A MIXED-METHODS ANALYSIS OF BLACK ADOLESCENTS' VOCATIONAL IDENTITY STATUS AND CAREER ADAPTABILITY COMPETENCIES IN A SOUTH AFRICAN TOWNSHIP

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DECLARATION

By submitting this thesis electronically, I declare that the entirety of the work contained therein is my own, original work, that I am the sole author thereof (save to the extent explicitly otherwise stated), that reproduction thereof by Stellenbosch University will not infringe any third party rights and that I have not previously in its entirety or in part submitted it for obtaining any qualification.

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ABSTRACT

A critical standpoint is taken in the present research study to explore the extent to which key career constructs, such as career adaptability and vocational identity, may manifest differently in a non-Western and developing world context, such as that of the Kayamandi township in South Africa. This research process consisted of six phases as part of a multi-phase mixed-methods research design. In *Phase 1*, relevant role players were included in the development of a culturally sensitive life-designing career intervention. In *Phase 2*, a psychometric analysis was undertaken that determined that the *Career Adapt-abilities Scale* (*CAAS)* and *Vocational Identity Status Assessment (VISA*) measures had moderate reliability and validity in the Kayamandi township context. This data was contextualised with qualitative Delphi interviews. Thereafter, *Phase 3* consisted of the pilot intervention, which established the content, structure and applicability of the career intervention, both quantitatively and qualitatively. *Phase 4* included the final administration of the *Shaping Career Voices* intervention.

In *Phase 4*, the career measures were administered to 582 Grade 10, 11, and 12 isiXhosa-speaking high school students between the ages of 14 and 22 years old (M=17, SD=1.3) from a peri-urban low-income setting. Participants included 314 Grade 10 (55%), 237 Grade 11 (41%) and 31 Grade 12 (5%) students, of whom 169 (31%) were males and 369 (69%) were females. A repeated-measures research design was utilised and scores were tracked at four time points: T_1 and T_2 before administering a culturally-constructed career life-designing intervention, as well as at two time points after the intervention (T_3 and T_4). Scores were observed in all of the subscales of the VISA and CAAS to have increased significantly as a result of the intervention. The most significant results were seen between T_1 and T_4, where scores remained high at the follow-up (T_4).

The results indicated gender differences, as female participants were seen to score significantly higher on the *CAAS* subscales of *concern* and *co-operation*, in contrast to male participants, who scored higher on the *VISA* subscales of *career flexibility (CF)* and *self-doubt (SD*). Grade differences were also observed, which indicated that learners who were facing high school graduation (Grade 12) had the highest increases in scores across the two instruments. Most interesting was the finding that vocational identity statuses began shifting at T_1 and then remained consistent from T_3 onwards. In addition, the *CAAS* subscales increased monotonically across vocational identity statuses from least to more adaptive as a

result of the intervention. Lastly, two new vocational identity statuses were uncovered in this sample, namely *undifferentiated moratorium* and *foreclosed moratorium*, due to the increase in vocational identity subscale scores that resulted from the intervention process. The implications for research and career counselling practice are discussed.

Furthermore, quantitative data were supplemented with evaluative and reflective intervention feedback (*Phase 5*) as well as a focus group interview (*Phase 6*). The focus group took place six months after the completion of the career intervention and allowed a deeper analysis of contextually bound and culturally sensitive factors. Unique patterns of stability and change in, as well as associations between, career adaptability and vocational identity subscales emerged in this South African case study. The findings suggest that the manifestation of career adaptabilities and vocational identity processes is the result of dynamic interactions between individuals, collectivistic values and their environments. The current research addresses the call for research to be conducted across diverse socio-economic statuses, geographical locations as well as racial and linguistic groups to facilitate etic-emic understandings of the career development of marginalised youth worldwide.

OPSOMMING

Die huidige navorsingstudie neem ’n kritiese standpunt in om sleutel loopbaan konstrukte soos loopbaan-aanpasbaarheid en beroepsidentiteit te ondersoek in die mate waartoe hierdie konstrukte anders mag manifesteer in ’n nie-Westerse en ontwikkelende wêreld konteks, soos dié van die Kayamandi dorpsgebied in Suid-Afrika. Die navorsingsproses het bestaan uit ses fases as deel van ’n veelfasige gemengde metodes navorsingsontwerp. Tydens *Fase 1* is relevante rolspelers ingesluit by die ontwikkeling van ’n kultuur-sensitiewe lewens-ontwikkelende loopbaan ingryping. Tydens *Fase 2* was ’n psigometriese analise onderneem wat bepaal het dat meetistrumente van die *Career Adapt-abilities Scale* (*CAAS*) en *Vocational Identity Status Assessment* (*VISA*) gematigde betroubaarheid en geldigheid in die Kayamandi-township konteks het. Hierdie data is aangevul met kwalitatiewe Delphi-onderhoude. Hieropvolgend het *Fase 3* bestaan uit ’n loodsingryping wat die inhoud, struktuur en ontvangs van die loopbaanigryping, beide kwantitatief en kwalitatief, bepaal het. *Fase 4* die finale administrasie van die “*Shaping Career Voices*” ingryping ingesluit.

In Fase 4 was die loopbaanmeetings aan 582 Graad 10, 11, en 12 isiXhosa-sprekende hoërskool studente tussen die ouderdomme van 14 en 22 jaar oud (M = 17, SD = 1.3) vanaf ’n peri-stedelike lae-inkomste-omgewing geadministreer. Deelnemers het 314 Graad 10 (55%), 237 Graad 11 (41%) en 31 Graad 12 (5%) studente ingesluit, waarvan 169 (31%) mans en 369 (69%) vroue was. ’n Herhaalende metingsnavorsingsontwerp is aangewend en tellings is op vier tydpunte geneem, soos volg: T_1 en T_2 voor die toepassing van ’n kultureele-gekonstrueerde lewens-ontwikkelende loopbaaningryping sowel as op twee tydpunte ná die ingryping (T_3 en T_4). Tellings vir al die sub-skale van die *VISA* en *CAAS* het toenemend verhoog as gevolg van die ingryping. Die mees beduidende resultate is tussen T_1 en T_4 waargeneem, waar tellings gebly het ten tyde van die opvolgmeting (T_4).

Die resultate het geslagsverskille aangedui in soverre vroulike deelnemers beduidend hoër tellings op die *CAAS* sub-skale van *Concern* en *Co-operation* behaal het, terwyl manlike deelnemers hoër tellings op die *VISA* sub-skale van *Career flexibility (CF)* en *Self-doubt (SD)* behaal het. Graadverskille is ook waargeneem en het aangedui dat leerders wat die einde van hoërskool in die gesig staar (Graad 12’s) die hoogste stygings in tetellings oor die twee metings gehad het. Die interessantste bevinding was dat beroepsidentiteit-statusse by T_1 begin skuif het en daarna vanaf T_3 voorwaarts konstant gebly het. Daarbenewens het die *CAAS* sub-skale eentonig oor beroepsidentiteit-statusse verhoog, vanaf minste tot meer

aanpasbaar as gevolg van die ingryping. Laastens is twee nuwe beroepsidentiteit-statusse in hierdie steekproef ontdek, naamlik *ongedifferensieerde moratorium* en *afgesluite moratorium*, as gevolg van die toename in beroepsidentiteit sub-skaal tellings wat deur die ingrypingsproses meegebring is. Die implikasies vir navorsing en beroepsvoorligting word bespreek.

Verder is kwantitatiewe data aangevul deur evaluerende en reflektiewe terugvoer oor die ingryping (*Fase 5*), sowel as ’n fokusgroep-onderhoud (*Fase 6*). Die fokusgroep het ses maande ná die voltooiing van die loopbaaningryping plaasgevind, en het ’n dieper analise van kontekstueelgebonde en kultuur-sensitiewe faktore toegelaat. Unieke patrone van stabiliteit en verandering in, sowel as assosiasies tussen, loopbaan aanpasbaarheid en die beroepsidentiteit sub-skale het in hierdie Suid-Afrikaanse gevallestudie na vore gekom. Die bevindings dui daarop dat die manifestering van loopbaan aanpassings en beroepsidentiteits-prosesse die gevolg is van dinamiese interaksies tussen individue, kollektiewe waardes, en hulle omgewing. Die huidige navorsing spreek die oproep vir navorsing oor diverse sosio-ekonomiese statusse, geografiese liggings sowel as ras en taalgroepe aan sodat “etic-emic” begrippe van die loopbaanontwikkeling van gemarginaliseerde jeug wêreldwyd gefasiliteer kan word.

DEDICATION

In loving memory of Rose Albien

This dissertation is dedicated to my mother, Rose Albien, who was the person I loved the most, my role model and best friend. Any achievements that may be linked to me are purely a result of the woman she shaped me to be and testament to the exceptional woman she was. I promised her that I would finish this work and I dedicate all my research work that follows in her honour.

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"Hope arises like a phoenix from the ashes of shattered dreams." – S. A. Sachs

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LIST OF ABBREVIATIONS

CAAS	*Career Adapt-ability Scale* 2.0 International version
CC	*Career commitment* subscale of the *VISA*
CCM	*Career commitment-making* subscale, part of the *VISA career commitment (CC)* subscale
CCT	Career Construction Theory
CE	*Career exploration* subscale of the *VISA*
CF	*Career flexibility* subscale, part of the *VISA career reconsideration (CR)* subscale
CR	*Career reconsideration* subscale of the *VISA*
IB	*In-breadth career exploration* subscale, part the *VISA career exploration (CE)* subscale
ICM	*Identification with career commitment* subscale**,** part of the *VISA career commitment (CC)* subscale
ID	*In-depth career exploration* subscale, part of the *VISA career exploration (CE)* subscale
SD	*Self-doubt* subcale, part of the *VISA career reconsideration (CR)* subscale
SIF	Subjective identity form
SU	Stellenbsoch University
VISA	*Vocational Identity Status Assessment Scale*

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CHAPTER 1
INTRODUCTION: CONTEXT AND BACKGROUND

1.1 Introduction

The rapidly changing nature of the world-of-work has resulted in concomitant reconstructions of individuals' vocational identities (McMahon, Watson, & Bimrose, 2012a). Increasing competitiveness and economic globalisation have led to shifts in labour arrangements with firms and work places employing more contract workers than core employees (McMahon & Yuen, 2009). Therefore, occupations and professions have become more uncertain, resulting in individuals facing the responsibility of designing their lives through multiple career transitions (Guichard, 2009). These vocational adaptations have been emphasised as specifically problematic for adolescents and young adults (Mäkinen & Vanhalakka-Ruoho, 2018; Maree, 2010a, 2010b), who are beginning their career trajectory and developmentally have less certainty about their vocational identity when facing career decisions.

Young people have been identified as an at-risk group internationally (Lindstrom, Kahn, & Lindsey, 2013), with early exposure to unemployment instilling feelings of hopelessness about the future as well making an impact on their lifetime work trajectory (Rankin & Roberts, 2011). This has been highlighted as problematic in industrialised Western societies, because many psychological and social resources are required to adapt to major work-life transitions, and these may not yet have been developed by adolescents and young adults (Cohen-Scali, Rossier, & Nota, 2018). Therefore, South African researchers are also compelled to reflect on developments in Eurocentric career research and examine whether or not these perspectives are appropriate in a South African context to create "experience-near" constructions of South African adolescents' career development (Blustein, McWhirter, & Perry, 2005; Kuit, 2006; Stead & Watson, 2017).

Chapter One introduces the extant career counselling challenges on a global scale. In the ensuing section the career counselling challenges that are unique to the South African context are contextualised. Thereafter, the historical implications of apartheid will be discussed to describe lingering disadvantages that are tied to being part of a previously marginalised racial population group. The tremendous challenges that Black township South African youth, as the target group of the current research, need to contend with will be discussed. In order to facilitate the career development of disadvantaged South African youth, indigenous career psychology approaches will be introduced to develop relevant career

interventions to enable individuals to transcend intergenerational poverty. The present study aims to address the call of the field of career psychology to create and develop career interventions and theoretical approaches that acknowledge developing world contexts and constraints. An overview of the current research is provided with a delineation of the research questions, rationale, objectives and proposed impact of the research study. Chapter One culminates with an overview of the structure of the dissertation with a short description given of constituent chapters.

1.2 South African Contextual Implications for Career Development

Unemployment is a major challenge for South Africans, with exceedingly high rates of unemployment being reported, of between 27.7% and 36.8%, in comparison to global standards (Statistics South Africa, 2017). The distribution of unemployment continues to be divided along racial lines, with 38.8% of Black people being unemployed, 26.4% of Coloured people, 14.5% of Indian people and 8.4% of White people (Statistics South Africa, 2016). Although the exclusion of the Black, Coloured and Indian population groups from an effective educational system and a range of employment opportunities was one of the greatest injustices orchestrated by the apartheid regime (Naidoo, Pretorius, & Nicholas, 2017), residual disparities can still be witnessed (Blustein, Franklin, Makiwane & Gutowski, 2017). In South Africa today, White people still have more access to education and economic opportunities than Black people (Naidoo et al., 2017; Perry & Smith, 2017). As a result, definitions of work that are primarily orientated at survival may be more relevant to previous disadvantaged population groups. This is in direct contrast with one of the main premises of career counselling, which is the assumption that a career acts as an opportunity for self-determination or is a rewarding task (Blustein et al., 2017).

Another core premise that informs career counselling is that an individual holds access to a range of career choices, which is called into question in developing world contexts, such as in South Africa (Perry & Smith, 2017). If access to career choices is not equal, then reduced opportunities for career exploration will limit an individual's career-life choices. This emphasises the need for perceived barriers, both real and imagined, to become the focal point of career counselling with adolescents or young adults (De Bruin & De Bruin, 2017). Specifically, South African youth (aged 15 to 34) are vulnerable in the labour market, with an unemployment rate of 38.6 % (Statistics South Africa, 2017). Furthermore, approximately 30% of the 10.3 million South African youth (aged 15 to 24 years) were reported not to be in employment, education or training (Statistics South Africa, 2017).

Therefore, notions of access, choice and careers need to be carefully unpacked with disenfranchised community members, who may not have the experience of what it is like to have access to a career or choices (Nicholas, Naidoo, & Pretorius, 2006). Chapter Two presents a deeper discussion of definitions of career, work and how the present research conceptualises these terms to take into consideration the contextual realities of unemployment and poverty faced by the disadvantaged youth of the Kayamandi township.

The practice of career counselling in South Africa is confronting the challenge of chronic unemployment over generations, which needs to be contextualised within the historical context and employment patterns within South Africa (Blustein et al., 2017). The main source of employment for low-skilled workers is provided by the mining and agricultural industries. This means that migratory patterns of employment are still common in a South African context, reminiscent of apartheid labour practices (Naidoo et al., 2017). As a result, low-employment communities were created and maintained over generations, with a limited skill-set that could not be absorbed into labour markets despite the end of apartheid (Darkey & Visagie, 2013). The absorption was stymied as the historical legacy of apartheid had denied quality education and training to the Black majority. The reliance on information technology and related skills in the global economy has created further challenges for historically marginalised community members seeking employment (International Labour Organization, 2014). Further barriers are linked to the travel distances to employment opportunities in cities and associated costs for individuals who reside in rural or informal settlements on city outskirts (Banerjee et al., 2008).

This rural-urban divide results in limited educational and career development opportunities for the youth, which are perpetuated by the poor quality of schools in South Africa's townships, high rates of attrition and grade repetition (Blustein et al., 2017; Graven, 2014; Leibbrandt, Woolard, McEwen, & Koep, 2010). There is a shortage of vocational, technical and career education services in South African schools, especially within historically disadvantaged communities (Watson, Samuels, & Flederman, 2014). Despite progressive legislation to promote education, most South African schools provide a low quality of education, as seen in the low matric pass rate, which is especially pertinent in disadvantaged schools (Ngcobo & Tikly, 2010). The latter are characterised by overcrowding, limited resources and equipment, high pupil-to-teacher ratios and poorly qualified teachers (Townsend, Flisher, & King, 2002). This becomes exceedingly problematic, as early exposure to unemployment instils a sense of hopelessness about the

future and has a negative impact on the lifetime work trajectory of young people. This highlights that young people are an at-risk group not only internationally, but specifically in a South Africa context (Lindstrom et al., 2013; Rankin & Roberts, 2011).

Various socio-political factors, such as the migratory employment opportunities discussed above, also have affected the family structures of Black South African families, as family members (i.e., predominantly fathers) had to leave rural homes for long contractual periods (Rabe, 2006). Traditionally, extended families were the norm, with three or more generations residing together in a patriarchal household (Steyn, 1993, 1994). The traditional values and norms included respecting the elderly, and conforming to tradition, and the father was seen as the undisputed head of the family who disciplined family members (Geijsendorpher, 2008). Although the extended family still forms the dominant family structure, the female-headed, single-parent is the fastest growing family structure. The economic restraints faced, as well as the acceptance of Western values and norms such as the nuclear family structure, have undermined the development of traditional family support systems (Van Vuuren, 1997).

As a consequence of these changing family structures, a decline in parental authority has been observed (Geijsendorpher, 2008). There is a widening gap between children and parents, who inhabit different worldviews germinating from different levels of exposure to education, internet information, social media and ideas. This leaves Black youth largely unguided in career decision-making, as parents may still be low-skilled workers who are unable to provide any insight into labour market trends. South African youth therefore are increasingly displacing old traditions and using education in order to move towards a greater sense of themselves as individuals (Ramphele, 2002). As a result, tension exists between utilising traditional values and survival strategies to adapt to economic and social changes, as well as finding a way to incorporate elements of modernisation without uprooting traditional practices (Albien & Naidoo, 2016).

This section highlights the role that state politics and domestic affairs have on the provision of developmental infrastructures, family and opportunity structures for South African adolescents and youth (Naicker, 1994). The effects of multigenerational mass unemployment in creating a poverty trap for the next generation (Magruder, 2010) needs to be taken into consideration in creating contextually sensitive and ethical career counselling practices that serve to instil hope and not hopelessness. This leaves career counsellors in a predicament, as there are no “Band-Aid” approaches to solve poverty, because career

interventions will not get to the root of societal problems or change the status quo (Prilletensky & Stead, 2012). The current research is aligned with a transformative approach which means that empowerment of the agentative identity of the individuals involved in the study is the primary aim (Watson & Stead, 2002). Research results will, however, be shared with the Department of Education and other structural level role players in order to inform future, locally relevant career development practices for township communities, such as Kayamandi township (Prilleltensky & Stead, 2012; Watson, 2010).

1.3 Kayamandi: A Peri-urban Township Context

Kayamandi is situated adjacent to one of the major arterial roads into Stellenbosch town (Kiangi, 1998) in the Cape Winelands district, approximately 50 kilometers from Cape Town (33.9167° S, 18.8500° E). Kayamandi is an informal settlement (i.e., an unplanned township) and is located on the northern outskirts of Stellenbosch, on the slopes of the Papegaaiberg (Toms, 2015). However, it is physically separated from the town by a bridge and a railway line, as these structural separators were characteristic of the apartheid engineering of geographical separation. The Group Areas Act of 1941, formulated under apartheid in South Africa, designated Kayamandi as a residential 'Black area', which housed migrant farm workers from the Eastern Cape (Fuchs, 2010). Currently, Kayamandi is recognised as a neighbourhood forming part of the Stellenbosch Municipality. Kayamandi means "sweet home" in isiXhosa and houses approximately 40, 000 residents.

Kayamandi residents appear to be employed predominantly in the lower paying sectors (e.g., domestic work, gardening, transport, as farm workers on the surrounding wine farms and other manual labour) (Darkwa, 2006; Kiangi, 1998; Rock, 2011). The unemployment rate of Kayamandi is set at 22.3%, but in certain areas, such as in Enkanini, it has been argued to be as high as 62% (Fuchs, 2010; Rock 2011). Census reports indicate that the total income per family is significantly low and that there is limited access to municipal services such as water, electricity and sanitation (Du Plessis et al., 2012; Statistics South Africa, 2011; Van Wyk, Cousins, & Lagardien, 2004). Approximately 62% to 77% of Kayamandi residents reside in informal housing structures, where an average shack, which is made of waste material, houses up to seven inhabitants in a space of between 9m² and 15m² (Booi, 2011; Darkwa, 2006; Kiangi, 1998). High rates of crime, poverty, substance abuse, teenage pregnancy, tuberculosis, HIV/AIDS and malnutrition have been reported in Kayamandi. Poverty in Kayamandi is associated with experiences of deprivation, violence and high levels of psychological distress and trauma (Ratele, 2007).

Kayamandi is estimated to be approximately one square kilometre, or 75.06 hectares, in size (Darkwa, 2006). There is little leeway for expansion, as the township is bordered on three sides by a major road, the town of Stellenbosch and valuable farmland respectively (Skinner, 2000). Yet exact population parameters are unknown, largely due to unmonitored migration of Eastern Cape individuals and families searching for better employment and educational opportunities, which causes annual increases in community growth rates, set at 5% (V. Zwelendaba, personal communication, October 13, 2015). Due to migration, isiXhosa is the primary language spoken in Kayamandi, but English, Zulu and Sotho also feature in the community (Tlooko, 2011; Toms, 2015). Schools no longer offer Afrikaans which results in school learners with poor Afrikaans skills, whereas Afrikaans is the predominantly spoken language in Stellenbosch town.

There are two high schools in Kayamandi, namely Kayamandi High School and Makupula High School, both with a capacity of approximately of 800 learners ranging from Grade 8 to Grade 12. There are important differences between these two schools, as Kayamandi High School is a science curriculum school, which has a focus on science courses (i.e., physical sciences and life sciences), and Makupula High School predominantly offers business subjects (i.e., accounting, economics, tourism, etc.). However, Life Orientation teachers at both schools have described a context of limited accessible career information, with 'once-off' career days in both school contexts (Ebersöhn & Mbetse, 2003). A lack of real-life exposure to occupations was cited as problematic, as access to role models and opportunities for job shadowing are restricted (Stead & Nqweni, 2006). Therefore, high school learners in Kayamandi have inadequate career support due to insufficient parental involvement in career development (Alexander, Seabi, & Bischoff, 2010; Seabi, Alexander, & Maite, 2010; Stead, 1996). This is a result of their parents' low-skilled occupations, as well as a deficit of positive work values attached to careers in the face of illegal careers that offer lucrative short-term solutions in surviving daily hardships and poverty (Maesala, 1994; Stead, 1996).

In addition, career or world-of work information is not easily accessible, and a lack of exposure to vocational realities often results in distorted ideas of careers and/or access requirements (Albien & Naidoo, 2016; Maree, 2012a, 2012b; Stead & Nqweni, 2006), or early foreclosure occurs based on materialistic indicators of success (Swartz, 2011). Financial constraints were also mentioned by Kayamandi teachers as a considerable impediment (Akhurst & Mkhize, 2006; Seabi et al., 2010). Although career fairs are offered outside

Stellenbosch, learners do not attend due to transport expenses. Moreover, learners have limited knowledge of their abilities, interests, achievements and role models, which has a negative impact on their career choices (Ebersöhn & Mbestse, 2003; Matshabane, 2016; Stead & Watson, 2006). Lastly, peer pressure was cited by high school principals at both schools in Kayamandi as a negative influence that often resulted in pregnancy, drug use and gang involvement, and ultimately, prevented career development. As a result, many adolescents in Kayamandi experience great challenges in finding their way into careers, or do not find employment at all, and are overlooked by career psychology practices that are either imported or based on the career experiences of a middle-class cohort.

1.4 Indigenous Career Psychology Approaches

Indigenous career psychologies are based on the questioning of Euro-American theories in order to find local and context-appropriate approaches as part of critical-emancipatory social science research (Paredes-Canilao & Babaran-Diaz, 2013). This prevents researchers and counsellors from losing sight that people from different cultural contexts attribute different meanings to the career decision-making process (Stead & Watson, 2017). The process of transforming, adapting or redefining imported career theories and constructs to become meaningful in their new environment is known as indigenisation (Adair, 2006). Therefore, Euro-American career theories and constructs from other countries need to be examined for their appropriateness in the South African context, instead of being uncritically adopted or dismissed (Stead, 1996; Stead & Watson, 1998; Watson, 2013).

There is a growing awareness that Euro-American psychological knowledge is not necessarily applicable to other countries such as South Africa. The appropriateness of imported career theories has been questioned by South African career practitioners and researchers (Mkhize, 2012; Stead & Perry, 2012). Previously, mixed results were obtained when US instruments were used in a South African context, which opens discussions around the validity and reliability of imported assessments that were adopted and not adapted (Creed, Patton, & Watson, 2002; Stead & Watson, 1998a). Further research and discussions are needed to examine if culturally bound constructs exist (i.e., the overemphasis of personal variables, that a free choice of occupations exists, and the idea that career choices are determined by job satisfaction) which may not translate into other contexts (Li, Hou, & Jia, 2015).

However, there is a danger of overemphasising an irreconcilable dichotomy between Western and non-Western perspectives. Instead, the issue should be whether career

psychology in South Africa is appropriate in its context, not whether career psychology should be parochial or not. Indigenisation psychologies enable both traditional and imported psychological perspectives to be accepted (Sinha, 1997). This allows career psychologists to focus on issues that are pertinent in a South African context, whilst still being part of a global village of career psychology research and practices, which would prevent premature generalisations and ethnocentrism. In addition, indigenous psychologies enable researchers to provide more useful accounts of career psychology in specific cultures (i.e., an emic approach), and perhaps will allow a universal career psychology to emerge (i.e., an etic approach) (Stead & Watson, 2017).

1.5 The Role of Culture in Career Psychology

The career behaviours of individuals within diverse cultural and ethnic groups can vary considerably. Yet, there is much debate about what the terms culture, ethnicity and career mean in a South African context. In post-apartheid years, cultures and ethnic groups are redefining themselves, which further compounds the lack of clarity behind these terms (Stead & Watson, 2017). Culture is proposed by Stead (2004, p. 392), following a social constructionist perspective, to be a "social system of shared symbols, meanings, perspectives, and social actions that are mutually negotiated by people in their relationships with others". The role of culture is receiving more and more attention in the field of career psychology, and the central question is whether career assessments are perceived in the same way by diverse population groups (Morgan, De Bruin, & De Bruin, 2015). This is particularly important in a South African context, where different cultures and ethnicities may attach different meanings to the world-of-work and interests and values may play differential roles in career choices (Stead, 1996).

Western societies place emphasis on individual achievement, satisfaction and actualisation (Du Toit & De Bruin, 2002; Stead & Watson, 1998), which manifests in differences in vocational constructs that may not be applicable to the Xhosa cultural group used in the research sample (Du Toit & De Bruin, 2002; Maree, Ebersöhn, & Molepo, 2006; Watson & Stead, 2002). Moreover, the meaning of the Xhosa expression, *umuntu ngumuntu ngabantu* (a person is a person through others), needs to be interpreted in relation to career decision-making processes to determine how this belief may affect career choices as a seminal challenge to the Western notion of individualism (Stead & Watson, 1998a). In the collectivist societies of African and Eastern cultures, a greater emphasis is placed on co-operation with others to fulfil social obligations as an expression of self-hood (Mkhize,

2015). Career counsellors should be aware that in a collectivistic culture, the needs of the group are given more importance than the notion of freedom of choice in career decisions (Mkhize & Frizelle, 2000). Stead (2007) highlights the important role that culture plays in career counselling, as an individual's culture will influence the development of a vocational self-concept, as well as the process and content of career exploration (Blustein & Flum, 1999).

A theoretical framework for career development that is useful in a South African context needs to include concepts of *ubuntu*, *isinti*, *ujamaa* and related Africentric principles (Nussbaum, Palsule, & Mkhize, 2010). Msila (2015) describes *ubuntu* as the connectedness, interdependence and respect for the dignity of others in social webs such as communities (Stead & Watson, 1998). In contrast, *isinti* is the Zulu word for the establishment of self-identity through the identity of other people (Nussbaum, 2003; Nussbaum et al., 2010). Similarly, the belief that people are only people through other people is encapsulated by the term *ujamaa,* which is a Swahili term for extended family or comradeship (Ibdawoh & Dibua, 2003). Africentric narratives of perseverance and collective mastery are based on the notion of suffering for the well-being of others (Theron & Theron, 2013) to promote the transcendence of poverty and allow family members access to a difference socio-economic niche and lifestyle. Postmodern career counselling approaches are specifically relevant for African contexts, where career development processes are informed by collective meaning-making processes based on oral traditions that promote resilience in the face of hardship (Watson et al., 2011).

1.6 Postmodern Career Counselling Approaches

Career counselling will be defined in the present research as a service provided to individuals seeking assistance with career concerns (Isaacson & Brown, 2002). Career concerns are ultimately related to how individuals see themselves in the selection of and adjustment to an occupation, as well as the integration of the worker role with other life roles within a career-life (Sharf, 2013). The intersection of career and personal counselling thus becomes apparent, where marginalised individuals may have suffered from distress related to poverty, hardship and trauma in the continuous search for employment opportunities (Stead & Subich, 2017). Postmodern career counselling is a reaction to positivism because it advocates a subjective and contextually situated understanding of knowledge (Maree, 2010c; Struwig & Stead, 2013).

Narrative approaches take into consideration that career behaviour needs to be framed within contexts and cultures, which is seminal to the social constructionist viewpoint (Holdstock, 2000; Stead & Watson, 2017). Social constructionist and social constructivist approaches are believed to be useful in the South African context, because an emphasis is placed on the interconnectedness of social, contextual and cultural aspects that resonate with African worldviews (Holdstock, 2000). The oral tradition is important to many cultures, and the use of stories endorsed in postmodern career counselling approaches is recognised as a universal way to share experiences. These narratives will result in the development of self-insight, along with new meanings in career development with individuals from various social and ethnic groups (Chope & Consoli, 2011; Mkhize, 2015; Young & Popadiuk, 2012).

The most important difference between social constructivism and social constructionism is social constructivism's emphasis on individual cognitive processes, or an internal self (Young & Popadiuk, 2004), which is not readily accepted by social constructionism (Stead, 2004). Social constructionism emphasises identity rather than personality, career adaptability instead of maturity, and stories in addition to scores, and facilitates agency in the face of career-related transitions (Savickas 2011a). The dual interest of interpreting the *subjective* aspects of career counselling, which include clients' career-life stories, and the *objective* career assessment results, is best accommodated by the career construction theory which enables clients to develop career adaptability in their career-lives (Maree, 2014; Savickas et al., 2009).

1.7 Introducing Career Construction Theory (CCT)

The present research aims to respond to the call for context-specific career counselling methods, such as narrative approaches, to address non-normative, non-Western, non-'standard' population groups (McMahon & Patton, 2002). Although narrative approaches can be used with diverse cultures, storied approaches are more readily accepted by cultures that value oral traditions (Morgan, 2010), including Africentric perspectives (Theron, 2016). Postmodern career counselling approaches increasingly include narrative explorations of subjective meaning-making processes and cultural contexts in which an individual's needs, interests, abilities and values develop (Stead & Subich, 2006). Career construction theory (CCT) is used in the present research as a narrative theoretical framework to facilitate understandings of how an individual's narratives are interwoven with his/her *vocational personality* (who he/she is), *career adaptabilities* (how to adapt) and *life themes* (what work roles are valued, and why) (Del Corso & Rehfuss, 2011; Savickas & Porfeli, 2012). Career

construction theory (Savickas, 2005) is based on an extension of Super's (1957) life-span life-space theory (1957), after which life-design counselling was created as a new paradigm for career counselling (Savickas et al., 2009). Career counselling approaches that are informed by the life-designing approach allow individuals to understand themselves as authors who can express their life experiences in story form (Cochran, 1998; Inkson, 2004; Sarbin, 1986).

CCT emphasises career decision-making and career development based on the notion that individuals impose subjective meanings on the process of constructing career-lives (Savickas, 2005). Savickas (2013a, 2013b) posits that, if individuals succeed in assigning meaning to their career-related experiences, a distinguishable plot could be shaped that contains the essence of the client's career identity, resulting in a career trajectory. According to Hartung (2011), CCT highlights the importance of a) discovering clients' traits by eliciting career-life stories, b) adapting these traits, and c) examining career-life themes as central concerns to which individuals assign importance throughout their life-spans (Csikszentmihalyi & Beattie, 1979). Therefore, reflexive construction, deconstruction, co-construction and reconstruction lie at the heart of the required adaptability to cope with changing self and work situations, with the intention to design a subjectively successful life (Hartung, 2013a; Savickas, 2011b).

Savickas (2005, 2007) linked clients' capabilities to an ABC model of attitudes (A), beliefs (B), and competencies (C) that correlate positively with career adaptability in terms of four adaptability dimensions. *Concern* is the first dimension, which is the capacity to feel optimistic and consider future prospects. Secondly, *control* refers to self-regulation and the personal responsibility assumed for shaping a future career through career decision-making. *Curiosity* is the third dimension and refers to an enquiring attitude that includes career exploration. Lastly, *confidence* refers to self-efficacy and the capability beliefs that an individual has if he/she can solve problems. These four adaptability dimensions can enable clients to adapt to the rapidly changing contexts that are encountered in career-related transitions and traumas (Porfeli, Lee, & Vondracek, 2013; Savickas & Porfeli, 2012). The construct of career adaptability describes the set of psycho-social resources that result in self-regulation and adjustment to the unfamiliar and complex problems presented by career transitions (Öncel, 2014; Savickas, 1997; Savickas & Porfeli, 2012). As part of the literature review, Chapter 2 provides more information on the life-designing paradigm and career

construction theory whereas Chapter 4 includes the theoretical underpinnings of the career construction theory that were used to design the career intervention.

1.8 Problem Statement and Focus

The overarching research goal was to address the international call for the further testing and development of the nomological network of career adaptability and vocational identity research. Furthermore, the present research aims to assess whether evidence exists supporting the use of career adaptability and vocational identity constructs in a developing world context (Savickas & Porfeli, 2012; Watson, 2013). In this multiphase mixed-methods QUANTITATIVE-qualitative study, the primary research focus was on the quantitative strand that aimed to explore whether the vocational identity and career adaptability competencies of Grade 10, 11 and 12 Kayamandi and Makupula high school learners improved after the completion of a narrative career intervention.

The problem statement is whether a qualitative career intervention based on the life-designing approach (Maree, 2017; Savickas et al., 2009) can enhance the career adaptability competencies and vocational identity scores of Grade 10, 11 and 12 learners from Kayamandi. A repeated-measures research design was utilised in the final intervention and scores were tracked over five time points: a week pre-intervention ($T_{1)}$, pre-test (T_2) before the intervention as a well as three time points after the intervention (post-test,T_3, a week later, T_4, and three months later, T_5). Two career assessments were used, namely the *Vocational Identity Status Assessment (VISA) and Career Adapt-abilities Scale (CAAS)*. Quantitative data were supplemented with qualitative data to allow insight into subjective meaning-making processes that had occurred in the participants' career development trajectory as a result of their participation in the intervention. The qualitative data included was taken from evaluative and reflective feedback as well as a focus group held six months after the intervention ended. Qualitative data allowed contextualised accounts of the career experiences of Kayamandi high school learners to be created (Blustein et al., 2005).

1.9 Research Objectives

As seen below, Table 1.1. provides an overview of the research objectives and hypotheses grouped according to research phases.

Table 1.1.

Research Objectives and Hypotheses Grouped by Research Phases

Research phases	Research objectives
Phase 1: Intervention development (2015)	***Objective 1:*** Include role players in a qualitative process that informed the creation of the *Shaping Career Voices Intervention Booklet*.
Phase 2: Psychometric pilot (2015)	***Objective 2:*** Assess suitability of *CAAS* and *VISA* measures for application in a South African township context. The research hypotheses are presented in Chapter 6. (*Hypotheses*: H_1: High factor loadings of confidence expected; H_2: Low factor loadings in career exploration, curiosity and openness to change; H_3: Low factor loadings in future orientation dimensions; H_4: Low factor loadings in control dimensions; H_5: Lower factor loadings (i.e., under 0.5) would be observed; H_6: Lower Cronbach's alpha reliability scores would be observed (i.e., under 0.7) in comparison to international samples).
Phase 3: Intervention Pilot (2016)	***Objective 3:*** Determine how the content, structure and process of the pilot intervention was received by Grade 11 high school participants and if higher post-intervention measures resulted.
Phase 4: Final Implementation of *Shaping Career Voices Intervention* (2016)	***Objective 4*:** Determine if the career intervention resulted in improved scores for Grade 10, 11 and 12 township high school learners on the *CAAS* and *VISA* ***Objective 5*:** Examine if gender or school grade would result in unique quantitative scoring patterns that could be indicative of adolescents' adaptations to the township context.
Phase 5: Evaluative written feedback (2016)	***Objective 6*:** Explore the highest scoring participants' subjective evaluations of the career intervention upon completion using reflective feedback forms.
Phase 6: Focus group (2017)	***Objective 7:*** Conduct a focus group interview to gain insight into participants' perceptions of their post-intervention adaptations in career ideations, career decisions and career identities.

In addressing the problem statement, the objectives of the current research study were to:

1) Include role players in a qualitative process that would culminate in the creation of a contextually relevant narrative career intervention for Kayamandi youth
2) Assess the suitability of *CAAS* and *VISA* measures for application in a South African township context.
3) Determine how the content, structure and process of the pilot intervention was received by Grade 11 high school participants and if higher post-intervention measures resulted.
4) Determine if the career intervention resulted in improved scores for Grade 10, 11 and 12 township high school learners on the *CAAS* and *VISA*.
5) Examine if gender or school grade would result in unique quantitative scoring patterns that could be indicative of adolescents' adaptations to the township context.
6) Explore the highest scoring participants' subjective evaluations of the career intervention upon completion using reflective feedback forms.

7) Conduct a focus group interview to gain insight into participants' perceptions of their post-intervention adaptations in career decisions and career identities.

The research phase objectives will be used to structure the results presented in Chapter 6 to provide a better understanding of how the quantitative data will be supplemented with qualitative data. Evaluative intervention feedback, written reflections, Delphi panel focus groups and a six-month post-intervention focus group facilitated the contextualisation of the career development experiences of marginalised Kayamandi youth.This allowed an exploration of the participants' career changes following the completion of the intervention. The exploration of the participants' subjective experiences of the career intervention programme can provide insight into adolescents' perceptions of their changes in career adaptabilities, career decisions and career identities in order to develop career interventions that are contextually relevant and can facilitate the employability of disadvantaged Kayamandi youth.

1.10 Research Questions

The research attempted to answer the following research questions:

• Are constructs of career adaptability and vocational identity applicable in a non-Western context?

• How effective is a career intervention based on the life-designing approach for Grade 10, 11 and 12 learners from a low socio-economic background, in enhancing vocational identity status and career adaptability?

• Are there patterns of stability and change in career adaptability competencies and vocational identity statuses in the Kayamandi sample?

• What time effects are exhibited in *CAAS* and *VISA* subscales as well as vocational identity statuses?

• What is the impact of gender status on vocational identity status and career adaptability scores?

• What is the impact of grade on vocational identity status and career adaptability scores?

• What qualitative aspects of the career intervention may have resulted in an improvement in post-measure scores?

• What recommendations could this research provide for future Grade 10, 11 and 12 career interventions aimed at enhancing vocational identity status and career adaptability competencies to ultimately facilitate employability?

1.11 Relevance of Proposed Research

The proposed dissertation was an extension of my Master's thesis on career influences in the Kayamandi community (entitled *Exploring Grade 12 Kayamandi adolescents' career influences using the systems theory framework of career development*). This current research forms part of a community interaction project called the Career Life-Planning Project, which aims to aid career decision-making processes in Kayamandi high schools. Community engagement and collaborative scholarship have moved to the forefront of Stellenbosch University's institutional policy, undergirding the importance of this dissertation to inform community-based career psychology research. The National Research Foundation (NRF) funded the current research in order to address the critical necessity to give voice to the needs of marginalised population groups that traditional career counselling paradigms have excluded (McMahon & Patton, 2002). The effects of a low socio-economic status and Africentric principles on career development in Black township youth is an under-explored research area. The present research may contribute to critical discussions, which may help to achieve cultural sensitivity and address social justice issues by creating contextually relevant career interventions for South African youth to prevent unemployment and multigenerational poverty (Hooley & Sultana, 2016).

1.12 Overview of chapters

The dissertation is structured as follows:

Chapter 1 has introduced youth as an at-risk population group both globally and locally. South African career counselling practices and imported Euro-American approaches were contextualised within the current socio-political constraints that still exist in South Africa, as accentuated by disadvantaged contexts. Career construction theory (CCT), as the theoretical orientation of the study, was introduced. The research problem, objectives, and questions of this study were elucidated.

In ***Chapter 2***, a discussion of the reviewed literature is presented according to a classification system, using *'content'*, *'process'*, *'content and process'* and *'bridging framework'* theories of career development. Theories were selected that were globally

created, and then the relevant South African adaptation and application of career constructs is presented for critique and future improvements for the career psychology field.

Chapter 3 describes the research methodology of the study. The multiphase, mixed-method design is discussed, with a description of the six different phases of the research process. In each phase the participants, the objectives, the methodology utilised (i.e., qualitative and/or quantitative) and the procedure is described. The chapter ends with a reflection on the research process challenges and critical insights gained.

In ***Chapter 4***, a description of the development of the career intervention materials is presented. The theoretical underpinnings are detailed, as well as the content and structure of the career intervention: *Shaping Career Voices Intervention Booklet.*

Chapter 5 presents the research results. First the *quantitative analyses* are presented according to each research phase. The psychometric properties of the *CAAS* and *VISA* are presented. The results of mixed-model analysis of variances (ANOVA) are presented to determine whether time, grade and gender effects can be observed. Incorporated at each phase, *qualitative analyses* are presented. The inclusion of a qualitative analysis of participants' written evaluative feedback and reflections (*Phase 5*) as well as focus group data (*Phase 6*) aims at contextualising the quantitative data. Themes were extracted according to *CAAS* and *VISA* dimensions to portray participants' career constructions and career adaptability competencies.

In ***Chapter 6***, an integrated discussion is presented, whereby the quantitative and qualitative findings are merged to portray a contextually-near and rich discussion that incorporates relevant literature.

Lastly, ***Chapter 7*** presents a summary of the most significant research findings. The limitations as well as the recommendations of the study are presented to inform future career research in marginalised population groups. Recommendations for both qualitative and quantitative methodologies are presented to determine how to best to develop a context-specific indigenous career psychology approach.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

The advent of technology and globalisation has drastically changed the world-of-work, which has resulted in a global call for adaptations to career theory and practice that reflect the changes that have occurred in international labour markets and economies (Maree & Beck, 2004). Worldwide, career counselling practitioners and researchers are realising that traditional approaches to career counselling and assessment are prescriptive and may not be applicable to the wider and more diverse range of career issues and clientele that are presenting career concerns (Maree & Beck, 2004; Savickas, 2007). Although imported career theories and interventions may be excellent references emanating from a global village, the focus on career issues that are relevant in developed world environments understandably do not adequately address career concerns in a developing world context, such as South Africa (Stead & Watson, 2017).

In South Africa, career psychology has attained several milestones since the end of apartheid, using both quantitative and qualitative career measures. However, many South African vocational tests reify Western, Educated, Industrialised, Rich and Developed (known as WEIRD) contexts, thereby excluding the majority of South Africa's population (Laher & Cockcroft, 2013). Therefore, a call has repeatedly been made to develop career theories, techniques and interventions that are unique to specific contexts to adequately address subjective and objective markers in South African career choices (Maree, 2010a). However, there is still much work to be done to facilitate South Africa's progress towards a career theory that embodies the shift to a more just and equitable society.

In this chapter, an overview of the field of career psychology is presented, with the intention of situating the present research in a theoretical framework, as well as allowing a critical discussion of theoretical contributions that could prove beneficial to future career theory development. The changes that have occurred in the world-of-work will be explored to determine how volatile markets have affected career psychology theories, career development definitions and concepts of what a career entails. Thereafter, the global focus of career issues that affect individuals worldwide will be explored to examine how globalisation may require a greater focus on social justice issues in career development. Social justice issues in South Africa will be discussed briefly before delving into the international theoretical base,

followed by a local South African contextualisation to determine whether this theoretical approach is deemed useful in a South African context.

Western or developed world contexts are facing issues of diversity and multiculturalism as never before, largely due to increasing numbers of displaced and migratory population groups. Therefore, research conducted in multi-cultural contexts, such as South Africa, may prove extremely beneficial in providing examples of dealing with diversity in guiding vocational decision-making processes in an ever-changing world-of-work. Future theoretical review and further research is needed to discuss other important areas in South African career psychology to gain more practical insights into the mechanisms of multicultural counselling with diverse age groups presenting different career needs (Stead & Watson, 2017).

2.2 Changes in the World-of-Work

Global economic crises, technological innovations and unstable global employment patterns have had a drastic effect on career development processes and the world-of-work (Savickas, 2007). New, non-standard and non-traditional work opportunities, such as contractual work and time-limited work, have emerged as current developments in the world-of-work (Maree, 2017). Lifetime occupations and linear upward mobility have become outdated. Instead, temporary assignments or contractual labour have become the norm (McMahon & Yuen, 2009), with individuals who work part-time or are self-employed frequently revisiting career decision-making processes (McMahon & Patton, 2002). This phenomenon has been described as “white water change” (Gelatt, 1993, p. 10) and has led to more work insecurity and fewer guarantees in work contexts today.

Furthermore, the development of information technology and the increasing speed of the global dissemination of information have resulted in new vocational realities, with career information becoming quickly redundant (Schwab, 2016). As a result, individuals doubt their career choices and struggle to recall the factors that influenced their career choices (Lease, 2004). Increasing feelings of job dissatisfaction, frustration, alienation and anxiety about an uncertain and changing world-of-work are experienced (Maree, 2016). In order to determine the impact of rapidly fluctuating economic markets, advances in information systems technological and socio-political changes on career decision-making patterns; explorations are needed of how acceptable beliefs about careers or work may be reduced to myths (Albien & Naidoo, 2017; Stead & Watson, 1993).

Thus, research is needed in low socio-economic contexts, in which there is limited access to career information and resources and little exposure to vocational identities (Akhurst & Mkhize, 2006; Seabi et al., 2010), such as in the present research, but also in higher socio-economic contexts, to contrast the two climates and decipher the resulting different career concerns. However, variances in career decision-making processes are most apparent in multicultural contexts and diverse socio-economic contexts, such as in South Africa. This makes research that has been conducted in developing or Global South contexts richer in meaning for the developed or Global North countries, which are now facing new issues of diversity in dealing with refugees, migrants and immigrants and could benefit from insights gained by managing diversity. Never before has the career counselling field been challenged by such a wide and diverse range of career issues and clientele that oppose traditional career conceptions, and this has raised issues of inequality and resulted in a call for new theoretical directions (Maree & Beck, 2004).

The issues that we, as career counselling professionals and researchers, need to deal with are based on the consequences that the transformations in the world-of-work will lead to in terms of anxieties and possibilities for clients, career counsellors and labour markets. The career counselling field is trying to address clientele issues, with little clarity of what the concept of work will mean in the near future. Uncertainty about what the future of work will entail is increasingly becoming problematic as a result of the disappearance of traditional jobs and changing views of what careers and work mean (Maree, 2017).These drastic shifts in labour markets and occupations are largely the result of an increasing reliance on technology (Maree, 2016). However, a new divide could result, based on a high-skilled technological elite versus a global army of unemployed individuals who are struggling with economic and social redundancy (Hall, 1996; Moynagh & Worsley, 2005), which may offer new challenges to the principles of fairness or social justice. Therefore, the complexity of the world-of-work, job opportunities, career decisions, working conditions and issues of social justice are a part of the same problem, namely how best to facilitate employability (which includes transitions into and within the workforce) in the face of wide and far-reaching macroeconomic factors (Maree, 2016, 2017; Watson, 2013).

In confronting the uncertainty of what the future of work may hold, this research supports career counselling professionals who are advocating career abilities or competencies that can be learnt. Thereby, individuals who have higher levels of resilience or career adaptability skills are theorised to have higher levels of employability and to be more

successful in mastering vocational transitions (Rossier, 2015). Career adaptability has been described as a set of competencies that result in a readiness to cope with predictable and unpredictable adjustments required for the world-of-work (Savickas, 1997). Career adaptability has also been linked to other traits that promote resilience and psychological well-being. For example, studies have shown links between optimism, hope, future orientation and career adaptability (e.g., Santilli, Marcionetti, Rochat, Rossier, & Nota, 2016). It is believed that career adaptability competencies will generate transferable skills that would allow individuals to weather unpredictable world-of-work conditions and find creative solutions to the ongoing challenge of defining and re-defining career-life trajectories.

However, the aim of focusing on the development of career adaptability competencies is not to overlook the structural, economic or socio-political constraints, but rather to engage with individuals to create an agency or proactivity that could result in considering previously overlooked opportunities to transcend previous disadvantage (McMahon, Arthur, & Collins, 2008a). Nonetheless, discussions are needed that examine macro-systemic factors that can ensnare individuals in a low socio-economic class and result in great difficulties in transcending macro-systemic influences (Arulmani & Nag-Arulmani, 2004), and activism is also needed from the career counselling field to attempt to begin addressing social justice concerns (Watson, 2013).

2.3 Social Justice Issues in Career Development

In the turmoil related to the world-of-work, there is a need to revisit the role that social justice has played in career psychology in order to understand how social justice issues have been addressed and redressed, and what should still be accomplished in both a global context and, more specifically, in a South African context (Watson, 2010).The focus on social justice issues is not a new theme in career psychology (Hartung & Blustein, 2002), but in the present decade more urgent calls have been made to explore how the career development of marginalised, poor and low socio-economic individuals, who form the majority of many societies, can be addressed (Blustein, 2001).

The accepted definition of social justice, within the field of career psychology, is any action towards the creation of equal access in a specific society (O'Brien, 2001). Although numerous barriers exist to the implementation of social justice actions, the importance of broader systemic contexts, which include societal inequality and oppression, in an individual's career development processes is undeniable (Naidoo et al., 2017; Watson, 2007).

Social justice issues arise from the impact of macro-systemic influences that perpetuate divides (Watson, 2010; Watts, 2009). Previously in psychology and in the field of career psychology, contextual factors were negated through the use of imported, Westernised career counselling models and approaches that were not adapted to the local realities faced by disadvantaged population groups (Watson, 2013). It can be argued that these practises contributed to social exclusion, and they have been heavily criticised with regard to the values that the practices were promoting, whose interests the profession was serving, and who the clientele receiving these services should be (Watson & Stead, 2002). Although this has resulted in calls for indigenised career approaches (Stead & Watson, 2017) and contextually and culturally sensitive career practices (Maree, Ebersöhn, & Biagione-Cerone, 2010), the theoretical application thereof has remained elusive (Watson, 2010; Watts, 2009). Westernised and quantitative approaches have remained prevalent in South African career psychology, which seems to perpetuate historical divisions and benefit a small, developed-world ruling class (Naidoo et al., 2017).

South African society is inherently divided along socio-economic lines, and has one of the worst levels of inequality in the world (McGrath & Akoogee, 2007). Traces of apartheid linger in the form of economic, political and historic factors that continue to have an effect on the labour market, with only 40.4% of the South African youth population (aged between 15 and 34 years) economically active and employed (Statistics South Africa, 2011). Unemployment is distributed along racial lines, and Black South Africans have the highest unemployment rate (38.8.% of Black people being unemployed, Coloured people at 26.4%, Indians at 14.5% and White people at 8.4% (Statistics South Africa, 2016)). Furthermore, school children from low-resource communities in South Africa are torn between push-out factors (i.e., unpredictable timetables, erratic teaching and reduced teaching time) and pull-out factors (i.e., gangs, drugs, theft and economic opportunities), resulting in 50% of school children failing or dropping out of school (Jansen, 2009). These are just a few examples of challenges that permeate the South African career counselling landscape.

Previously, the South African career psychology field failed to address and redress social justice issues (Nicholas et al., 2006), and continuing shortcomings linger (Naidoo et al., 2017). A lack of funding, limited leadership, scant career information resources and an absence of indigenous career models have all been cited as impediments preventing the redressing of lingering inequalities (Flederman, 2009). This is not a concern that is unique to South Africa, as international calls have been made to move from a denunciation approach to

an annunciation approach in dealing with social justice issues (McMahon et al., 2008a, 2008b). Although a distinct shift has occurred towards narrative and constructivist approaches (Maree, 2013), and diversity is increasingly included for samples to be more representative of South African population groups (Albien & Naidoo, 2018; Mkhize, 2015), career psychology theoretical advances seem to outpace application or successful policy implementation (Watson, 2013).

2.4 Definitions of Career Assessment and Career Development

In order for the definitions associated with the word career to become more socially inclusive, the career approaches, interventions and counselling roles will all have to be reformulated in the future (Watson et al., 2011). In addition, the nature of career research would also have to redefined, with a movement away from quantitative research and research based on privileged population groups (Watson & Fouche, 2007). Instead of reducing the individual to a powerless assembly of traits and abilities in order to provide an incontestable "fit" (De Bruin & De Bruin, 2017), in the current research the client was actively included in the assessment process. The underlying assumption that guides the use of career assessments in the present research is that assessments can promote exploratory career behaviour by modifying self-understanding, instead of confirming career choices already held (Blustein & Flum, 1999). In addition, assessments can also allow a subjective exploration of the meanings that had previously been attached to, and the meanings that will be attached to, career development (De Bruin & De Bruin, 2017; McMahon, Patton, & Watson, 2003). This is a digression from the traditional view of career assessment, as a career choice is believed to be a possible outcome, but not the only outcome, of career assessments (De Bruin & De Bruin, 2017).

Often the career assessment process allows clients access to a different vantage point from which to view their abilities, interests, beliefs, values, personality characteristics or the impact of contextual influences on their career development, by using a more distanced or objective lens (McIlveen & Patton, 2007). The researcher holds the view that there is nothing inherently good or bad about using career assessments, whether they are quantitative or qualitative in nature. The manner in which these assessments are administered and interpreted, and the uses to which these assessments are put, determine whether the outcome is good or bad (De Bruin & De Bruin, 2017). In the present research, the career assessments (*CAAS* &*VISA*) utilised had a dual function; they were used as pre- and post- measures, and as an activity that would allow self-insight to be gained (Stead & Subich, 2017), which

supports the belief that a career choice is a reflection of an individual's self-concept (Super, 1957).

In addressing the call for balance between the use of quantitative and qualitative methods in career psychology, both methods were used in the present research, as the data elicited through career assessments was woven into clients' narratives in collaboration with the clients to elicit further career exploration (Brott, 2001; McMahon, Watson, & Bimrose, 2013). Therefore, in the present research and the career counselling intervention described (see Chapter 4), the assessment process allowed the active participation of Kayamandi adolescents in interpreting career assessments against a backdrop of their context, environment and needs. Savickas (2012) terms this a collaborative approach, which allows the embellishment of life-stories with meaning. This is particularly important in a South African context, in order to move past constraining definitions associated with career development. Previously, career choices were constrained and prescribed by socio-political factors that resulted from apartheid government policies that oppressed the Black, Coloured and Indian population groups (Naidoo et al., 2017). In the light of this context, the choice of the word "career" could be questioned for usefulness in the South African post-apartheid context.

The word "career" is a reflection of an industrialised society in which occupations are linked to entry into corporations or organisations. An individual's aim was to climb the organisational ladder of career success and remain in that position until retirement (Stead & Watson, 2017). This presents an important move away from the term "vocation", which was previously used to explain the meaning attached to an occupation, using descriptors such as "calling" or "higher purpose" in an individual's life (Patton & McMahon, 2014). These different meanings highlight the importance of the socio-political context, which ultimately informs the terminology and conceptualisation of important career constructs in career development theory. This indicates the flexibility of career constructs in an ever-changing world-of-work in the twenty-first century, and shows the need for theoretical adaptations over time (Watson, 2013). The continuous and contextualised work-life transitioning that individuals undergo should be reflected in temporally relevant career counselling theory, counselling and research practises (Cohen-Scali et al., 2018).

Specifically, the challenge is to consider the relevance and generalisability of a career theory in non-Western and developing world contexts. For example, many South Africans are seeking work in a mixture of pre-industrial (i.e., subsistence level), industrial (i.e.,

commercial level) and post-industrial (i.e., service level) economies, where hierarchical work environments currently exist in parallel with rural and peri-urban contexts of underemployed, underpaid or unemployed workers (Watson, 2013). The meaning of work or a career in developing world contexts may be limited to a life role based on economic necessity that allows for the basic need for survival to be fulfilled (Arulmani & Nag-Arulmani, 2004). Career definitions need to be able to include the informal economy, and activities used to sustain individuals' livelihoods in developing countries (Watson, 2010).

Any definition of what a career should entail will be challenged by chronic unemployment, survival-related activities as well as the recursive interaction of life roles, where the absence of one role (i.e., absence of formal employment) will influence an individual's other roles (Watson, 2010). Individuals often are not able to pursue their career interests when any employment or livelihood is the ultimate goal (Naidoo et al., 2017), yet leisurely pursuits or other roles can still be used to inform an individual's self-construction and self-realisation processes (Savickas, 2013). In the present research, a more inclusive definition of the term "career" is endorsed that aims to take all work undertaken by diverse groups of individuals into consideration, whether this refers to formal or informal employment (Sharf, 2013; Stead & Watson, 2006).

However, role construction also needs to be included to better understand career adaptability specifically, and adaptation in general. In order to understand processes of adaptation better, the balance and choice of life roles made by an individual to actively synthesise personal and situational determinants needs to be examined (Super, 1980). The definition of the word "career" used in the current research will also include an individual's subjective framing and re-framing of any form of work in relation to other life roles, relationships and self-development with the aim of self-construction and self-actualisation (Savickas, 2013a; Stead & Watson, 2006). However, further discussions are needed to broaden the theoretical and definitional foci of the field of career psychology to account for career development in developed and developing world contexts.

2.5 Fragmented Theoretical Base

The field of career psychology can be described as an assortment of theories and constructs that have resulted in a fragmented and inconsistent theoretical base (Brown, 2002a; Watson & Stead, 2006a). It is important to note that theories and approaches are relevant to the societies within which these particular practices are created and used, but that

the assessment of the continuing relevance of these approaches remains critical to the development of new theory (McIlveen, 2009). Although, there has been rapid proliferation of career theories, the theoretical base remains inadequate, incomplete, incoherent (Brown 2002a; Savickas, 2009) and unable to account for diversity (Blustein, 2011; Richardson, 2012a, 2012b) or contextual issues (Savickas, 2013a). However, the importance of these theories, even if they are incomplete (Guichard & Lenz, 2005), overlapping (Patton & McMahon, 2006), segmented or individualistic in focus (Super, 1990), is undeniably the overall understanding of career behaviour (Gottfredson, 1983; Osipow, 1983).

There is an an evident lack of cohesion in the career literature; and convergence has been proposed as a strategy to integrate career development theories, but divergence aims to maintain distinctions between different career theories and constructs in future research (Brown & Brooks, 1996; Savickas & Lent, 1994). In support of the theorising of Krumboltz and Nichols (1990), the present research argues for both convergence and divergence. An overarching theory is needed that can act as scaffolding to allow major constructs to be examined across career development theories, but distinctions between constructs and career development processes also need to be maintained (Lent et al., 2002). An overarching framework would sanction the incorporation of diverse and distinct, valuable career concepts in facilitating theoretical and practical application (Dullabh, 2004). There are only two theoretical positions that have allowed convergence and social constructionism to be included, and these are the career construction theory (CCT) and the systems theory framework (STF) (Patton, 2008). The career construction theory has been proposed as such a metatheoretical framework (Savickas, 2001, 2002, 2005, 2013a), because social constructionism can and has been successfully used to integrate the segmental theories of career development, and this line of thought is mirrored in the present research (Savickas, 2013b). Therefore, a creative bridge can be built between fragmented theoretical perspectives and the application of culturally sensitive career counselling practices (Kuit, 2006; McMahon & Watson, 2008; Watson & Stead, 2006a).

2.6 Overview of the Development of Career Psychology

Parsons (1909) is the founder of vocational guidance (Hackett & Lent, 1992; Isaacson & Brown, 1993). Three elements of career choice had a lasting influence on subsequent career theories, and these have been described as self-knowledge, world-of-work knowledge and the interaction between the two (Parsons, 1909). These elements led to the emergence of trait-and-factor theories, which concentrated on matching individuals and occupations.

Shortly afterwards, the development of person-environment fit theories ensued as precursors to career-development processes, resulting in developmental theories. Recently, constructivist and social constructionist influences have moved to the forefront in career theory. Career development in the 21st century is attempting to respond to three specific challenges, namely the need for integration and/or convergence of theories; the creation of a multi-disciplinary dialogue and the expansion of constructivism; and social constructionism approaches (Patton & McMahon, 2014).

2.7 Issues of Categorisation

In presenting a theoretical overview, the challenge is to depict theories not as mutually exclusive or independent but instead to choose a strategic starting point that represents one 'vantage point' of many possible categorisations. Categorisation can facilitate a critical discussion of career theories to determine similarities and differences in line with the aim of convergence (Herr & Cramer, 1992). Therefore, a return was made to the traditional classification of career theories according to the *content* or the *process*, as well as the *content and process* of career decision-making (Hackett et al., 1991). Lastly, a section on *bridging theoretical frameworks* was included to introduce metatheoretical frameworks that have been proposed in the career psychology field to allow the convergence of relevant theory and constructs.

2.8 Theories of Content

Major theories have been selected that focus on the *content of career development*, as can be seen in Table 2.1.

Table 2.1

Career Theories of Content

Theories	**Citations**
Trait-and-factor theory	Parsons (1909)
Theory of work adjustment	Dawis & Lofquist (1984); Dawis (1996)
Brown's Values-based theory	Brown (1996b, 2002b, 2002c)
Holland's Theory of personality	Holland (1997); Nauta (2010)

Note. Adapted from "*Career Development and Systems Theory: Connecting Theory and Practice*" (3rd ed., pp. 13-14), by W. Patton, & M. McMahon, 2014, The Netherlands: Sense Publishers. Copyright 2014 by Sense Publishers. Reprinted with permission.

Content refers specifically to the career development influences that are intrinsic to an individual or tied to the work environment in which an individual is embedded (Patton &

McMahon, 2014). Individual influences have received far more attention in career theory, and contextual influences have been overlooked until recently.

2.8.1 Trait-and-factor theory.

Traditional career psychology was based on the assumption that an 'expert' should provide a lifelong occupational fit for an individual through the assessments of interests, abilities and needs (Kazuyuki & Kuo-Lin, 2006; McIlveen & Patton, 2006). The trait-and-factor theory was informed by the identification of three key elements involved in career selection, namely: 1) *self-knowledge* (abilities, interests, resources, limitations, etc.); 2) *world-of-work knowledge* (opportunities, compensation, work environments, requirements and conditions of success, etc.); and 3) *true factual reasoning* on the relationships between these two groups (Parson, 1909). Zunker (2011) explains that this theory rests on the premise that individuals have unique traits that can be measured using tests and then matched with occupations. This measurement of individual differences is used as a basis for career and self-exploration, which is informed by collecting and interpreting personal information in order to aid clients' career decision-making processes (De Bruin & De Bruin, 2006; Sampson, 2009).

Currently, trait-and-factor (i.e., matching) techniques are still among the most accepted approaches used in career counselling (Bimrose, 2010). This is inherently problematic, as stability cannot be assumed for an individual's traits or that opportunities fit an individual's particular view of self (Shefer, 2011). The static nature of the trait-and-factor theories and their lack of emphasis on development resulted in the *person-environment fit* (P-E fit) approach (Patton & McMahon, 2014). Savickas (2007) explains that there is a *complementary* P-E fit (i.e., the organisation and worker needs are addressed by what each party offers) and a *supplementary* P-E fit (i.e., when a worker and organisation share similar characteristics). The assumption of *congruence* between personal characteristics and job requirements is viewed as an indicator of job success and satisfaction, which is common to both the trait-and-factor and P-E fit theories. However, the concept of *dynamic reciprocity* is a primary feature of the P-E fit theory, indicating that individual and environments influence each other to cause on-going adjustments (Rounds & Tracey, 1990).

2.8.2 Theory of work adjustment (TWA).

As an extension of P-E fit theory, Dawis and Lofqist's (1984) *theory of work adjustment* (TWA) evolved from trait-and-factor models and has also been described as a matching model. Whilst the TWA can assist individuals to make career choices, the primary

aim was to develop a model that conceptualised the interaction between individuals and work environments (Dawis & Lofquist, 1976; Swanson & Schneider, 2013). The TWA places greater emphasis on adjustment over time than Holland's (1997) theory, and is a predictive model of the individual's satisfaction with the work environment. The TWA is also viewed as a process model that focuses on how the fit between individuals and work environments is created and maintained, using terms such as *celerity* (i.e., interaction quickness), *pace* (i.e., interaction effort), *rhythm* (i.e., interaction pace pattern) and *endurance* (i.e., duration of interaction) (Dawis, 1996; Patton & McMahon, 2014).

Dawis (1994) describes two different types of traits, with *surface traits* consisting of skills and needs, whereas the traits that are more enduring over time and linked to the structure of personality are known as *source traits*. If the individual and work environment is in *equilibrium*, then work adjustment and job satisfaction have been achieved as a result of needs that are mutually met and reinforced (Swanson & Schneider, 2013). *Reinforcers* include achievement, advancement, co-workers, activity, security, social status and variety (Dawis, 1996). The main contribution of this theory is that the TWA helps to identify an individual's adjustment style based on that person's flexibility, in terms of *active adjustment* (i.e., trying to change the environment), *reactive adjustment* (i.e., trying to change his/her response to the environment) and *perseverance* (i.e., the ability to endure) (Swanson & Schneider, 2013). *Discorrespondence* was also introduced as the mismatch of both parties' needs, causing a period of adjustment that could culminate in changing jobs. This discorrespondence was addressed by Brown with an examination of cultural values and the resulting match between individuals and their work environments (2002b, 2002c).

2.8.3 Brown's value-based theory.

Individuals would most likely be satisfied with their career choice when a compatibility existed with their values, which mirrored the trait-and-factor principle of matching self-knowledge with world-of-work knowledge. This was the first theoretical attempt to delineate the function of values in career decision-making and counselling, as well as the placement of values into life roles. *Values* were defined as beliefs that acted as guidelines for an individuals' actions, with the perceived worth attached to a set of outcomes or life roles which created motivation (Brown, 1996; Brown & Crace, 1996). A set of values was developed as a result of inherited value messages from family, friends and media as well as lived experiences (Brown, 1996). Diverse value systems result within and between subgroups in society, according to an individual's cultural background, gender, and socio-

economic status, which would influence social interactions and career opportunities (Arthur & McMahon, 2005). Therefore, success in a work role is predicted to be based on work role-related skills, as well as the *value congruence* between the individual and primary people in that working environment (Brown 1996a).

In an extension of Brown's theory (2002b, 2002c), *work values* and *cultural values* were included, thereby acknowledging the existing overreliance on Eurocentric values in career psychology. These *Eurocentric values* include: individualism, future time orientation, self-control, domination over nature and a predominant focus on individual activities (Brown, 2003). The exploration of cultural values led to differentiations between individuals holding individualist versus collective social values, and resulted in career decisions being interconnected with life roles over a life span (Brown, 1996, 2002c). However, life roles could be in conflict with or compensate for a lack of value satisfaction in the work environment (Brown, 1995). *Intra-role conflict* occurs when the values of an individual are not reinforced in the workplace, but *inter-role conflict* is when a less satisfying role takes time away from a more satisfying role (Brown & Crace, 1996). The role relationship problems, as well as the personal distress faced, caused links between career and personal counselling to be established (Do Céu Taveira, Riberio, Cardoso, & Silva, 2017; Stead & Subich, 2017).

Clients are believed to be able to make effective decisions if they understand their subjective value systems (Brown, 1996), and this view resulted in the creation of the *Life Values Inventory* (LVI; Brown & Crace, 2002; Crace & Brown, 2002). If a client's cultural values do not match a Eurocentric work environment's cultural values, effort is expended so that the minority cultural discourses are not overshadowed by dominant cultural discourses in career counselling, but included (Brown, 2002b). Specifically, attention is drawn to the influence of cultural values on the career development process and in career decision-making itself, calling for cultural sensitivity (Patton & McMahon, 2014).

2.8.4 Holland's theory of personality.

The *self-directed search* (SDS) is used as a psychometric instrument – as an application of Holland's (1997) theory of personality – to categorise individuals according to their interests in a suitable occupation (Holland, 1974). Congruence between the individual's personality traits and the characteristics of the chosen work environment resulted in a successful work adjustment (Foxcroft & Roodt, 2005). Therefore, a career choice is theorised

to be an expression of personality that helps find suitable work environments for the individual (Holland, 1997).The RIASEC structure was used in this model to classify career information. The RIASEC fields are *Realistic* (R), *Investigative* (I), *Artistic* (A), *Social* (S), *Enterprising* (E) and *Conventional* (C)(see Table 2.2. for a detailed description). Holland (1997) posits that most people can be classified into six RIASEC types according to their personality by using their interests, values, abilities and fantasies. Individuals are believed to seek out work environments that complement their dominant personality types, thereby maximising the chances of work satisfaction and well-being (Miller et al., 2008).

Table 2.2

The RIASEC Personality Types

Personality type	Characteristics
Realistic (R)	Practical, physical, hands-on and tool-orientated. E.g., agriculturist, athlete, engineer, mechanic, paramedic, police officer, etc.
Investigative (I)	Critical, scientific, analytical, explorative and intellectual. E.g., actuary, economist, financial executive, lawyer, psychologist, professor, physician, etc.
Artistic (A)	Expressive, creative, non-conforming, original and independent. E.g., actor, animator, art therapist, author, graphic designer, musician, painter, etc.
Social (S)	Cooperative, nurturing, helping and supportive. E.g., counsellor, educator, nurse, psychologist, social worker, teacher, pastor, speech and hearing therapist, etc.
Enterprising (E)	Persuasive, leadership orientated and competitive. E.g., marketing/advertising consultant, journalist, communicator, insurance broker, politician, public health worker, publisher, etc.
Conventional (C)	Conscientious, clerical, detail-oriented and organised. E.g., accountant, bank clerk, investment broker, copy editor, receptionist, retail assistant, administrator, proof reader, etc.

Note. Adapted from "*Manual for the Self-Directed Search questionnaire (SDS): Occupational interest*" (pp. 6-7), by J. Gevers, R. du Toit, & R. Harillal, 1997, Pretoria: Human Sciences Research Council. Copyright 1997 by Human Sciences Research Council.

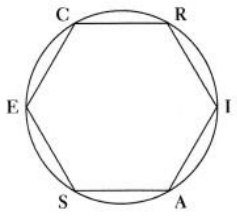

Figure 1. Holland's Hexagonal Model. Adapted from "The structural validity of Holland's R-I-A-S-E-C model of vocational personality types for young Black South African men and women," by R. du Toit, & G. P. de Bruin, 2002, *Journal of Career Assessment, 10*, p. 63. Copyright 2002 by Sage Publications. Reprinted with permission.

However, individuals often do not fall into only one of these six fields, which resulted in the use of a three-letter-code (Holland, 1997). The six types are used, in order of descending preference, to express vocational identity according to a hexagonal model (see Figure 1 above) (Holland, 1997; Miller et al., 2008). Close proximity of the fields in the hexagon indicates *consistency* as a strong connection between an individual's interests, skills and values (Bisschoff, 1987). If interest fields are inconsistent (i.e., found on opposite sides of the hexagon), attention is given to ascertain if careers could combine these two fields or if the individual's interests need further exploration (Bisschoff, 1987).

2.8.5 South African application of content theories.

The greatest contribution of content theories was the introduction of self-knowledge, the world-of-work classification as well as the fit between person and environment (Patton & McMahon, 2014). A major criticism of the trait-and-factor approach has been the overemphasis of individual factors (e.g., personality, interests and abilities) at the expense of contextual issues (Skorikov & Vondracek, 2007). The theories mentioned above emphasise one trait at the expense of other traits; for example, Holland's focus on an interest/personality typology and Brown's emphasis on values (Patton & McMahon, 2014). However, the interaction between individuals, their traits and their contexts in career decision-making was completely disregarded (Watson & McMahon, 2005).

The influence that parents, peers as well as other social and interpersonal factors have on career decisions was overlooked in content theories, such as Holland's typology (Watson & Stead, 2006b). Similarly, socio-historical, socio-economic and cultural factors, which have far-reaching implications for career decision-making processes, were also excluded (Alexander et al., 2010). Although, Brown (1996a, 2002a, 2002b) made an attempt to acknowledge the influence of contextual variables on career development, no systematic exploration or inclusion has been proposed theoretically. Divergent cultural values were highlighted as a result of different values endorsed by the work environment and the individual, but no further theoretical developments were made (Patton & McMahon, 2014).

Holland's theory was quickly adopted and extensively used in South African secondary and tertiary educational institutions (Brand, Van Noordwyk, & Hanekom, 1994). Yet it was not *adapted* by South African practitioners (Watson, 2000). It was not clear whether the model was applicable to different cultures, genders or socio-economic groups. However, the model's simplicity made the SDS popular in South Africa, and it was also

applied to traditionally disadvantaged learners (Maree & Beck, 2004). Brand et al. (1994) determined the usefulness of the SDS for Black adolescents in South Africa, and the SDS was indicated as an effective interest-assessment technique in a non-Western cultural environment. However, Watson, Schonegevel and Stead (1997) found that a misshapen hexagon resulted among Grade 10 to 12 Black adolescents. Similarly, when the SDS was applied to Black Grade 12 learners, no correct ordering of interests was found (Wheeler, 1992). In determining the structural validity of the SDS, Du Toit and De Bruin (2002) tested a sample of Black men and women selected randomly from the Eastern Cape and the North West. Their results show that the SDS did not fit the data well.

These mixed results regarding the validity and applicability of the SDS to non-Westernised and multicultural contexts indicate that significant adaptations and refinements are essential in a South African setting before any conclusions can be drawn. Holland's interest structure requires further research and refinement due to the poor fit observed in its application to Black South African adolescents, and the theorised irrelevance of associated career developmental stages (McMahon et al., 2008b; Wheeler, 1992). Further research is needed if the translation of the SDS into indigenous South African languages (e.g., isiXhosa and seTswana) would result in a better fit of Holland's theory and the RIASEC model (Du Toit & De Bruin, 2002; Morgan et al., 2015).

2.9 Theories of Process

Process theories are different from theories of content because they depict interaction as well as change over time in career decision-making (Patton & McMahon, 2014). Process theories typically depict stages that an individual has to pass through over his/her lifespan, and these are also known as developmental theories (see Table 2.3 for selected 'process' theories).

Table 2.3

Career Theories of Process

Theories	**Citations**
Life-span life-space theory	Hartung (2013b); Super (1957, 1980, 1990); Super, Savickas, & Super (1996)
Theory of circumscription and compromise	Gottfredson (1981, 2002)
Vocational identity development	Crocetti, Rubini, & Meeus (2008a); Luyckx, Goosens, Beyers, & Vansteenkiste, (2005); Marcia (1966); Porfeli, Lee, Vondracek, & Weigold (2011)

Note. Adapted from "*Career Development and Systems Theory: Connecting Theory and Practice*" (3rd ed., pp. 14), by W. Patton, & M. McMahon, 2014, The Netherlands: Sense Publishers. Copyright 2014 by Sense Publishers. Reprinted with permission.

Process theories view career choice as part of a developmental process, instead of a once-off matching exercise (Watson & Stead, 2017a, 2017b). Career development is viewed as a dynamic developmental process that involves a series of career decisions made over time, beginning in childhood and culminating in adulthood, but that ultimately shape a career path throughout life (Lent, Brown, Nota, & Soresi, 2003). Developmental approaches are also referred to as life-span approaches and, although widely accepted, little revision of these theories has occurred (Patton & McMahon, 2014). As one of the major proponents of career development theory, Super (1990) developed his life-span life-space theory.

2.9.1 Life-span life-space theory.

Diverse life roles were included as part of the concept of work in the career development theory proposed by Super (1990). The life-work roles selected were influenced by individuals' altering definitions of self (Watson &Stead, 2006c). Career development was theorised to include different age-related stages that consist of mastering career-related tasks (Super, 1990). The life-career rainbow in Super's life-span, life-space theory depicts an orderly progression of stages throughout an individual's life-span (see Figure 2) (Super et al., 1996). In Super's theory, *life-span* refers to age-related career developmental stages, and *life-space* refers to major life roles. The individual's self-concept is believed to be assimilated from various career-specific developmental tasks, as well as life and role experiences (Kazuyuki & Kuo-Lin, 2006).

Super's life career rainbow describes the interaction of all the activities in which an individual takes part (i.e., paid and unpaid) that shape an individual's career. Therefore, different life roles can be held simultaneously. For example, an individual can assume the roles of a child, student, leisurite, citizen, worker, home-maker, spouse and parent all at the same time (Super, 1990). However, some life roles play a more significant role than others at a specific time, and this is illustrated by the thickness of shading in each inner role arc (Watson & Stead, 2006c). These major life roles can be acted out in the home, at educational institutions, in work-places and in community settings (Kazuyuki & Kuo-Lin, 2006). Super's theory made a significant contribution to the career psychology field because a holistic understanding of changes in life and work roles over an individual's life-span was presented (Watson & Stead, 2006a).

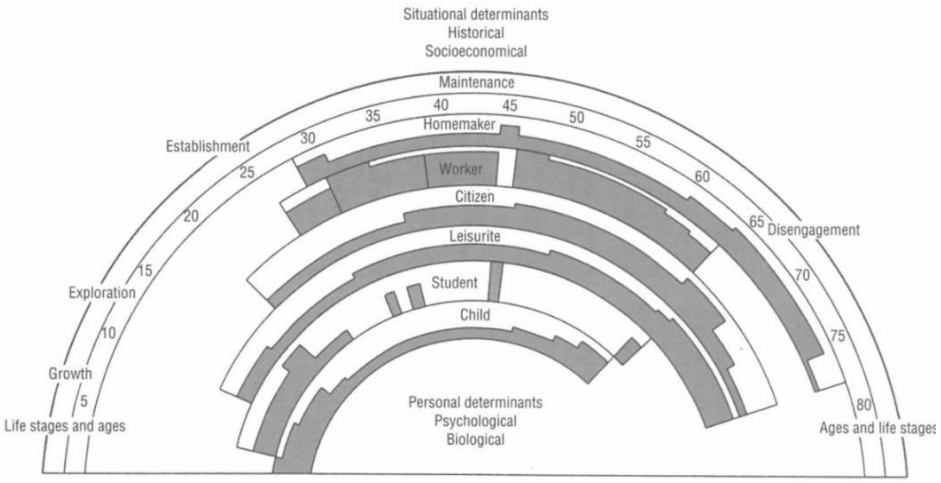

Figure 2. Career Life Rainbow. *Note*. Adapted From "The career development theory of Donald Super" (pp. 58), by M. B. Watson, & G. B. Stead. In *Career psychology in the South African context* (2nd ed), 2006, Pretoria, South Africa: Van Schaik Publishers. Copyright, 2006 by Van Schaik Publishers. Reprinted with permission.

An individual's life-span includes five developmental life stages, namely: *growth, exploration, establishment, maintenance* and *decline* (Super, 1990; Super et al., 1996). A normative sequence of developmental life stages was proposed upon the successful completion of tasks linked to age-related stages (Kazuyuki & Kuo-Lin, 2006). In the present research, the age range of the high school learners began at 14 years of age and culminated in 24 years of age. This corresponds with the *exploration stage* (14 to 24 years), which involves gaining self-knowledge, investigating the world-of-work and developing decision-making skills (McMahon et al., 2008a, 2008b). This stage culminates in a career decision or work role. Due to the importance attached to this stage, assessments (e.g., *Career Maturity Inventory* (Crites, 1969)), have been developed to measure an individual's career readiness, maturity or adaptability to make career choices (Watson & Stead, 2006c).

The term *career maturity* focuses specifically on adolescents' readiness to make career choices and is tied to the exploration stage. An individual is regarded as career mature when a certain level of self-knowledge is possessed, decision-making skills are demonstrated and world-of-work knowledge is evident in the execution of career plans (Super et al., 1996). In contrast, the ability to manage various life roles whilst coping with the changing nature of work commitments is considered to be an adult ability, known as *career adaptability* (Watson & Stead, 2006c). Career maturity is superseded by career adaptability as a construct. Instead, career adaptability forms the cornerstone of career construction theory (Savickas, 2002, 2005;

Watson & Stead, 2006c). Specifically, career adaptability refers to the readiness to deal with predictable and unpredictable work-role tasks and career transitions across an individual's life-span (Savickas, 1997). Renewed attention has been directed at the school-to-work transition because this stage is believed to require far greater self-concept development and more adaptability skills than any other developmental stage in the context of a continuously changing world-of-work (Savickas, 2002, 2005).

Previously, *self-concept* was described as the coherent assimilation of self-knowledge and was linked to adolescence (Erikson, 1982). Traditional views of career development focused on a singular self-concept that is relatively stable, but Super and colleagues (1996) identified the emergence of multiple self-concepts. Circumstances, social learning experiences and personal growth cause changes in "the picture the person has of [him/her] self in numerous roles and situations" (Super et al., 1996, p. 141). Therefore, career choices are conceptualised as an implementation of a specific self-concept that results in the development of a novel vocational identity based on changing circumstance (Sharf, 2016; Super et al., 1996).

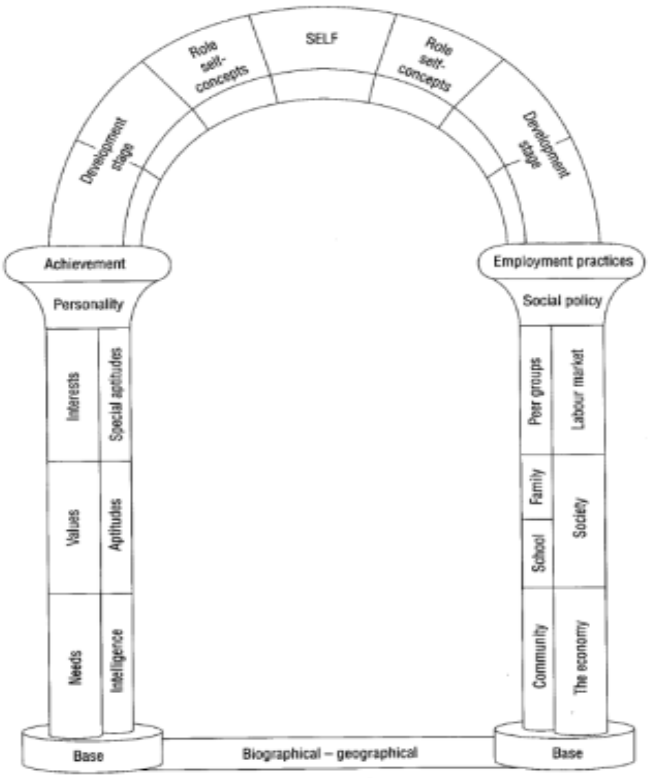

Figure 3. The Archway Model. *Note.* Adapted from "The career development theory of Donald Super" (pp. 58), by M. B. Watson, & G. B. Stead. In *Career psychology in the South African context* (2nd ed.), 2006, Pretoria, South Africa: Van Schaik Publishers. Copyright, 2006 by Van Schaik Publishers. Reprinted with permission.

Super's *Archway Model* was created in response to criticisms of the vague description of situational and personal determinants in the Life Career Rainbow (see Figure 3) (Watson & Stead, 2006b). The Archway Model provides an explanation of how contextual factors are integrated into an individual's self-concept. The two pillars of personal and situational determinants form the base of the Life Career Rainbow (Super, 1990). Personal and environmental factors are included in this extension of Super's initial theory, in order to represent important influences on an individual's ongoing career pattern. The sequence of occupations an individual holds across his/her life-span is affected by these contextual factors (Super, 1990).Therefore, the significant influence of contextual variables, such as age, sex, ethnicity, education and socio-economic class, were introduced (Watson & Van Aarde, 1986). Yet gender was not assigned a particularly important role in Super's theory, and this was addressed by Gottfredson (1981).

2.9.2 Theory of circumscription and compromise.

Barriers to career development were theorised to include variables of socio-economic status, race, gender and intelligence (Gottfredson, 1981). However, the main premise is the construct of *compromise*, which emphasised the barriers that inhibit an individual's career goals and opportunities over time (Gottfredson, 1981, 2002). The career development process is characterised by an ongoing narrowing down of career options that begin in childhood. The narrowing-down process is based on the elimination of negative options, instead of the selection of positive options, which causes individuals to "settle for a good choice, not the best possible choice" (Gottfredson, 2002, p.106).

Compromise depends on the degree of difference between occupational aspirations and external realities. The degrees of difference could be *small* (individuals would not compromise career interests based on prestige or sex-type factors), *moderate* (individuals would often compromise on prestige instead of sex-type factors) and *major* (individuals would often sacrifice their interests rather than prestige or sex-type factors) (Gottfredson, 2002). Cognitions about the self and occupations are believed to develop from preschool years in this theory.

There are four developmental stages that are proposed, and each time a new factor is incorporated into the development of self-concept. At each stage, the range of career goals is further limited or circumscribed (Gottfredson, 2002). The first stage, *orientation to size and power* (ages 3 to 5 years), describes how occupational aspirations develop from a fantasy

level to more realistic goals. In the second stage, *orientation to sex roles* (ages 6 to 8 years), the development of sex-role stereotypes of occupational aspirations occurs, but only after a gender identity or gender constancy has been achieved. The third stage, *orientation to social evaluation* (ages 9 to 13 years), involves the development of an awareness of social and intellectual differences between individuals, which results in career goals that correspond with the individual's social background. The last stage, *orientation to internal unique self* (age 13 years onwards), describes the cognitive development of adolescents and adults. Individuals attempt to match their current self-concept with cognitions held about different work environments (Stead &Watson, 2006).

Although this process can be compared to the term *congruence* used in Holland's theory, Gottfredson (2002) explains that it relies on cognitive maps that an individual has created. In these cognitive maps, occupations are differentiated according to criteria such as masculinity/femininity, level of occupational prestige, and field of work. In the last developmental stage, the notion of *social space* is described as a reflection of an individual's views of where they fit in a society (Gottfredson, 2002). Therefore, social space can be described as the personal boundaries that are drawn on the individual's cognitive map of appropriate occupations, defined on the basis of gender, race, social position and ability (Gottfredson, 2002). The unpacking of the impact of sex-typing and prestige factors has been cited as particularly useful in adolescent career development processes (Henderson, Stalnaker, & Taylor, 1988).

2.9.3 Vocational identity development theories.

Traditionally, career development processes in the early childhood years are theorised to culminate in a career choice and career identity in adolescence. Although career development in the early childhood years is an under-researched topic, adolescence is meant to provide an arena for utilising career development competencies such a career decision-making, career maturity, career adaptability and an existing vocational identity. These competencies are theorised to be the outcomes of mastering developmental tasks throughout childhood that would enable an individual to be equipped to make a career choice that reflects an integration of accurate self- and world-of-work knowledge in adolescence (Erikson, 1968; Super, 1990). In this section, selected developmental theories that have contributed to an understanding of vocational identity in the field of career psychology will be presented.

A range of foundational experiences are accrued by children to develop attitudes, beliefs and competencies that shape visions of the future, life-careers and career adaptability (Hartung, Porfeli, & Vondracek, 2008). Thereafter, a process is begun in adolescence in which individuals start aligning aspirations to form a self-reflective vocational identity. This process is described as consisting of five vocational development tasks (Super, 1990). The first vocational developmental task, *crystallisation* (14 to 18 years), refers to the beginnings of the cognitive processes of gaining awareness of personal interests and values, setting a vocational goal and developing a career plan. The second vocational development task, *specification* (18 to 21 years), is where vocational interests should be specified and a vocational preference made. *Implementation* (21 to 24 years) is the third vocational development task and occurs after the completion of education and labour market transitions. The fourth vocational development task, *stabilisation* (24 to 35 years), is the period when work experience is gained. Lastly, *consolidation* (35 years onwards) refers to gaining further job experience, status and more responsibility. Although career development is considered a life-long process, the role of career development during adolescence is receiving renewed attention due to the formidable challenges that changes in the world-of-work pose for adolescents' career decision-making (Creed et al., 2005).

However, diverse social contexts and global labour market fluctuations have been overlooked in these developmental tasks. This calls for a reformulation of age-specific tasks that adolescents will have to master in order to be equipped to formulate life-long vocational identities. Thus far, in Western countries, developmental tasks have been reformulated to include a distinct developmental phase, between the late teens and the late twenties, as a result of socio-economic and cultural changes across the last decades (Arnett, 2000). Thereby, vocational identity has shifted as a later core task to the emerging adulthood period in European countries (Arnett, 2007; Luyckx, Goossens, & Soenens, 2006a; Luyckx, Goossens, Soenens, & Beyer, 2006b). However, no research exists on the vocational identity formation process in contexts characterised by socio-economic disadvantage or developing country contexts.

The argument therefore has been made that vocational identity development should be studied in the contexts in which it occurs. This includes the influence of social, economic, political or technological fields that enable the documentation of visible fluctuations in vocational identity formation processes (Hartung, 2005; Super, 1990). Recently, vocational identity statuses have been linked to socio-economic and cultural variations in the Italian

context. The vocational identity statuses replicated most, but not all, vocational identity statuses extracted using American youth samples (Porfeli et al., 2011). Differences in vocational identity status formation have been conceptualised within unstable and uncertain socio-economic conditions, which include a lack of confidence in educational institutions and limited opportunities to coherently plan a career. These findings call into question the theoretical conceptualisation of adolescence as the time period of active career exploration, resulting in a commitment to a specific occupational path and a core vocational identity (Skorikov & Vondracek, 2011). If there is no active construction of a vocational identity or a tentative vocational identity is not achieved, this becomes problematic as other psychological factors are associated with this developmental task, such as the promotion of psychological adjustment and well-being (Skorikov & Vondracek, 2007).

In order to take into account changing contexts and uncertainty, a move was made away from Marcia's (1966) vocational identity framework. Originally, Marcia distinguished four identity statuses according to two independent dimensions namely: 1) the degree of exploration and decision-making crisis, as well as 2) the commitment to a particular identity. *Identity achievement* (A) is reached after a thorough exploration of possibilities and a successfully resolution of an identity crisis, resulting in a commitment to a self-chosen goal (i.e., high commitment and high exploration). *Identity foreclosure* (F) describes a state in which the commitment to an identity is typically reached by the premature identification with a role model, but without prior exploration and crisis (i.e., high commitment and low exploration). *Identity moratorium* (M) refers to an active, ongoing process of exploration, identity crisis and unreadiness to commit to a certain identity (i.e., high exploration but low commitment). Finally, *identity diffusion* (D) refers to a lack of engagement with and concern about the identity construction process (i.e., low exploration and low commitment). However, this model does not take into account unpredictable labour markets, career reconsideration or the need to formulate new vocational identities.

Only a few vocational identity measures exist, and these seem to have pronounced conceptual or psychometric limitations (Skorikov & Vondracek, 2007). The *Extended Objective Measure of Ego Identity Status (EOM-EIS*; Adama, Bennion, & Huh, 1989) used Marcia's model with an additional subscale to measure vocational identity. Marginal psychometric properties were demonstrated due to the low number of items in this subscale (Skorikov & Vondracek, 1998). In contrast, *My Vocational Situation (MVS)* has a subscale that has previously been used to measure vocational identity (Holland, Johnston, & Asama,

1993). Although excellent psychometric characteristics are exhibited, the measure omits career exploration entirely, with a sole focus on career commitment (Lucas, Gysbers, Buescher, & Heppner, 1988).

In the light of these shortcomings, Porfeli and colleagues (2011) developed a process-focused model of adolescent vocational identity that includes three dimensions (viz. commitment, exploration, and reconsideration of commitment), each comprising two sub-processes. Vocational commitment is composed of *commitment making* (i.e., the level of certainty about a career choice) and *identification with commitment* (i.e., the integration of the vocational choice into the self-system). Exploration integrates *in-breadth exploration* (i.e., learning general aspects about multiple career paths) and *in-depth exploration* (i.e., learning specific aspects about a certain career path). Reconsideration of commitment is represented as *self-doubt* (i.e., anxiety and uncertainty when facing career choices) and *commitment flexibility* (i.e., openness to future changes in occupational choices). This model allows career reconsideration to be measured, which has not been included in any other model. Vocational identity statuses are derived based on the basis of six vocational identity processes, moving from least clear vocational identity to the highest: *diffused*, *undifferentiated*, *moratorium*, *searching moratorium*, *foreclosed* and *achieved* (Porfeli et al., 2011).

The vocational identity statuses are described in the section below according to Porfeli et al. (2011). During the periods of childhood and adulthood, individuals typically start in the *diffused status* (D) and move toward the other statuses. Adolescents in the diffused status report relatively low levels on commitment and exploration dimensions, and moderate levels of self-doubt and commitment flexibility. The most advanced and preferred identity status is the *achieved status* (A), in which commitment is based on thoroughly explored career roles. Adolescents in the vocational *achieved status* are characterised by high levels of vocational commitment (i.e., commitment making, identification with commitment) and vocational exploration (i.e., in-breadth exploration, in-depth exploration), and relatively low levels of career self-doubt and career flexibility. The *moratorium status* (M) is a transitory status that most often leads to increased commitment and, ultimately, should result in movement towards the achieved status. Young people in the moratorium status display relatively low levels of commitment making; moderate levels of identification with commitment, in-depth exploration and self-doubt; and relatively high levels of in-breadth exploration and commitment flexibility (Porfeli et al., 2011).

Porfeli at al. (2011) elaborate further that the *foreclosed status* (F) is not a preferred status, because a career choice commitment was made without adequate exploration. Often, this means that the career ideation is based on external influences, such as status or family members' wishes. Adolescents in the foreclosed status report high levels of commitment making and identification with commitment, moderate levels of in-depth exploration, and low levels of in-breadth exploration, self-doubt and commitment flexibility. In contrast, the *searching moratorium status* (SM) is a combination of higher levels of commitment, exploration and reconsideration. Adolescents in the searching moratorium status are characterised by relatively high levels on all commitment and exploration dimensions, and by high levels of self-doubt and flexibility. Finally, adolescents in the *undifferentiated status* (U) are characterised by scores closer to the sample mean on all vocational identity dimensions, which is not considered as adaptive as no clear vocational identity status results (Porfeli et al., 2011).

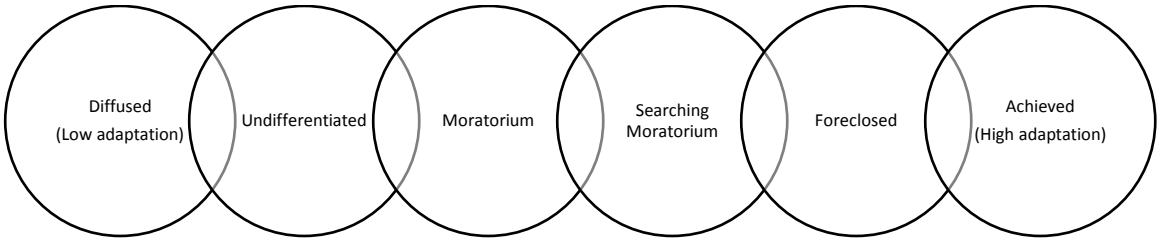

Figure 4. Vocational Identity Statuses from the Lowest to the Highest Degrees of Adaptation.

The developmental direction of identity formation has been proposed to move from diffusion toward achievement through the intermediate steps of foreclosure and moratoriums (Waterman, 1999). A developmental hypothesis is supported by qualitative (Van Hoof, 1999), and quantitative (Kroger, Martinussen, & Marcia, 2010) research reviews that indicate that an achieved vocational identity is more prevalent in older groups, while diffusion is more common in younger age groups. Progressive identity shifts are also more prevalent than regressive identity shifts. So far, only partial support has been provided for a clear developmental pattern (Waterman, 1982). In contrast, research supports an individual difference hypothesis of identity statuses (Marcia, 1966). Statuses were found to represent relatively stable individual dispositions over time in adolescence (Kroger et al., 2010; Meeus, Van de Schoot, Keijsers, Schwartz, & Branje, 2010). Many adolescents showed a relatively stable identity over shorter periods of time, with no clear developmental patterns between identity statuses (Meeus, Iedema, Helsen, & Vollebergh, 1999; Van Hoof, 1999). However, questions remain whether, during the course of adolescence, there is a developmental

progression from diffusion to achievement (Fadjukoff, Pulkkinen, & Kokko, 2005; Skorikov & Vondracek, 1998).

Previous vocational identity research indicated that vocational identity statuses were relatively stable, but this conclusion was reached without including social and environmental contexts (Schwartz, 2005). Vocational identity research studies have not confirmed that early and middle adolescence can be linked to identity moratorium, or that adolescence and emerging adulthood are characterised by the culmination of identity construction (Arnett, 2000; Meeus et al., 1999). Rather, the results imply that many students become engaged, and subsequently disengaged, in the vocational identity construction process (Hirschi, 2009). Identities are formed tentatively and then later questioned in a dynamic process, which is believed to begin in middle adolescence, as was indicated in a Swiss research study (Hirschi, 2011). Specific time points in educational and vocational transitions, as well as the educational environment, seem to be key factors in how, when or why vocational identity formation processes occur, rather than individual dispositions (Hirschi, 2012).

Recently, research has begun documenting movement between vocational identity statuses. For example, longitudinal research on Romanian adolescents indicated that, during the time period of a school year, adolescents became less engaged in in-depth occupational exploration, identified less with vocational commitments, and had increased career flexibility and self-doubt (Negru-Subtirica, Pop, & Crocetti, 2015). This can be viewed as problematic, because higher levels of vocational commitment are positively linked with well-being (Hirschi, 2012). Although vocational exploration pursuits are associated with more anxiety or negative emotions such as distress, exploration activities also resulted in increased intrinsic career motivation in pursuing a career path (Nurmi, Salmela-Aro, & Koivisto, 2002). Career identity has been highlighted as a core component of employability, and of the ability to identify and realise career opportunities (Fugate, Kinicki, & Ashforth, 2004). Adolescents and adults with a clearer sense of vocational identity have been found to be more successful in career transitions, to have greater well-being and stronger career self-efficacy beliefs, and to show improvements in work engagement (Diemer & Blustein, 2007; Gushue, Clarke, Pantzer, & Scanlan, 2006).

Vocational identity is a term that is new in both research and practice in South Africa. Previously, the term career maturity was used to define the readiness to cope with the developmental tasks of an individual's life stage and involved theoretical variables of career planning, decision-making and exploration (Super, 1990). Career maturity was previously

measured using *the Career Development Questionnaire* (CDQ; Langely, Du Toit, & Herbst, 1992), which has shown excellent reliability and validity in a South African context but does not include any subscales or constructs of career reconsideration, flexibility or self-doubt. Previous South African research showed that variables such as gender, culture, socio-economic circumstances and literacy form the context in which career maturity is attained (Naicker, 1994). Different scores on popular instruments, such as the *Career Maturity Inventory*, have been traced back to socio-economic status, with previously disadvantaged population groups such as Coloured and Black adolescents consistently achieving lower scores (De Bruin & Bernard-Phera, 2002). On this basis, South African career psychology was criticised for viewing career development processes largely from a White, middle-class, Eurocentric lens, with little regard for indigenisation (Watson, 2013).

2.9.4 South African application of process theories.

Although, the inclusion of contextual variables was welcomed, socio-political, socio-economic and familial factors were not holistically included or applied in the South African context (De Bruin & Nel, 1996; McMahon et al., 2008b; Watson, 2000). Super's theory was predominantly applied to White, middleclass, 15- to 25-year-old individuals in a South African context, which ignored career behaviours in other South African population groups (De Bruin & Nel, 1996; Watson & Stead, 2002). Stead and Watson (1998, 2017) have suggested that developmental stages, self-concept, career maturity and decision-making constructs need to be re-examined or redefined to be meaningful in a South African context. The construct of career maturity was hypothesised to reflect South African population groups' differing access to educational and vocational services, rather than the completion of developmental career tasks (Naidoo et al., 2017; Nicholas et al., 2006). Therefore, Super's developmental stages are not believed to adequately reflect disadvantaged Black youth's career development processes (De Bruin & Bernard-Phera, 2002; Van Niekerk & Van Daalen, 1991; Watson & Van Aarde, 1986; Watson, Stead, & De Jager, 1995).

Gottfredson's theory has also been applied to a South African context and has received mixed results. The specific focus on children and adolescent career development, and the exclusion of adult career development, has been criticised. Further criticism has been directed at the lack of specified factors believed to affect career and self-concept development processes (Patton & McMahon, 2014). Individuals who broadened their career options, did not sex-type occupations and did not circumscribe or compromise, were excluded in Gottfredson's theorising (Brown, 1996). In contrast, Watson and McMahon

(2005, 2006) reported studies of children's career development processes that supported concepts of sex-typing, socialisation, as well as the inverse relationship between fantasy and realism.

There has been a continued South African reliance on the career maturity construct to provide an assessment for career identity formation processes due to a lack of vocational identity research. Recently, career maturity scores have been documented in a South African township context (Grossen, Grobelar, & Lacante, 2017), with the conclusion that career maturity scores did not increase over time (Kornspan & Etzel, 2001) or over school grades, as widely accepted (Patton & Lokan, 2001). Instead, there was an observed decrease in career maturity scores from Grade 11 to Grade 12 (Grobelar, Lacante, & Lens, 2014), and it was found that repeating school grades was linked to a decrease in career maturity scores (Grossen et al., 2017). The decrease in career maturity scores is largely unaccounted for and a call has been made for further research to examine this process. The present research aims to present a shift away from interpreting career assessment results in a manner that serves to accentuate deficits in the career measurement scores of marginalised population groups. There are salient contextual, socio-economic or cultural factors that may affect career development competencies in marginalised population groups and alter career development trajectories (Watson, 2010). Therefore, research is needed to explore the development of vocational identity formation processes in adolescence to be able create a forward-looking progression into and throughout adulthood, because the importance of vocational identity is undeniable (Erikson, 1968; Super, 1990).

2.10 Theories of Content and Process

As a reaction to the overlooked context in which an individual's career development takes place, theories were constructed to take into account both content and process influences (Patton & McMahon, 2014). This meant that characteristics of the individual and the context, as well as the interactions between the context and the career development of an individual, were considered. Selected theories that focus on the 'content and process' of career development can be seen in Table 2.4 below.

Table 2.4

Career Theories of Content & Process

Theories	**Citations**
Social Learning Career Theory (SLTC)	Mitchell & Krumboltz (1990, 1996); Krumboltz, Mitchell, & Jones (1976); Mitchell & Jones (1979).
Social Cognitive Career Theory (SCCT)	Lent et al. (1996, 2002); Lent (2005, 2013).
Cognitive Information Processing Approach (CIP)	Peterson, Lumsden, Sampson, Reardon, & Lenz, (2002a); Peterson, Sampson, Lenz, & Reardon (2002b); Peterson, Sampson, Reardon, & Lenz (1996); Reardon, Lenz, Sampson, & Peterson (2000; 2009; 2011); Sampson, Reardon, Peterson, & Lenz (2004).
Career Decision-making Approaches (CDM)	Amundson (1995); Arulmani (2010a, 2010b); Gati (1986); Gati, Fassa, & Houminer (1995)
Developmental-contextual Career Approach	Vondracek, Lerner & Schulenberg (1986)

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2.10.1 Social learning theory of career decision-making.

The social learning theory posits that the environment influences the skills set that individuals develop, as well as the career preferences they hold. This is specifically pertinent in a South African context, where there are many environmental constraints imposed on the lives of disadvantaged population groups. Career development is hypothesised to be the product of four factors: *genetic endowment and special abilities*; *environmental conditions and events*; *learning experiences*; and *task approach skills* (Krumboltz et al., 1976; Mitchell & Jones, 1979). Firstly, *genetic endowment and special abilities* set inherent limits on an individual's career development. Secondly, *environmental conditions and events* affect the career decision-making process by acknowledging that situations are beyond an individual's control. Thirdly, *learning experiences* affect career decision-making processes. These experiences are described as *instrumental learning experiences* (i.e., learning by observing other's reactions or from the results of certain actions) or *associative learning experiences* (i.e., classical conditioning with positive or negative reactions towards associated situations). Lastly, *task approach skills* (TASs) are the skills that individuals use in career decision-making. TASs include problem-solving skills as well as cognitive and emotional responses to tasks, which are theorised to change over time.

According to Krumboltz et al. (1976), individuals learn in different ways throughout their life-span, and these learning processes influence their career choices. Learning experiences are based on self-observation generalisations (SOGs), which are the generalisations that individuals make about themselves based on their experiences and

performance (Mitchell & Jones, 1979). Then TASs are utilised to create actions that result in career entry. This theory is important because of the focus on distorted beliefs and generalisations individuals hold, which negatively affects their career decision-making processes (Mitchell & Krumboltz, 1990). The identification of dysfunctional beliefs has been aided by the *Career Beliefs Inventory* (Krumboltz, 1988) and the *Career Myths Scale* (Schultheiss & Stead, 2004; Stead & Watson, 1993). The latter has been the only application in South Africa to date, with no other revisions since then.

2.10.2 Social cognitive career theory (SCCT).

The social cognitive career theory (Lent, Brown, & Hackett, 2002) focuses on the belief systems that influence career behaviour (Sharf, 2016), by proposing several core constructs, namely *triadic reciprocity*, *self-efficacy expectations*, *outcome expectations* and *goals*. Inter-related factors in career development include gender, attitudes, aptitudes, feelings, environmental aspects as well as the individual's behaviour. This is reflected in the principle of *triadic reciprocity*, as individuals are viewed as active agents in shaping their environments and career development, and vice versa (Stead & Watson, 2017).

The second concept of SCCT, *self-efficacy expectations* examines the underlying beliefs that individuals hold regarding their capability to perform certain tasks (Lent et al., 2002). If individuals believe that they are able to accomplish a task, then the likelihood is far greater that they will attempt to do so and successfully complete the task. This concept is rooted in Bandura's (1997, 2006) self-efficacy formulation, where these expectations are acquired through direct experiences of success or failure (i.e., *personal accomplishments*); the observations of the successes or failures of others (i.e., *vicarious learning*); and the encouragement received from significant others (i.e., *social or verbal persuasion*). The individual's anxiety levels also play a role in lowering self-efficacy expectations (i.e., *physiological and affective states*).

The third concept of the SCCT, *outcome expectations*, refers to individuals' beliefs in the outcomes or results of a performed behaviour. This refers to the question "If I do it, what will happen?" (Osipow & Fitzgerald, 1996) or "Will I like the results if I do it?" (De Bruin, 1999). If the answer is positive, then the SCCT hypothesises that the individual is more likely to attempt the behaviours involved. If the individual is still deterred, then the individual's determination to pursue a particular activity or reach a specific outcome becomes important.

This personal agency is described by the fourth concept of the SCCT, namely that of *goals* (Lent et al., 2002).

SCCT provides an important contribution to career psychology, because career interests are hypothesised to develop from an individual's belief in his/her capabilities to perform certain career tasks and the beliefs held about the positive outcomes upon task completion (Stead & Watson, 2017). This presents a deviation from traditional career theories, which state the opposite: that career interests develop from an individual's capabilities (Patton & McMahon, 2014). SCCT proposes that, if an individual has the capability to perform a task well, then confidence is instilled and this leads to the development of career interests. Once career interests have developed, the next step is career goal setting and, lastly, career-related activities are initiated (Lent et al., 2002).

2.10.3 Cognitive information processing and career decision-making approaches.

The cognitive information processing (CIP) approach presents a guide for the cognitive processes that are involved in career decision-making (Peterson, Sampson, & Reardon, 1991; Peterson et al., 1996, 2002a, 200b; Reardon et al., 2000, 2009, 2011; Sampson et al., 2004). In this manner, improved problem-solving and decision-making skills can be learnt that could enable individuals to make more informed future career choices. This theory is useful for fluctuating global labour markets because of the numerous career problem-solving and decision-making challenges presented (Reardon et al., 2011).

The nature of career problem-solving involves both cognitive and emotional processes (Peterson et al., 1996). The CIP model uses a pyramid to represent the hierarchically organised information processing domains, with self-knowledge and occupational knowledge at the base. Mid-level information processing skills are viewed as a cycle. At the mid-level, there are five stages of the CASVE cycle of information-processing skills used in career decision-making (Peterson et al., 1991). These generic skills are utilised in response to internal or external problem cues and comprise: *communication* (i.e., identifying a gap); *analysis* (i.e., relating problem components); *synthesis* (i.e., creating alternatives); *valuing* (i.e., prioritising these alternatives); and *execution* (i.e., developing strategies) (Peterson et al., 1996). Lastly, the importance of higher order cognitive functions is emphasised and these metacognitions (i.e., "thinking about thinking" processes) form the apex of the pyramid (Peterson et al., 2002a, p. 104). Metacognitions (i.e., self-talk, self-awareness, monitoring and control) are used to regulate other cognitive functions, such as information acquisition,

storage and retrieval, as well as the cognitive problem-solving strategies used (Peterson et al., 1996). If clients present career decision-making difficulties, they are typically guided through the CASVE cycle to facilitate the development of problem-solving skills, but this overlooks contextual factors present in the decision-making process (Sampson et al., 2004).

There are various career decision-making (CDM) approaches that have been developed on the basis of career indecision and undecidedness. However, the assumption of having a wide range of career choices is not appropriate in a South African context (Spokane, Moya, & Faris, 2017). Therefore, only CDM approaches will be included that acknowledge the normative limitations of cognitive processes, partial information, contextual influences and personal biases (Stead & Subich, 2017). These models, which are briefly described below, are the *sequential elimination model* (*SEM*) (Gati, 1986; Gati et al., 1995), the *interactive career decision-making model* (Amundson, 1995), and the *cultural preparedness approach* (Arulmani, 2010a).

The *SEM* (Gati, 1986) is based on Tversky's (1972) elimination-by-aspects theory of choice, which is theorised to result in 'the best' decision based on a limited amount of information. This model is described as prescriptive due to the stipulation that an individual lacks access to comprehensive information (Gati, 1986). The *SEM* (Gati et al., 1995) is based on the following tenets: 1) that the individual defines the decision problem (i.e., choosing between the occupational alternatives of a salesperson or a bank clerk); and that 2) each occupation alternative is assigned qualitative (i.e., the community will benefit) and/ or quantitative (i.e., monthly salary) dimensions by the individual, based on subjective importance and external barriers (i.e., travelling time and costs). In order to create priority rankings, optimal and acceptable levels of each aspect that affect the career decision-making process are identified (i.e., an ideal salary versus what is available). Therefore, alternatives are that do not have acceptable levels (i.e., a bank clerk is not an acceptable occupation, as the only job is 1000 km away) are deleted. Preceding stages in which alternatives are eliminated are re-examined to prevent other potentially worthwhile choices from being discarded (Gati, 1986). Additional information on the remaining alternatives is then collected by contacting people currently in those occupations. Thereby, insight is gained into the lived-experience and the advantages and disadvantages associated with that job (Stead & Subich, 2017). Lastly, steps are taken for implementing the most preferred alternative (i.e., the individual applies for the post).

In order to take into account a lack of contextual resources that may prevent the acquisition of the necessary information (Stead & Subich, 2017), the model of *interactive career decision-making* was proposed (Amundson, 1995). This model attempted to address the following contextual factors: *cultural* (i.e., attitudes of significant others); *political* (i.e., education cutbacks and governmental affirmative-action policies); *economic* (i.e., apartheid job reservation); and *interpersonal* (i.e., expectations of others). These factors are moderated by self-awareness and self-efficacy. Career decisions are activated by *decision triggers* that compel a person to action, after which the problem is *framed* and, as a result, a blueprint for *action* is developed, whereas *reframing* refers to a re-evaluation of the action phase within the relevant contextual constraints and compromises (Amundson, 1995).

Often, career decision-making processes become fragmented and career counsellors need to assess whether there is a central thread of purpose in the decision-making process (Stead & Subich, 2017). The following monitoring strategies were suggested, namely *particle vantage point* (i.e., issues requiring immediate attention); *wave vantage point* (i.e., sequential nature of decision-making); and *a field view* (i.e., contextualising career decisions) (Amundson, 1995). Individuals may often make career decisions based on *satisficing* strategies (i.e., a "good enough" decision that meets minimal requirements, with no additional alternatives being considered) (Simon, 1976); *quasi-satisficing* strategies (i.e., decisions must be morally justifiable, such as choosing an occupation based on the moral duty of respecting the parents' wishes) (Janis & Mann, 1977); and *incremental* strategies (i.e., in the attempt to alleviate previous shortcomings, small changes are made that do not stray too far from the known) (Janis & Mann, 1977). Whilst taking an individual's context into consideration, career counsellors need to monitor the proposed strategies to prevent career decision-making difficulties from hindering career goal attainment.

The *cultural preparedness approach* to career counselling was proposed in order to acknowledge a wide range of contextual factors that contribute to the creation of career beliefs (Arulmani, 2010a). The underlying premise of this approach is that thinking patterns, otherwise known as social cognitions, are persistent across social groups and communities (Bandura, 1986). This means that a set of attitudes and opinions inform people's orientations to career ideas, and the term career beliefs is used in this approach to refer to habitual cognitions about career decision-making and planning (Arulmani & Nag-Arulmani, 2004). Arulmani (2010a) has thematically classified and identified six types of career beliefs, namely *proficiency beliefs* (i.e., value attached to receiving formal qualifications); *control*

and self-direction beliefs (i.e., sense of control over current life situation and the individual's orientation towards directing his/her life); *common practice beliefs* (i.e., unwritten community career norms); *self-worth beliefs* (i.e., belief in personal ability for career preparation); *persistence beliefs* (i.e., sense of purposefulness and resolve in progressing towards a career goal); and *fatalism* (i.e., resignation and passive acceptance of the current life situation). The underlying processes that result in these career beliefs are proposed to be a result of family, social practices, religious persuasions, economic climates, political orientations, community-orientations and cultural heritages that merge to create a *social cognitive environment* (Arulmani & Nag-Arulmani, 2004). This approach is useful because of the classification of career beliefs, as well as the practical techniques (i.e., career beliefs diary and the use of vignettes) that are suggested as tools to address underlying belief structures to promote career development (Arulmani, 2010).

2.10.4 Developmental-contextual approach.

The developmental-contextual approach (Vondracek & Fouad, 1994; Vondracek, Lerner, & Schulenberg, 1983, 1986) is a conceptual model designed to assist with career development. This approach views the organism as influencing and being influenced by its context (termed *organicism*). The construct *dynamic interaction* is used to describe the constant change at all levels of analysis (e.g., inner-biological, individual-psychological, community, cultural and historical) that are embedded and interact reciprocally with all other levels (Stead & Watson, 2006). Another important term used in the developmental-contextual approach is *affordances*, which refers to the individual's perception of the offerings provided by the environment (Stead & Watson, 2017). An example of this would be an individual's limited understanding of the transference of job-related skills to a variety of job settings. However, the importance of this approach is the emphasis on the interaction between the individual and the context in the perception of career offerings.

Therefore, career development is theorised to be a life-span process that dynamically interacts with the individual, the macro-context (e.g., the economy) and the micro-context (e.g., the family) (Stead & Watson, 2017). This approach calls for a multi-disciplinary analysis of career development, which could contribute significantly to understanding career behaviour through the inclusion of numerous situational factors that interact with individual factors in career development (Stead & Watson, 2006). The dynamic interaction of a developing individual with a changing context is highlighted by the developmental-

contextual approach, as individuals were viewed as "producers of their own development" (Savickas, 2002, p.158).

2.10.5 South African application of content and process theories.

The developmental-contextual perspective was used to illustrate career development during apartheid, and suggestions were made on how career development theories could be made meaningful for Black adolescents (Stead, 1996). Career development interventions were recommended to include economic policies (i.e., promoting economic policies), organisational programmes (i.e., career guidance and counselling practices at school) and individual counselling (i.e., one-on-one assistance for adolescents to facilitate career decisions) (Stead, 1996). This was a departure from the focus of South African career psychology on individual psychological processes. The inclusion of factors such as history, education, family, occupational aspirations, culture, the economy and identity development, would allow appropriate career interventions to be devised (Stead & Watson, 2006).

Furthermore, the SCCT was of particular relevance to South African career psychology because the contextual and environmental factors that influenced and hindered an individual's career development were acknowledged (Stead & Watson, 2017). The concept of barriers to career development was thus introduced, which is especially relevant for Black South Africans, who are still facing lingering apartheid barriers that limit their career development processes (De Bruin, 1999; Naidoo et al., 2017). However, SCCT research has largely been based on psychometric studies, which used the *Career Decision-Making Self-Efficacy Scale* (*CDMSES*) or the *Short Form* (*CDMSES-SF*; Betz, Klein, & Taylor, 1996). Support was not found for the *CDMSES-SF* in a sample of South African students drawn from two universities; instead, using the total score of the scale was recommended (Watson, Brand, Stead, & Ellis, 2001). The *CDMSES* original structure was not confirmed with South African and Australian adolescents, which was interpreted to indicate cross-cultural variations (Creed, Patton, & Watson, 2002). Yet, in a sample of Coloured high school students, De Bruin and Bernard-Phera (2002) found that all five *CDMSES* subscales were satisfactory indicators.

Other South African research focused on *CDMSE* behaviour, where differences were reported in the perception of career barriers among White, Coloured and Black high school students (Watson, Eaton, & Muller, 2002). Black learners reported that they viewed the school they attended as a career barrier, in comparison to their White and Coloured peers.

Furthermore, Coloured and Black learners perceived a lack of parental support as being more of a career barrier than did their White peers, but a significantly higher *CDMSE* was related to a strong attachment to parental figure (Stead, Schultheiss, & Howcroft, 2004). The *CDMSE* scores of Black South Africans were also lower than that of their international peers (William, 2001).

Research was also conducted on the perception of barriers, where career immaturity was linked to higher career indecision and resulted in the perception of more career barriers (Patton, Creed & Watson, 2003). Stead, Els and Fouad (2004) researched the perception of career barriers in a sample of White and Black students and found that no gender or personal characteristics were potential career barriers. Only White learners perceived racial or ethnic discrimination as the most problematic career barrier, due to affirmative action policies implemented to readdress apartheid injustices (Stead et al., 2004). However, the conceptualisation of the SCCT of the role of environmental supports and barriers needs further examination to account for the role of great personal effort expended in the implementation of a career choice (Lent et al., 2003).

There is limited South African research on career decision-making and career indecision processes and, as a result, European and North American research features predominantly (Stead & Subich, 2017). An urgent need has been identified for South African instrumentation to measure CDM or career indecision. Thus far, South African career psychology has no evidence base of how career decisions are made by South Africans, as well as no indication of which methods are effective and which are not. Mkhize and Frizelle (2008) have advocated the use of qualitative approaches to inform decision-making interventions, which would allow tailoring to individual needs and cultures. Thereby, decision-making anxiety can be reduced, and conflicting or inappropriate expectations and attitudes of significant others, such as parents, spouses and children, can be identified and resolved (Amundson, 1995; Maree, 2016).

2.11 Bridging Frameworks: Towards Integration in Career Theory

Previously, quantitative (i.e., positivist) approaches were used to address career indecision and self- and career construction difficulties. However, insight was not gained into an individual's life themes (why), nor into adapt-"abilities" (how) (Del Corso & Rehfuss, 2011). Momentum has been visible in theories that reflect the individual as a central meaning-maker in the construction of his/her career and life paths. This shift to

constructivism or constructionism has allowed a career to be redefined as the ever-shifting personal negotiation of professional and life roles (Bimrose & Hearne, 2012; Severy, 2008). This allows career counselling to help individuals to understand themselves as authors who express their life experiences in story-form (Cochran, 1998; Inkson, 2004; Sarbin, 1986).

Social constructivism and social constructionism include social explanations that were previously excluded in the career construction process (Young & Popadiuk, 2012). As a result, subjective (i.e., sense of identity or hopefulness) and objective (i.e., visible career behaviours) markers of career development can be addressed simultaneously in career psychology (McMahon, 2013; Savickas et al., 2009). Questions have been raised about whether qualitative measures or storied approaches could be more adept at working with diverse clients. However, narrative approaches may not provide enough direction unless tied to a comprehensive metatheory or bridging framework (Del Corso & Rehfuss, 2011). See the table below for the selected bridging frameworks that will be discussed in this section.

Table 2.5

Bridging Frameworks: Social Constructivist/ Constructionist Metatheories

Theories	**Citations**
Systems theory framework	Patton & McMahon (1999).
Career construction theory	Savickas (2001, 2002, 2005, 2011a, 2011b, 2013a).

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2.11.1 Systems theory framework (STF) of career development.

The STF is a constructivist metatheoretical blueprint for career development that includes *content* and *process* dimensions of career development in order to contextualise significant intrapersonal variables (McIlveen, McGregor-Bayne, Alock, & Hjertum, 2003; McMahon, 2005; McMahon et al., 2008a; McMahon, Patton, & Watson, 2004; Patton & McMahon, 2006; Watson & McMahon, 2006). Specifically, the term *influence* allows individuals to ascribe negative or positive meanings to factors that affect their career development (Arthur & McMahon, 2005; McMahon, 2005). *Content influences* refer to the *individual influence system* (e.g., age, personality, gender, beliefs, interests and ethnicity), the *social influence system* (e.g., family, school, peers and the media) and the *environmental-societal influence system* (i.e., geographic, political and socio-economic factors) (Arthur & McMahon, 2005; McIlveen et al., 2003; McMahon & Watson, 2008; Patton & McMahon, 2006; Stead &

Watson, 2006). As seen in Figure 5, the individual is perceived as a system and part of a greater contextual system, which includes the social and environmental-societal systems (McMahon & Watson, 2008).

The changeable nature of career development within and between systems of influence is recognised in the *process influences* construct (McIlveen et al., 2003). Process influences include *recursiveness*, *change over time* and *chance* (McMahon et al., 2008b). Interaction occurs within and between subsystems and the individual system, where both the nature and degree of the influences change over time in a largely unplanned manner (McMahon & Watson, 2008). The recurring nonlinear, acausal, mutual and multidirectional interaction in the individual system, other subsystems as well as between the individual and his/her context, is known as *recursiveness* (McMahon et al., 2004; Patton & McMahon, 2006).

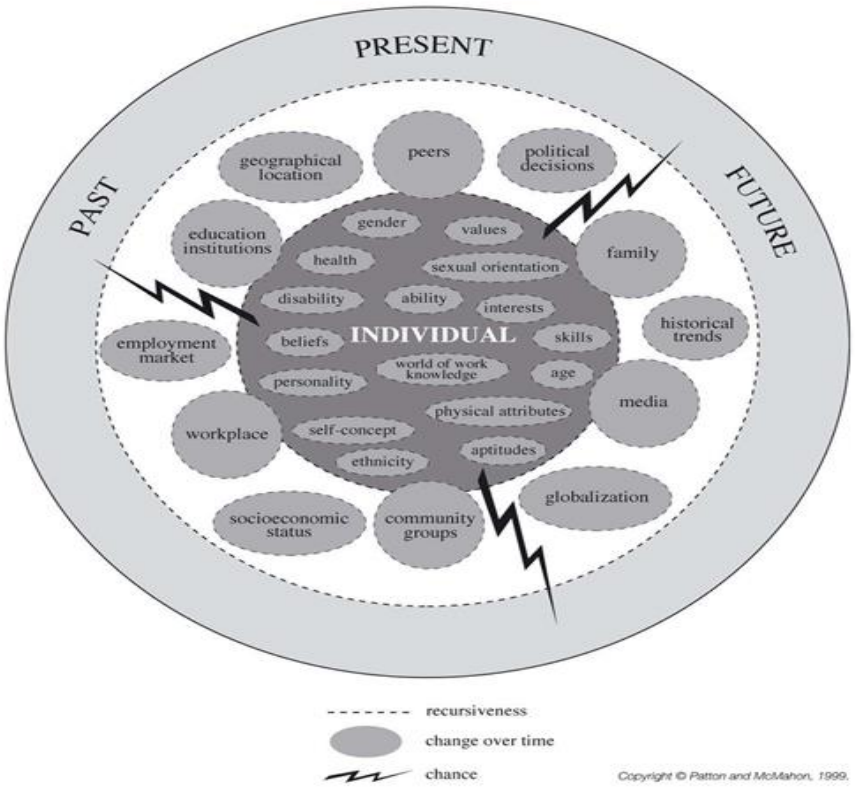

Figure 5. The Systems Theory Framework of Career Development. *Note*. Adapted from "*Career Development and Systems Theory: A New Relationship*" by W. Patton & M. McMahon, 1999, Pacific Grove, CA: Brooks/Cole. Copyright 1999 by Brooks/Cole. Reprinted with permission.

The complex interplay between influences is exemplified in the STF diagram above (see *Figure 5.*). Broken lines express permeability, whereas chance is illustrated with

lightning flashes. Chance events acknowledge that career trajectories are not predictable or logical. Events, not anticipated by the individual, may play a significant role in career development (e.g., illness, death, loss, trauma, natural disasters, immigration, accidents, etc.) (McMahon & Watson, 2008; Watson & McMahon, 2006). Temporal interconnectedness is seen by the placement of past, present and future dimensions in different parts of the outer circle (McMahon, 2005; Patton & McMahon, 2006). The STF can be customised to accommodate career development within individualistic or collectivistic cultures by incorporating aspects of culture (e.g., interests, attitudes and values) that are relevant (Arthur & McMahon, 2005; McMahon, 2005; Stead, 1996; Stead & Watson, 2006). The STF has been applied across countries and cultures because of its flexibility in addressing specific client issues (Arthur & McMahon, 2005; McMahon, 2005). A qualitative assessment based on the STF, the *My System of Career Influences* (*MSCI*; McMahon, Patton, & Watson, 2005c) was used in career counselling processes with South African adolescents from traditionally marginalised groups and was found to be useful to explore overlooked career influences (e.g., rural locations and disadvantaged socio-economic conditions) (Albien, 2013).

2.11.2 Career construction theory: Life-design counselling.

Life-design counselling is regarded as a co-ordinated counselling theory based on the integration of Holland's (1997) and Super's (1990) theories of vocational development centered around the *career adaptability* construct. Savickas (2001, 2002, 2005, 2013a) identified that the career construction theory was positioned in the metatheory of social constructionism and in the life-designing paradigm. The importance of facilitating career adaptability, which is referred to as an individual's capacity to change in response to world-of-work transitions, is emphasised by the paradigm of life-design counselling (Savickas, 2011b, 2011c, 2011d). Career adaptability as a definition was extended to include employability, as well as the meaning-making processes behind career-life transitions (Maree, 2016).

A life-design counselling paradigm was needed that could speak to the repeated career transitions that individuals undergo and the negotiations needed to traverse an unpredictable and rapidly changing world-of-work (Savickas & Porfeli, 2012a, 2012b). In such uncertain labour markets, the main aim of career counselling has been to help individuals to develop finesse in constructing and re-constructing their career paths. Therefore, the development of career adaptability competencies is believed to enable individuals to adapt to rapid changes in

their work contexts as well as improve their adaptability in general (Maree, 2016). Adaptability is based on an individual's ability to implement change. However, identity processes accompany all significant changes that an individual undergoes. Successful engagement with meaning-making processes culminates in a new vocational identity and narrative.

Career construction theory (CCT) was used in the present research as a theoretical framework to facilitate understanding of an individual's vocational personality (who he/she is), career adaptability (how to adapt) and life themes (what work roles are valued) (Savickas & Porfeli, 2012a, 2012b). Separate descriptions of vocational personality (what), career adaptability (how) and life themes (why) are provided by the CCT, but in practice these dimensions are interwoven in an individual's narratives (Del Corso & Rehfuss, 2011). Savickas et al. (2009) argue that personal career-life stories contain idiosyncratic scripts that can be used in repeated career-related transitions to create and re-create subjective macro-narratives using narratability to give meaning to doubts, fears and uncertainties. The authors of career-life stories can reconstruct past events, but also build new stories through reflection on micro-plots present in their career-life journeys. An individual's career-life stories have the potential to provide a renewed sense of agency based on hope, increased self-knowledge and personal insight that will allow the negative effects associated with transitions to be overcome (Savickas, 2005, 2008).

Career adaptability has emerged as a construct to describe the set of psycho-social resources that may enable an individual to self-regulate and adjust to unfamiliar and complex problems presented by developmental tasks, career transitions and traumas (Öncel, 2014). Adaptation is described as a series of attempts and problem-solving strategies that an individual employs in order to implement a self-concept in a work role (Savickas, 1997). Thus, an individual's needs are placed into occupational opportunities (Savickas & Porfeli, 2012a, 2012b). Savickas (2005, 2007) identified the ABCs of career adaptability, which include coping *attitudes*, *beliefs* and *competencies*. These attitudes, beliefs and competencies influence four dimensions of career adaptability, namely how *concerned* people are about their career, the *control* they believe they have over their career, the extent of their *curiosity* about existing work roles and opportunities, and the *confidence* they have to initiate and complete career tasks (Del Corso & Rehfuss, 2011).

The first dimension of career adaptability is *career concern*, which includes the task of developing a future orientation (Savickas & Porfeli, 2012a, 2012b). The CCT uses the

construct of career concern to encompass a variety of highly-related constructs, which include time perspective, planfulness, anticipation, future orientation, involvement and achievability of future goals (Öncel, 2014). *Career control* is the second most important dimension of career adaptability and describes the responsibility that individuals assume for constructing their own careers. This construct entails variables of decision-making, assertiveness, locus of control, autonomy, self-determination, effort attributions and agency (Öncel, 2014). Individuals who lack *career control* tend to be indecisive, uncommitted and hesitant about their future (Hartung & Taber, 2015). Therefore, career control is associated with a sense of direction and subjective ownership of future plans, which ultimately allow effective self-regulation in career decision-making (Hartung & Cadaret, 2017).

The third dimension, *career curiosity*, includes initiatives to engage in exploration of the world-of-work and the self in order to create a realistic vocational identity (Foxcroft & Roodt, 2005). Lastly, *career confidence* is the fourth dimension of career adaptability and denotes beliefs harboured about task-related capabilities, otherwise known as self-efficacy (Bandura, 1986, 2006). Self-confidence, self-esteem and self-efficacy is generalised across career decision-making processes and results in execution of goal-related career activities (Betz & Hackett, 1981; Lent, Brown, & Hackett, 2000). Favourable career planning and exploration attitudes are theorised to result in positive attitudes towards the future, more internal attributions for success and higher levels of self-esteem in adolescents (Gushue et al., 2006; Janeiro, 2009; Skorikov, 2007a, 2007b; Usinger & Smith, 2010).

As a result of these four dimensions, career adaptability is seen to enhance adjustment to different working environments, flexibility when facing change, proactivity in searching for new challenges and future career plans, and increasing levels of career exploration and commitment-making (Bimrose & Hearne, 2012). Career adaptability competencies are more strongly associated with specific vocational identities. The vocational identity progression moves from lower levels of career exploration and lack of commitment (i.e., diffused status) to higher levels of career exploration and high commitment to an identity (i.e., achieved status). Therefore, career adaptability increases monotonically across a continuum of identity statuses, arranged from higher to lower degrees of adaptation (Savickas & Porfeli, 2012).

Although vocational identity was emphasised by Erikson (1982) as part of the developmental stage associated with adolescence, recent research has found that vocational identity may be positively related to overall identity, and to identity in other domains (Skorikov & Vondracek, 1998). Vocational identity can aid the identification of a pattern of

work valences and well-being, which is believed to put adolescents in an advantaged position because of their increased engagement with the world-of-work (Porfeli et al., 2011). Diemer and Blustein (2007) reported that pre-adolescents' and adolescents' resilience, which is defined as the ability to bounce back (Masten & Tellegen, 2012), were positively related to vocational identity, career commitment, and scholastic achievement.

Porfeli and Savickas (2012) found that career adaptability was correlated with career identity, in terms of vocational exploration and identification with career commitments in a sample of U.S. adolescents. Therefore, individuals with higher levels of career adaptability competencies were more able to make career choices that facilitated their identity construction. Career adaptability has been shown to be related to attitudes of work engagement (Rossier, Zecca, Stauffer, Maggiori, & Daualder, 2012), emotional intelligence (Coetzee & Harry, 2014), personality traits (Van Vianen, Klehe, Koen, & Dries, 2012), life satisfaction (Santilli, Nota, Ginevra, & Soresi, 2014) and meaning in life (Yuen & Yau, 2015).

The positive effects of career adaptability on salient career outcomes was also demonstrated in research presented by Han and Rojewski (2015), who found that career adaptability enhanced job satisfaction in school-to-work transitions in Korean adolescents. A positive reciprocal relationship was also found between career concern and academic achievement, which indicated that a strong future orientation resulted in Romanian adolescents performing better in school and vice versa (Negru-Subtirica & Pop, 2016). Career adaptability was found to be meaningfully related to several psychological resources in French, Greek and Italian adolescent samples (Pouyaud Vignoli, Dosnon, & Lallemand, 2012). For example, career concern correlated positively with motivation in educational environments, whereas a negative correlation was observed with general anxiety and fear of failing in an educational-professional path.

A strong future-orientation has been linked to greater involvement in decisional processes, as well as higher levels of commitment to and success in scholastic achievements and professional careers (Ferrari, Nota, & Soresi, 2010; Simons, Vansteenkiste, Lens, & Lacante, 2004). Janeiro and Marques (2010) indicated that a future orientation was positively correlated with higher levels of career maturity, which was operationalised as career exploration and planning. Career adaptability was seen to predict career decidedness indirectly, by enhancing positive views about the future, as well as having a future orientation, in a sample of Italian adolescents (Ginevra, Pallini, Vecchio, Nota, & Soresi,

2016). In a group of young Greek adults, career adaptability resources were seen to correlate strongly with perceived career self-efficacy and career resilience (Sidiropoulou-Dimakakou, Mylonas, & Argyropoulou, 2015). Likewise, Santilli et al. (2015) reported that resilience was positively related to career adaptability, life satisfaction and future orientation.

In the Italian context, a significantly positive association was demonstrated between career adaptability and the variables of hope and life satisfaction in a sample of high school students (Wilkins et al., 2014). Positive correlations were reported between career adaptability and optimism (Rottinghaus, Day, & Borgen, 2005). Moreover, Patton, Bartrum and Creed reported that optimism functioned as a predictor of high school students' career goals, planning and exploration. Santilli, Grossen and Nota (in press) found that higher levels of career adaptability were linked to higher levels of resilience and a greater time perspective, and also were linked indirectly to the variable of life satisfaction through resilience, in Italian and Belgium middle school students.

In addition, career adaptability was found to be linked to life satisfaction in Swiss and Italian adolescents (Konstam, Celen-Demirtas, Tomek, & Sweeney, 2015). In Swiss adolescents, this included a full mediation showing that career adaptability is indirectly linked to life satisfaction by a positive future orientation (i.e., hope and optimism). But this mediation was influenced by contextually bound variables, such as limited educational systems and job opportunities for Italian adolescents (Santilli, Di Maggio, Marcionetti, & Grossen, 2018). Also, career adaptability resources positively and significantly predicted courage as a variable among French, Greek, and Italian adolescents (Sovet, Annovazzi, Ginevra, Kaliris, & Lodi, 2018).

Therefore, career adaptability is seen to play an important role in preparing young people to make important career decisions, set and pursue realistic career goals and contribute to work-life satisfaction (Hirschi, 2009). The current career adaptability literature base indicates that career adaptability plays a determining role in fostering positive psychological resources and coping with various career obstacles and/or transitions, regardless of contextual or socio-economic backgrounds (Santilli et al., 2016). However, previous career adaptability research has mainly been conducted in a European context, highlighting the need for application in a developing world context such as that of South Africa.

Savicka's (2013a, 2013b) career construction theory has significantly moved career psychology forward to remain relevant in the twenty-first century world-of-work. However,

Savickas' CCT should not be adopted uncritically without an assessment of context applicability, especially in a South African context (Watson, 2013). The usefulness of Savickas' theory (2013a, 2013b) is based on the disbandment of a metanarrative of predictable or theorised career stages and/or tasks. Previously, Stead and Watson (1998, p. 41) made the same claims, but they were based on South African post-apartheid environments that constrained career development and resulted in developmental stages that "appeared artificial for most Black South Africans". Therefore, Maree (2016) makes the argument for qualitative career counselling approaches to be utilised in developing countries for career counsellors to best assist diverse clients and career concerns. This emphasises the applicability of career construction theory to a South African context within the life-designing paradigm. The conceptual framework and interpretive lens that guided the present career intervention and data gathering process consist of two closely associated constructs, namely career construction (Savickas, 2011a, 2011b, 2015a) and self-construction (Guichard, 2005, 2009). The development of the intervention, the materials included in the intervention, as well as the specific theoretical career counselling nuances included, will be discussed in Chapter 4.

This section provided a brief overview of career construction theory and the life-design counselling paradigm that informed the career intervention process based on the primary aim of facilitating career adaptability, and, ultimately, career-life-designing in the sample of disadvantaged Kayamandi adolescents (Collin & Guichard, 2011). The present research aims to contribute to the limited base of evidence for the effectiveness of career construction counselling techniques to promote career adaptability in minority groups, especially South African Black township adolescents. Blustein (2011a, 2011b), Eshelman and Rottinghaus (2015), and Maree (2016) have urged researchers to address this research gap and the current research aims to answer this call.

2.12 Chapter Summary

This chapter presented a review of the existing theoretical literature, and the relevant career constructs were presented. Theoretical attempts to incorporate cultural and individual diversity into career development processes were discussed. The changing definitions of career and career development were discussed as well as the need to develop theories to account for the continuous changes in the world-of work. The main aim of this chapter was to present a discussion of how the field of career psychology has attempted and continues to attempt to present adaptive theory that is flexible enough to be relevant for an uncertain

future of work (Patton & McMahon, 2014). The career development of adolescents was emphasised due to increasing uncertainty in labour markets and the consequent impact on vocational identity development. A description was provided of social justice issues that have moved to the forefront of the career psychology field in order to contribute to the addressing and redressing of social inequalities. The next chapter describes the mixed-methods research design and multiphase research process that integrates quantitative and qualitative components in the current research study.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

The South African work context is vastly different from that in developed countries, and South African career practitioners and researchers have questioned the appropriateness of imported career theories (Mpofu, Maree, Kasayira, & Van der Westhuizen, 2011; Mkhize, 2012; Stead & Perry, 2012). Currently, there is no existing career research that documents how career behaviour manifests differently in low socio-economic contexts with the intention of determining unique career behaviour patterns in a South African context. The standpoint taken in the current research study is that there is benefit in utilising and adapting theories, constructs, and counselling instruments from other countries to the South African context. These Western approaches should not be dismissed unnecessarily, but rather examined for usefulness, applicability and indigenisation (Watson, 2013). Hence, the present study addresses this lacuna and also the call made for mixed-methods research that will add depth to existing South African career psychology research (Maree, 2012a, 2012b, 2016, 2017).

This chapter provides an overview of the mixed-methods research design used in the current research study. A description is provided of the objectives of each of the six phases of the research process, including whether they are quantitative and/or qualitative strands. The career adaptability competencies and vocational identity statuses of marginalised Kayamandi high school learners are determined quantitatively at different time points before and after being exposed to a narrative career intervention. The quantitative data is supplemented with qualitative data, which includes intervention feedback, written reflections and a focus group, to allow for contextualisation of the participants' career development experiences. The intention is that, by utilising mixed-methods research, the qualitative insights gained in this process could be used to deconstruct proscriptive conceptualisations of career development and allow for the championing of resilience-promoting culture-sensitive career development theories and interventions in a South African context (Watson, 2013).

3.2 Overview of Mixed-methodology Aims

Mixed-methodology has been described as the use of both qualitative and quantitative approaches in a research design, as well as the integration of both findings, and is informed by a specific set of philosophical assumptions (Creswell, 2013). The pragmatic paradigm was the guiding philosophy underpinning the present mixed-methods QUANTITATIVE-

qualitative study (Creswell, 2014). Pragmatism conveys the importance of using pluralistic approaches to derive knowledge about a social science research problem (Morgan, 2007; Patton, 1990; Tashakkori &Teddlie, 2010). According to this pragmatic worldview, the nature of reality can be described as singular or multiple, and this informs the ontology of the research study and allows for the collection of both quantitative and qualitative data in an attempt to describe the complexity of a social phenomenon, such as career behaviour in the present study (Creswell & Clark, 2010, p. 42). The quantitative component is informed by post-positivist paradigm foundations, while constructionistic paradigm foundations account for the qualitative component. The pragmatic paradigm accommodates both of these paradigms, with the view that quantitative and qualitative methods are able to complement each other by providing different perspectives on the same research questions, which allows a complexity and depth of research findings that each method by itself would not be able to achieve (Tashakkori &Teddlie, 2010). The present mixed-methods research used a multiphase mixed-methods design, where quantitative (primary strand-seen in bold below) and qualitative methodologies were interwoven in the six phase research process, presented in Figure 6.

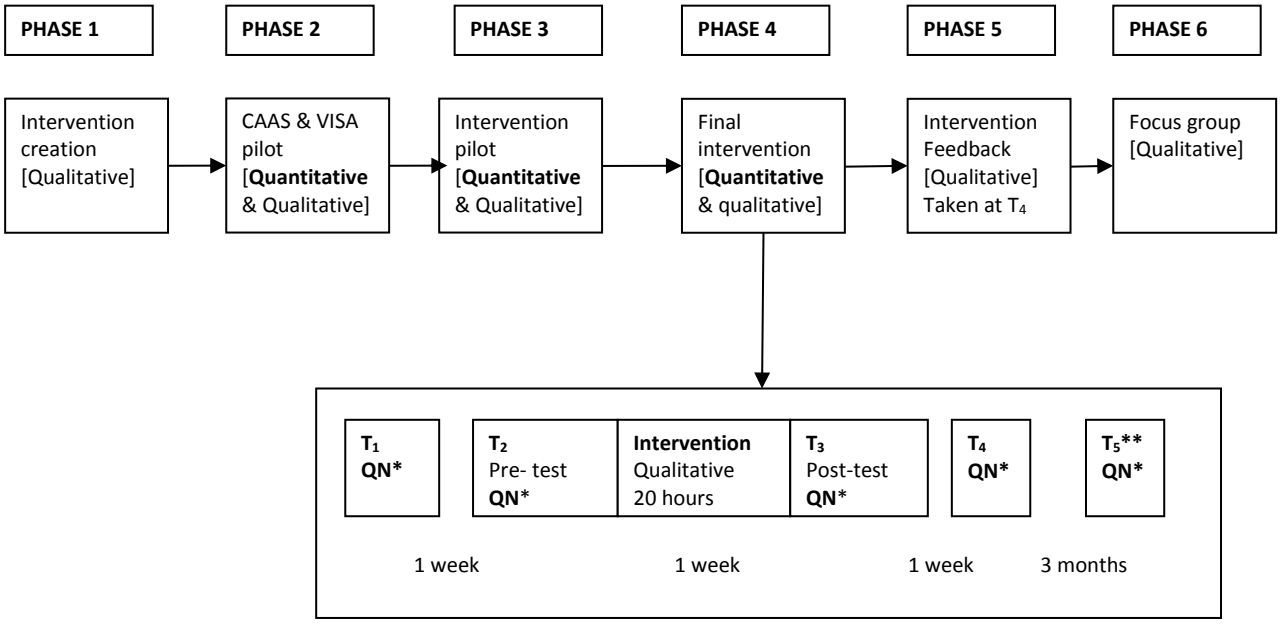

Figure 6. Multiphase mixed-methods QUANTITATIVE-qualitative research design

Notes. *QN is used as an abbreviation for the quantitative components due to space constraints.
** T_5 was excluded from the data set and analysis due to an insufficient number of participants (n=30). Therefore, feedback after the completion of T_4 became Phase 5 data.

According to Clark and Creswell (2010), a multiphase mixed-methods design entails the combination of the concurrent and/or sequential collection of quantitative and qualitative

data sets over different study phases. Specifically, this research design is used to connect, merge and/or embed the results within the objectives of an intervention programme (Creswell & Creswell, 2017). In the current research study, a mixed-methodology was essential to the exploration of the research problem, which was to examine if a qualitative career intervention could facilitate the development of career adaptabilities and vocational identities in an under-researched and marginalised group. The importance of career adaptability competencies and vocational identity development has previously been established and linked to various positive psychological outcomes that range from work satisfaction to the feeling of hopefulness for career-life planning (Savickas et al., 2009).

3.3 Research Design

A multiphase mixed-methods QUANTITATIVE-qualitative design was used in the present research study to combine quantitative and qualitative strands (Clark & Creswell, 2011; Sandelowski, 2003). This design included multiple research phases that consisted of sequential and/or concurrent timing over a research process (Creswell & Creswell, 2017). However, the primary research focus was the quantitative strand, which aimed to explore whether the vocational identity and career adaptability competencies of Grade 10, 11 and 12 learners at Kayamandi and Makupula high schools improved after completion of a narrative career intervention.

Quantitative data was supplemented with qualitative data that would allow insight into changes that had occurred in the participants' career decision-making processes, the development of career adaptability competencies, as well as their vocational identity development as a result of their participation in the intervention. The inclusion of qualitative data was based on the need to create "experience-near" and contextualised accounts of the career experiences of Kayamandi high school learners (Blustein et al., 2005). Senior high school years, which culminate in Grade 12 as the graduating year in the South African schooling system, have been targeted for the development of career adaptability competencies that can facilitate entry into a work role or tertiary education structures. The need to equip adolescents with skills to transition repeatedly in work and other life contexts has caused interventions to be informed by narrative and self-construction methods, like the career intervention developed in the present study (Savickas, 2011b).

The research process consisted of six phases (see Sections 3.5 to 3.11). These phases are outlined in detail below to indicate the objectives of each phase, the participants involved,

the methodology utilised, as well as the procedure undertaken for each phase. Multiple phases were required due to the difficulties encountered in attempting to create a contextually-near intervention and to conduct quasi-experimental research in a largely unpredictable township environment. During the research process, many unforeseen challenges were encountered, such as disruptions to the school programme, protest actions regarding education fees, service delivery protests, election rallies, data theft, safety threats and untimely deaths, which affected the planned research process (a further discussion is provided in Section 3.15).

3.4 Research Process Phases

This research process consisted of six phases, each with different groups of participants. In the section below, each research phase is described, and a summary of the research process phases is presented in Table 3.1. The creation of a contextually relevant career intervention resulting from a qualitative process with key role players, was the focus of *Phase 1*. In order to assess whether the career measures were applicable to the sample of isiXhosa-speaking township adolescents, the implementation of *Phase 2* in 2015 consisted of a psychometric pilot study, which determined the psychometric reliability and validity of the *CAAS* and *VISA*. *Phase 3*, in 2016, comprised of the Grade 11 population at the two high schools in Kayamandi (Makupula High School and Kayamandi High School) who completed pre- and post- measures in a quasi-experimental design as an intervention pilot. Due to the difficulties experienced in the randomisation process of participants, the research design was adapted.

In *Phase 4*, a repeated-measures research design was utilised in the final 2016 intervention with Grade 10, 11 and 12 learners (n = 582), in which scores were tracked at two time points (T_1, T_2) before the intervention, as a well as three time points (T_3, T_4, T_5) after the intervention. In *Phase 5*, qualitative evaluative worksheets were completed by the participants after their post-career assessments at T_4. These worksheets also contained reflective questions that allowed an exploration of the participants' subjective career changes following the completion of the intervention. Thereafter, *Phase 6*, explored the effect of the career intervention programme on the career adaptability competencies and career identity development of selected participants (n = 6) using a focus group interview in 2017 (i.e., six months later) to gain insight into the adolescents' perceptions of the changes in their career adaptabilities, career decisions and career identities.

3.5 *Phase 1*: Intervention development

The purpose of *Phase 1* was to design, develop and produce the *Shaping Career Voices Intervention Booklet.* I wanted to create a contextually relevant intervention process that was qualitative in nature, and this was the focus of the first research objective *(Objective 1)*. The intervention was created by examining previous literature and career counselling techniques, having informal conversations with community members, interviewing Kayamandi role players individually and in meetings to structure the career intervention, conducting Delphi panel interviews with fieldworkers, including fieldwork observations and using my prior career counselling experiences in Kayamandi. The development process of the career intervention is described in detail in Chapter 4.

As a final product, the *Shaping Career Voices Intervention Booklet* consisted of 19 pages with lined spaces to write down reflections. An introduction to narrative career counselling and how it could facilitate the development of career adaptability was provided in the beginning of the career booklet. Thereafter, career adaptability was explained using a simple five Cs analogy, which included *concern*, *control*, *curiosity*, *confidence* and co-*operation*. Although, the career construction theory (CCT) (Savickas, 1997, 2005) uses only four dimensions, a fifth dimension (i.e., *co-operation*) was included (McMahon et al., 2012a). This concept was added after numerous Delphi panel meetings were held with fieldworkers and intervention structure meetings were held with school management and the relevant grade teachers involved. These parties emphasised a huge social relational component that needed to be considered in developing career adaptability, which was supported by research that operationalised co-operation as a sub-scale in the development of the *CAAS-Iceland* (Einarsdóttir, Vilhjálmsdóttir, Smáradóttir, & Kjartansdóttir, 2015) (for more information, please see Chapter 4).

3.5.1 *Phase 1* participants.

Focus groups were held with seven Kayamandi residents employed as fieldworkers, using the Delphi method (Fletcher & Marchildon, 2014), in order to facilitate the development of the career intervention materials. The Delphi method is when "expert" opinions are gained from a focus group using people who are considered knowledgeable in the field or context of interest, in this case on the career difficulties that high school learners faced in the Kayamandi context (Hsu & Sandford, 2007; Okoli & Pawlowski, 2004; Powell, 2003). The Delphi focus groups were held with the group of fieldworkers (n = 7) who were

employed to facilitate the fieldwork, oversee questionnaire administration and provide in-session translation services to overcome linguistic barriers during the career intervention process. These fieldworkers were all Kaymandi residents, consisting of five females and two males, and at the time enrolled in a higher education institution or colleges pursuing a chosen career path. Their ages ranged from 21 to 25 years old (M = 23, SD = 1.25), which reflects an older normative age range in comparison to the typical middle-class undergraduate cohort, whose ages would range between 18 and 22 years old.

These experts were asked to voice adjustments they believed would be beneficial, such as the inclusion of examples, explanations or instructions to aid understanding of the career assessments or career booklet exercises. The fieldworkers' recommendations allowed the contextual factors associated with being part of a marginalised population group to be incorporated, throughout the development of the career intervention, as well as during the intervention. Another aim linked to the active involvement of fieldworkers was for these young people to become visible examples of success stories or to become mentors (Matshabane, 2016). Thereby, they could serve as resources and provide access to channels of information that would continue to be available after the research process had ended. This was done in an attempt to alter the pervading stereotype of 'parachute' research, where researchers left no visible imprint on the community (London & MacDonald, 2014).

In the creation of the career intervention, additional community members and role players were consulted, including the principals of the two high schools (n = 2), teachers from both high schools (n = 8) and management members (n = 4) of a Kayamandi-based NGO Vision Afrika, colloquially called Vision K, undertook community development programmes, such as a variety of life skills afterschool workshops. The teachers' and principals' age range was between 33 and 54 years of age (M=38, SD= 1.52). They all had a higher education teaching qualification and had been teaching for a minimum of 5 years and a maximum of 25 years (M=10 years, SD=1.34). Both principals were male, and three of the teachers were male and five were female. Vision K staff members consisted of four Kayamandi youth, two males and two females (age range between 22 and 28; M= 25, SD=1.71), who had finished high school and were enrolled in part-time education courses. The input collected from these individuals is documented in detail in Chapter 4, which provides a description of the development of the career intervention materials.

3.5.2. *Phase 1* procedure.

I have been working in Kayamandi since 2010 and, in the process, I have also completed data collection for my Master's degree at the high schools in Kayamandi. This meant that the teachers were already familiar with me and my research focus on various facets of career counselling. The teachers therefore were willing to share ideas and be interviewed for intervention suggestions. Two teachers in particular were also willing to look over examples of activities that I had planned to include in the career intervention. However, the teachers sometimes expected their high school learners to be far more proficient at certain career development tasks than what I had previously been witness to. This prompted me to include other voices that did not have a pedagogical function but to whom adolescents could relate. I, therefore, asked the fieldworkers to sign consent forms (see Appendix M) that stipulated that with their consent, their roles and responsibilities could expand, to allow their voices to influence the career intervention development process (Mfecane, 2014).

The fieldworkers were sourced through one contact person (her chosen pseudonym is Luanda) using a snowball sampling recruitment process, based on her acquaintances. I met Luanda at the SU writing laboratory, purely through serendipity, which is described as luck or happenstance (Ryan & Lörinc, 2016). I had worked as a writing consultant at the University in 2015, and I was allocated by chance to Luanda to help her with an academic essay. On hearing that Luanda was from Kayamandi, I recruited her to become a fieldworker. As a result of this chance encounter, Luanda became the fieldworkers' team leader and made sure that attendance, activities and commitment stayed consistent. There were ten meetings that took place in 2015 to determine the career intervention structure with the fieldworkers.

In addition, I had five meetings with the principals of the high schools in Kayamandi, and had further meetings with eight teachers at the schools to create intervention materials. I spoke to another four individuals, who belonged to the Vision K management team, on four occasions during 2015 to garner insights for intervention materials. All of these individauls were asked to sign consent forms to ensure their willingness to take part in the research process (see Appendices I & K). Most of these interviews were informal conversations that were not recorded, as they happened between classes or meetings, as fleeting serendipitous moments. However, this information was documented as I took notes or made voice notes for

Table 3.1

Research Process Phases

Phase	**Objective**	**Participants**	**Methodology (quantitative and/or qualitative strands)**
Phase 1: Intervention development (2015)	*Objective 1:* Include role players in a qualitative process that informed the creation of the *Shaping Career Voices Intervention Booklet*.	Participants (n = 21) included: fieldworkers (n = 7), teachers (n = 8), principals (n = 2), and Vision K management members (n = 4).	*Qualitative strand:* Information gained through Delphi panel interviews, informal conversations with relevant Kayamandi role players, and the researcher's written fieldwork notes. Local and global career counselling literature and career counselling techniques used in multi-cultural contexts were reviewed. The CCT was used to extract themes, which were used to create the career intervention exercises.
Phase 2: Psychometric pilot (2015)	*Objective 2:* Assess suitability of *CAAS* and *VISA* measures for application in a South African township context.	The pilot involved administering the *CAAS* and *VISA* measures to the 2015 Grade 11 population at both Kayamandi high schools (n = 396).	*Quantitative strand:* The psychometric data would reveal suitability for *CAAS* and *VISA* assessments to be used as pre- and post- indicators in the context of the study. *Qualitative strand:* Delphi panel interviews with fieldworkers to discuss wording, preliminary scoring results and contextual understandings of these results.
Phase 3: Intervention pilot (2016)	*Objective 3:* Determine how the content, structure and process of the pilot intervention was received by Grade 11 high school participants and if higher post-intervention measures resulted.	Grade 11 population at Makupula High School and Kayamandi High School completed pre- and post- *CAAS* and *VISA* measures in a quasi-experimental design as an intervention pilot (n = 87) (control group: n = 35; intervention group: n = 52).	*Quantitative strand:* As a trial, reliability and validity of the *CAAS* and *VISA* measures were determined, as well as any score changes that occurred between pre- and post- measures in the intervention group. *Qualitative strand:* Delphi panel interviews were conducted with fieldworkers for suggestions to improve intervention administration. Teachers were also asked for constructive criticism. Participants' written evaluations were also examined for potential intervention improvements.

Phase	Objective	Participants	Methodology (quantitative and/or qualitative strands)
Phase 4: Final implementation of *Shaping Career Voices Intervention* (2016)	*Objective 4*: Determine if the career intervention resulted in improved scores for Grade 10, 11 and 12 Township high school learners on the *CAAS* and *VISA*. *Objective 5*: Examine if gender or school grade would result in unique quantitative scoring patterns that could be indicative of adolescent's adaptations to the township context.	A repeated-measures research design was utilised in the final 2016 intervention with Grade 10, 11 and 12 learners (n = 582) in which scores were tracked at two time points (T_1, T_2) before the intervention as a well as at three time points (T_3, T_4, T_5) after the intervention.	*Quantitative strand:* A mixed-model repeated measures ANOVA was performed in order to determine whether the differences between scores at different time points were statistically significant. A group analysis was conducted to determine if any group differences existed in the *CAAS* subscale scores or *VISA* identity statuses for grade or for gender differences. Vocational identity statuses were explored using cluster analysis and a comparison was made to determine whether changes occurred in vocational identity statuses over different time points.
Phase 5: Evaluative written feedback (2016)	*Objective 6*: Explore the highest scoring participants' subjective evaluations of the career intervention upon completion using reflective feedback forms.	Qualitative evaluative worksheets were completed by the participants after their post-career assessments at T_4 (n = 265).	*Qualitative strand*: Evaluative worksheets included reflective questions that allowed an exploration of the participants' subjective career development changes after the intervention. These feedback worksheets were analysed using Braun and Clarke's (2006) content analysis to group themes according to the CCT career adaptability dimensions.
Phase 6: Focus group (2017)	*Objective 7:* Conducting a focus group interview to gain insight into the participants' perceptions of their post-intervention adaptations in career ideations, career decisions and career identities.	Evaluation of the career intervention was explored using a focus group interview of selected participants (n = 6).	*Qualitative strand:* A semi-structured interview schedule adapted from the reflective questions posed in the *Shaping Career Voices Intervention* booklet as well as feedback questions used to assess the value that participants attached to their participation in the career intervention. The transcribed focus group interview was analysed using Braun and Clarke's (2006) content analysis to group themes according to the CCT career adaptability dimensions.

myself. The teachers, principals and Vision K management members were asked each time if they could be recorded, but they seemed reluctant and preferred me to take notes, which was interpreted as indicative of the politics around knowing and silence in township contexts (Versfeld, 2014). These notes were visible and they could correct me at any time, which they proceeded to do.

Many of the career intervention suggestions came from the team of fieldworkers, who were alumni of the two Kayamandi high schools. Discussions were held to determine what career development difficulties were experienced by adolescents, with the intention of developing useful exercises and activities that could instil a sense of agency in the participants. Many formidable obstacles were mentioned that township residents faced daily, and these scenarios were discussed for use as material for in-session examples. These Delphi panel meetings were all recorded, transcribed and thematically analysed (Braun & Clarke, 2006) using the CCT to guide the creation of the intervention materials. The fieldworkers were more relaxed about recording these meetings due to their familiarity and daily use of voice notes. The fieldworkers were also critically involved in addressing linguistic concerns in the consent forms and assent forms. Decisions were made through a collaborative leadership approach, which acknowledged fieldworkers as experts in the Kayamandi context with access to localised knowledge that I did not have (Matebeni, 2014).

Therefore, the consensus was reached to reject the academic isiXhosa translations of the career assessments and to use the English versions instead, with added explanations to facilitate administration. Language difficulties were based on the dialect of isiXhosa that was spoken in Kayamandi, which was very different from the academic translations offered by the SU Xhosa Department translation services in explaining career adaptability and vocational identity constructs. Previously, translation issues were cited as a barrier to cross-cultural research (Keikelame, 2018; Temple & Young, 2004). Specifically in a South African context, issues of translation and language remain relevant due to the identity and cultural politics involved (Deumert, 2013, Drennan, Levett, & Swartz, 1991; Swartz, 2014; Temple & Edwards, 2002). Due to rapid migration into Kayamandi, as well as the need to communicate across a diverse range of language barriers, substantial changes have occurred in the way isiXhosa is spoken as there has been extensive borrowing from the other 11 official languages and an increasing reliance on code-switching (Keikelame, 2018).

In order to facilitate the administration of assessments and allow better communication with the participants, the fieldworkers completed all the assessments

themselves to gain insight into their career development process to be able to guide participants from their own lived-experience. Furthermore, the team of fieldworkers was consulted before the administration of the career assessments, as well as after the psychometric pilot. I thereby hoped to gain insight into where explanations were needed in the administrative procedures, as well as how fieldworkers would interpret the high or low scoring patterns that emerged during the research process.

3.6 *Phase 2*: Psychometric Pilot

The primary quantitative component of the present research study aimed at assessing whether two career measures (*CAAS* and *VISA*), which had been developed and standardised in Western contexts could be used in the South African township context (*Objective 2*) (Stead & Watson, 2017; Watson, 2010, 2013). This involved adapting these measures and testing them on a pilot sample to assess their psychometric data to determine whether these measures were suitable as pre-and post- indicators of career behaviour and could be considered reliable and valid in the context of the study. A qualitative strand was embedded after the psychometric data was interpreted. Delphi panel interviews (Fletcher & Marchildon, 2014) with fieldworkers were used to gain contextual insight into the scoring patterns and problematic terminology of the assessments, which required further contextualised explanations.

3.6.1 *Phase 2* Participants.

The psychometric pilot involved administering the *CAAS* and *VISA* measures to the 2015 Grade 11 population at both Kayamandi high schools (n = 396) to determine the psychometric properties of these instruments. The sample consisted of 396 Black township high school learners between the ages of 15 and 24 years (M = 18, SD = 1.3). Due to socio-economic difficulties, learners often have to repeat school years or return to school after sporadic absences on the basis of economic opportunity or dire family circumstances (Munsaka, 2009). This makes the age range of Kaymandi learners older in comparison to a middle-class high school cohort.

In the present research, the majority of the age scores fall within the adolescent age range of between 10 and 19 years old, which coincides with the World Health Organisation's definition of adolescence (Statistics South Africa, 2018). However, I would like to argue for the extension of the age range of adolescence to include the early twenties, and to use the age range from 14 and 24, which is categorised as the *exploration stage* (14 to 24 years) (Super et

al., 1996), as a result of socio-economic and cultural changes across the last decades in South Africa. Similar European-reformulations have occurred that have shifted developmental phases, from where the core element is the development of a vocational identity, to a later stage between late teens and late twenties, termed the emerging adulthood period (Arnett 2000; Arnett 2007; Luyckx et al., 2006a, 2006b).

Lastly, the sample had a far larger female representation, with 247 (62%) female participants in comparison to 130 (33%) male participants. This trend was in direct contrast with the situation in the case of my Master's thesis data, which was collected between 2010 and 2012 and had predominantly male participants taking part in professional or leadership development activities. When the teachers were asked if they had noticed a gender dynamic at school or in who took part in extra-mural activities, they told me that, since 2014, every year there were fewer boys: *"eish, ja, these gangsters they steal our boys. They drop out to get rich quick"* (Teacher 1: T.1).

3.6.2 *Phase 2* procedure.

Before the psychometric pilot had been administered, the *CAAS* had already been used in a South African context and was found to be valid. After conversations with Prof M. Duarte, who had been involved in adapting the *CAAS* to create a Brazilian (Teixeira et al., 2012) and a Portuguese version (Duarte et al., 2012), it was suggested that the *CAAS* could be adapted to better reflect non-Western population groups' experiences of career adaptability in a South African context. In order to be culturally sensitive, Prof Duarte recommended two additional subscales, namely a mobility subscale with six items, and an emotional regulation subscale with six items. A provisional *CAAS* version was created, with subscale items added after the feedback elicited from the Delphi panel discussions with fieldworkers. The provisional *CAAS* version was also sent to a panel of career counselling academics and experts for comment. However, the draft version was subsequently disregarded due to copyright protection and logistical concerns.

The present research followed an *etic-emic approach* in response to the recent reactionism of the career psychology field against the inherent Western conceptualisation of career development. The *etic approach* refers to universalism and supports the transfer of constructs, models and measures between cultures and countries in an attempt to gain cross-cultural measures of career behaviour (Einarsdóttir et al., 2015). Instead of polarising the emic approach in comparison to the etic approach, integration is advocated to allow the

exploration and synthesis of different perspectives as the cornerstone of cross-cultural studies. The *emic approach* is based on cultural relativism, cultural-specific meanings and the development of indigenous constructs (Ægisdóttir, Gerstein, Leung, Kwan, & Lonner, 2009; Church, 2010). Due to the extant collectivistic cultural values, which are based on *ubuntu* values (i.e., humaneness) (Kamwangamulu, 1999) in the Kayamandi population group, I explored how different versions of the *CAAS* (i.e., *CAAS-South Africa* and *CAAS-Iceland*) could be best adapted to the Kayamandi population group in an attempt to address the creation of cross-cultural measures of career adaptability. The universal aspects of career adaptability that the *CAAS* model reflects thereby could be acknowledged, but culturally specific limitations also could be explored with the intention of follow-up research based on an emic approach.

The *CAAS* and the *VISA* were translated into isiXhosa (using the forward and backward translation approach) by a bilingual expert who works for the Department of African Languages at Stellenbosch University. This expert organised a panel of language experts to use the Delphi method to discuss ambiguous items in the *CAAS* and *VISA* translations. As a result of the different regional dialect, the recommendation was made that the *CAAS* and *VISA* rather be administered in English, with Xhosa translators present to overcome any language difficulties. Language difficulties stemmed from the abstract terminology used in the *CAAS* and *VISA*, which could not be reflected directly in Xhosa. The isiXhosa language simply did not have any equivalent words, and long convoluted sentences had to be created in an attempt to approximate equivalent meanings. The English versions proved easier to understand. The final consensus was that isiXhosa academic translation of the *CAAS* and *VISA* was very convoluted and confusing due to career adaptability and vocational identity terminology. This has been documented before due to code switching, which means that academically translated texts do not reflect the regional dialects and community members are needed to clarify terms (Deumert, 2013; Keikelame, 2018). Therefore, in-session translators were used to support administrative procedures and to facilitate understanding with additional explanations.

An additional check was included at the grass-roots level, whereby the *CAAS* and *VISA* translations were evaluated using the Delphi panel of fieldworkers, who were all mother-tongue isiXhosa-speaking members of the Kayamandi community. The fieldworkers' recommendations echoed that of the language experts. The translation was deemed confusing and the decision was taken that the measures would be administered in English, with the

fieldworkers present as translators. An assurance was given by management at both high schools in Kayamandi, after a copy of the *CAAS* and *VISA* was checked for language proficiency, that the Grade 11 learners had adequate English proficiency to be able to understand the vocational constructs measured. Nonetheless, a pilot test was deemed necessary to determine whether the *VISA* and *CAAS* instruments were psychometrically reliable, valid and contextually relevant as pre- and post-measure assessments to assess changes in scores at different points in time after the *Shaping Career Voices Intervention.* This would address the concern that the *VISA* had never been used in a South African context.

The pilot involved administering the *CAAS* and *VISA* measures to the 2015 Grade 11 population (n = 396) of Kayamandi High Schools and Makupula High School. Furthermore, the exploration of the applicability of the instruments in the psychometric pilot study was supplemented using an emic approach by generating qualitative data from the Delphi panel of fieldworkers after the psychometric data had been analysed. The Delphi panel allowed extremely low or high factor loadings, linguistic confusions or other unaccounted factors that could have impacted the confirmatory factor analysis (CFA) results to be discussed, which allowed cultural sensitivity to be included.

3.7 *Phase 3*: Intervention Material Pilot Study

Phase 3 was intended as pilot to test the intervention materials and structure for logistical or practical concerns. After the psychometric properties of the *CAAS* and *VISA* were determined, the intervention pilot in 2016 included the *CAAS* and *VISA* as pre- and post-measures. This phase aimed to address two quantitative objectives, namely to assess if the intervention was applicable (i.e., relevant and feasible) in a South African township context (*Objective 3*), and to determine if the career intervention pilot indicated higher scores for Grade 11 township high school learners on the *CAAS* and *VISA* post-intervention (*Objective 4).* A qualitative strand was also included, whereby the Delphi panel interviews were conducted with fieldworkers after the trial intervention to elicit suggestions that could improve the content, structure or administration of the intervention. Teachers were also asked for constructive critique. Furthermore, the participants' written evaluations were examined for potential intervention compliments and criticisms to add improvements to the career intervention.

3.7.1 *Phase 3* participants.

In 2016, the Grade 11 population at Makupula High School and Kayamandi High School was asked to complete pre- and post- measures in a pre-and post-test control group design. This grade was selected due to the career development tasks and processes that are tied to adolescence as an age group (Erikson, 1968), but also due to the fact that these participants were a year away from high school graduation and actively engaged in career decision-making. Group equivalence was planned by using random assignment based on selection intervals to form the control group and intervention group. However, the randomisation process was only effective for 87 participants, with a control group (n = 35) and intervention group (n = 52). The other participants defected and refused to participate at a later time, as they were under the impression that they would be disadvantaged in the study because of the delayed intervention for the control group (see more details under Section 3.14.4). Thus the pilot sample consisted of 87 Black township high school learners between the ages of 15 and 20 (M = 17, SD = 1.15) of whom 23 (26%) were males and 64 (74%) were females.

3.7.2 *Phase 3* procedure.

In order to test the applicability of intervention materials, including the structure, content and process of the intervention, a sample needed to be found with similar characteristics as the Kayamandi community. Other townships with similar demographics were investigated and high schools in each of these areas were approached (viz., Nomzano, Lwandle, and Asandla). However, these schools were not easily accessible and the principals never returned my repeated requests for meetings. Township communities are known to be extremely closed off to outsiders and to be characterised by suspicion and mistrust (Bénit-Gbaffou, 2009; Mosoetsa, 2006). Time and logistical constraints meant that rapport could not have been established in time and I withdrew from these sites. The decision was taken to test the intervention materials in a pilot study with a sample in Kayamandi.

An NGO, Vision K, which works with learners from both high schools in Kayamandi, was approached. A group of Grade 11 learners (n = 40) were asked to participate in the pilot, and this formed 10% of the entire Kayamandi Grade 11 population (n = 388) of both high schools. These learners would have been in Grade 12 in 2016 and thus were excluded from the data collection process, which avoided test-retest effects (Gravetter & Forzano, 2018). Vision K was chosen because of prior community engagement. The staff were willing to

allow the pilot intervention to take place on their property. The intervention was planned to take place from 19th to 31st October 2015, for two hours every evening (4:30 to 6:30 p.m.) from Monday to Thursday for two weeks, with a Saturday morning (included from 9:00 a.m. to 1:00 p.m.). The intervention was planned for a total of 20 hours. The final structure of the intervention was based on the outcomes of this intervention pilot study. However, the NGO cancelled the intervention in 2015 because of a lack of interest from learners due to time constraints in their programmes linked to preparation of the end of year examinations.

After consultation with my supervisor, we elected to use the Grade 11 population group at the two Kayamandi high schools to take part in the pilot intervention in 2016 in order to assess career measures and the intervention process. The pilot intervention could not have occurred earlier in the year, as school class lists were only finalised during March 2016. This was due to the fact that many learners only returned to school from the Eastern Cape at the beginning of March due to severe financial constraints after the festive season. Poor school attendance during April had been flagged by school management due to the Easter public holidays. As a result of the contextual challenges, the intervention pilot was scheduled for the whole month of May. The intervention was shortened to 12 hours (eight hours of homework needed to be completed to make a total of 20 hours) to accommodate the limited time parameters; this was negotiated with participants, fieldworkers, school management and the teachers responsible for the Grade 11 learners.

The continuous negotiation process, which included all these parties, was vital for the successful implementation of the intervention, as there were many challenging factors that were contextually bound to the Kayamandi setting and needed to be taken into consideration (MacDonald & Greggans, 2008). A few examples of contextually bound factors will be discussed briefly to describe the limited parameters within which this research took place. Firstly, the teachers made it clear that learners often only attended school classes on Tuesday, Wednesday and Thursday, skipping Mondays and Fridays. In addition, tests were written at unannounced times on test days to ensure that learners attended the whole school day. Learners received one meal from the school-based governmental feeding scheme and would not attend afterschool activities because they were hungry and needed to go home to get another meal.

Also, safety was a concern, as learners did not want to be too far away from home after 5:00 p.m., as there had been an increase in gangster-related crime and stabbings. Furthermore, the learners also had other care-giving commitments and financial

responsibilities in their families, which negatively affected consistent participation in extra-mural activities (Bray, 2014). Lastly, some learners used public transport, such as trains, to travel to school from other townships, like Khayelitsha, and this caused severe time constraints. Fieldworkers' availability also needed to be taken into consideration, as they were attending classes at surrounding universities and also needed to catch trains or taxis. These factors created challenging constraints around which the pilot intervention needed to be structured. The planning and negotiation for the pilot intervention took place during March and April 2016, with 18 meetings and three intervention structures. Table 3.3 below indicates the three intervention structures that were proposed.

As an outcome of the negotiation between all the parties involved, the start time of the intervention was shifted to directly after school, from 2:30 to 4:30 p.m. The consensus was reached that the intervention would be held at Kayamandi High School for two weeks (2 to 16 May 2016) and then at Makupula High School for the next two weeks (17 to 31 May). During March and April, the research team (fieldworkers and myself) went into five Grade 11 classes at Kayamandi High School and three Grade 11 classes at Makupula High School to present an introduction to the research. This introductory session was used to get an indication of the learners who were interested and willing to participate. The learners who indicated interest were asked to write their names and cell phone numbers on lists in order to be sent an SMS reminder a day before the May intervention began.

Table 3.2

Weekly Cycle for Pilot Career Intervention

Week	**Monday**	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday & Sunday**
Week 1	Research introduction (15min)	T_1 written 2:30-3:00 3:00-4:30 Intervention Session 1 (S1)	S_2 2:30-4:30	S_3 2:30-4:30		Intervention Homework (12 hours) Control group Session 1 (CG_1) & T_1 11:00-5:00
Week 2	S_4 2:30-4:30 CG_2 & T_2 2:30-4:30	T_2 written 2:30-3:00				

Notes. S refers to the career counselling session indicated by a number behind it.
T_1& T_2 refer to the pre- and post- tests, respectively.
CG refers to the control group career counselling sessions.

The intervention was structured to begin every Monday in May (2, 9, 16, 23 and 30 May 2016), with a research announcement made in the last Grade 11 classes before the school day ended. During the announcement session, the cover letter, consent and assent forms were handed out. Those learners who wished to participate that week had to bring back the completed forms the next day. After school each Tuesday, pre-tests were written in approximately 30 minutes, and then the intervention began for the other 90 minutes. Sessions were held from 2:30 to 4:30 p.m. on Tuesday, Wednesday, Thursday, as well as the following Monday, and the post-test was written on Tuesday (Table 3.2 above presents the schedule for the intervention pilot week).

Over the weekend participants had to complete the written homework sections of the career booklet. The post-test was written on the following Tuesday and then, once the participants had handed in their completed career intervention booklet, a certificate was received. The control group wrote the tests at the same time as the intervention group. However, they received the intervention programme (total hours: 20 hours, with 8 hours facilitated and 12 hours of homework) once the intervention group had completed the programme. The control group received the same number of hours, but the career intervention took place in two sessions, with the first session taking place on a Saturday (11:00 a.m. to 5:00 p.m.). In the second session, the following Monday after school (2:30 to 4:30 p.m.), the intervention and post-test were completed to receive a certificate.

The random assignment of participants was based on selection intervals to form the control group and the intervention group. The randomisation process was only effective for 87 participants, with a control group (n = 35) and intervention group (n = 52). However, due to the mistrust and the feelings of being excluded and disadvantaged (Arnot & Swartz, 2012; Dieltiens & Meny-Gibert, 2009; Swartz, Harding, & De Lannoy, 2012), the participants did not want to risk missing this opportunity and so declined to be placed in the control group. Some participants also felt angered that they could not all take part at once. This was seen as unfair and, as a result, many participants refused to participate. This fear of exclusion was interpreted to be related to a high turn-over rate of university student volunteers and semester programmes. As a result, participants were doubtful about the sustainability of the research process and assumed that this opportunity was another example of ‘parachute’ or ‘helicopter’ research, where there would be no residual local benefits once resources were depleted (London & MacDonald, 2014). Visible examples of NGOs that appeared and disappeared overnight without being able to meet community needs were cited by the participants. The

Table 3.3

Proposed Intervention Structures

Intervention structure meeting	Criticisms	Role players involved
1. Vision K Model: 20 hours' contact time with no homework. Intervention structured over two weeks from Monday to Thursday (4:30 to 6:30 p.m.) and one Saturday (9:00 a.m. to 1:00 p.m.).	Safety was cited as an issue due to the late afternoon time as well as the use of public transport, and other afternoon family commitments. This structure was proposed to be held on the Vision K premises but, due to lack of interest and end-of-year time constraints, this intervention was cancelled.	Fieldworkers (n = 7), Vision K management members (n = 4). Four meetings were scheduled to create this structure. One meeting was held with fieldworkers. One meeting was held with Vision K management, and then two combined meetings took place.
2. Redrafted Model: 12 hours' contact time with 8 hours' homework. Intervention structured afterschool (2:30 to 4:30 p.m.) Tuesday, Wednesday and Thursday, as well as the following week on Monday, Tuesday and Wednesday.	Discarded during planning session with teachers and fieldworkers. The problem was how to sustain interest over a two-week cycle and how to ensure that the control group received the same number of hours. Fridays could not be used due to limited school attendance.	Fieldworkers (n = 7), principals from both schools (n = 2), teachers from both schools (n = 8). A total of seven meetings took place to create this structure suited for the Grade 11 population groups at both Kayamandi and Makupula high schools. Two meetings with principals were held separately. Another meeting was held with fieldworkers to discuss time constraints. Two meetings were held with teachers from each school (n = 4). Lastly, one combined meeting was held at each school which included fieldworkers, teachers and principals.
3. Intervention Pilot Model: 8 hours' contact time and 12 hours' homework. Intervention structured afterschool (2:30 to 4:30 p.m.) Tuesday, Wednesday and Thursday, and in the following week on Monday and Tuesday (see Table 3.3).	The time constraints were a real challenge to get learners actively engaged in reflective processes. The control group was scheduled for a Saturday time slot, but no other time was available. However, this was the most practical solution to all the role players' time constraints.	Fieldworkers (n = 7), principals from both schools (n = 2), teachers from both schools (n = 8). A total of seven meetings took place to create this structure. A meeting was held with each principal of each school separately. Another meeting was held with fieldworkers to discuss time constraints. Two meetings were held with teachers from each school (n=4). Lastly one combined meeting was held at each school which included fieldworkers, teachers, and principals.

participants had past experiences of free services being provided within a limited timespan and finite goods, where hesitation would lead to a lost opportunity that could never be regained again due to the low-resource context (Swartz, 2009; Swartz et al., 2012). The failure of the randomisation process was a threat to the validity and reliability of the research findings (Gravetter & Forzano, 2018), and the research design was altered in the next phase.

3.8 *Phase 4*: *Shaping Career Voices* Intervention

The career adaptability intervention, the *Shaping Career Voices Intervention*, was conceptualised as a qualitative process based on a life-designing narrative approach guided by the career construction theory (Savickas, 1997, 2005) (see Appendix Q for the career booklet). Chapter 4 outlines the structure, content, literature and theory that informed the development of this intervention. The intervention pilot was outlined above, in *Phase 3* and *Phase 4*, which refer to the final implementation of the *Shaping Career Voices Intervention* in 2016. *Phase 4* sought to address two quantitative objectives, namely: 1) to determine if the career intervention resulted in higher scores for Grade 10, 11 and 12 township high school learners on the *CAAS* and *VISA* (*Objective 4*); and 2) to examine if gender or school grade would result in quantitative scoring patterns that could be indicative of adolescents' adaptations to the township context or collectivistic elements unique to developing world contexts, such as South Africa (Watson, 2013) (*Objective 5*). Although qualitative data was collected concurrently during this phase of the mixed-methods design, the decision was made to exclude any analysis of the completed career intervention books to limit the scope of this research study.

3.8.1 *Phase 4* participants.

The intervention group consisted of 582 Black township high school learners between the ages of 14 and 22 years (M = 17, SD = 1.3). The participants included 314 Grade 10 learners (55%), 237 Grade 11 learners (41%) and 31 Grade 12 learners (5%) learners were assessed over five different points in time (T_1, T_2, T_3, T_4 & T_5) using the *CAAS* and *VISA*. The number of learners who completed the career assessments differed according to time period, with 579 learners assessed at T_1, 496 learners at T_2 (attrition rate of 19% between T_1 and T_2), 377 learners at T_3 (attrition rate of 24% between T_2 and T_3), 265 learners at T_4 (attrition rate of 30% between T_3 and T_4) and 30 learners at the three month follow-up T_5 (attrition rate of 89% between T_4 and T_5). As s result of the low participant numbers at T_5, this phase was excluded from analysis. The total attrition rate between T_1 and T_4 is 55%. This high attrition

rate can be attributed to the difficulty in maintaining interest over a sustained period of time, especially in Township contexts.The participants comprised of 169 (31%) males and 369 (69%) females. Learners were recruited from both high schools in Kayamandi, with 390 learners (67%) from Kayamandi High School and 192 learners (33%) from Makupula High School.

3.8.2 *Phase 4* procedure.

A strategic decision was made to include the Grade 10s, Grade 11s and Grade 12s in the final intervention group. This decision was made due to the high attrition rate (approximately between 20% and 30%) that was expected based on previous community involvement with both schools. However, any Grade 12s who had taken part in a previous pilot study, for example the psychometric pilot in 2015, were excluded. Due to the difficulties experienced with the randomisation process, the quasi-experimenatl design was discarded and instead the final intervention adopted a repeated-measures research design. This allowed all the participants who wanted to take part, the opportunity to do so, without any perceived discrimination associated with the previous randomisation process. However, there were five assessment times, which in itself could have caused participants to drop-out of the research process due to fatigue or competing time demands. According to the participants in the grades approached, a repeated-measures design was considered more ethical than two separate groups tested at different times, and the final sample exceeded expectations (n = 582).

The final ***Shaping Career Voices Intervention*** was introduced at the start of the third term, from 18 July 2016 onwards. The fieldworker team and the researcher went to Grade 10, Grade 11 and Grade 12 Life Orientation (LO) classes at both Makupula and Kayamandi high schools to explain the ***Shaping Career Voices Intervention*** process at the start of the term. Contact lists were created to send SMS reminders before the intervention began. The intervention was structured in a four-week cycle, where T_1 and T_2 were written a week apart, to determine test re-test effects or any other contextual effects that may have affected learners during a school week. Thereby, any changes in career thinking processes that occurred after the participants had written the first career assessment could be captured. T_2 was used as a baseline measurement – as an intervention pre-test – and was compared to the assessment written once the week-long 20-hour intervention was completed (T_3). T_4 was a follow-up, written a week later, to determine if scores stayed consistent. An intervention evaluation was included in the administration of T_4 to determine whether there was any other qualitative

feedback that could be elicited about the measures or the intervention. T_5 was written during a follow-up session three months later and was intended to include a longitudinal measure of the post-intervention results. However, due to the low number of participants (n = 30), this measurement time point was excluded from the final analysis.

The intervention was structured to begin on Monday, 25 July 2016, with a research announcement made in the last 15 minutes of classes before the school day ended. During the announcement session, the cover letter, consent and assent forms were handed out. Those learners who wished to participate that week had to bring back the completed forms the next day. Afterschool each Tuesday, assessments were written in approximately 30 minutes (see Table 3.5. below for a generic four-week cycle). The following Tuesday, the second assessment was written, and then the intervention began in the remaining 90 minutes. Career sessions were held from 2:30 to 4:30 p.m. on Tuesday, Wednesday and Thursday, and then the following Monday and Tuesday. Participants had to complete the written homework sections of the career booklet over the weekend. The post-test (T_3) was written on the following Tuesday, once the participants had handed in their completed career intervention booklet. Then, a week later, after T_4 had been written, a certificate was awarded. The intervention programme consisted of a total of 20 hours, but the amount of face-to-face career counselling time was informed by the time constraints highlighted by the pilot study. The result was a career intervention that consisted of 8 hours of facilitated career counselling and 12 hours of homework.

The fieldworkers split up to form three teams, with me moving between teams to facilitate and supervise sessions. Teams were formed so that groups could be completed at the same time due to severe time constraints. The format was flexible, which meant that if there were few learners, the groups were merged to form one group. The fieldworkers had been trained to facilitate the completion of the career counselling exercises and they had divided the exercises between them. All the grades were done at the same time, at the same school, in venues next to each other to allow me to move between the groups to supervise, as well as to complete the externalising conversation section of the career booklet.

The Grade 10 classes at Kayamandi High School were first approached. Three Kayamandi Grade 10 groups were completed in August. Group 1 consisted of Grade 10A and 10B (25 July to 16 August); Group 2 consisted of Grade 10 C and 10D (25 July to 16 August); and Group 3 consisted of Grade 10 E and 10F (25 July to 16 August). One fieldworker remained behind at Kayamandi High School to supervise the T_3 and T_4 writing

sessions, whereas the other fieldworkers moved to complete Makupula Grade 10 learners. The same format, described above for the Grade 10 classes Kayamandi High School, was followed in all subsequent groups, and the four-week cycle can be seen below in Table 3.4.

Three groups of Makupula High School Grade 10 learners were completed simultaneously, as mentioned above. At Makupula, Group 1 consisted of Grade 10A and 10B (8 to 30 August); Group 2 consisted of Grade 10C and 10D (8 to 30 August); and Group 3 consisted of Grade 10E and 10F (8 to 30 August). Thereafter, three Grade 11 groups were completed at Kayamandi High School. Group 1 consisted of Grade 11A and 11B (5 to 27 September); Group 2 consisted of Grade 11C & 11D (5 to 27 September); and Group 3 consisted of Grade 11E and 11F at Kayamandi High school (5 to 27 September). At Makupula High School, two Grade 11 groups (Group 1 = Grade 11A and 11B and Group 2 = Grade 11C & 11D) were completed from (19 Sept to 11 October).

Table 3.4

Career Intervention Schedule over a Four-week Cycle

Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday & Sunday
Week 1	Research introduction (15min)	T_1 written 2:30-3:00				
Week 2		T_2 written 2:30-3:00 3:00-4:30 Session 1 (S_1)	S_2 2:30-4:30	S_3 2:30-4:30		Intervention homework (12 hours)
Week 3	S_4 2:30-4:30	T_3 written 2:30-3:00				
Week 4		T_4 written 2:30-3:00				

Notes. S refers to the career counselling session indicated by a number after it.
T_1, T_2, T_3, T_4 and T_5 refer to repeated measure tests at five different time points.

Thereafter, Grade 12 learners from both high schools completed the intervention in October 2016 (3 to 25 October) at an available venue at Makupula High School. During the intervention workshop, learners were given a career booklet filled with narrative activities, facilitated by interactive role playing and group discussions, to develop career adaptability competencies. The intervention also included guided exploration of career pamphlets and guided sequential elimination of career alternatives using the *SEM* approach (Gati et al., 1995). Lastly, reflective questions terminated the narrative career intervention.

3.9 *Phase 5*: Qualitative Intervention Feedback and Reflections

As part of the qualitative strand, the sixth aim (*Objective 6*) aimed to explore the highest-scoring participants' evaluations of the career intervention using reflective feedback forms. The qualitative components supplemented the quantitative strand, at the completion of the post-intervention measures at time point T_4. Individual written reflections were used to gain in-depth information about the participants' lived career adaptability experiences to investigate whether any adaptations or transitions had occurred in their career decisions and/ or identities upon completion of the intervention. The individual thereby had to reflect on subjective meaning-making experiences that took place, and whether the career intervention facilitated the development of career adaptability competencies and life-designing processes (McMahon et al., 2012).

3.9.1 *Phase 5* participants.

In the qualitative phase of the study, post-intervention written reflections and intervention feedback were collected from all the participants at T_4 (n = 265) in order to determine if the career intervention had elicited reflections or career competencies had been gained. However, only the participants who exhibited the highest changes in scores were selected, and a content analysis was conducted on 47 evaluation and reflective worksheets. In the sample of 47 Black township high school learners, the age range was between 15 and 20 years old (M = 17, SD = 1.15). The participants consisted of 12 (26%) males and 35 (74%) females.

3.9.2 *Phase 5* procedure.

Qualitative evaluative worksheets were completed after the post-career assessments, including two exercises. The one was a *feedback exercise* (Appendix R), which asked four questions. The first question asked if participants thought that the career intervention had achieved its aims, and participants could choose from answers on a Likert scale that included *no*, *not really*, *unsure*, *a little bit* and *yes.* Then participants were asked to list the positive and negative aspects of the intervention. Lastly, a space was provided for recommendations to allow participants to voice what they would have improved or would have liked to be done differently. The second qualitative exercise included 11 reflective questions. Participants were asked what current career decisions they needed to make, if they believed that these career ideas would stay the same in the future, if their past career ideas had changed, and what had caused them to change. Thereafter, they were asked to describe surrounding career

barriers, resources, and influences on their career development. Reflection questions were aimed specifically at the intervention, by asking how career ideas, self-awareness, thoughts and feelings had changed during the intervention. The exercise ended with termination questions that asked the participants how they would describe their experience of the intervention, and if there was something that they would have liked to change. A celebratory ceremony, during which certificates were awarded, was held for the intervention participants who had completed the career booklet, assessments and reflective and evaluative feedback.

3.10 *Phase 6*: Focus group

Lastly, in order to supplement the qualitative feedback received, a focus group was used to understand the intervention outcomes observed in greater depth (*Objective 7*). As part of the qualitative strand, a focus group interview was conducted to determine which aspects of the career adaptability intervention were perceived as either useful or least useful in facilitating the development of career adaptability competencies. A focus group interview was held with the participants who showed the highest changes in scores to elicit evaluative feedback about the intervention process (Krueger & Casey, 2014).

3.10.1 *Phase 6* participants.

A sample of six participants (5 girls and one boy) between the ages of 17 and 20 years old (M = 18, SD = 1.25) was selected to be interviewed in a focus group based on a significant increase in scores obtained in the *VISA* and *CAAS*.

3.10.2 *Phase 6* procedure.

Due to the tragic death of my mother, the interviewing process took place from on Saturday, 10 of July 2017, exactly six months after the intervention had ended, instead of three months after the intervention. The fieldworkers had helped to organise the learners who had the highest improvements in assessment scores to attend a focus group meeting. An incentive was provided for participation, as each participant received a Burger King meal as compensation for their time. A post-measure focus group interview explored the qualitative elements of the intervention that were perceived as most beneficial and least beneficial to their career development process. The focus group interview protocol (Appendix T) is an evaluative component of the research process. The interview schedule was adapted from the reflective questions posed in the *Shaping Career Voices Intervention* booklet, as well as from feedback questions to assess the value that participants attached to their participation in the career intervention. The reflective questions focused on adaptations to career decisions and

career identities perceived to be a result of the intervention by the participants. However, the fieldworkers were also present and used prompts to better elicit conversation. Positive and negative aspects of the intervention were also discussed, as well as recommendations for future career counselling and life-designing interventions.The proposed integrated qualitative and quantitative analysis supports the move towards the merging of qualitative and quantitative methods in career psychology (Maree, 2012), which allows engagement with both objective and subjective markers of career adaptability (McMahon et al., 2012).

3.11 Quantitative Measures

3.11.1 *Career Adapt-abilities Scale (CAAS).*

A collaborative team of vocational psychologists from 18 countries (Australia, Belgium, Brazil, China, England, France, Germany, Hong Kong, Iceland, Italy, Japan, Korea, Netherlands, Portugal, South Africa, Switzerland, Taiwan and the USA) met several times over four years to co-construct the CAAS (Savickas & Porfeli, 2012a). The measure was translated from English into local languages, and cross-cultural validity studies were conducted. The resulting *CAAS-International Form 2.0* (Porfeli & Savickas, 2012) consists of four scales with six items to form a combined total score that indicates career adaptability (Appendix G). Responses are measured using a Likert scale, from 1 (*not strong*) to 5 (*strongest*). The 24 items are equally divided into four subscales, measuring *concern*, *control*, *curiosity* and *confidence* as psycho-social resources for coping with career planning and developmental tasks (Porfeli & Savickas, 2012).

Strong supportive research on the construct validity and convergent validity of the *CAAS* has emerged (Porfeli & Savickas, 2012). The *CAAS* demonstrate metric invariance, as scale items show similar relations among the latent traits across countries. This suggests that the *CAAS* measures the same constructs in the same way across countries (Savickas & Porfeli, 2012a). Varying levels of acceptable reliability were indicated across countries, with the *CAAS–International* reporting a reliability of 0.92, which is higher than the subscales of *concern* (0.83), *control* (0.74), *curiosity* (0.79) and *confidence* (.85) (Savickas & Porfeli, 2012a). Internal consistency estimates of the four subscales of *concern*, *control*, *curiosity* and *confidence* were generally acceptable to excellent. Whilst the fit indices were acceptable for each country, the theoretically derived measurement model of the *CAAS* worked best in the USA, South Africa and Italy (Savickas & Porfeli, 2012a).

Although the *CAAS South African form* has been tested (Maree, 2012) and found to have excellent reliability and appropriate cross-national measurement equivalence, further research in a South African context is warranted. In the first South African study, Maree (2012) assessed its validity in a sample (N = 435) from the area of Molopo in Mafikeng in the North-West province. The study was conducted at three multi-racial English-medium secondary schools, two of which were public schools and one a private school. The reliabilities were seen to be slightly lower than those for the international version. The reliability for the total score was 0.91, which is higher than the subscale scores for concern (0.77), control (0.71), curiosity (0.78) and confidence (0.80). However, psychometric data does not exist for the *CAAS South African form* with isiXhosa-speaking townships adolescents.

In an attempt to examine the cultural sensitivity of the *CAAS* and its applicability to a collectivistic context, the use of the Icelandic version of the *CAAS* was explored (Vilhjálmsdóttir, Kjartansdóttir, Smáradóttir, & Einarsdóttir, 2012). Confirmatory factor analysis of the four dimension *CAAS-Iceland* data indicated that it had a poorer fit to the theoretical model than the *CAAS* in the international sample, which resulted in an examination of theoretical constructs of career adaptability and how these are related to Icelandic culture and social context (Appendix H). The six-dimension model was created using an etic-emic approach to include two subscales, namely *co-operation* and *contribution,* allowing the social, cultural and relational aspects to be included in the conceptualisation of career adaptability (Einarsdóttir et al., 2015).

The intention was to determine if the Icelandic version was a better fit to the Kayamandi context by measuring psychosocial resources for managing career transitions, developmental tasks and traumas, with two additional subscales of *co-operation* and *contribution.* The importance of *co-operation* in career adaptability was supported by a study of the career transitions of older women in England, South Africa, and Australia (McMahon et al., 2012). The close-knit Icelandic community seemed to share cultural values related to helping and co-operation, as reflected in the European Value Survey results (Halman, Sieben, & Van Zundert, 2011). Therefore, a relational aspect of career adaptability was brought to the forefront and included as a subscale by measuring co-operative attitudes, the ability to get along with others and being capable of co-operating with others (Einarsdóttir et al., 2015). In contrast, *contribution*, as a subscale, is based on the importance attached to work and community, with the belief that identity and reputation can be enhanced by contributing to

society. These subscales were used in the Icelandic version to indicate collectivistic cultural experiences and relational aspects that contribute to managing career transitions.

However, in the Kayamandi context there are cultural similarities based on tightly knit communities whose extended relational networks and support systems share resources in a context of low socio-economic resources. After a Delphi panel discussion with the fieldworker team that included a thorough interrogation, the Icelandic version was used with the two additional subscales. Thereafter, a psychometric analysis was conducted to determine whether these additional constructs of the *CAAS-Iceland* were culturally viable and valuable in a South African context in comparison to the *CAAS-South African* version (see Chapter 5). The psychometric characteristics and construct validity of the Icelandic six-dimensional form of the *Career Adapt-Abilities Scale (CAAS-Iceland)* was demonstrated by Einarsdóttir and colleagues (2015). Internal consistency estimates of reliability for the subscale and total scores ranged from 0.78 to 0.87 were indicated, which is the same as those reported in the *CAAS-International* sample (Savickas & Porfeli, 2012a). The six-dimensional Icelandic model was created based on the importance of developing measures of career adaptability that can be compared cross-culturally (Einarsdóttir et al., 2015), as is being proposed in the present research. These results indicate that the *CAAS-Iceland* is reliable and valid and can be used with minor modifications in career counselling and research cross-culturally (Einarsdóttir et al., 2015). The present research aims to contribute to exploring the processes of how individuals manage career transitions, particularly individuals are required to activate internal resources as well as resources in their relational webs or communities (McMahon et al., 2012a, 2012b, 2012c).

3.11.2 *Vocational Identity Status Assessment (VISA).*

The *VISA* (Porfeli et al., 2011) (Appendix P) consists of three dimensions with six subscales, and the combined scores assess vocational identity progression (Crocetti et al., 2008a; Luyckx et al., 2005). The first dimension, ***career commitment,*** contains subscales of *career commitment-making* (choice certainty) and *career commitment identification* (career choice investment). The second dimension, ***career exploration***, contains subscales of *in-depth career exploration* (activities crystallising occupational and ability preferences) and *in-breadth career exploration* (activities specifying an occupational choice). The third dimension, ***career reconsideration***, consists of the *commitment flexibility* (openness to occupational interest changes) and *commitment self-doubt* (career planning uncertainty)

subscales. Each subscale contains five items, and the response set is a Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

The *VISA* scores place individuals in one of six identity statuses. Four statuses are based on the different combinations of exploration and commitment identified by Marcia (1966). These statuses are *achieved* (commitment based on exploration), *foreclosed* (commitment with low in-breadth exploration), *moratorium* (exploration without commitment) and *diffused* (low exploration or commitment). The *VISA* scores provide differentiation of exploration (in-depth versus in-breadth) and commitment (making and identifying), resulting in a fifth status of *searching moratorium* (i.e., tentative commitment between the achieved and moratorium statuses), which is repeatedly supported by identity research (Porfeli et al., 2011). If individuals cannot be classified into these five *VISA* score statuses, they are called undifferentiated (Porfeli & Savickas, 2012). In the commitment dimension, the *achieved status* (high commitment and low flexibility) begins the continuum, followed by the *searching status* (high commitment and high flexibility) and finally the *moratorium status* (low commitment and medium flexibility) (Savickas & Porfeli, 2012b). The *VISA* was chosen because it provides scores of exploring and commitment-making, which indicates identity processes. In addition, adaptation can be scored using *VISA* identity statuses (Porfeli & Savickas, 2012). Career adaptability is expected to increase monotonically across a continuum of identity statuses, arranged from higher to lower degrees of adaptation, including undifferentiated, diffused, moratorium, searching for moratorium, foreclosed and achieved vocational identity statuses (Savickas & Porfeli, 2012b).

3.12 Data Analysis

In the quantitative strand of the multiphase mixed-methods design, descriptive statistics, such as the means and standard deviations for repeated-measures scores for the *VISA* and *CAAS,* were calculated using Statistica (data analysis software system), Version 13 (StatSoft, Inc, 2017). Psychometric properties of the *VISA* and *CAAS* were analysed using confirmatory factor analyses, and measures of goodness of fit were considered. A mixed-model repeated measures ANOVA was performed in order to determine whether the differences between scores at different time points were statistically significant. A group analysis was performed to determine if any group differences existed in the *CAAS* subscale scores or the *VISA* identity statuses for grade or gender differences. Vocational identity statuses were explored using cluster analysis and a comparison was conducted to determine whether changes occurred in vocational identity statuses over different time points. All

statistical analyses were planned and executed in collaboration with a senior statistician at the Statistical Consultation Service of Stellenbosch University.

In addition, the qualitative strand entailed an in-depth qualitative analysis of the participants' written responses to explore if career adaptability processes were enhanced through this career intervention in this under-researched population group (McMahon et al., 2008a, 2008b). Individual written reflections and a focus group interview were semi-structured. This allowed participants to better articulate subjective markers of career adaptability, instead of using a developmental approach that focused only on objective career markers. Thereby, the researcher hoped to gain insight into career adaptability competencies, as well as participants' vocational identity statuses. NVivo Qualitative Research Software (Version 11) was used to facilitate Braun and Clarke's (2006) steps of a thematic analysis of narrative themes based on the CCT framework (Savickas, 1997, 2005).

Firstly, an immersion in the data occurred which involves repeatedly reading and searching for patterns and meanings. Thereafter, initial codes were generated whereby important sections of the transcribed text are identified and provisional labels are attached to relate to a theme or issue in the data. Thirdly, the relevant coded data was sorted into themes using the *CAAS* dimensions according to the CCT (i.e., concern, confidence, control, curiosity and co-operation) as a coding schedule (see Appendix BB). The data was also coded according to the *VISA* dimensions (i.e., career exploration: in-depth and in-breadth, career commitment: commitment identification and commitment-making, and career reconsideration: flexibility and self-doubt) (see Appendix CC). A group of research assitants, who were all Stellenbosch University Master's Research students, had transcribed, captured, and performed the initial data coding of all of the qualitative data. I trained them using the coding schedules mentioned above to help overcome any personal biases. Fourthly, as a check I reviewed the coded themes by identifying issues and inadequacies in the themes that were generated. Fifthly, themes were redefined and renamed by assessing if the theme captured the central theme of the data accurately. Then verbatim extracts were chosen to support the finalised theme by the group pf research assistants. Lastly, my supervisor also reviewed the themes generated as a form or inter-rater reliability check.

3.13 Ethical Considerations

Ethical approval for the study was obtained from the Stellenbosch University (SU) Psychology Department's Doctoral Admission Committee, the SU Research Committee (Appendix D) and the Western Cape Education Department (WCED) (Appendix E) to collect

data from 2014 to 2017, with renewal applied for on a yearly basis. The principals of Makupula High School and Kayamandi High School were asked for written permission (Appendix F), but were under no obligation to assist in the research process. The researcher's community involvement since 2010 facilitated credibility and access to the learners, but effort was expended to ensure that the research process did not interfere with academic schedules.

All learners involved in the research were given a take-home pack, consisting of a cover letter explaining the research in English and isiXhosa (Appendix A), an assent form for the learner to sign (Appendix B), and a consent form for guardians or parents to sign (Appendix C). Participants' confidentiality and anonymity was respected with identity makers used (i.e., P.1). Fieldworkers also had to sign a contract of employment which included a confidentiality agreement (See Appendix L) as well as a consent form for additional voluntary research activities that were not stipulated in the work contract (see Appendix M). Teachers and Vision K staff members were also asked to sign consent forms to agree to take part in research activities (see Appendices I and K). All research participants were given identity markers (e.g., F.1 for fieldworkers, T.1 for teachers, VK.1 for Vision K staff and P.1 for participants), except the fieldworkers' team leader, who was given a pseudonym (i.e., Luanda) and this allowed their identities to be protected. At the start, both fieldworkers and participants were informed about the confidentiality of the intervention process.

Fieldworkers acted as isiXhosa translators, inside informants as well as research assistants to facilitate the repeated-measure administration and potentially reduce any investigator bias (Bless, Higson-Smith, & Sithole, 2013). Furthermore, fieldworkers were present during the career intervention to provide culturally or contextually relevant examples, overcome any language barriers as well as negotiate any cultural nuances that could cause misunderstandings (Posel & Ross, 2014). I facilitated the narrative therapy section of the career adaptability intervention, as I had received narrative therapy facilitation training for two years. However, the other sections of the career intervention were divided between the fieldworkers and they presented these sections using contextually relevant case studies and examples that had been discussed beforehand in the intervention structure and training sessions.

The participants involved in this research process were given numerous opportunities to attend and complete the *Shaping Career Voices* intervention workshops to prevent the

unfair exclusion of any Kayamandi adolescents in Grades 10, 11 and 12. This meant that any learner in those grades who wished to participate in the intervention was accommodated and received a certificate upon completion. If there were additional questions, the learners could ask the fieldworkers, as they had been briefed that they were meant to act as visible role models or mentors during the intervention and, once the intervention was completed, to a be a lingering presence. In addition, learners with additional questions were referred to the Career Life-Planning Project, which held career counselling sessions at both high schools in Kayamandi on a weekly basis.

Participants had the right to withdraw from the study at any time, without consequences. Throughout this research process, debriefing was undertaken by the researcher with the fieldworkers to facilitate a respectful environment that allowed a plurality of opinions to co-exist without tension. In debriefing sessions, discussions were based on creating a critical and self-reflexive awareness of the historical, social and contextual situatedness of the participants and how this affected the research process. A summarised report of the research results will be made available to interested parties among the participants, fieldworkers and high school staff upon completion of the research process. I intend to present these research findings to various role players, such as the Department of Higher Education, Stellenbosch University's Psychology Department and the Centre for Counselling and Student Development, and the Human Research Sciences Council. These research findings can be used to inform the development of future career-life-designing interventions for marginalised high school learners. Furthermore, these findings could inform government policy around career guidance in the Life Orientation syllabus for previously disadvantaged learners, and be included in the training of teachers, career counsellors as well as NGO staff, on how best to facilitate the development of career adaptability competencies.

3.14 Research Process Challenges

Although the fieldwork conducted was specific to a South African township context and located in Stellenbosch, the issues that I grappled with are germane to research in other parts of the world, especially in the face of the politics of cultural differences and deepening inequality worldwide (Posel & Ross, 2014). This section provides a brief overview that is limited due to spatial constraints, but a mixed-methods research process would be incomplete without a section on the unanticipated complexities that occurred in the 12 months of fieldwork. Research in the social sciences is inherently complex because of the navigation of the social relationships in fieldwork that are necessary to gain data. However, the

positionality of the researcher includes multi-layered roles, professional ethics codes as well as a personal 'value backpack' (Weinberg, Posel, & Ross, 2014). These elements all play a role in determining how I reflexively traversed this low-resource environment, where deep inequalities and hardship were witnessed. Therefore, not only the ability to reflect inwards is important in the enquiry process, but also the ability to reflect outward to the cultural, historical and political forces that shape the process of enquiry between the researcher, the participants and the spaces in which they interact (Sandelowski & Barosso, cited in Tuesner, 2015).

3.14.1 Researcher's positionality.

As a researcher, I made the choice to go into a peri-urban township, as a 32-year-old White South African female to try to gain access to the marginalised voices of the township youth who are struggling to make career decisions unaided. I had been an insider-outsider in the Kayamandi community since 2010, and these years in Kayamandi have left me with more questions, than answers in this post-apartheid, postcolonial and postmodern time period in South Africa. To begin explaining my 'gaze', it is important to acknowledge that I have been deeply formed by my undergraduate anthropological training, which embraced a culturally relativist stance, did not attempt to prescribe standards or norms to behaviour and celebrated human autonomy and creativity across cultural spectrums (Van Wyk, 2014).

As a fundamental initiation, it was an imperative to study individuals who were culturally and economically distant from experiences that were subjective to myself as a researcher. So far, my whole research journey has consisted of studying individuals who are different from me. However, I inhabit a complex identity landscape as a cultural hybrid raised between two nationalities (South African and German) on South African soil by parents who were Second World War refugee survivors. As an immigrant child I was sent to acculturation classes during the Apartheid regime, and was considered as not the 'right White'. In addition, after I had finished high school, I went to Germany as an exchange student, which led to my heritage and identity also being questioned. This meant that I was always perceived as outsider, or as an 'other', in both cultures. Although I am multilingual, my spoken languages had accents and markers missing that indicated belonging. Financial struggles accompanied my upbringing and academic journey. However, merit scholarships and hard work made my studies and academic development possible. It is for these reasons that I wanted to engage with research that relied on an ethics of solidarity with non-Western, poor, marginalised

individuals to be able to become more than a witness, but rather a spokesperson for my research participants as an ally in working towards achieving social justice (Posel, 2014).

This 'other' position has made me an asset in establishing rapport with diverse cultures and gaining critical insight into overlooked cultural patterns of behaving. Similarly, my outside position proved to be an asset in establishing rapport with the Kayamandi community members, where my 'otherness' was seen as a welcome change from the stereotypical assumptions associated with Stellenbosch University student 'Whiteness'. These assumptions of 'Whiteness' included notions of entitlement, inherited privilege, power and unlimited access to resources (Carr, 2015; Kerperlman & Mosher, 2004). However, it is undeniable that my White racial category provided privileges that a researcher of another race may not have had in gaining access to the school management systems or school learners (Spanierman & Smith, 2017a).

However, my 'Whiteness' also created barriers to engagement, which were made visible when I had attempted to gain access to townships in the Helderberg basin area (Spanierman & Smith 2017b; Sue, 2017). My access to the Kayamandi community was a result of my long-standing engagement with the community, starting in 2010, when I was involved in setting up the Career Life-Planning Project and through which webs of trust had been established over time (Mfecane, 2014). Although access had been granted at school management level, there was still a huge level of mistrust, dislike and hostility towards my 'Whiteness' from Kayamandi community members, which included high school learners (Spanierman, Poteat, Whittaker, Schlosser, & Arévalo Avalos, 2017). As a result, the fieldworkers often had to convince learners of the merit of participating in the career intervention. Furthermore, there were many instances where the fieldworkers protected me from unwanted attention, or helped me navigate aggressive rallies or protests that had anti-White racial undercurrents. For example, this was the case during the 'Fees must Fall' protest against the inequality in and lack of access to tertiary education. In addition, the election rallies of the African National Congress (ANC) and Economic Freedom Fighters (EFF) were held in high schools and on the streets of Kayamandi. These protests and rallies interrupted the data collection process for days, as the protests began in Kayamandi and then moved to Stellenbosch.

The researcher's examination of the tensions inherent in his/her positionality and power, privileges and biases is among the fundamental elements of the self-investigative process termed reflexivity (Leavy, 2014). In order to acknowledge both the challenges and

the privileges that accompany inhabiting the White racial category, I positioned myself as a White ally (Spanierman & Smith, 2017a). The definition of a White ally is a researcher who participates in multicultural research by working in solidarity with people of colour who inform the research process, using interdisciplinary literature and utilising social justice as the guiding principle underpinning the research process (Spanierman et al., 2017a). Self-reflexivity is involved in being a White ally and means that nuanced understandings of institutional racism and racial privileges need to be cultivated (Smith & Redington, 2010). However, my sense of responsibility to work in solidarity with people of colour to promote equity by utilising my White racial privilege did not waver throughout this research process in the context of aiding the career decision-making of township high school learners to avoid the perpetuation of intergenerational unemployment.

3.14.2 School environment challenges.

There were many challenges in the school context, which were taken as an indicator that the school environment offers a microcosm of the broader Kayamandi context. There was an extremely high drop-out rate at the schools due to drug use, gangsterism, teenage pregnancy and financial need. This high dropout rate was visible in the research process, as only 30 people completed the assessment at the three-month follow-up, which indicates that, in this disadvantaged environment, utilising longitudinal measures is a formidable challenge, which has also been cited in other research studies (Cluver et al., 2014). The lack of structured school environments made the collection of assessments at different time points exceedingly difficult (Mampane & Bouwer, 2011).

In this case, structure in this case refers to sticking to time and class schedules, as well as the organisation of venue bookings. The lack of available venues, as well as the lack of well-maintained facilities, means that it was impossible to show the participants video footage. The school timetables changed daily due to unpredictable events such as food donations, floods, fires, protests, election rallies, as well as memorials. Furthermore, power shortages were frequently experienced; these were linked to the illegal usage of the schools' power supplies by Kayamandi residents. Teacher support was not easy to maintain with the competing programmes, duties and heavy teaching loads. Yet there some teachers who were observed to put in extra effort to help learners develop self-efficacy beliefs and encouraged learners to use examples of hardship "*to create an inner drive to succeed that will determine how far you can go in life"* (T.7).

In terms of learner dynamics, learners often did not come to school, as a principal (P.2) explained: *"they like to take long weekends, that start at the end of Thursday and they only return the following week Tuesday."* Furthermore, the idea that a deadline means that there is no other chance to participate, was a foreign concept for participants (Swartz, 2011). A fieldworker (F.4) explained this belief as *"another day brought another chance."* Whilst, this may have been adaptive for living in a township environment, and my deadlines suffered as a consequence of this belief. Teachers confirmed the difficulty of getting learners to complete tasks: *"These kids, they just run away through the hole in the fence"* (Teacher 1: T.1) or "*they only come when it suits them, like they come for a free meal, then they go back to being a gangster"* (P.1).

Moreover, there was a noticeable shift in gender dynamics amongst the learners. In 2012/2013, I had been involved in career counselling sessions as part of the Career Life-Planning Project and mostly boys attended these sessions. This is supported by previous research, which stated that boys had higher self-efficacy and assertiveness in career development tasks (Seane, cited in De Bruin & Bernard-Phera, 2002; Uitto, 2014). However, the intervention in 2015 and 2016 was attended by a majority of girls (74%), rather than boys (26%). I soon realised that there were very few boys that attended school in comparison to girls. In order to explain the disappearance of high school boys, the fieldworkers and teachers stated that: *"they want to get rich quick, so they drop out and start working"* (F.3) or "*they join gangs, we lose more and more of our boys to the gangs"* (T.5), and lastly, *"you know, once you are a tsotsi [gangster] you can never go back and so you leave school out of shame to your family name and fear of the gangsters"* (T.6).

3.14.3 Communication challenges.

Communication was a continuous challenge for all the role players involved in this research process. Communication channels needed to be monitored continuously due to the frequent theft of cell phones, as well as changing of phone numbers due to stalkers or debt collectors that needed to be avoided. An added complication was the value placed on word-of-mouth communication, as well as a preference for phone calls rather than any other form of communication. I used all these communication channels and SMS reminders were sent to ensure that learners had not forgotten their allotted time slot. Whatsapp was not used, due to the lack of money for data and resulting limited internet connectivity, which was cited by participants as a barrier to communication (Walton & Hassreiter, 2014). Even if the time slot was agreed to verbally, tensions arose regarding time management. These tensions surrounding late communication of unforeseen events and being late for time slots, was

mirrored in the fieldworker team dynamic as well. The notion of "African time" was cited frequently and frustrated me continuously. Time was wasted waiting for participants to arrive, and participants chose to arrive 30 min to one hour later and often not at all.

Communication was also built around common knowledge of criminal behaviour or *tsotsis* (i.e., gangsters). Although, knowledge of criminal activity was freely available, there was a general consensus of silence: that no one in the community would report these criminal acts (Versfeld, 2014). There were certain acts that were seen as unforgivable in the community and these included rape and murder, but even so, often fear for personal safety overshadowed legal responsibility of reporting responsible parties. This was coupled with the perception that the police force was corrupt and ineffective, which led to further under-reporting (Versfeld, 2014). This became a difficult issue to traverse, as gang members knew of the career counselling and research work. Luckily, it was not viewed as a threat because no jobs were offered and no monetary compensation was given to learners for participating. However, other NGOs were targeted in the 12 months of fieldwork and had to pay "protection money" to gang members to be left alone, after suffering property damage and assaults on security personnel. The research team only once came into contact with gang members, and this was an immense setback for the completion of the research process.

After the completion of fieldwork, in April 2017, the hard copies of the data and flash drives were in transit. At this point in time, the electronic data capturing and backing-up process was only completed halfway. The hard copies of the career assessments and flash drives were stolen from my car in Stellenbosch. This meant that an immeasurable amount of research work and information was lost, including articles, finalised chapters, etc. I reported the incident to the police according to legal procedures, but I needed to find a way to get my paper copies back in order to complete my dissertation. As a result of using my community contacts, I was able to buy back all the completed career assessments. The flash drives, however, were untraceable. Due to this encounter, I experienced my personal safety to be threatened and felt reticent to go back to Kayamandi. Thereafter, in July 2017, the focus group was organized at Stellenbosch University in a venue on campus, specifically to avoid any renewed conflict or safety concerns. However, Luanda mentioned that *"they know that you haven't reported them, so now you are safe again, you can come back to Kayamandi."* At this point, issues of safety, ethics and lawfulness were no longer clear-cut or easy for me to delineate (Clayton, 2013).

3.14.4 Exchanges, rewards and payment.

Ethical concerns in fieldwork centre on power dynamics, supposedly that of the fieldworker having a position of superiority over the individuals encountered in the field (Colvin, 2014). However, fieldwork accounts have indicated an exchange of instrumentality that community members shape to their own needs. This dynamic relationship is, in fact, ever-shifting and based on reciprocity and social exchange between the researcher and research informants (Dickson-Swift, James, Kippen, & Liamputtong, 2007; Matebeni, 2014). In the present research, the decision was made to pay fieldworkers. Although, there is an ethical debate about the ideas of payment for fieldwork, especially in contexts of dire financial need (Colvin, 2014), the NGOs in Kayamandi paid learners for tasks carried out. Therefore, the decision was made co-jointly by myself and my supervisor that payment was necessary for the completion of the research process. The monetary compensation was not very lucrative, due to the limited budget of the research as this project was funded by an NRF research grant. In order to show appreciation a lunch was held at the end of 2016 during which each fieldworker was awarded a certificate of appreciation that stated how many hours of fieldwork they had completed.

However, the research participants had complaints about the certificates received at the completion of the intervention process. Learners who had refused to participate or had only attended one session felt entitled to be awarded a certificate and had to be informed that this was not possible. This was an example of boundary pushing attached to issues of being rewarded, as the hope was that I would feel a level of guilt or sympathy that would result in getting a 'free' certificate. This can be interpreted as a combination of learned helplessness, a certain level of being streetwise (i.e., opportunistic), and assumptions of access to unlimited resources that were associated with my White race and affiliation with Stellenbosch University (Ratele, 2007). When this strategy did not receive the desired outcome, continued feelings of resentment were expressed towards myself and the fieldworkers. Notions of "strictness", "unfairness", "exclusion" and "fatalism" were noted, which is supported by previous research (Campbell & Vainio-Mattila, 2003; Ramphele, 2002). However, learners initially assumed an attitude of cleverness or "*trying to trick the system to get the certificate*" (F.2). The Fieldworkers initially struggled with this negativity directed towards them, particularly due to the cultural values of *ubuntu* (Owusu-Ansah & Mji, 2013). However, in debriefing sessions this scenario was deconstructed and the dynamics in this marginalised population, which is often excluded from mainstream society, were discussed from various

angles to assess how underlying issues of oppression and inequality may have surfaced in this research encounter (Mosoetsa, 2006).

3.14.5 Issues of trauma and personal loss.

Fieldwork reflections seemed to brush over incidences of death in the field (see Keikelame (2018) for an example). However, a landscape of violence exists in low-resource communities with victims and perpetrators co-existing in close proximity, often even as neighbours (Cluver et al., 2014). In this scenario, researchers unwillingly become witnesses to deep human suffering, which they are helpless to alleviate (Bray, 2014). One such instance occurred during this research process. In August 2016, the boyfriend of the fieldworkers' team leader (i.e., Luanda) was stabbed to death in a gang-related street brawl. The unexpected and sudden passing of Luanda's boyfriend had a severe impact on the research team. I felt uncertain how to handle this situation, because I did not know how my position was viewed by the fieldworkers (Ryan, 2015) and what was expected from me in this season of mourning. The data collection was interrupted due to the Xhosa mourning rituals, one of which stipulated that the bereaved individual could not be left alone for two weeks, as she was viewed to be between two realms: the world of the living and the ancestors. Due to my friendship with Luanda, I was also expected to offer a day where I needed to escourt and support Luanda. However, my reasons for paying my respects and honouring these mourning rites were in line with my 'value backpack' which contains values that entail humanness and compassion.

Data collection continued after these two weeks, but without Luanda the team was less efficient, which might have affected the career counselling process. However, death became a common theme during the fieldwork period. There were countless stories or incidences that we heard of, in which individuals were the victims of violent crime. Although, low-resource communities have been reported to be marked by high levels of crime and violence (Versfeld, 2014), it was incredibly hard to bear witness this. Learners who had entered the career counselling programme filled with hope to create a different career-life story had been stabbed to death. This information was given to us in passing; for example while we were tracking down learners who did not come to collect their certificates, we were told that the school had held memorials for these individuals. The instances of stabbings were observed to have increased since 2014 and lead to learners not attending evening events in Kayamandi out of fear, as this was where the gang-related stabbings frequently happened.

Although these traumas and personal losses affected the research process and everyone involved, I experienced these losses more indirectly. However, I experienced a personal trauma and suffered a devastating loss in May 2017, when my mother died after complications related to open-heart surgery in April 2017. I was witness to my mother's decline and death and, as a result, developed post-traumatic stress disorder. I therefore was not able to finish my dissertation by October 2017. Previous fieldwork reflections have paid little attention to the psychological toll involved in the research process especially in conducting fieldwork in high-risk areas (Cowles, 1988; Dunn, 1991; McCosker, Barnard, & Gerber, 2001). The psychological toll of having data stolen, navigating uncertain ethical and legal terrain, the unpredictability of daily life in Kayamandi and the unexpected death of my mother caused a traumatic shattering of my career-life narrative (Van der Merwe & Gobodo-Madikizela, 2008). Upon reflection, the necessity of career counselling in scenarios like this became apparent to me, yet these scenarios remain largely unaccounted for in the career psychology literature. The impact of death on career development has only recently been acknowledged by social constructionistic/constructivistic career approaches (viz., CCT and STF), which aim to guide individuals to reconstruct a new narrative that includes a sense of hopefulness about the future and the construction of a new sense of meaning or purpose. Now, at the end of this research process, the staying power of the intervention process is still evident in the questions asked by former participants and addressed to fieldworkers who still contact me to touch base. The completion of this research in 2018 would mean the first successful completion of a mixed-methods career intervention in a sample of township adolescents, on this scale.

3.15 Chapter Summary

This chapter provided an overview of the multiphase mixed-methodology research design. The research process consisted of six phases, which were discussed in detail in this chapter. The creation of a qualitative, contextually relevant intervention process was the focus of *Phase 1*. *Phase 2* consisted of a psychometric pilot study that determined the psychometric reliability and validity of the career assessments utilised. *Phase 3* consisted of an intervention pilot in which pre- and post-measures in a quasi-experimental design were completed. In *Phase 4,* a repeated-measures research design was utilised in the final intervention, and scores were tracked over five time points: T_1 and T_2 before the intervention as well as three time points after the intervention T_3, T_4 and T_5. *Phase 5* entailed the completion of qualitative evaluative worksheets and reflective questions by the participants at

the conclusion of the intervention (i.e., T_4). Thereafter, in *Phase 6*, a focus group interview was used to gain insight into the adolescents' subjective career changes six months after completion of the career intervention. The chapter culminated in reflections on the challenges encountered during the research process, as well as insight into the positionality and reflexivity of the researcher.

CHAPTER 4
INTERVENTION DEVELOPMENT

4.1 Introduction

South Africa, like many other nations, faces multiple challenges in creating work opportunities and reducing unemployment (Statistics South Africa, 2016). Contextual factors, such as unemployment, a weak national economy and shifting entry requirements into occupations, constantly impact South African individuals and make career development processes inherently complex (Stead & Watson, 2017). However, career psychologists can assist with the alleviation of pressing social problems by creating interventions that facilitate career decision-making processes amongst vulnerable and marginalised population groups. Career interventions can serve as vehicles to enable youth to transcend poverty as a long-term objective and can yield positive short-term effects on grades attained, school attendance, tertiary education enrolment and employment outcomes (Perry & Smith, 2017; Tripney & Hombrados, 2013).

In this chapter, an overview will be presented of the design process of the career intervention materials. The theoretical underpinnings as well as the content and structure of the career intervention will be described. A qualitative process was undertaken in *Phase 1* of the research process which entailed incorporating the voices of various Kayamandi role players in the creation and structure of the career intervention. Through this interactive process, which will be described in section 4.6, imported constructs, theories and techniques were examined for South African relevance. The resulting adaptations ensured that the career intervention materials were contextually relevant and useful in the Kayamandi context.

4.2 A Description of the Kayamandi context

The competencies that individuals develop by adapting to a specific environment are largely overlooked in theorised career development processes. Disadvantaged South African high school learners may have acquired skills in childhood that have enabled successful navigation of a township context. Yet there is a dearth of research on how these skills may be transferrable to career development competencies. This present research study therefore aims to contribute to research on career development and vocational identity processes in a marginalised adolescent population group to gain an understanding of career development processes that have taken place and improve competencies that may need further development to facilitate employability.

4.3 Postmodern Career Counselling Foundations

The career intervention was grounded in a postmodern career counselling approach to advocate subjective and contextually situated understandings of career behaviours (Maree, 2010b, 2010c; Struwig & Stead, 2013). The importance of this approach in a South African context has been emphasised by Maree and colleagues (2006) in order to address complex issues in diverse cultural environments. The importance of the oral tradition in many cultures means that the use of stories is recognised as a universal way to share experiences that result in developing self-insight and new meanings in career development with individuals from various social and ethnic groups (Chope & Consoli, 2011; Mkhize, 2015; Young & Popadiuk, 2012). The purpose of focusing on narratives is to deconstruct problem-saturated narratives, by naming and externalising a problem, to allow the client to re-author a new life-story (Campbell & Ungar, 2004; Monk, Winslade, Crocket, & Epston, 1997). As a result, broader and richer life stories can be constructed that cohesively integrate past, present and future narratives in a career-life story (Peavy, 1992, 1993).

4.4 Career Construction Counselling Anchorage

According to Savickas (2013a, 2013b), there are four proposed dimensions of "adapt-abilities". The first dimension is *concern*, which involves a future orientation, whereas *control* refers to self-regulation and responsibility for career decisions. In contrast, *curiosity* describes career exploration activities and *confidence* refers to self-efficacy and the ability beliefs that an individual holds. However, questions have been raised by Watson (2013) if these basic tenets of the CCT are versatile enough to meet the needs of diverse cultural groups in developing world context, with particular reference to "non-career groups" (p. 6). This term specifically refers to underprivileged, underclass, disadvantaged and non-normative population groups, whose career development has been undocumented.

Specifically with this caution in mind, research studies were examined to determine the applicability of the CCT to population groups that had non-normative career paths or multiple transitions. McMahon et al. (2012a) used inductive data analysis to explore the career stories of transition and adaptability of 36 older women (with equal numbers from South Africa, Australia and England). Their findings indicate that qualitative indicators of the CCT could be applied, which shows the versatility of the career adaptability dimensions to various contexts and diverse population groups. Their research results also led to the conclusion that career adaptability dimensions are flexible enough to be assessed

quantitatively and qualitatively, which furthermore supports the usefulness of the CCT in a South African context. The quantitative and qualitative indicators of the career adaptability dimensions are compared in Table 4.1 and were used to guide the data analysis procedure.

Table 4.1

Career Adapt-Abilities Scale Subscales: Qualitative Descriptors

Subscales	**Career adapt-abilities scale items**	**Qualitative descriptors**
1) Curiosity	Exploring my surroundings	Investigative
	Looking for opportunities to grow as a person	Self-reflective
	Imagining what my future will be like	Future focused/orientated
	Investigating options before making a choice	Explorative
	Observing different ways of doing things	Observant
2) Control	Making decisions by myself	Independent/autonomous
	Thinking before I act	Contemplative/pre-emptive
	Taking responsibility for my actions	Accountable/trustworthy
	Being persistent and patient	Persistent/patient
	Sticking up for my beliefs	Self-principled
3) Confidence	Performing tasks efficiently	Efficient/ productive
	Learning from my mistakes	Self-perceptive
	Being dependable: Doing what I say I will do	Reliable
	Feeling pride in a job well done	Proud
	Having self-confidence	Self-confident
4) Concern	Planning important things before I start	Planful
	Thinking about what my future will be like	Forward thinking
	Realising that today's choices shape my future	Connects present and future
	Expecting the future to be good	Optimistic/ hopeful
	Preparing for the future	Prepared/ready
5) Co-operation	Becoming less self-centred	Inter-relational
	Acting friendly	Collegial/friendly
	Getting along with all kinds of people	Interpersonally skilled
	Cooperating with others on group projects	Accommodating
	Playing my part on a team	Collaborative

Notes. Taken from McMahon, M., Watson, M. B. & Bimrose, J. (2012a). Career adaptability: A qualitative understanding from the stories of older women. *Journal of Vocational Behavior*, 80(3), 762-768.

There is no longer a sure method to predict future success for an individual in the ever-shifting sands of labour markets (Pryor, 2008). Therefore, career counselling needs to equip individuals with a set of adaptability skills that will facilitate adaptation to rapidly changing contexts encountered in career-related transitions and traumas (Porfeli et al., 2011; Savickas & Porfeli, 2012b). Career interventions should facilitate the mastery of the following facets of adaptability in clients: creative problem solving, successful handling of unpredictable situations, mastery of new tasks, dealing with change, and managing work stress and crisis situations (Pulakos et al., 2002). In a South African context, interventions that promote career adaptability skills could result in an increase of observable markers of career adaptability competencies and ultimately increase employability (Soresi, Nota, Ferrari, & Solberg, 2008).

4.5 Life-design Counselling Theoretical Underpinnings

The Life-design counselling model (Savickas et al., 2009) is informed by, and at the same time actualises, the career construction theory (Savickas, 2011c) and self-construction theory (SCT) (Guichard Pouyaud, De Calan, & Dumora, 2012). The SCT views people as proactive agents who use prospective reflexivity to construct versions of themselves at given times and places in their life domains (Guichard & Lenz, 2005; Mahoney, 2002). Self-construction is actualised by the development of a story of the self, which is viewed as an internal compass to negotiate transitions, and articulates the essence of personal experiences (Guichard et al., 2012). The creation of different selves, known as subjective identity forms (SIFs), allows the design of successful lives. A career-life choice is based on the identification of central SIFs that are tied to a resulting action plan (Guichard et al., 2012; Savickas, 2015a).

The life-design counselling process is based on five underlying assumptions, which are contextual possibilities, dynamic processes, non-linear progressions, multiple perspectives, and personal patterns that are believed to affect career-life choices (Savickas et al., 2009). The life-design counselling model is structured to be *lifelong* (i.e., lifelong acquisition of skills in the face of repeated work transitions); have a *holistic* focus (i.e., career-related challenges are not examined in isolation); and be *contextual* (i.e., by including past, present and future life roles over the course of a lifetime) to enhance understanding of lived-experiences (Soresi et al., 2008). The successful designing of career-lives entails

reflexive construction, deconstruction, co-construction (i.e., collaboration between client and counsellor), and reconstruction of a career- life story (Savickas, 2011a).

An intervention based on the life-design career counselling model, such as the one described in this research, is believed to be able to increase clients' adaptability, narratability, intentionality and activity (Savickas, 2011a). *Adaptability* addresses the need to adapt to work transitions with the aim of being employable rather than following a linear form of employment (Maree, 2017). *Narratibility* refers to the ability to articulate a career-life story as a form of autobiographical reasoning to be used in navigating transitions and allowing clients to rebuild a sense of self (Law, Bunning, Byng, Farrelly, & Heyman, 2005; Savickas, 2011a). The telling of career-life stories can empower clients to deal with career-life transitions by improving their biographicity and proactivity (Alheit & Daussien, 1999). The implementation of a newly devised or changed self in making important changes in clients' career-life stories cannot be achieved without the *intentionality* to change (Maree & Morgan, 2012, Savickas, 2009). However, self- and career construction and life-designing can only take place when clients intentionally pursue goals, which include investigations of the world-of-work (i.e., job shadowing networking or part-time employment) (Maree 2015a, 2015b; Savickas 2011a, 2011c).

The life-design counselling model informed the design of the present career intervention. There are three broad phases (Savickas, 2015b) namely: 1) encouraging clients to tell small stories (constructions); 2) reconstruction of small stories into larger stories; and 3) co-construction of future stories. There are six general stages used in the present intervention (see Table 4.2) based on the life-design intervention model (Savickas et al., 2009). In *Stage 1*, the focus is on the establishment of the client's expectations and understandings of the career challenges faced (*Stage 1* aim: Creation of a working alliance). Thereafter, in *Stage 2* clients are encouraged to explore their existing SIFs, which helps to recognise that different settings may require the construction of a new or different self (*Stage 2* aim: Mapping and exploring SIFs). Self-reflection allows an investigation of the agreement between the client's current identity and his/her desired identity (Guichard et al., 2012).

The versatility and applicability of the life-design model has been documented across diverse settings, which includes developed and developing country contexts using both individual and group formats (Maree, 2016, 2017). The facilitation and promotion of career life-design in group contexts is important, specifically in developing country contexts where one-on-one counselling is not accessible or affordable to the majority of the population. In

disadvantaged contexts, group interventions are an efficient format to enhance clients' career adaptability competencies (Di Fabio & Maree, 2012).

Table 4.2

Career Intervention according to the Life-design Model's Six Stages

Stage	Career Booklet activities	Description
Stage 1	Nikiwe's story (pp.2 & 3) The Future You (p.4)	Participants were given the opportunity to discuss specific career problems, define expectations.
Stage 2	My Career Voice (Past, present & Future): Shaping My Career Story (p.6) Identifying Positive & Negative Voices (pp.7-8) Identifying the People who Shaped You (p. 10)	Explored current SIFs and completed the timeline consisting of success and failure experiences (Cochran, 1998).
Stage 3	Creating the Plot of My Career Story (p.11) Choosing My Skills (p.12) Career Pamphlets in Session	Invited to discuss biggest success and failure experiences in addition to drafting life lines.
Stage 4	Plotting My Career Story (p. 13)	Helped to place existing problems in revised story.
Stage 5	Externalising Conversations (p. 14) Mapping Externalising Conversation & the Counter-story (p. 15)	Was encouraged to participate in a discussion on the emerging themes generated.
Stage 6	Actualising a Career Identity (p. 17) Reflection (pp. 18-19) Intervention Evaluation Feedback	Helped to identify and plan activities that might assist them to actualise their own identities. Reflected on experiences of life-design and the various postmodern career counselling activities they had participated in.

Notes. Adapted from Maree, K. (2017). *Life-design Counselling.* In G.B. Stead & M.B. Watson (Eds.), Career Psychology in the South African Context (3rd ed; pp 106-118). Pretoria: Van Schaik Publishers.

Various studies have indicated that life-design counselling helps clients to use their lived-experiences and stories to develop an inner stability that is needed for a rapidly changing world-of-work (Maree, 2015a, 2015b). According to Maree (2017), career construction counselling, embedded in the framework for life-designing, offers "hope, especially to people in the poorest regions in South Africa, of escaping the cycle and trap of

poverty and overcoming the barriers of poor education and the inability to find work" (p. 115).

4.6 Career Intervention Strategy

The current career intervention was guided by previous interventions that were developed for population groups without much access to volitional jobs (Blustein, Kozan, Connors-Kellgren, & Rand, 2015). Previous research has emphasised that written components as well as the provision of occupational information in-session, are specifically beneficial to clients (Brown & McPartland, 2005). As a result, the current career intervention was centered on the completion of a career workbook and provision of training pamphlets in-session. Additional research has suggested the inclusion of the following components in career interventions: individual attention within a group setting and opportunities to engage with occupational information in-session, while role modelling and identification of existing support structures (Brown & McPartland, 2005). These components have all been linked to desirable outcomes, so that if a career intervention includes two or three of the components listed above, then the intervention seems to have a more positive outcome than an intervention that included fewer components (Stead & Subich, 2017). The career intervention included all of the elements listed above in an attempt to develop career adaptability competencies that were exhibited as observable outcomes in the post-intervention assessments.

4.7 Creation of the Career Workbook

Each of the five career adaptability dimensions (viz., concern, control, curiosity, confidence and co-operation) required specific exercises to facilitate reflection, self-awareness and meaning-making (Savickas, 1997, 2005). These exercises were adapted from narrative therapy practices (Combs & Freedman 2012; Denborough, 2005, 2014; Epston & White, 1992; Madigan, 2011; Morgan, 2000; White, 1991, 1995, 1997; White & Epston, 1990), qualitative career counselling interviews (Bimrose & Hearne, 2012; McMahon & Watson, 2013; McMahon et al., 2012a; McMahon, Watson, Chetty, & Hoelson, 2012b), the career construction interview (Barclay & Wolff, 2012; Savickas, 2005, 2011b, 2012), case study approaches (Arulmani, 2004, 2007, 2010a, 2011, 2014; Arulmani, Van Laar, & Easton, 2003; Maree 2010a, 2014; Maree & Molepo, 2007; Maree et al., 2006) and established career interventions such as the Career Interest Profile (Di Fabio & Maree, 2013; Maree, 2013). The end product is a mosaic of previous qualitative career counselling practices woven together

by the perspectives of academics, field workers, NGOs, teachers and principals with the intention of including culturally relevant and contextually bound challenges.

4.7.1 Process of engaging role players.

Previously, in Section 3.8.2 the development of the time structure of the intervention was dicussed and Table 3.3 detailed the process of finding time slots that suited all the role players involved. In this section, a brief overview of the meetings held with Kayamandi role players and a summary of the suggestions that resulted from these meetings is presented (see Table 4.3). There were seven fieldworkers, eight teachers, two principals and four Vision K management members involved in the design of the content and structure of the career intervention (n = 21). The intervention content meetings were predominantly held during *Phases 1*, *2* and *3* in 2015 and 2016 before the final implementation of the career intervention. Meetings were held to ask for guidance from experts in the Kayamandi field to design a contextually relevant and culturally sensitive intervention. I was responsible for ensuring that the career intervention was theoretically informed by career counselling principles.

In total, there were 28 meetings held during 2015 – 2016. However, 16 meetings were held before the creation of the career booklet. Three meetings were held with fieldworkers, one meeting with each principal, three meetings with Vision K management members and four meetings with teachers at each school. Once the career booklet had been created another 12 meetings took place to assess the career booklet in terms of cultural relevance and practicality. There were four meetings held with fieldworkers and four meetings with teachers at each school. The principals and Vision K staff were not included due to time constraints. Table 4.4 lists the changes suggested to improve the career booklet as well as the ensuing adjustments that the researcher made as a result of these meetings.

Table 4.3 provides an overview of role players, their suggestions and the resulting exercises that were created. The qualitative information eleicited was analysed and then grouped according to one of the CCT five career adaptability dimensions. The career intervention was structured for four sessions of two hours each, resulting in a total of eight hours with 12 hours of homework. The career intervention was broken up as follows: *Session 1* included writing T_1 and the career concern dimension; *Session 2* included the career control and curiosity dimensions; *Session 3* included the career confidence and co-operation

dimensions and *Session 4* included pamphlets, consolidating a career identity and reflection questions.

Table 4.3

Process of Intervention Content Construction

Role players	**Suggestions**	**Exercise created**
Teachers (T)	T.1. "You *need to find something that they can relate to, let them see I am not alone in being confused and scared."*	Nikiwe's case study was included and it was hoped that fieldworkers could also be role models/ mentors.
	T.2. *"They need to explore, often they have never even seen a pamphlet. They need to sit, absorb and get questions."*	The last session included pamphlets and answering of questions.
	T.3. *"A positive voice must be encouraged, that one stands up for him/her. Saying no man, I can do this!"*	Mapping externalising conversations & the counter-story (p. 15)
	T.4. *"We need to talk about barriers, that are other voices, these kids face so many challenges."*	Putting the Voices of others into my story (p.8).
	T.5. *"Role models. To pick the good role models and to know why you look up to that person. And it should not only be about money, clothes or we will lose them all to the tsotsis."*	Identifying the people who have shaped you (p.10)
	T.6. *"They need to learn to plan step by step and know what they need to know."*	Actualising a career identity (p.17)
	T.7. "They *need to learn to reflect where they came from, the decisions they made put them on a path and they can change that path at any time."*	Reflection (pp. 18-19).
Fieldworkers (F)	F.1*"I like the idea of being the author of a story and the depending how you link events together you can either be a victim or a hero."*	Curiosity: Creating the plot of my career story (p. 11)
	F.2. *"We need to find a way to create a complex picture of all the small puzzle pieces that inform career choices, make them see all these small things link."*	Curiosity: Plotting my career story (p.13)

Role players	Suggestions	Exercise created
Fieldworkers (F)	F.3. "*These kids they need perspective, they need to think about how others see them and how that compares to what they see. They really don't have much self-awareness."*	Co-operation: Johari's window (p. 16)
	F.4 *"And they have no clue what they like doing. It's always the same I like socialising and chatting on Facebook or WhatsApp. They need to think about what they like doing and how that links to skills that can be used in a job"*	Curiosity: Choosing my skills (p.12)
Principals (P)	P.1:*"Include exercises where they need to reflect on what others are telling them. They must be able to be critical and think this person is jealous and not being supportive."*	Control: Identifying positive & negative voices in my career story (p.7)
	P.2. "*The one thing that worries me the most is that these kids have weak minds. They give up when it is too difficult to become that career. They listen to that voice inside that tells them they will fail no matter what they do"*	Confidence: Externalising conversations (p.15)
Vision K (VK) management members	V.K.1:"*These kids they don't spend any time in the future, they are like grabbing anything that comes their way one moment to the next."*	Concern: The Future You (p.4)
	V.K.2: "*Time is something that no one really thinks about. We need them to think this is what I did in the past, I learnt this lesson, now I do this thing differently, but in the future I must still learn to other things differently. That time connection is missing.*"	Concern: My Career Voice: Past, present & future career stories (p.6)

Table 4.4

Process of Career Intervention Redrafting

Role players	**Suggested changes**	**Changes made**
Teachers	T.1. *"You need lines for these kids to write on."*	Lined spaces were included.
	T.2. *"You need to include fun things, like games or jokes."*	Fieldworkers included jokes and role playing.
	T.3. *"They will get bored, make the instructions short."*	All text was reworked and shortened.
	T.4. *"You should print this in an A5 booklet format so that they think it is not so much work, if they see it in an A4 format they will complain that it's too much writing."*	The booklet was printed in an A5 format.
	T.5. *"You will have to check that they answer all the sections, they try to cheat and only fill out a few pages because they think you won't check."*	Each booklet was checked for completion.
	T.6. *"You need to include pictures, they don't like pages of writing"*	Images were included on every page.
	T.7. *"You need to give them career pamphlets to look at with you so you can help them fight that fear of not understanding"*	Career pamphlets were collected and included.
	T.8. *"You need to make them choose three careers at the end. You know like plan a, plan b and plan c."*	This idea was included the whole way through.
Fieldworkers	F.1. *"You will need to make these kids work to finish in time, we will have to explain the sections first and then give them time to work afterwards."*	This approach was followed and worked very well, then there were also quiet times.
	F.2. *"We will have to help them understand the externalising conversation using a role playing example."*	This was included and fieldworkers took turns using personal examples.
	F.3. *"We will have to explain entry requirements and bursaries."*	This was included.
	F.4. *"These reflection questions will need explaining because they are not used to reflecting."*	An explanation was given verbally about the value of thinking back to what was learnt.
	F.5. *"This plotting of events will confuse them, but they need to learn how a story is made, we need to give them examples."*	We used two examples of plotted stories in-session.

4.7.2. Contextual examples and images.

Three main categories will be discussed, namely the inclusion of the concept of co-operation, the use of Africentric imagery in the career booklet, and the narrative structure of the career intervention. Firstly, the concept of co-operation was added to the intervention after numerous Delphi panel meetings with fieldworkers and intervention structure meetings with school staff. These parties emphasised a huge relational component that needed to be considered in developing career adaptability, which was supported by previous research conducted using the *CAAS-Iceland* (Einarsdóttir et al., 2015). The co-operation construct was included as an adaptation of the CCT to be contextually-relevant to the collectivistic amaXhosa sample (Stead & Watson, 2006). This subscale encompassed the interconnectedness of social, contextual and cultural aspects, which resonates with collectivistic worldviews (Holdstock, 2000), where co-operation with others to fulfil social obligations was paramount in the expression of a self-concept (Arulmani & Nag-Arulmani, 2004; Mkhize, 2015). In the amaXhosa collectivistic culture, the needs of family members are often respected out of a sense of duty, which resulted in detrimental effects on career development processes (Mkize & Frizelle, 2000). Therefore exercises were included that focused on an examination of voices that influenced career decision-making, to allow a reconciliation between individual ambition and Africentric duties in the creation of a coherent self-concept (Albien, 2013; Theron & Theron, 2013).

In addition, the use of African images in the workbook, as a move away from Eurocentric images, was debated. The main theme that emerged during dicussions with fieldworkers was that images of success were tied to Western notions of success and traditional African images often were not seen as desirable or prestigious enough. The decision was made to follow the fieldworkers' recommendations. As a result, images were used that related to the content of the workbook and depicted people of diverse heritages. This was believed to prevent learners' misinterpretations of the intervention's intentions, which would negatively impact their participation and completion of the intervention. Fieldworkers had already expressed concern that the narrative structure of the intervention did not conform to the traditional assumptions about what career counselling entailed. Fieldworkers were apprehensive that learners would not complete the intervention if the content seemed too unfamiliar as this would be associated with being less valuable. Fieldworkers had explained that a *"testing and telling approach was expected"* (Fieldworker 1: F.1). The learners had expectations of the career counselling process which entailed being

told what they were good at and then what career this skill or trait was associated with. This misconception of the career counselling process was supported by previous research in the Kayamandi context (Albien & Naidoo, 2017).

In order to incorporate Kayamandi voices and reality-near experiences, each section of the career workbook was critically discussed by the researcher and the team of fieldworkers after feedback had been received from the teachers and principals. Thereby an intervention could be created which included role players at grassroots level and was tied to career counselling theory. The career booklet structure can be seen in Table 4.5. An overview is presented of the career dimension addressed, the associated workbook exercise and the corresponding page number. The process that informed the design of the present intervention content and structure provides a new method of creating culturally sensitive career interventions that could contribute to dialogues surrounding social justice and decolonisation of people in the global south (Arthur, 2005, 2014; Connell, 2014; Edmonds, 2013; Sultana 2014; Watson, 2010).

4.8 Description of the Intervention Materials

The intervention was based on the completion of a career booklet (see Appendix Q) which contained written exercises. Pamphlets of higher education institutions and colleges were provided in-session to facilitate career exploration. The intervention was facilitated by the fieldworkers and researcher as a team, thus creating a bilingual English and isiXhosa environment. Each team member was responsible for explaining demarcated sections of the booklet. Role playing scenarios were included and contextually-relevant examples were used to bring creativity and cultural-sensitivity into the relational space created. The career booklet was initially named: *Voices of career development: A narrative workbook for creating career-life adaptability* but was colloquially shortened and referred to by all role players involved as the *Shaping Career Voices Intervention.* The *Shaping Career Voices Intervention Booklet* consists of 19 pages, with lined spaces for written reflections. An introduction to narrative career counselling was provided to describe how the intervention aimed to facilitate career adaptability. A simple five C's analogy (i.e., concern, control, curiosity, confidence and co-operation) was used to explain the dimensions of career adaptability (Savickas, 1997; 2005). Although, the CCT (Savickas, 1997; 2005) uses only four dimensions, a fifth dimension (i.e., co-operation) was included, as an adaptation to relational components emphasised by amaXhosa collectivistic cultural underpinnings (Mkhize, 2015).

Table 4.5

Life-designing Intervention Structure

Adapt-ability dimension	**Career question**	**Attitudes and beliefs**	**Competence**	**Career problem**	**Coping behaviours**	**Relationship perspective**	**Career Intervention**	**Types of intervention**
1. Concern	Do I have a future?	Planful	Planning	Indifference	Aware Involved Preparatory	Dependent	Orientation exercises	1.The Future You (p.4) 2.My Career Voice: Past, present & future career stories (p.6)
2. Control	Who owns my future?	Decisive	Decision-making	Indecision	Assertive Disciplined Wilful	Independent	Decisional training	1.Identifying positive & negative voices in my career story (p.7) 2. Putting the Voices of others into my story (p.8).
3. Curiosity	What do I want to do with my future?	Inquisitive	Exploring	Unrealism	Experimenting Risk-taking Inquiring	Interdependent	Information-seeking activities	1. Identifying the people who have shaped you (p.10) 2. Creating the plot of my career story (p. 11) 3. Choosing my skills (p.12) 4. Plotting my career story (p.13) 5. Career Pamphlets & fieldworker facilitated discussions in session.
4. Confi-dence	Can I do it?	Efficacious	Problem-solving	Inhibition	Persistent Striving Industrious	Equal	Self-esteem building	1. Externalising conversations 2. Mapping externalising conversations & the counter-story
5. Co-operation	Who is involved?	Collaborative Compromising	Negotiation	Indecision Foreclosure	Accommodating Interpersonally skilled Agreeable	Interdependent	Inter-relational & interpersonal skills training	1.Johari's window 2.Identifying positive & negative voices in my career story (p.7) 3. Putting the Voices of others into my story (p.8).

Notes. See Appendix Q of the Career Intervention Booklet titled: *Voices of Career Development: A Narrative Workbook for Creating Career Life-Adaptability.* The intervention title was shortened and referred to as: *Shaping Career Voices Intervention.*
Table adapted from Hartung, P.J. (2007).*Career construction: Principles and practice.* In K. Maree (Ed.), *Shaping the story: A guide to facilitating narrative counselling*, p. 110. Pretoria: Van Schaik Publishers.

4.9 Content of the Career Intervention Booklet

The processes of reflexive construction, deconstruction, co-construction and reconstruction were included in this career booklet. These constructive processes are theorised to form the cornerstone of developing career adaptability and designing a subjectively successful life (Hartung, 2013a; Savickas, 2011b). If individuals assign meaning to career-related experiences, a distinguishable plot can be shaped as an implementation of the client's career identity into a work role (Savickas, 2013b). The CCT highlights the importance of discovering and adapting clients' traits through the process of eliciting career-life stories and examining central career-life themes to which individuals assigned importance during their life-spans (Csikszentmihalyi & Beattie, 1979; Hartung, 2011).

4.9.1 Narrative case study.

At the start of the intervention, a narrative career counselling case study entitled *Nikiwe's story* was presented (Maree, 2010c). The case study provides an example of how stories could stimulate reflection and help re-author a new career-life narrative (Maree, 2017). The case study was contextualised by describing Nikiwe as a high school learner who turned to her teacher for help in facing career indecision and uncertainty. Nikiwe's teacher encouraged her to tell three stories: a family story from the past; a story from a previous part-time job; and a recent story from Nikiwe's school. Common themes were identified in these stories, and were presented in a text block. In the intervention, the participants were asked if they could identify life themes in Nikiwe's stories. Life themes were described as "clues" to what career Nikiwe should choose to be happy in her future career-life. Lastly, Nikiwe's career choice of working for an international aid agency was discussed based on the integration of her life themes. The narrative structure of the intervention was emphasised and compared to Nikiwe's dialogue with her teacher, with the aim of stimulating awareness of common themes that exist in an individual's life stories and could inform a career choice that would enable career-life satisfaction. The participants were encouraged, throughout the career booklet, to reflect on how personal qualities, influential people and experiences could ultimately be woven into their own unique career voice.

4.9.2 Reflective theoretical underpinnings and exercises.

The career booklet was created using Schön's (2006) three reflection types. The first type is *reflection-on-action*; in which retrospective reflection is elicited after an event has passed, and which is used in exercises that ask participants to think back to past events or experiences. *Reflection-in-action* is simultaneous, and can be compared to a running

commentary in which an individual narrates thought processes during actions. The career booklet uses *reflection-in-action* by asking participants, in reflection text boxes, if they noticed/thought/learnt anything during the exercise. Thirdly, *reflection-through-action* is the process of becoming aware of internalised or habituated sets of actions and thoughts.

Additionally, reflection was also theorised according to Kolb (1984). *Reflection-in-action* is the first stage, which includes *concrete experience (CE)*, during which tacit knowledge is used to carry an experience forward. Instead, *reflection-on-action* is mapped onto the *reflective observation (RO)* stage, which includes identifying the significance of an experience or naming problems and/or questions triggered by the experience. In the *abstract conceptualisation (AC)* stage, usable concepts or hypotheses are generated, which can be compared to the *reflection-on-action stage*. The next stage is the *active experimentation (AE)* stage of Kolb's cycle, where the implications of the generated concepts are tested. This links to *reflection-for-action*, when someone reflects in order to create a new plan or to confirm an understanding (Cowan, 1998).

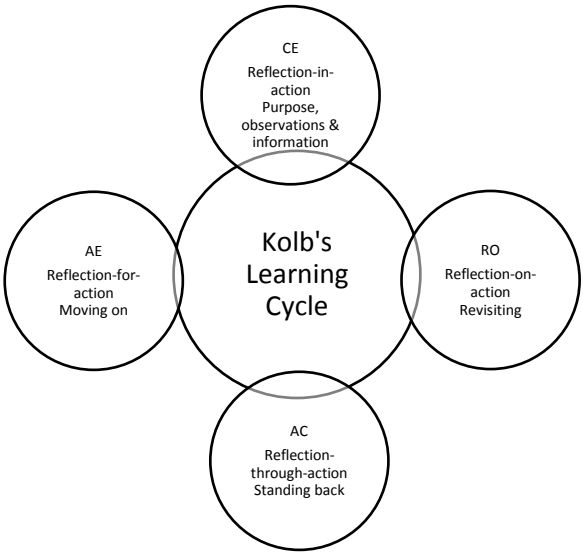

Figure 7. Types of Reflection Assigned to Kolb's Learning Cycle (1984). Adapted from. "Development of student skills in reflective writing," by T. King, 2002, July, Paper presented at the *4th World Conference of the International Consortium for Educational Development in Higher Education, Perth, Australia. doi: http://citeseerx. ist. psu. edu/viewdoc/summary*.

Furthermore, stages of reflection can be simplified into seven stages according to Moon (1999a). The first three are precursory steps needed for later reflection (i.e., *purpose*, *basic observations* and *additional information*). The first true level of reflection is *revisiting*,

when earlier reflections are reviewed to develop a different point of view and this stage includes theorising and/or planning new actions (Moon, 1999a).The next stage is *standing back*, when new actions are tested and results discussed. This can result either in *moving on*, as a consequence of having learned or resolved an issue, or the individual may return to reflection to generate new possibilities, in which case the reflection cycle is started again (Moon, 1999b). Figure 7 is a diagram that structures the reflection theories mentioned according to Kolb's learning cycle (Kolb, 1984; Moon, 1999; Schön, 2017). These reflective theories informed the selection and use of reflection exercises throughout the intervention.

4.9.3 Career adapt-ability section: Concern.

The first section in the career booklet was *concern* and dealt with having a future orientation. In the first part of the *concern* section, the participants were asked what expectations they had. If specific needs were voiced that were not included in the intervention material, then the researcher and fieldworker team would research the specific concern and include the information the next day. The main exercise in this section was to write a story about an ideal futureself and reflect what choices would lead to this futureself. This written exercise took the form of a newspaper article and the participants had to write about themselves in third person. The participants were told to outline their achievements, describe the type of person they would like be and the qualities they would like to be remembered for. A reflection box was added at the end of the section, in which participants were asked to reflect what they learnt in describing their futureselves. The intention was to provide a space to include process-related reflections (Kolb, 1984; Moon, 1999a; Schön, 2017), which would help participants to identify life themes, goals or values that were pertinent in shaping their career stories.

The second exercise of the *concern* section, was a table called *My Career Voice: Shaping my Career Story*. This contained three columns, titled *past* (describing past career decisions that were taken), *present* (describing current career actions) and *future* (describing what career actions need to be taken). The participants had to tie future career ideas identified in the first exercise to decisions that they needed to make in the present, which allowed a time perspective to be developed. This is based on Kolb's cycle (Kolb, 1984; Moon, 1999a; Schön, 2017) of integrating previous examples of successful career decision-making and observable incidents of mastery into a new movement forward in a chosen career direction (i.e., a movement from *revisiting*, to *standing back* and to *moving on)*. Thus an awareness was gained of how career ideas, concerns and decisions changed over time.

4.9.4. Career adapt-ability section: Control.

The next section, *control,* dealt with the responsibility that individuals assume for constructing their own careers. The *Control section* was conceptually adapted from the *My Systems of Career Influences instrument* (*MSCI*: McMahon, Patton, & Watson, 2017) by looking at career voices at different levels that include social (family, friends, teachers and culture) and societal-environmental (community and media). The *control section* was designed to develop critical thinking skills to help participants navigate various positive and negative influences in the township context, and to examine how career voices could affect the participant's behavior, if control was not exerted in implementing his/her own career voice. This exercise aimed to critically analyse the mixed-messages that were transferred between social groups in township contexts, which could lead to the perpetuation of career myths and dyfunctional and/or irrational career beliefs (Albien & Naidoo, 2017). The underlying belief was that individuals could adjust to different contexts, using self-regulatory strategies and that they could exert an influence on their context. This served to acknowledge contextual challenges, but did not victimise or pathologise township youth in any way (Kapp et al., 2014).

The second *Control* exercise was called *Putting the voices of others into my story.* Participants were meant to transfer the most meaningful or relevant career voices to their current career path, using the same divisions again (family, friends, teachers, culture, community and media). Thereafter, they were instructed to cross out the voices that they should actively ignore. This left the career voices behind that were an accurate reflection of their abilities, or voices that were supportive and/or were able to provide information or mentorship. At the end of this section there was a reflection box that asked participants what they would do in the future when negative voices were encountered that could provide barriers to creating a successful career story. This is termed a *reflection-in-action* exercise (Kolb, 1984; Moon, 1999a; Schön, 2017). Thereby, a unique situation was created in which participants have the opportunity to cognitively process a variety of reactions and decide which action would be relevant in a scenario-bound context. This pre-empts a practised reaction that could be used when negative voices are met in real-life.

4.9.5 Career adapt-ability section: Curiosity.

The third section, *curiosity*, included exploration activities to engage with the world-of-work. Participants were encouraged to explore possible selves in order to create a realistic career identity. As an introduction to this section, a description was given, called *Voices of self: My story.* This introduction section described that narratives are created by an individual

by linking specific events together over time, in a way that is uniquely meaningful to the individual. As a result the individual is the author who chooses the events to weave together to create a career-life story and that this story can be re-authored if steps were retraced or a different direction was taken.

The *curiosity* section consisted of four parts: 1) *Who has helped shape who you are?;* 2) *Creating the plot of my career story*; 3) *Choosing my skills;* and 4) *Plotting my career story*. The first section dealt with describing three people whom the participants admire. The instruction was for the participants to select individuals who made a significant impact on them. The proximity of the relationship was not important; it was explained that it could be an individual who is very familiar or someone whom participants only know from afar, such as someone in the media or a character on TV or in a book. The intention was not to describe materialistic indicators of success, or people with lavish lifestyles. Instead, the underlying values that were attached to these role models were questioned. Each fieldworker provided examples of their personal role models, with qualities listed that they value, as an example of the subjective integration of career and personal values (Betz & Corning, 1993; Jaskyte, 2016; Savickas, 2005; Savickas et al., 2009).

The second part of the *curiosity* section, *Creating the plot of my career story,* required the participants to think about all the events, chance encounters, obstacles and people that had shaped their career story up until that point. This exercise built on the previous exercise and participants were instructed to include their role models in their career plot. The event mentioned could be good or bad, but what mattered was that it had elicited change or influenced a decision for the participant. If various obstacles were listed, then these events can be linked together to create a plot of being resilient and allowing future obstacles to be overcome. A diagram was provided, in which participants had to fill in the boxes and then join the events by drawing a line to plot the order or sequence of events. Participants also had to write down a belief or meaning they held in connecting these events. If participants wanted to they could go back to their diagram to add skills, other relevant pieces of information or join the events differently as a way of re-authoring their experiences.

This exercise demonstrates the idea that selected events are linked across time to form a narrative (Morgan, 2000; Van der Merwe & Gobodo-Madikizela, 2009). Events are selected or privileged over other events, which allows reflection to occur of what events are outside of the dominant story or seem less significant for participants. Stories could be re-constructed using the less significant events or reflections of other people which highlighted that stories were never produced in isolation from the broader world. The intervention highlighted that

individuals needed to gain insight into the events, messages, reflections and meanings they were assigning importance to and as a result informed their self-concept and career identity.

The third exercise was called *Choosing my skills* and was based on the participants gaining self-awareness of their skills. Twelve categories of different skill sets were listed, and thie exercise was adapted from Bolles (2009). The answer ranges included *below average*, *average* and *a real talent.* The participants only needed to put a tick in the appropriate box. The skill categories were listed as follows:1) *mechanical* (taking things apart, building things and fixing objects); 2) *physical* (athletic skills including co-ordination, quickness, strength and size); 3) *manual finesse* (handling small object easily with your fingers); 4) *analytical* (solving puzzles/ brainteasers or problems, questioning how things work); 5) *creative* (inventive, good at coming up with new ideas, imaginative); 6) *artistic* (drawing pictures, painting and crafts); 7) *musical* (singing, playing an instrument, producing music, and listening to music); 8) *social* (making friends, meeting new people and helping others); 9) *persuasive* (selling things and getting people to see your point of view); 10) *organising* (keeping things neat, using a planner and managing time); 11) *leadership* (others look up to you and follow your example); and 12) *academic* (learning things easily and performing well in tests). The fieldworkers facilitated discussions about diverse skill sets that are visible in the informal and formal work sectors.

Contextual examples of visible vocations in Kayamandi were introduced purposefully by fieldworkers. A few examples of these vocations, most of which were located in the informal sector, are hairdressers, spaza shop owners, shebeen owners, taxi drivers, people who cook and sell food, sangomas, municipality ward officers, social workers, nurses and police officers. Active facilitation allowed participants to brainstorm careers that could be linked to these skill areas. Discussions were facilitated around overlaps in skills for specific careers, how their self-identified skill set affected their current career ideas, and if peers had feedback that might reflect additional skills that were not considered by the individual, using *reflection-in-action* (Schön, 2017).

The last part of the *curiosity* section was called *Plotting my career story*. This section required the participants to integrate the skills identified in the previous exercise, the advice provided by role models, and the previous career events identified. The participants thereby could question how they had combined significant people, events and skills to arrive at a career decision. This reveals if a career choice is based on family members' opinions or has a materialistic basis that otherwise has no link to the skill set possessed. This exercise can also allow a re-authoring to occur, in which the individual questions previous interpretations

utilised to link events in creating a career-life story or is faced with choices of how to include new information into his/her career-life narrative.

4.9.6 Career adapt-ability section: Confidence.

Confidence was the fourth dimension covered in the career adapt-ability intervention. Confidence is defined as the belief held by an individual about his/her capabilities, which has also been called self-efficacy (Bandura, 2006). Proactive career behavior has previously been linked to self-confidence, self-esteem and self-efficacy in completing career-related career activities (Betz & Hackett, 1981; Lent et al., 2000). Most importantly, confidence also includes the ability to persist in pursuing aspirations and objectives in the face of obstacles and barriers. This career competency becomes essential when the township context is taken into consideration. The participants had faced extreme hardships in comparison to middle-class cohorts (Hiller et al., 2017). Previous career interventions have not taken personal losses or traumas into consideration, when these often require a complete identify reformulation and extensive meaning-making processes that spilled over into career development processes (Brown, 2015; Hartung & Taber, 2008; Strauser, Lustig, & Çiftçi, 2008; Strauser, Lustig, Cogdal, & Uruk, 2006).

This section used an externalising conversation approach (Morgan, 2000), which allowed the participants to identify the greatest problem currently faced in their career path. Thereafter, the participants were asked to picture this problem as a person. The problem was personified by providing a description of physical appearance, mannerisms, gestures, and what he/she would say. The impact of the the identified problem on different areas of the participants' lives was discussed. A role play was provided by the fieldoworkers of how the problem voice affected their behaviours. This helped to explain how the problem could affect participants' relationships, as well as their personal stories of who they wanted to be.

Once the far-reaching effects of the problem voice had been identified, the reasons for why this problem voice was allowed to have such a negative influence were unpacked. The tricks, strategies or tools the problem voice used to gain control over the participants were identified. Examples of overcoming the influence of problem voice were also examined to search for strategies that the participants had already used in the past to break free from the problem voice. Lastly, a social support system was identified, whereby participants were asked who could help them to overcome the problem voice in order to create a positive counter-story. The section ended with a summary that engaged the participants in the different types of reflection (*reflection-in-action*, *reflection-on-action*, *reflection-through-a*ction and *reflection-for-action*) (Kolb, 1984; Moon, 1999b; Schön, 2017). The overview is called

Mapping externalising conversations (White, 1991, 1997, 1998). Participants had to fill out a table that placed the problem voice directly against a positive counter-story. In contrasting the two narratives, an understanding was generated about the meaning-making processes and subjective value attached to both voices (Madigan, 2011; White & Epston, 1990).

4.9.7 Career adapt-ability section: Co-operation.

The last dimension was *co-operation*, which is described as beliefs held about working with others and collaboration. Johari's window (Luft, 1969, Luft & Ingham, 1961a, 1961b) was used to indicate the hidden areas (viz., skills or traits) that were unknown to the participants but perceived by others. Johari's window is a disclosure or self-awareness feedback model that can help identify characteristics that a participant may be afraid to reveal or admit to anyone, but these characteristics can be crucial to their career-life story. A four-quadrant window had to be filled out and is called *My personalised Johari's window of my career story*. Johari's window has four equal cells, where *Cell 1* is known by the person and is known by others (i.e., an open area). *Cell 2* is a blind area, unknown by the person but known by others. *Cell 3* is a hidden area which includes what the person knows about him/herself that others do not know (i.e., the façade) (O'Toole, 2015).

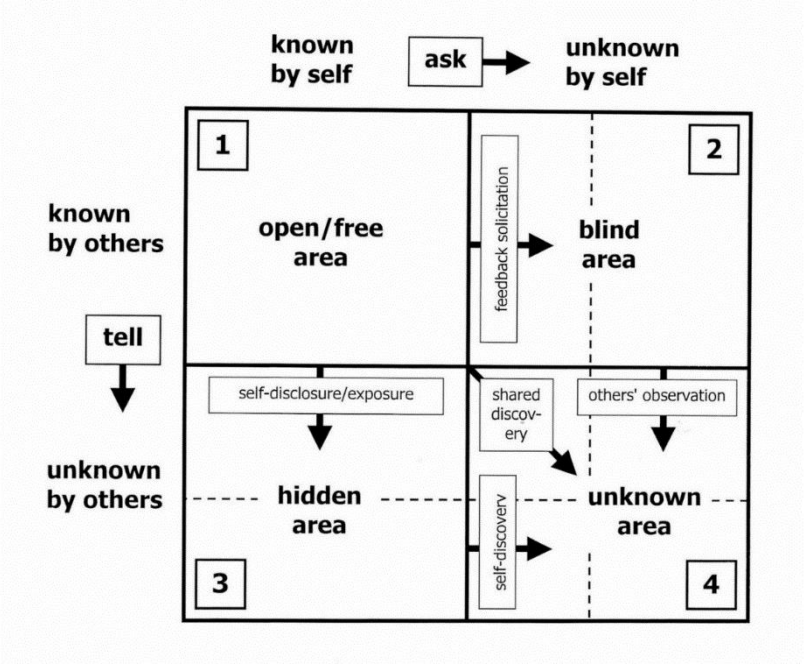

Figure 8. Johari's Window. *Note.* "The Johari Window for understanding individual and group learning" (pp. 203-204) by A. Drejer (2002). *Strategic management and core competencies: Theory and application*. Copyright, 2002 by Greenwood Publishing Group, Connecticut. Reprinted with permission.

Cell 4 is an unknown area, unknown by the person and also unknown by others (Luft & Ingham, 1961a). Information, which an individual is prepared to learn from others or experience, is incorporated in *Cell 2* (Luft & Ingham, 1961b). The amount of self-disclosure participants are prepared to engage in with others is incorporated in *Cell 3*. The model presumes that accurate self-awareness is a function of how much is known about the self and requires shifting information from *Cells 2*, *3*, and *4* into *Cell 1* (O'Toole, 2015). Therefore, the more an individual knows about him/herself, the more self-determination he/she will have in pursuing career actions.

4.9.8 Termination section: Action plan and reflection.

This section, *Actualising a career identity*, was focused on helping the participants integrate snippets of information gained during the intervention.The aim was to have three career choices at the end of the intervention. Pamphlets were handed to the participants for them to explore career options. Pamphlets included a range of training options including Further Education and Training (FET) colleges, universities, private training institutions, learnerships and internships. Questions were listed in the career booklet, so that the participants knew they had to answer all the questions by reading, exploring and asking for help from the fieldworkers and the researcher. This created a safe space for engaging with difficult concepts (i.e., entry requirements). This session also created a holding space for disappointment if school marks did not meet the minimum entry-level requirements and a reformulation of career goals ultimately was needed. This section provided a checklist to help the participants think about their next steps once the career intervention had been completed.

The last two pages of the career booklet included twelve reflection questions based on the reflective stages assigned to Kolb's Learning Cycle (Kolb, 1984; Moon, 1999a, 1999b; Schön, 2017). At the start participants were asked about their current career ideas. Participants were asked to picture what career would allow them to be happy and successful. A reflective question was included about Nikiwe's case study to determine what participants had found useful. Thereafter, the influence of participants' role models was re-assessed to see if new insights had been gained. Then participants' career voices were re-examined to determine what the participants had learnt. Participants' externalising conversations were explored to assess if any understandings had been gained about their past or present behaviours. Reflective questions were also directed at participants' perceptions of insights gained during the plotting of their career story exercise as well as the question checklist. The last three termination questions assessed participants' reflections about what had meaningfully stood

out for them during the intervention, if they would have liked to change anything or mention anything else.

4.10 Chapter Summary

Career construction counselling, as explained above, is embedded in life-design counselling. Life-design counselling can be regarded as an effective means to achieve career adaptability. The fundamental guiding principle is the successful integration of the objective and subjective meanings that people attached to their career-life stories (Maree, 2017). This chapter presented theoretical nuances that shaped the career intervention activities and informed the design of the career intervention process. Although, Watson (2013) questions the effectiveness of the career construction theory in developing country contexts, the present research answers the call made for more research – either to confirm or refute the usefulness of the life-design counselling approach in the (South) African context. The hope is that, although South Africa faces challenges that are unique as well as of an extraordinary scale, the knowledge and practice that is generated in a South African context can, and should, be applied to other contexts and cultures. The description of the career intervention design process presented in this chapter, as well as the post-intervention results presented in the next chapter, may lead to the utilisation of the materials for similar disenfranchised youth by career practitioners.

CHAPTER 5

RESEARCH RESULTS

5.1 Introduction

The results of *Phase 1* were discussed in the previous chapter, where the qualitative processes were described that were undertaken with various role players to gain contextual and culturally relevant information to inform the creation of the intervention materials. The outcome of *Phase 1* was a culturally sensitive life-designing career intervention. The rest of this chapter will be structured according to subsequent research phases that link to specific objectives. This chapter begins with the presentation of the results of *Phase 2*, which are based on the psychometric analyses of the *CAAS* and *VISA* instruments, which tested the suitability of these measures as pre-and post-intervention indicators in a non-Western, low-income context. Thereafter, the results from the intervention pilot are presented in *Phase 3.* These pilot results aimed at determining if learners obtained higher scores in the post-intervention measures. In addition, the intervention pilot also provided qualitative feedback to assess the practicality and feasibility of the intervention, as well as if adaptations of content and/or process were needed.

The results of Phase 4 present repeated-measures scores to assess whether the *Shaping Career Voices Intervention* resulted in improved scores on the career measures over different time points. In addition, scores on the career measures were examined according to gender, grade and vocational identity statuses to assess whether there are unique scoring patterns of career variables. The subjective evaluations elicited from the reflection and feedback forms are presented in the results of *Phase 5*. Lastly, *Phase 6* presents the qualitative findings that were extrapolated from a focus group discussion, six months post-intervention, to gain insight into the participants' perceptions of changes elicited by the intervention, such as adaptations in career ideas, career identities and career decisions.

5.2 *Phase 2*: Results of Psychometric Pilot Study

The overarching objective of the psychometric pilot study was to determine whether constructs of career adaptability and vocational identity, as well as the instruments measuring these constructs, were applicable for adolescents from a low-resource community (i.e., Kayamandi). Confirmatory factor analyses (CFA) were conducted and the results compared to determine how career competencies manifested differently in a low socio-economic context in comparison to an international instrument administration, as well as a previous South African

administration. This addresses the international call for the further testing and development of the nomological knowledge base of career adaptability and vocational identity research to provide evidence for the validity of the *CAAS and VISA* constructs in developing world contexts, which forms the current research problem being addressed (Savickas & Porfeli, 2012; Watson 2013).

5.2.1 *CAAS-South Africa Kayamandi.*

In Table 5.1 the *CAAS-South Africa Kayamandi* item mean scores and standard deviations are reported.

Table 5.1

CAAS-South Africa Kayamandi: Items, Standardised Loadings and Descriptive Statistics

Construct	Item (first-order indicators)	Mean	SD	Loading
1. Concern	1. Thinking about what my future will be like	3.89	0.90	0.38
	2. Realising that today's choices shape my future	3.31	1.10	0.45
	3. Preparing for the future	3.81	0.93	0.43
	4. Becoming aware of the educational and career choices that I must make	3.38	1.12	0.56
	5. Planning how to achieve my goals	3.68	1.04	0.55
	6. Concerned about my career	3.57	1.15	0.47
2. Control	1. Keeping upbeat	3.11	1.11	0.38
	2. Making decisions by myself	3.64	1.16	0.48
	3. Taking responsibility for my actions	3.80	1.13	0.61
	4. Sticking up for my beliefs	3.83	1.09	0.43
	5. Counting on myself	3.70	1.09	0.55
	6. Doing what's right for me	3.99	0.98	0.50
3. Curiosity	1. Exploring my surroundings	3.10	1.17	0.39
	2. Looking for opportunities to grow as a person	3.64	1.12	0.52
	3. Investigating options before making a choice	3.31	1.23	0.49
	4. Observing different ways of doing things	3.30	1.16	0.53
	5. Probing deeply into questions I have	2.98	1.18	0.58
	6. Becoming curious about new opportunities	3.52	1.22	0.53
4. Confidence	1. Performing tasks efficiently	3.19	1.21	0.56
	2. Taking care to do things well	3.79	1.00	0.57
	3. Learning new skills	3.71	1.03	0.48
	4. Working up to my ability	3.60	1.04	0.58
	5. Overcoming obstacles	3.30	1.22	0.54
	6. Solving problems	3.57	1.27	0.52
Construct	Construct (second-order indicators)			
adaptability	1. Concern	3.61	0.62	0.88
	2. Control	3.68	0.55	0.82
	3. Curiosity	3.31	0.73	0.90
	4. Confidence	3.53	0.72	0.97
	Adaptability	3.53	0.55	

Note: All the loadings are statistically significant at $p < 0.05$

In order to begin addressing this problem statement, the *CAAS* psychometric results will be presented first. The specific objectives of this phase are to compare the psychometric

properties and CFA loadings across three *CAAS* scale versions, with one administration being international (viz., the *CAAS*-International 2.0 (Savickas & Porfeli 2012)) and the other being a previous South African CAAS administration (viz., the *CAAS*-South Africa in the North West sample (Maree, 2012)) with the present South African administration in the Kayamandi sample.

The typical response was in the score range of strong (4) to strongest (5). Skewness and kurtosis values for the 24 *CAAS-South Africa Kayamandi* items ranged from -0.90 to 0.04 and from -0.93 to 0.46 respectively, an indication that the items conformed to the assumptions of confirmatory factor analysis for this sample. The subscale mean scores were concern (3.61), control (3.68), curiosity (3.31) and confidence (3.53) in the *CAAS-South Africa Kayamandi form*. Skewness and kurtosis values for the four *CAAS-South Africa Kayamandi* subscales ranged from -0.39 to -0.08 and from -0.44 to -0.17 respectively, indicating that the subscales conformed to the assumptions of correlation-based statistics for this sample. The second-order indicators of the career adaptability construct ranged from 0.88 to 0.97 and were significant at the $p < 0.01$ level.

5.2.1.1. Confirmatory factor analysis (CFA) results.

Confirmatory factor analysis (CFA) revealed that the data for the *CAAS-South Africa Kayamandi* fit the theoretical model well. The fit indices were RMSEA = 0.049, SRMR = 0.051 and GFI= 0.91, which conform to the established joint fit criteria (Hu & Bentler, 1999). The t-values were all greater than 2, indicating that the standardised loadings were all statistically significant (i.e., $p < 0.05$), and the factor loadings were above 0.3. Since the sample size exceeded 350 participants, all loadings met the guideline given by Hair, Anderson, Babin and Black (2010), namely that loadings of 0.3 or higher are acceptable if the sample size exceeds 350 participants. If a factor loading is above 0.3 or very high (above 0.6), then the relevant variable describes that factor quite well (Shyu, Li, & Tang 2013).

According to Diekhoff (1992), factor loadings ≥ 0.3 are considered moderately significant. Therefore, factor loadings were required to be ≥ 0.3 and statistically significant ($p < 0.05$) to accept that any variable was part of the *CAAS* subscales. Hair et al. (2010) also suggest that a higher reliability is indicated by the average variance extracted, and that extracted variance should be greater than 0.5. The variance extraction scores were found to be < 0.5 (see Table 5.2. below), which indicated variation in participants' responses to the *CAAS* questionnaire, which affected factor loadings. A Cronbach's alpha of 0.7 is usually considered a minimum cut-off

point (Hair et al., 2010); however, arguments have been made for this requirement to be lowered to a range between 0.5 and 0.6 (Kent, 2001).

Table 5.2

CAAS-South Africa Kayamandi Variance Extracted, Construct Reliability and Standardised Cronbach's Alphas

Construct	Construct (second-order indicators)	Variance extracted	Construct reliability	Standardised Cronbach's Alphas
Construct adaptability	1.Concern	0.23	0.63	0.64
	2.Control	0.25	0.66	0.65
	3.Curiosity	0.26	0.68	0.67
	4.Confidence	0.30	0.71	0.71
	Adaptability			0.83

In the present research, the construct reliability scores and Cronbach's alpha scores were all above 0.6, which were viewed as acceptable.

5.2.1.2 Comparison between CAAS Factor Models.

In terms of measures of reliability, the *CAAS-South Africa North West* study (Maree, 2012) reported slightly lower reliabilities than the total *CAAS-International* sample. Specifically, the reliability for the total career adaptability score was 0.91, which was higher than the subscales for concern (0.77), control (0.71), curiosity (0.78) and confidence (0.80). In contrast, the reliability scores for the *CAAS-South Africa Kayamandi* were lower, where the total career adaptability score was 0.83, which was higher than the subscale alphas for concern (0.64), control (0.65), curiosity (0.67) and confidence (0.71). However, the fit indices indicated that the Kayamandi data showed acceptable fit to the model. The fit indices for the *CAAS-International* model (RMSEA = 0.05 and SRMR = 0.04) (Savickas & Porfeli, 2012), the *CAAS-South Africa North West* (Mafikeng) model (RMSEA = 0.046 and SRMR = 0.05) (Maree, 2012) and the *CAAS-South Africa Kayamandi* model (RMSEA = 0.049 and SRMR = 0.051) showed much similarity.

The second-order construct adaptability loadings in the *CAAS-South Africa Kayamandi* sample, namely concern (0.89), curiosity (0.90) and confidence (0.98,) were higher than the *CAAS-International* sample of concern (0.78), curiosity (0.88) and confidence (0.90) loadings. In the *CAAS-South Africa North West* sample, the concern (0.79), curiosity (0.88) and confidence (0.98) loadings were lower than the *CAAS-South Africa Kayamandi* sample. However, the lowest factor loadings in the *CAAS-South Africa Kayamandi* sample were seen in the control construct (0.78), which can be compared to the *CAAS-South Africa North West*

sample (0.87) and the *CAAS-International* sample (0.86). In Table 5.3, the loadings of the first-order items on the second-order factors (*concern*, *control*, *curiosity* and *confidence*) of adaptability in the *CAAS-South Africa Kayamandi* hierarchical factor model are compared to those of *CAAS-South Africa North West* (Maree, 2012) and the *CAAS-International* model (Savickas & Porfeli, 2012).

Table 5.3

A Comparison of Confirmatory Factor Loadings Across the CAAS Factor Models

Construct	Item (first-order indicators)	Loading *CAAS International*	Loading *CAAS North West*	Loading *CAAS Kayamandi*
1. Concern	1. Thinking about what my future will be like	0.66	0.55	0.38
	2. Realising that today's choices shape my future	0.61	0.58	0.45
	3. Preparing for the future	0.77	0.69	0.43
	4. Becoming aware of the educational and career choices that I must make	0.69	0.63	0.56
	5. Planning how to achieve my goals	0.70	0.67	0.55
	6. Concerned about my career	0.60	0.46	0.47
2. Control	1. Keeping upbeat	0.48	0.48	0.38
	2. Making decisions by myself	0.58	0.51	0.48
	3. Taking responsibility for my actions	0.57	0.55	0.61
	4. Sticking up for my beliefs	0.56	0.57	0.43
	5. Counting on myself	0.66	0.57	0.55
	6. Doing what's right for me	0.57	0.59	0.50
3. Curiosity	1. Exploring my surroundings	0.62	0.58	0.39
	2. Looking for opportunities to grow as a person	0.69	0.61	0.52
	3. Investigating options before making a choice	0.64	0.65	0.49
	4. Observing different ways of doing things	0.66	0.67	0.53
	5. Probing deeply into questions I have	0.57	0.61	0.58
	6. Becoming curious about new opportunities	0.58	0.59	0.53
4. Confidence	1. Performing tasks efficiently	0.60	0.59	0.56
	2. Taking care to do things well	0.66	0.66	0.57
	3. Learning new skills	0.69	0.57	0.48
	4. Working up to my ability	0.72	0.66	0.58
	5. Overcoming obstacles	0.75	0.68	0.54
	6. Solving problems	0.73	0.65	0.52
Construct adaptability	Construct (second-order indicators)			
	1. Concern	0.78	0.79	0.89
	2. Control	0.86	0.87	0.78
	3. Curiosity	0.88	0.88	0.90
	4. Confidence	0.90	0.93	0.98

Note: All the loadings are statistically significant at $p < 0.05$

In terms of the *concern* construct, the concern scale loadings (0.89) in the *CAAS-South Africa Kayamandi* sample were higher than the concern loadings of the *CAAS-International* sample (0.78) and the *CAAS-South Africa North West* sample (0.79). The concern scale had the lowest Cronbach's alpha scores and variance extracted in the *CAAS-South Africa Kayamandi*. The

concern scale item 1 (*Thinking about what my future will be like)*, item 2 (*Realising that today's choices shape my future*), item 3 (*Preparing for the future*) and item 6 (*Concerned about my career*) all had loadings over 0.30 but under 0.50. The *CAAS-South Africa North West* only had similar loadings for the concern scale item 6 (*Concerned about my career*) (0.46). Although loadings under 0.5 for the concern scale item 6 were found across both South African studies, these loadings were deemed acceptable, as they were higher than the 0.3 value (Hair et al., 2010).

The lowest factor loadings in the *CAAS-South Africa Kayamandi* sample were seen in the control construct (0.78), which can be compared to the *CAAS-South Africa North West* sample (0.87) and the *CAAS-International* sample (0.86). The control scale item 1 (*Keeping upbeat*) (0.35) in the *CAAS-South Africa Kayamandi* sample showed the weakest loadings compared to that of the *CAAS-South Africa North West* and the *CAAS-International* sample (see Table 5.3). Furthermore, in the *CAAS-South Africa Kayamandi* version, the control scale item 2 (*Making decisions by myself*) was also under 0.5 (0.44). The *CAAS-South Africa Kayamandi* control scale item 3 (*Taking responsibility for my actions*) (0.60) was higher than that of the *CAAS-South Africa North West* (0.55) and the *CAAS-International* model (0.57). The *CAAS-South Africa Kayamandi* control scale item 3 (*Taking responsibility for my actions*) had the highest loading (0.61) across the *CAAS-International* (0.57) and *CAAS-South Africa North West* (0.55) versions, and this also was the *CAAS-South Africa Kayamandi* item with the highest loading. Although control scale item 1 (*Keeping upbeat*) had acceptable coefficients across all three versions (> 0.3), this item had coefficients under 0.5 across all the studies.

In terms of the curiosity construct, the second-order construct loadings in the *CAAS-South Africa Kayamandi* sample (0.90) were higher than the *CAAS-International* curiosity loadings (0.88) and the *CAAS-South Africa North West* curiosity loadings (0.88). The curiosity scale item 3 (*Investigating options before making a choice*) (0.49) had a loading that was over 0.30 but under 0.50. However, the curiosity scale item 1 (*Exploring my surroundings*) (0.39) had one of the lowest loadings in the whole instrument. Although curiosity scale item 5 (*Probing deeply into questions I have*) was expected to have low loadings due to language difficulties in the *CAAS-South Africa Kayamandi*, this item was seen to perform similarly to that in the *CAAS-International* (0.57), indicating sufficient translation and explanations.

Lastly, in terms of the confidence construct, the second-order construct loadings in the *CAAS-South Africa Kayamandi* sample (0.98) were higher than the *CAAS-International* confidence loadings (0.90) and the *CAAS-South Africa North West* confidence loadings (0.98). The *CAAS-South Africa Kayamandi* confidence scales showed the highest factor loadings, which

were all above 0.5, except for one item. The confidence scale item 3 (*Learning new skills*) showed a loading of 0.48, which was not replicated across the *CAAS-South Africa North West* and the *CAAS-International* models. Nonetheless, the *CAAS-South Africa Kayamandi* confidence scale had the highest Cronbach's alpha scores and the highest extracted variance.

5.2.2 *VISA* psychometric pilot study results.

This study contributes to culturally sensitive research on the psychometric properties of the *Vocational Identity Status Assessment* (*VISA*). South African career psychology research has overlooked vocational identity processes, which this research aims to address. Therefore, the psychometric pilot of *Phase 2* provided an exploration of the usefulness of the *VISA* to measure career identity processes amongst the Kayamandi youth. The psychometric pilot study aimed to determine whether constructs of vocational identity and the measurement thereof, using the *VISA*, are applicable for disadvantaged adolescents, as well as how these vocational identity statuses may manifest *differently* in comparison to the *VISA-American* version. Table 5.6 shows the item loadings and descriptive statistics from the confirmatory factor model comparing the *VISA American* version (Porfeli et al., 2011) and the *VISA-South Africa Kayamandi* version.

5.2.2.1 VISA-South Africa Kayamandi.

The mean scores and standard deviations reported of the *VISA-South Africa Kayamandi* items (Table 5.5) suggest that the typical response was in the range of strong (4) to very strong (5). Skewness and kurtosis values for the 30 *VISA-South Africa Kayamandi* items ranged from -1.82 to 0.62 and from -1.20 to 3.31, an indication that the items conformed to the assumptions of confirmatory factor analysis for this sample. The mean scores of the subscales in the *VISA-South Africa Kayamandi* form were 3.50 for *Career commitment-making*, 4.17 for *Identification with Career Commitment*, 4.11 for *In-depth Career Exploration*, 3.85 for *In-breadth Career Exploration*, 3.36 for *Career Flexibility* and 2.70 for *Career Self-doubt*.

5.2.2.2. Confirmatory factor analysis.

Confirmatory factor analysis (CFA) was conducted using robust maximum likelihood estimation. LISREL 8.8 was used to perform the CFA analysis. The CFA revealed that data for the *VISA-South Africa Kayamandi* fit the theoretical model well. The fit indices were RMSEA = 0.036, SRMR = 0.054 and GFI = 0.91, which conform to the established joint fit criteria (Hu & Bentler, 1999). The standardised loadings reported in Table 5.4 suggest that the loadings are all statistically significant, and the factor loadings were above 0.3.

Table 5.4

VISA-South Africa Kayamandi: Items, Standardised Loadings, Descriptive Statistics

Construct	Item (first-order indicators)	Mean	SD	Loading
Career commitment				
Career commitment-making				
	1. I know what kind of work is best for me	3.47	1.09	0.66
	2. No other career is as appealing to me as the one I expect to enter	4.01	1.05	0.40
	3. I have known for a long time what career is best for me	3.87	0.92	0.60
	4. No one will change my mind about the career I have chosen	3.97	0.92	0.51
	5. I have invested a lot of energy into preparing for my chosen career	3.94	0.97	0.57
Identification with career commitment				
	1. My career will help me satisfy deeply personal goals	4.18	0.98	0.51
	2. My family feels confident that I will enter my chosen career	4.22	0.88	0.48
	3. Becoming a worker in my chosen career will allow me to become the person I dream to be	4.21	0.90	0.71
	4. I chose a career that will allow me to remain true to my values	3.93	0.99	0.54
	5. My career choice will permit me to have the kind of family life I wish to have	4.00	0.87	0.50
Career exploration				
In-depth career exploration				
	1. Identifying my strongest talents as I think about careers	3.68	1.16	0.47
	2. Learning as much as I can about the particular educational requirements of the career that interests me the most	3.03	1.19	0.60
	3. Learning what I can do to improve my chances of getting into my chosen career	3.20	1.31	0.57
	4. Trying to find people that share my career interests	4.01	1.21	0.42
	5. Thinking about all the aspects of working that are important to me	3.59	1.09	0.43
In-breadth career exploration				
	1. Learning about careers that are unfamiliar to me to find a few to explore further	4.16	0.87	0.31
	2. Trying different experiences so that I can find several jobs that might suit me	4.01	1.08	0.57
	3. Thinking about how I could fit into many different careers	4.35	0.95	0.41
	4. Learning about various jobs that I might like	4.24	0.87	0.56
	5. Keeping my options open as I learn about many different careers	4.09	1.03	0.52
Career reconsideration				
Career flexibility				
1. My work interests are likely to change in the future		2.97	1.17	0.60
2. What I look for in a job will change in the future		2.65	1.26	0.68
3. I will probably change my career goals		2.87	1.22	0.60
4. My career choice might turn out to be different than I expect		2.61	1.35	0.56
5. I need to learn a lot more before I can make a career choice		2.39	1.26	0.18
Career self-doubt				
1. Thinking about choosing a career makes me feel uneasy		3.39	1.22	0.49
2. When I tell other people about my career plans, I feel like I am being a little dishonest		3.40	1.26	0.68
3. People who really know me seem doubtful when I share my career plans with them		2.68	1.24	0.54
4. I doubt I will find a career that suits me		3.19	1.15	0.63
5. I may not be able to get the job I really want		4.13	1.07	0.57
Construct (second-order indicators)				
Career commitment		3.83	0.59	
	Career commitment-making	3.50	0.79	0.54
	Identification with career commitment	4.17	0.63	0.76
Career exploration		3.98	0.49	
	In-depth career exploration	4.11	0.58	0.93
	In-breadth career exploration	3.85	00.7	0.42
Career reconsideration		3.03	0.70	
	Career self-doubt	2.70	0.86	0.31
	Career flexibility	3.36	0.77	0.37

Note: All the loadings are statistically significant at $p < 0.05$

All loadings meet the guideline given by Hair et al. (2010), namely that loadings of 0.3 or higher are acceptable if the sample size exceeds 350. Therefore, factor loadings were required to be ≥ 0.3 and statistically significant ($p < 0.05$) to accept any variable as part of the *VISA* subscales (Diekhoff, 1992; Shyu et al., 2013). In addition, the average variance extracted should be greater than 0.5 to indicate higher reliability (Hair et al., 2010). As seen in Table 5.5, the variance extraction scores are reported as < 0.5, which indicates variation in the participants' responses to the *VISA* questionnaire, affecting the factor loadings.

Table 5.5

VISA-South Africa Kayamandi: Variance Extracted, Construct Reliability and Standardised Cronbach's Alphas

Second-order construct	Construct (first-order indicators)	Variance extracted	Construct reliability	Standardised Cronbach's Alphas
1. Career commitment				
	Career commitment-making	0.31	0.69	0.68
	Identification with career commitment	0.31	0.68	0.66
2. Career exploration				
	In-depth career exploration	0.25	0.63	0.62
	In-breadth career exploration	0.23	0.59	0.57
3. Career reconsideration				
	Career flexibility	0.31	0.67	0.65
	Career self-doubt	0.34	0.72	0.72

While a Cronbach's alpha of 0.7 is usually considered a minimum cut-off point (Hair et al., 2010), arguments have been made for this requirement to be lowered to a range of 0.5 to 0.6 (Cronbach & Shavelson, 2004; Kent, 2001) when used in a research context. In the present research, the construct reliability scores and Cronbach's alpha scores were all above 0.6, which were viewed as acceptable.

5.2.2.3 Comparison between VISA factor models.

The fit indices indicated that the Kayamandi data shows acceptable fit to the model. The fit indices for the *VISA-American* model (RMSEA = 0.05 and SRMR = 0.05) (Porfeli et al., 2011), and the *VISA-South Africa Kayamandi* model showed much similarity. In Table 5.6, the loadings of the first-order *VISA* items of the *VISA-South Africa Kayamandi* model are compared to the *American VISA* model. In the *VISA-South Africa Kayamandi*, all the loadings over 0.3 were deemed acceptable. However, there was one extremely low loading on the CF subscale,

viz. item number 5 (*I need to learn a lot more before I can make a career choice*) (0.18), which can be compared to the American version, which had a much higher loading (0.65).

Table 5.6

A Comparison of the VISA-South Africa Kayamandi Factor Model and the VISA-American Factor Model

Construct	Item (first-order indicators)	Loading *VISA Kayamandi*	Loading *VISA America*
Career commitment (CC)			
Career commitment-making (CCM)			
	1. I know what kind of work is best for me	0.66	0.65
	2. No other career is as appealing to me as the one I expect to enter	0.40	0.72
	3. I have known for a long time what career is best for me	0.60	0.69
	4. No one will change my mind about the career I have chosen	0.51	0.74
	5. I have invested a lot of energy into preparing for my chosen career	0.57	0.70
Identification with career commitment (ICM)			
	1. My career will help me satisfy deeply personal goals	0.51	0.65
	2. My family feels confident that I will enter my chosen career	0.48	0.67
	3. Becoming a worker in my chosen career will allow me to become the person I dream to be	0.71	0.75
	4. I chose a career that will allow me to remain true to my values	0.54	0.67
	5. My career choice will permit me to have the kind of family life I wish to have	0.50	0.48
Career exploration (CE)			
In-depth career exploration (ID)			
	1. Identifying my strongest talents as I think about careers	0.47	0.65
	2. Learning as much as I can about the particular educational requirements of the career that interests me the most	0.60	0.70
	3. Learning what I can do to improve my chances of getting into my chosen career	0.57	0.68
	4. Trying to find people that share my career interests	0.42	0.54
	5. Thinking about all the aspects of working that are important to me	0.43	0.66
In-breadth career exploration (IB)			
	1. Learning about careers that are unfamiliar to me to find a few to explore further	0.31	0.66
	2. Trying different experiences so that I can find several jobs that might suit me	0.57	0.68
	3. Thinking about how I could fit into many different careers	0.41	0.75
	4. Learning about various jobs that I might like	0.56	0.70
	5. Keeping my options open as I learn about many different careers	0.52	0.69
Career reconsideration (CR)			
Career flexibility (CF)			
	1. My work interests are likely to change in the future	0.60	0.81
	2. What I look for in a job will change in the future	0.68	0.61
	3. I will probably change my career goals	0.60	0.80
	4. My career choice might turn out to be different than I expect	0.56	0.60
	5. I need to learn a lot more before I can make a career choice	0.18	0.65

Career self-doubt (SD)		
1. Thinking about choosing a career makes me feel uneasy	0.49	0.58
2. When I tell other people about my career plans, I feel like I am being a little dishonest	0.68	0.78
3. People who really know me seem doubtful when I share my career plans with them		
4. I doubt I will find a career that suits me	0.54	0.66
5. I may not be able to get the job I really want	0.63	0.78
	0.57	0.55

Note: All the loadings are statistically significant at $p < 0.05$.

The highest factor loading was seen in the *VISA-South Africa Kayamandi* ICM subscale item number 3 (*Becoming a worker in my chosen career will allow me to become the person I dream to be*) (0.71). This was followed closely by the SD subscale item number 2 (*When I tell other people about my career plans, I feel like I am being a little dishonest*) (0.68) and the CF subscale item number 2 (*What I look for in a job will change in the future*) (0.68). Thereafter, the next highest loading was the CCM subscale item 1 (*I know what kind of work is best for me*) (0.66). Lastly, the SD subscale item number 4 (*I doubt I will find a career that suits me*) (0.63) also had a loading over 0.6 (Shyu et al., 2013).

There were loadings under 0.5 for a number of items on the ID subscale, namely item 1 (*Identifying my strongest talents as I think about careers*) (0.47), item 4 (*Trying to find people that share my career interests*) (0.42), item 5 (*Thinking about all the aspects of working that are important to me*) (0.43). Similarly, there were loadings under 0.5 for the IB subscale, namely item 1 (*Learning about careers that are unfamiliar to me to find a few to explore further*) (0.31) and item 3 (*Thinking about how I could fit into many different careers*) (0.41). In the SD subscale there was only one item, number 1 (*I doubt I will find a career that suits me*) (0.49) that was just below 0.5. Similarly, the ICM subscale item number 2 (*My family feels confident that I will enter my chosen career*) (0.48) was just under 0.5. Lastly, the CCM subscale item 2 (*No other career is as appealing to me as the one I expect to enter*) (0.40) was also below 0.5.

However, the ID subscale had the highest factor loading (0.93), followed by the ICM subscale (0.76). In contrast, the two subscales with the lowest factor loadings were SD (0.31) and CF (0.37). There were acceptable coefficients across both versions (> 0.3), but the Kayamandi coefficients generally remained lower than the American version, with a few exceptions.

5.2.2.4 Cluster analysis.

A cluster analysis was used in order to allow clusters within the data to emerge without stipulating a priori theoretical clusters. Although, there are many different approaches used to conduct an exploratory cluster analysis, the approach espoused by Gore (2000) and recently used

in the identity status literature (e.g., Crocetti, Rubini, Luyckx, & Meeus, 2008b; Luyckx et al., 2005) was used in the present study. Prior to the analysis, univariate (i.e., values more than 3 SDs below or above the mean) and multivariate outliers (i.e., individuals with high Mahalanobis distance values) were removed. In the first step, hierarchical cluster analyses were conducted using Ward's method and squared Euclidean distances (Steinley & Brusco, 2007).

A cluster solution was chosen based on the suggestions made by Gore (2000) and Crocetti et al. (2008a, 2008b). The recommendations for choosing a solution are that the solution should be consistent with a priori theoretical predictions (e.g., number of clusters and pattern of subscale scores within clusters), parsimony of the cluster solution (i.e., choosing solutions with a minimum number of clusters), and the capacity of the cluster to explain the variance in the variables used in the cluster solution (e.g., the target is 50% explained variance for each variable). In the second step, three- to six-cluster solutions were evaluated in terms of the recommendations made for choosing a solution. The solutions presented in Figure 9 were evaluated in terms of substantive interpretability, parsimony, and explanatory power (i.e., the cluster solution had to explain approximately 50% of the variance in each of the constituting dimensions), and only four clusters were retained.

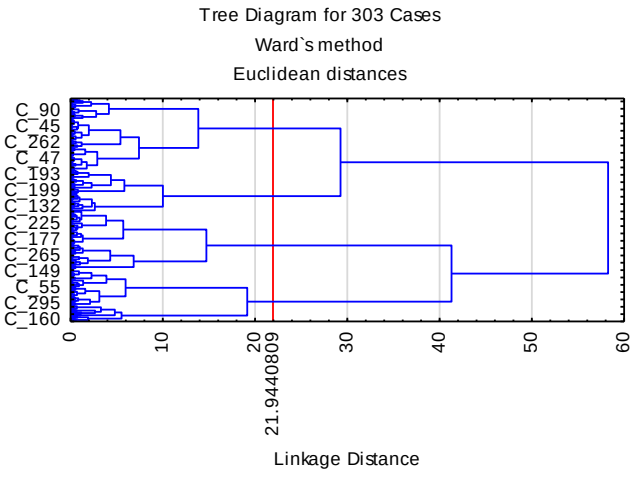

Figure 9. Cluster Analysis Tree Diagram

As can be seen in Figure 10 and Figure 11, Cluster 1 (n = 56, 18%) had high levels of career exploration, high levels of career commitment and low levels of career reconsideration. This refers to the *Achieved vocational identity status*. Cluster 2 (n = 97, 32%) had high levels of career exploration, medium levels of career commitment and low levels of career reconsideration. This could be compared to the *Foreclosed vocational identity status*, except that the career exploration scores were higher than theorised for this status. Cluster 3 (n = 79, 26%)

was characterised by high levels of career exploration, high career commitment and high career reconsideration. This could be compared to the *Searching moratorium vocational identity status*.

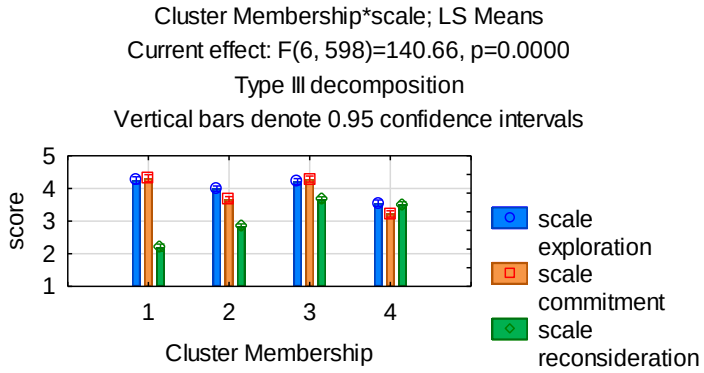

Figure 10. Retained vocational identity clusters

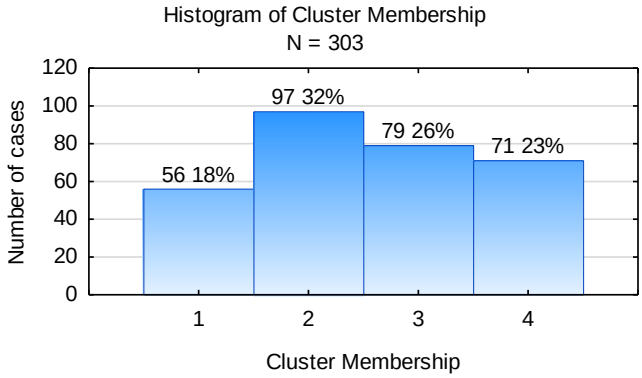

Figure 11. Clusters' Membership Percentages

Lastly, Cluster 4 (n = 71, 23%) referred to as m_m_m, had medium career exploration scores, medium career commitment scores and medium career reconsideration scores. The details of this new vocational identity status will be discussed in the next chapter.

5.2.3 Qualitative Delphi panel results.

A Delphi panel focus group was held with fieldworkers to examine the *CAAS-South Africa* and *VISA* instruments to gain contextual insight into unique factor loadings or scoring patterns that could be a reflection of the subjective realities of the Kayamandi youth. The inclusion of this qualitative data would allow a deeper understanding of the complexity involved in measuring and developing career adaptability and identity dimensions.

5.2.3.1 Qualitative CAAS results.

A thematic analysis was conducted using the CCT as a theoretical framework, and themes were grouped according to the four career adaptability dimensions of *concern*, *control*,

curiosity and *confidence*, as can be seen in Table 5.7. Braun and Clarke's (2006) six thematic analysis steps (refer to Section 3.12 for more details) were used to allow the subjective voices of the marginalised youth to inform an understanding of how the *CAAS-South Africa* measure was perceived. Table 5.7 provides an overview of the themes and subthemes extrapolated. However, due to the fact that the participants in the present sample are part of a collectivistic community and culture, the Delphi panel indicated that there was no mention of any social influences or collectivistic elements in the *CAAS* and that this was problematic. This is in agreement with Watson's (2013) questioning of the appropriateness of the career adaptability dimensions in non-Western population groups. Therefore, the decision was taken, in conjunction with my supervisor, to use the *CAAS-Iceland* six-dimension scale (Einarsdóttir et al., 2015), which added two subscales (i.e., *co-operation* and *contribution*) to the *International CAAS* version in order to include social or collectivistic elements.

Table 5.7

Themes and Subthemes Extrapolated Using the CCT Dimensions.

Theme	Subtheme
1. Concern	1.1 Lack of future time perspective 1.2 Mismatch between present and future ideas
2. Control	2.1 Fatalism 2.2 Personal responsibility
3. Curiosity	3.1 Lack of career exposure 3.2 Mimicking success
4. Confidence	4.1 High self-efficacy beliefs 4.2 Family support

This would allow an assessment of the *CAAS-Iceland* six-dimension scale to determine if there were etic collectivistic concerns that were universal in these two population groups. However, the main intention was to address the concern that fieldworkers had raised and to adapt the *CAAS* in an attempt to be culturally sensitive to the social influences that had been documented in this community previously (Albien & Naidoo, 2016). In Phase 4 the psychometric analysis of the *CAAS-Iceland* six-dimension scale is presented.

5.2.3.2 Qualitative VISA results.

A thematic analysis was conducted using Braun and Clarke's (2006) six steps to group themes according to the second-order dimensions of vocational identity proposed by Porfeli et al. (2011), namely *career commitment*, *career exploration* and *career reconsideration*. In Table

5.8, the extrapolated themes and subthemes are presented. Thereby, the subjective experiences of vocational identity development processes could be explored in a South African township context.

Table 5.8

Themes and Subthemes Extrapolated Using the VISA Second-order Construct Dimensions

Theme	Subtheme
1. Career commitment	1.1 Career identity linked to future lifestyle
	1.2 Commitment to escaping poverty
	1.3 Secrecy about chosen career identity
2. Career exploration	2.1 Disregard of unfamiliar careers
	2.2 Fixed career identity linked to self-esteem
3. Career reconsideration	3.1 Pervasive self-doubt
	3.2 Rejection of career choice flexibility
	3.3 Acceptance of work-related changes

This was an attempt to capture the emic dimensions of vocational identity that could be unique to vocational identity development processes in a low-income community and add qualitative data to the first quantitative administration of the *VISA* in South Africa.

5.3 *Phase 3*: Pilot Study of Intervention Material

In the pilot intervention phase, there were 87 participants and comparisons will be presented between the control group (n=35) and experimental group (n=57). The sample consisted of 26% boys and 74% girls. Adolescents were between 15 and 20 years old, where the mean age was 17 years (SD=1.15).

5.3.1 Reliability analyses.

The *CAAS-Iceland* six-dimension scale was included at the end of *Phase 2* because collectivistic elements were not captured in the *CAAS-South Africa*. Therefore, the *CAAS-Iceland* scale was assessed for proficient reliability values. In Appendix U, the means, standard deviations and Cronbach's alpha values are presented. Reliability analyses were performed on the pre- and post-subscales of the *CAAS-Iceland*. All the pre- and post-test subscale Cronbach's alpha values were above 0.6, which was deemed acceptable (Cronbach & Shavelson, 2004; Kent, 2001). The *CAAS-Iceland* pre-test and post-test subscale alpha values were as follows:

Concern (pre: 0.73; post: 0.83), *Control* (0.72; 0.83), *Curiosity* (0.76; 0.81), *Confidence* (0.72; 0.81), *Co-operation* (0.86; 0.84), and *Contribution* (0.63; 0.67).

In addition, reliability analyses were performed on the pre- and post-*VISA* subscales, which all had Cronbach's alpha values above 0.60. The *VISA* pre- and post-test subscale Cronbach's alpha values are as follows: *In-breadth career exploration (IB)* (pre: 0.71; post: 0.85), *In-depth career exploration (ID)* (0.68; 0.83), *Career commitment-making (CCM)* (0.74; 0.74), *Identification with career commitment (ICM)* (0.70; 0.80), *Career self-doubt (SD)* (0.71/ 0.77), and *Career flexibility (CF)* (0.66; 0.73). Once reliabilities were established, an in-depth analysis was conducted of the mixed-model ANOVA results to determine if groups were significantly different over time, which would indicate an intervention effect.

5.3.2 *CAAS* pre- and post-scores.

In examining the pre- and post-test scores of the *CAAS-Iceland* subscales, an overall trend was observed that indicated that post-measure scores were higher than pre-test measure scores (see Appendix V), although only three subscales were seen to have significantly changed between the pre- and post-test measures. It is important to note that there were no significant differences between the pre-control and pre-experimental group scores in any of the subscales, which seemed to indicate that the control and experimental groups were not significantly different at the start. In addition, no significant differences were seen in pre- and post-control group scores, in comparison to the pre- and post-experimental group scores, which seemed to indicate that the intervention had an effect. Each subscale is described below that showed significant differences after the administration of the pilot intervention.

The first *CAAS* subscale (i.e., *control* subscale) indicated that the groups were significantly different over time. There was a significant group*time effect F (1, 84) = 3.79, p = 0.05, indicating that there were increases in subscale scores after the intervention in the experimental group, as seen in Figure 12.

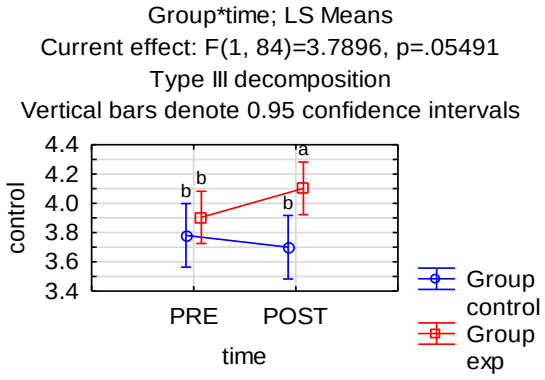

Figure 12. Plot Line Graph Indicating Pre- and Post-measures of the *CAAS-control* Subscale.

An increase can only be seen in the experimental group and not in the control group. There were significant differences in mean scores between pre- and post-experimental group scores ($p < 0.05$), seen in the lettering *b* and *a*, which indicates that the participants'mean scores increased significantly after the intervention. Significant differences were also observed in the post-control and post-experimental group scores ($p < 0.01$), which indicated that mean scores were different in the experimental group who had received the intervention.

Significant changes were seen in the *CAAS concern* subscale. There was a significant group*time effect $F(1, 84) = 5.96$, $p = 0.016$, indicating that there were increases in concern scores after the intervention, which can only be seen in the experimental group and not in the control group. There were significant differences in the mean scores between pre- and post-experimental group scores ($p < 0.01$) (see letters *b* and *a* in Figure 13). This seemed to suggest that the intervention contributed to an increase in concern scores. There were also significant differences in the post-control and post-experimental scores ($p < 0.001$), which indicated that mean scores were different in the experimental group after the intervention.

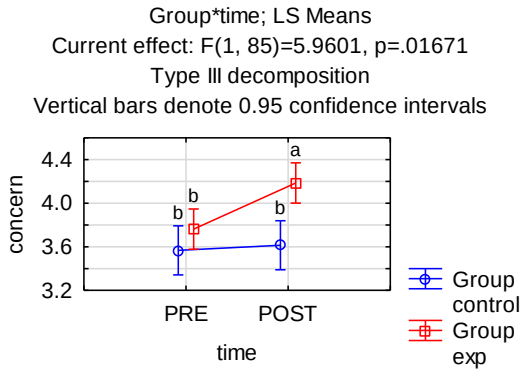

Figure 13. Plot Line Graph Indicating Pre- and Post-measures of the *CAAS-concern* Subscale.

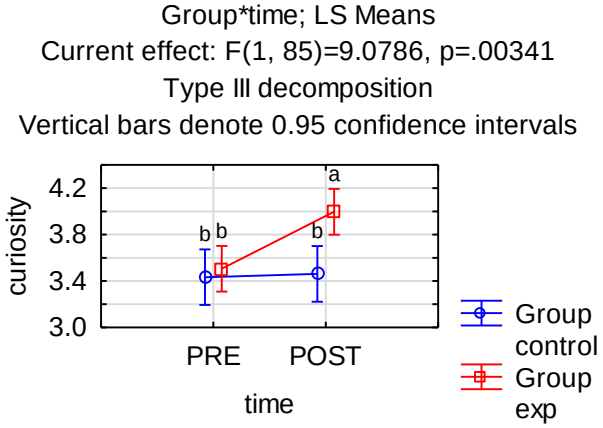

Figure 14. Plot Line Graph Indicating Pre- and Post-measures of the *CAAS-curiosity* Subscale.

The *CAAS-curiosity* subscale also showed significant changes after the intervention (see Figure 14). There was a significant group*time effect F (1, 85) = 9.07, p < 0.01, indicating increases in curiosity scores in the experimental group. There were significant differences between the pre- and post- experimental group mean scores (p < 0.01) as shown in Figure 14 with the letters *b* and *a*. In addition, significant differences were observed between the post-control and post-experimental group scores (p < 0.01), which seemed to indicate that the intervention contributed to the increase in scores in the experimental group.

However, there was no significant group*time effect in the *co-operation* subscale F (1, 85) = 0.59, p = 0.44. In addition, no significant differences were observed between the post-control and post-experimental group scores. Similarly, there was no significant group*time effect in the *contribution* subscale F (1, 85) = 2.06, p = 0.15, as well as no significant differences between the pre- and post-contribution scores. Furthermore, no significant differences were observed between the post-control and post-experimental *contribution* subscale scores. Although these subscales represent collectivistic dimensions of the career adaptability construct, the sample size in *Phase 3* was too small to psychometrically analyse the applicability of the *CAAS-Iceland* version.

5.3.3 *VISA* pre- and post-scores.

An overall trend was observed that post-measures were higher than pre-test measures (see Appendix V), although only two *VISA* subscales (viz., *CCM* and *ICM*) significantly changed between the pre- and post-test measures. In these two subscales there was no significant difference between the pre-control and pre-experimental group scores. Also, there were no significant differences between the pre-and post-control group scores.

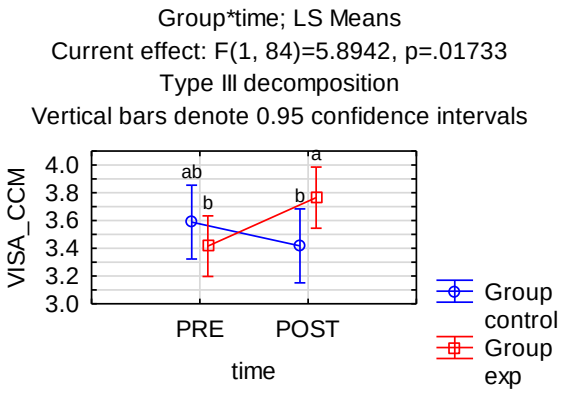

Figure 15. Plot Line Graph Indicating Pre- and Post-measures of the *VISA CCM* Subscale.

There was a significant group*time effect F (1, 84) = 5.89, p = 0.017 in the *Career commitment-making* (*CCM*) subscale. In this subscale, a significant difference was seen between the pre-and post-experimental group mean scores ($p < 0.05$), seen in the lettering *b* and *a* in Figure 15. Also, significant differences were observed in the post-control and post-experimental group scores ($p < 0.05$), which indicates that the intervention contributed to the increase in scores in the experimental group. In addition, there was a significant group*time effect F (1, 83) = 4.44, p = 0.038 in the *Identification with career commitment* (*ICM)* subscale. There was a significant difference observed in the post-control group and post-experimental group mean scores ($p < 0.05$) as seen in the lettering of *b* and *a* in Figure 16, which can be attributed to the effect of the intervention.

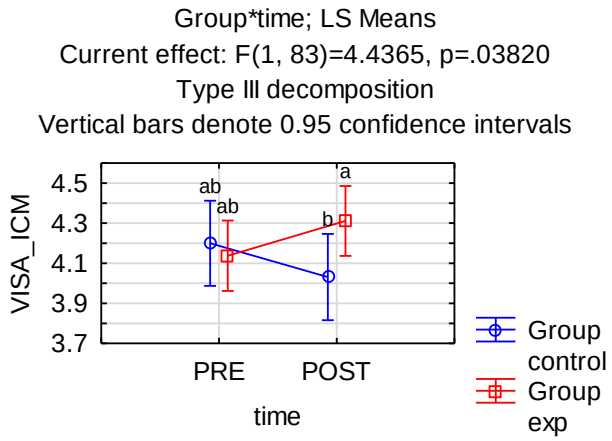

Figure 16. Plot Line Graph Indicating Pre- and Post-measures of the *VISA ICM* Subscale.

At the end of the pilot intervention, qualitative feedback was elicited to assess subjective perceptions of the effectiveness of the intervention.

5.3.4 Qualitative pilot intervention feedback.

A thematic analysis was conducted by grouping themes according to the evaluation feedback form (see Appendix R). Extracted themes were grouped according to career adaptability and vocational identity dimensions, as seen in Table 5.9. The evaluation feedback form focused on positive and negative concerns as well as recommendations voiced by the participants. All 87 participants chose the option that indicated that the career intervention achieved its aim of facilitating career development.

Table 5.9

Themes and Subthemes Extrapolated From the Pilot Intervention Feedback Forms

Theme	Subtheme	CAAS subscale	VISA subscale
1. Positive feedback	1.1 New openness to career ideas	curiosity	IB
	1.2 Enjoyed discovering new career fields	curiosity	IB
	1.3 Learning about career details	concern	ID
	1.4 Future plan developed	concern	CCM
	1.5 Increased personal responsibility	control	ICM
	1.6 Reduced self- doubt	confidence	SD
	1.7 Increased life-plan flexibility	curiosity	CF
	1.8 Identification with role models (i.e., fieldworkers)	co-operation	ID
2. Negative feedback	2.1 Too much content		
	2.2 Too much reflection		
	2.3 Too little time to write		
3. Improvements	3.1 Include more fun activities (i.e., games)		

A thematic analysis was conducted using Braun and Clarke's (2006) six steps to allow subjective experiences of the pilot intervention to be examined to include improvements in the following phase.

5.4 *Phase 4:* The final *Shaping Career Voices Intervention*

In this phase, results will be presented according to the instrument used to collect the data (viz. *CAAS* and *VISA*) at four different time points (viz. T_1, T_2, T_3 and T_4). Time point 1 (T_1) and time point 2 (T_2) were collected before the intervention began, and were administered a week apart. Time point three (T_3) was measured upon completion of the 20-hour intervention. Time point 4 (T_4) was measured a week later. Time point five (T_5) was excluded from the analysis due to a high attrition rate after T_4.

5.4.1 Descriptive statistics.

In this phase, there were 582 participants. The participants included 31% males (n = 169) and 69% females (n = 369). The high school learners were between 14 and 22 years old, with a mean age of 17 years (SD = 1.3). Specifically, 25% of the participants were younger than 16 years old, although 75% of the sample was younger than 18 years old (see Figure 17 below).

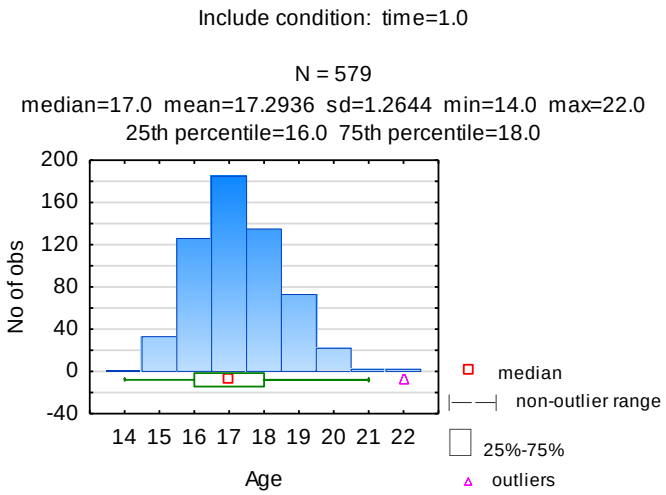

Figure 17. Phase 4 Age Descriptive Statistics

Although both high schools were given an equal chance to participate, 67% of the participants were from Kayamandi High School (n = 390) and 33% were from Makupula High School (n = 192). Four grades participated in the career life-designing intervention, namely Grade 10 (n = 314, 55%), Grade 11 (n = 237, 41%), and Grade 12 (n = 31, 5%).

5.4.2 *CAAS.*

The Icelandic-International six-dimensional model (Einarsdóttir et al., 2015) called the *CAAS-Iceland* was psychometrically assessed in Phase 4. In this version, *co-operation* and *contribution* were added as two extra subscales because of the importance attached to the development of career adaptability measures that could be compared across cultures (Einarsdóttir et al., 2015). In order to avoid confusion between versions, the name *CAAS-collectivistic version* was given to the Kayamandi administration of the *CAAS-Iceland.*

5.4.2.1 Psychometric analysis of CAAS-collectivistic version.

Robust maximum likelihood estimation in LISREL 8.8 was used to conduct a CFA. The CFA revealed that data for the *CAAS-Collectivistic version* used in Kayamandi fit the theoretical model well. The goodness-of-fit indices were RMSEA = 0.037, SRMR = 0.046, GFI = 0.91 and CFI = 0.91, which conform to the established joint fit criteria (Hu & Bentler, 1999). Skewness and kurtosis values for the six *CAAS-Collectivistic* subscales ranged from -1.04 to 0.03 and from -0.97 to 0.82, which indicate that the subscales conformed to the assumptions of correlation-based statistics for this sample. The standardised loadings reported in Table 5.10.

Table 5.10

CAAS-Collectivistic Version: Items, Standardised Loadings and Descriptive Statistics

Construct	Item (first-order indicators)	Mean	SD	Loading
1. Concern	1. Thinking about what my future will be like	3.99	0.94	0.67
	2. Realising that today's choices shape my future	3.47	1.10	0.68
	3. Preparing for the future	3.81	0.96	0.71
	4. Becoming aware of the educational and career choices that I must make	3.60	1.07	0.71
	5. Planning how to achieve my goals	3.72	1.03	0.65
	6. Concerned about my career	3.71	1.06	0.74
2. Control	1. Keeping upbeat	3.19	1.15	0.85
	2. Making decisions by myself	3.67	1.15	0.70
	3. Taking responsibility for my actions	3.69	1.07	0.59
	4. Sticking up for my beliefs	3.71	1.08	0.75
	5. Counting on myself	3.82	1.08	0.68
	6. Doing what's right for me	4.02	0.99	0.65
3. Curiosity	1. Exploring my surroundings	3.12	1.15	0.75
	2. Looking for opportunities to grow as a person	3.68	1.04	0.71
	3. Investigating options before making a choice	3.31	1.23	0.67
	4. Observing different ways of doing things	3.29	1.11	0.67
	5. Probing deeply into questions I have	3.18	1.14	0.75
	6. Becoming curious about new opportunities	3.61	1.14	0.66
4. Confidence	1. Performing tasks efficiently	3.32	1.15	0.67
	2. Taking care to do things well	3.73	0.93	0.71
	3. Learning new skills	3.78	0.97	0.67
	4. Working up to my ability	3.67	1.01	0.66
	5. Overcoming obstacles	3.36	1.24	0.67
	6. Solving problems	3.40	1.15	0.75
5.Co-operation	1. Getting along with all kinds of people	3.50	1.27	0.65
	2. Cooperating with others on group projects	3.61	1.20	0.53
	3. Compromising with other people	3.40	1.18	0.61
	4. Going along with the group	3.40	1.25	0.56
	5. Sharing with others	3.75	1.11	0.71
	6. Understanding others point of view	3.67	1.05	0.75
6.Contribution	1. Finding purpose in my studies and work	3.91	1.00	0.63
	2. Wanting to be appreciated	3.76	1.10	0.70
	3. Wanting my work to be respected	4.07	0.92	0.65
	4. Expecting to be active in my community	3.50	1.18	0.78
	5. Wanting people to think I do good	3.24	1.29	0.87
	6. I know I have to perform well to obtain my future goals	4.15	0.91	0.70
Construct adaptability	Construct (second-order indicators)			
	1. Concern	3.72	0.67	0.72
	2. Control	3.69	0.67	0.67
	3. Curiosity	3.36	0.73	0.72
	4. Confidence	3.54	0.70	0.73
	5. Co-operation	3.56	0.80	0.77
	6. Contribution	3.77	0.67	0.68

Note: All the loadings are statistically significant at $p < 0.01$.

Table 5.11

A Comparison of Confirmatory Factor Loadings Across CAAS-Iceland Factor Models

Construct	Item (first-order indicators)	Loading *CAAS-Iceland*	Loading *CAAS-collectivistic*
1. Concern	1. Thinking about what my future will be like	0.64	0.67
	2. Realising that today's choices shape my future	0.67	0.68
	3. Preparing for the future	0.79	0.71
	4. Becoming aware of the educational and career choices that I must make	0.81	0.71
	5. Planning how to achieve my goals	0.86	0.65
	6. Concerned about my career	0.76	0.74
2. Control	1. Keeping upbeat	0.65	0.85
	2. Making decisions by myself	0.68	0.70
	3. Taking responsibility for my actions	0.70	0.59
	4. Sticking up for my beliefs	0.73	0.75
	5. Counting on myself	0.71	0.68
	6. Doing what's right for me	0.59	0.65
3. Curiosity	1. Exploring my surroundings	0.63	0.75
	2. Looking for opportunities to grow as a person	0.70	0.71
	3. Investigating options before making a choice	0.75	0.67
	4. Observing different ways of doing things	0.78	0.67
	5. Probing deeply into questions I have	0.77	0.75
	6. Becoming curious about new opportunities	0.74	0.66
4. Confidence	1. Performing tasks efficiently	0.75	0.67
	2. Taking care to do things well	0.81	0.71
	3. Learning new skills	0.70	0.67
	4. Working up to my ability	0.77	0.66
	5. Overcoming obstacles	0.89	0.67
	6. Solving problems	0.86	0.75
5.Co-operation	1. Getting along with all kinds of people	0.71	0.65
	2. Cooperating with others on group projects	0.80	0.53
	3. Compromising with other people	0.90	0.61
	4. Going along with the group	0.85	0.56
	5. Sharing with others	0.76	0.71
	6. Understanding others point of view	0.68	0.75
6.Contribution	1. Finding purpose in my studies and work	0.85	0.63
	2. Wanting to be appreciated	0.74	0.70
	3. Wanting my work to be respected	0.80	0.65
	4. Expecting to be active in my community	0.80	0.78
	5. Wanting people to think I do good	0.62	0.87
	6. I know I have to perform well to obtain my future goals	0.82	0.70
Construct Adaptability	Construct (second-order indicators)		
	1. Concern	0.72	0.77
	2. Control	0.87	0.83
	3. Curiosity	0.79	0.92
	4. Confidence	0.84	0.92
	5. Co-operation	0.64	0.66
	6. Contribution	0.74	0.81

Note: All the loadings are statistically significant at $p < 0.05$.

Table 5.12

CAAS-Collectivistic Version Variance Extracted, Construct Reliability and Standardised Cronbach's Alphas

Construct	Construct (second-order indicators)	Variance extracted	Construct reliability	Standardised CAAS collectivistic Cronbach's alphas	CAAS Iceland Cronbach's alphas
adaptability	1. Concern	0.31	0.73	0.72	0.84
	2. Control	0.28	0.69	0.67	0.82
	3. Curiosity	0.30	0.72	0.72	0.83
	4. Confidence	0.31	0.73	0.73	0.82
	5. Co-operation	0.36	0.77	0.77	0.87
	6. Contribution	0.28	0.69		0.83

The t-values were all greater than 2, indicating that the standardised loadings were all statistically significant (i.e., $p < 0.05$), and the factor loadings were above 0.3. The standardised loadings reported in Table 5.10 indicate that the loadings were all statistically significant, and above 0.3. This meets the guideline given by Hair et al. (2010), which stipulates that loadings of 0.3 or higher are acceptable when a sample exceeds 350 participants. Therefore, factor loadings were required to be ≥ 0.3 and statistically significant ($p < 0.05$) to accept that any variable was part of the *CAAS-Collectivistic* subscales (Diekhoff, 1992; Shyu et al., 2013). The *CAAS-Collectivistic* version seemed to provide a measure of career adaptability competencies for Black South African township adolescents with moderate reliability and validity.

In the *CAAS-Iceland* version, higher factor loadings can generally be seen, as in in Table 5.11. However, there are two first-order items in the *CAAS-Collectivistic* version that were higher than their *CAAS-Iceland* counterparts, namely contribution item 5 *(Wanting people to think I do good)* (0.87) and control item 1 *(Keeping upbeat*) (0.85). In the second-order constructs, the *CAAS-collectivistic* version had two subscales that were higher than the *CAAS-Iceland* version. These were *curiosity* (0.92) and *confidence* (0.92), which seems to indicate cultural differences; these will be discussed in the next chapter.

In the present research, the construct reliability scores and Cronbach's alpha scores were all above 0.6, which was viewed as acceptable within a lowered range of 0.5 and 0.6 (Cronbach & Shavelson, 2004; Kent, 2001), instead of the 0.7 cut-off point (Hair et al., 2010). The average variance extracted should be greater than 0.5 to indicate a higher reliability (Hair et al., 2010). As seen below in Table 5.12, the variance extraction scores are reported as < 0.5, which indicates variation in the participants' responses to the *CAAS-collectivistic version* and could have affected the factor loadings.

In comparing the *CAAS-Iceland* to the *CAAS-collectivistic* version, the Cronbach's alpha reliability scores are as follows: concern (0.84), curiosity (0.83), confidence (0.82), co-operation (0.87), contribution (0.83), and control (0.82). In contrast, the reliability scores for the *CAAS-collectivistic* version are: concern (0.72), curiosity (0.72), confidence (0.73), co-operation (0.77), contribution (0.68), and control (0.67). However, the lowest Cronbach's alpha scores in the *CAAS-collectivistic* version are in the *control* (0.67) and *contribution* (0.68) constructs, which can be compared to the *control* (0.82) and *contribution* (0.83) constructs in the *CAAS-Iceland* sample. The highest factor loading observed in *CAAS-collectivistic* version was the *co-operation* construct (0.77), which indicates that collectivistic elements were captured in this version. However, in the *contribution* subscale, the ideals of contributing to society do not seem to hold the same value in the Kayamandi sample as in a socialist country, which shows a narrower collectivistic focus on communities. In conclusion, the *CAAS-collectivistic version* seems to provide a measure of career adaptability competencies for Black South African township adolescents and youth with moderate reliability and validity, and the psychosocial dimension of the career adaptability construct is included (Einarsdóttir et al., 2015).

5.4.2.2 CAAS reliability analyses.

The reliability analyses are presented in Table 5.13.

Table 5.13

Reliability Analyses of CAAS-Collectivistic Subscales by Time Point

CAAS-collectivistic Subscale	**Time 1**	**Time 2**	**Time 3**	**Time 4**
	α	*α*	*α*	*A*
Concern	0.73	0.75	0.84	0.84
Control	0.67	0.73	0.79	0.81
Confidence	0.72	0.76	0.83	0.82
Curiosity	0.71	0.78	0.79	0.79
Co-operation	0.77	0.83	0.82	0.83
Contribution	0.68	0.75	0.75	0.80

Reliability analyses are presented over four time points (T_1, T_2, T_3 and T_4) according to the *CAAS-collectivistic* version subscales (*concern*, *control*, *confidence*, *curiosity*, *co-operation*

and *contribution*). The reliability analysis score at each time point for each subscale was above 0.6, which was viewed as acceptable (Cronbach & Shavelson, 2004; Kent, 2001).

5.4.2.3 Differences in CAAS subscales over time points.

A mixed-model ANOVA was conducted to determine which mean scores of the *CAAS-collectivistic* subscales showed significant differences over the four time points (see Appendix W).

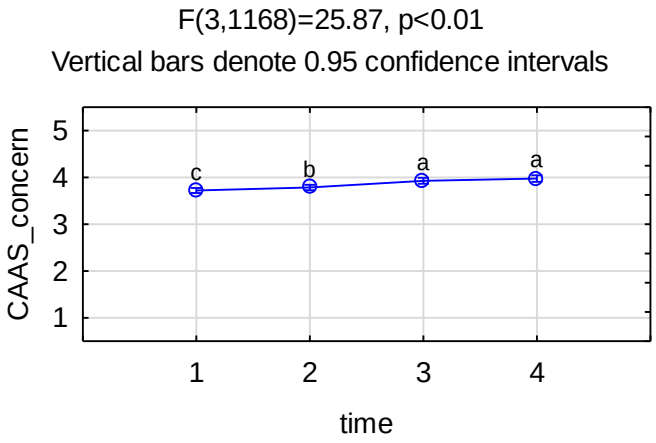

Figure 18. Plot Line Graph of the *CAAS concern* Subscale over Time Points

The first significant main time effect was found for the *Concern* subscale F (3, 1168) = 25.87, $p < 0.01$. There were significant differences in mean scores at T_1, T_2, and T_3 ($p < 0.01$) as indicated by the lettering of *c*, *b* and *a* in Figure 18. However, the focus was on the difference between T_1 and T_4 time points. A medium effect size (0.42) was observed between T_1 and T_4 ($p < 0.01$). This shows that the mean scores for the concern subscale remained high at the follow-up test T_4, which indicates that the intervention contributed to an increase in concern scores.

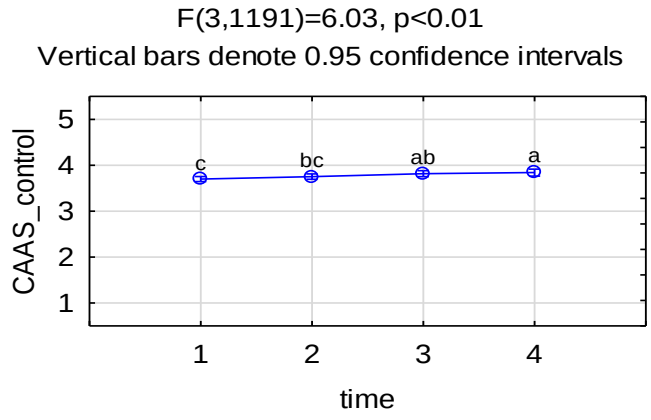

Figure 19. Plot Line Graph of the *CAAS control* Subscale over Time Points

In the *CAAS control* subscale, a significant main time effect was found for the *Control* subscale F (3, 1168) = 25.87, p < 0.01. At T_4, the mean scores were significantly different from the mean scores at T_1 (p < 0.01) (see Figure 19 as indicated by lettering *c* and *a*) with a small effect size (0.23). This indicates that the intervention contributed to a steady increase in scores that were sustained at T_4.

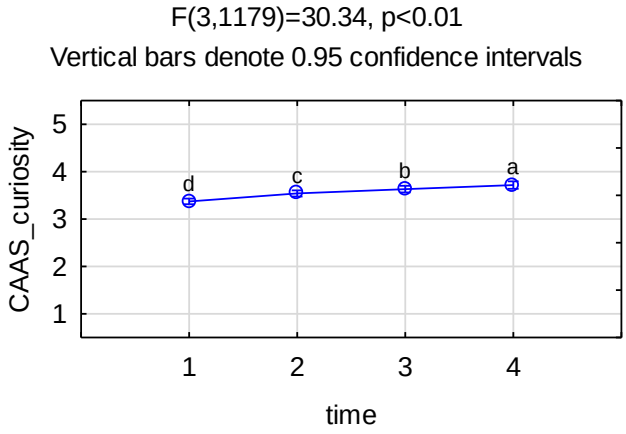

Figure 20. Plot Line Graph of the *CAAS curiosity* Subscale over Time Points

There was also a significant main time effect for the *CAAS Curiosity* subscale F (3, 1179) = 30.34, p < 0.01. There were significant differences in mean scores at T_1, T_2, T_3 and T_4 (p < 0.01) indicating a steady increase in mean scores at each time point (shown by the lettering *d*, *c*, *b* and *a* in Figure 20). A medium effect size (0.53) was observed between T_1 and T_4 (p < 0.01). This shows that the mean scores if the curiosity subscale remained high after the intervention had been completed at T_4 and were significantly different from T_1.

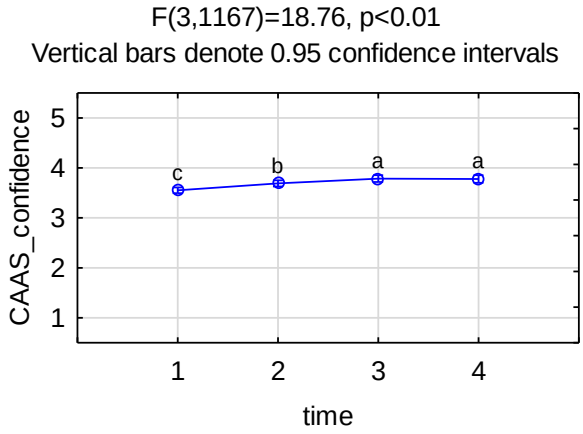

Figure 21. Plot Line Graph of the *CAAS confidence* Subscale over Time Points

A significant main time effect was found for the *Confidence* subscale F (3, 1167) = 18.76, p<0.01. There were significant differences between time points T_1, T_2, and T_3 (p<0.01), with a

steady increase in the mean scores at each time point indicated by lettering *c*, *b* and *a* (see Figure 21). However, the most significant difference was between T_1 and T_4 ($p<0.01$), with a small effect size (0.38). This shows that the confidence subscale mean scores remained high after the intervention had been completed at T_4, and were significantly different from T_1.

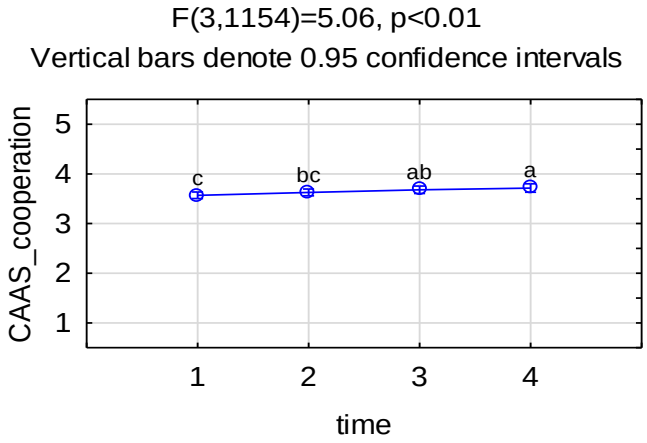

Figure 22. Plot Line Graph of the *CAAS co-operation* Subscale over Time Points

The *CAAS co-operation* subscale also showed a significant main time effect F (3, 1154) = 5.06, $p < 0.01$. The most significant time effect was seen between T_1 and T_4 ($p < 0.01$) as indicated with lettering *c* and *a*, with a small effect size (0.20) (see Figure 22). This suggests that the co-operation subscale mean scores remained high after the intervention had been completed at T_4. However, there was no main time effect for the *Contribution* subscale F (3, 1168) = 0.66, $p = 0.57$. Contribution scores did not seem to change over time, but stayed consistent instead.

5.4.2.4. Gender differences in CAAS subscales.

A two-way mixed-model ANOVA was conducted to determine if mean scores of the *CAAS* subscales showed a main gender effect or whether there was a gender*time interaction effect (see Appendix X for more details). In the *CAAS concern* subscale (see Figure 23), there was a main gender effect observed F (1, 620) = 4.12, $p < 0.05$, but of negligible effect size (0.15). This means that female participants' scores were slighter higher than male participant's mean scores on this *CAAS* subscale but this was not a strong result. There was no significant gender*time interaction effect F (3, 1115) = 0.55, $p = 0.65$.

There was a main gender effect observed in the *Co-operation* subscale F (1, 624) = 7.37, $p < 0.01$, with a small effect size (0.22), which indicated that female participants scored slightly higher on this subscale (see Figure 23). However, there was no gender* time interaction F (3, 1101) = 0.07, $p = 0.98$.

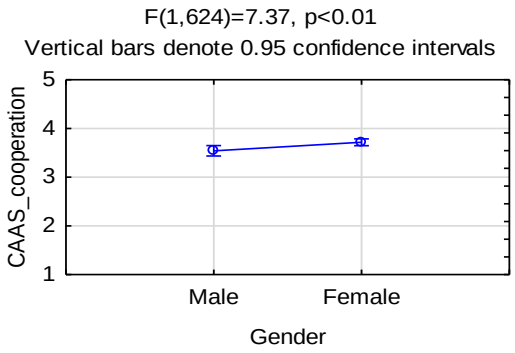

Figure 23. Plot Line Graph of Gender Differences on the *CAAS Co-operation* Subscale

The *CAAS contribution* subscale scores indicated a main gender effect F (1, 620) = 7.23, p < 0.01, with a small effect size (0.24), which showed that female participants' scores were slightly higher for this subscale (see Figure 24). However, there was no gender*time effect F (3, 1112) = 0.38, p = 0.77. In the *CAAS control* subscale, there was no main gender effect F (1, 618) = 0.87, p = 0.35 and no gender*time interaction F (3, 1131) = 0.24, p = 0.87. The *CAAS curiosity* subscale scores also did not indicate a gender*time interaction F (3, 1125) = 0.33, p= 0.80 and there was no main gender effect observed F (1, 617) = 2.64, p = 0.10. In the *CAAS confidence* subscale, there was no main gender effect F (1, 620) = 2.89, p = 0.09 and no gender*time interaction F (3, 1112) = 0.87, p = 0.45.

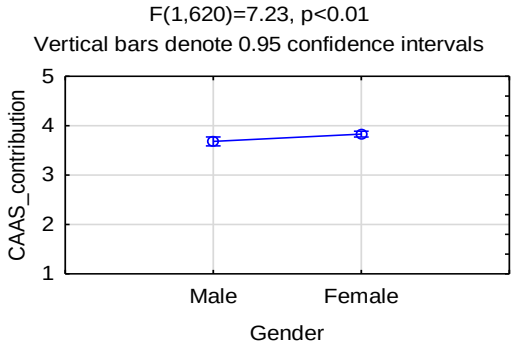

Figure 24. Plot Line Graph of Gender Differences on the *CAAS Contribution* Subscale

In summary, the female participants scored slightly higher than the male participants on the *contribution*, *co-operation* and to a lesser extent on the *concern* subscales, but no gender*time interaction effects were present.

5.4.2.5 Grade differences in CAAS subscales.

Mixed-model two-way ANOVAS were conducted to determine if any group differences existed according to school (i.e., Kayamandi or Makupula). This was important because more

participants were from Kayamandi High School. No significant differences were observed in any of the subscales of the measures used.

Previous career psychology literature has indicated that increases in career related-tasks occur over school grades, and this hypothesis was tested using a mixed-model two-way ANOVA. The *CAAS* subscales are presented below, in which a significant main grade or grade* time effect can be observed (See Appendix X). No *CAAS* subscales exhibited a main grade effect; however, there were two subscales for which there was a grade*time effect was observed (viz. the *concern* and *contribution CAAS* subscales). In the *concern* subscale, there was no main grade effect F (2, 640) = 0.29, p = 0.75, with Grade 10, 11 and 12 participants scoring similarly on the concern subscale. There was a grade*time interaction for the concern subscale F (6, 1156) = 4.17, p < 0.01. Differences were observed between the grades' scores over time, especially an increase in the Grade12 participants scores (see Figure 25). The mean scores for the concern subscale across the Grade 10, 11 and 12 participants were significantly different between T_1 and T_4 (p < 0.01), with a medium effect size of 0.42, which indicates that the scores stayed significantly higher than before the intervention.

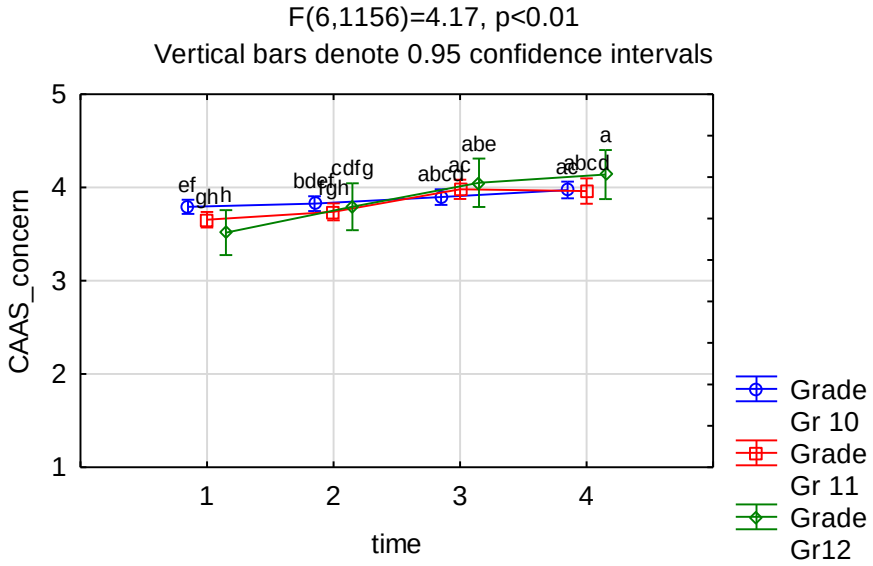

Figure 25. CAAS Concern Subscale Comparison by Grade

In the *contribution* subscale there was a significant grade*time interaction effect F (6, 1153) = 2.54, p<0.05, in which the Grade 10, 11 and 12 participants scores all seemed to increase differently over time. Although Grade 12 participant's scores seemed to increase the most, this was not a strong result. However, there was no main grade effect F (2, 632) = 0.71, p = 0.49. There was a significant difference in mean scores between T_1 and T_4 (p < 0.05) across the grades, but the effect size of 0.05 was negligible.

5.4.2.6 CAAS results summary.

Over time all the *CAAS* subscales scores increased, except the *contribution* subscale, and the most significant changes were seen between T_1 and T_4. The *CAAS* results indicate that female participants had slightly higher scores on the *CAAS contribution* and *co-operation* subscales. There were no main grade effects which meant that grades did not seem to score differently on the *CAAS* subscales. However, the *concern* and *contribution* subscales had significant grade*time effects, where Grade 10, 11 and 12 participants' scores all seemed to increase differently over time, with specifically the Grade 12 participants' scores seeming to increase the most.

5.4.3 *VISA.*

The *VISA* has first-order and second-order subscales (Porfeli et al., 2011); Table 5.14 gives an indication of second-order subscales and resulting vocational identity statuses.

Table 5.14

Vocational Identity Status Model

Identity status	Career exploration	Career commitment	Career reconsideration
1. Achieved	High	High	Low
2. Searching moratorium	High	High	High
3. Moratorium	High	Low	High
4. Foreclosed	Low	High	Low
5. Diffused	Low	Low	High
6. Undifferentiated	Low	Low	Low

For example, the first order-subscales are *in-depth (ID)* and *in-breadth (IB) exploration* subscales (second-order: *career exploration*), *commitment-making (CCM)* and *identification with commitment-making (ICM)* subscales (second-order: *career commitment*) and *flexibility (CF)* and *self-doubt (SD)* subscales (second-order: *career reconsideration*). Each of the six vocational identity statuses is made up of the *career exploration*, *career commitment* and *career reconsideration* second-order subscales, which can either be described as high or low, depending on the participants' scores as seen in Table 5.14.

5.4.3.1 VISA reliability analyses.

Reliability analyses will be presented over the four time points (T_1, T_2, T_3 and T_4) according to the VISA second-order subscales (i.e., *exploration, commitment and reconsideration)* (see Table 5.15).

Table 5.15

Reliability Analyses of VISA Subscales By Time Point

VISA-subscales	**Time$_1$**	**Time$_2$**	**Time$_3$**	**Time$_4$**
	α	*α*	*α*	*α*
IB	0.72	0.78	0.84	0.86
ID	0.73	0.79	0.85	0.87
CCM	0.72	0.74	0.78	0.79
ICM	0.76	0.86	0.89	0.87
SD	0.66	0.76	0.86	0.87
CF	0.67	0.74	0.80	0.83

The reliability analysis scores at each time point for each subscale were above 0.6, which were viewed as acceptable (Cronbach & Shavelson, 2004).

5.4.3.2 VISA subscales over different time points.

A mixed-model ANOVA was conducted to determine which mean scores of the *VISA* subscale showed significant differences over the four time points.

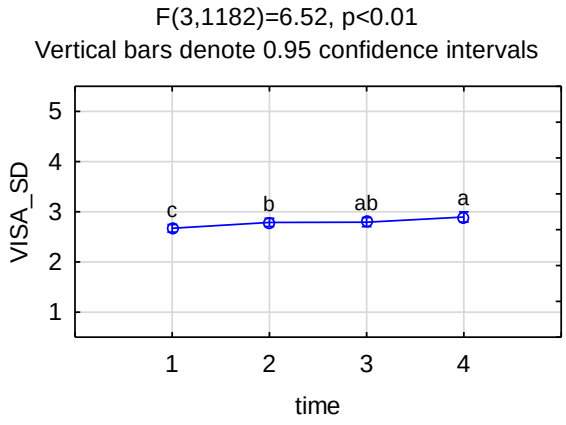

Figure 26. Plot line graph of the *VISA SD* subscale over time points

The most significant main time effect was seen in the *self-doubt (SD)* subscale F (3, 1 182) = 6.52, p < 0.01 (see Figure 26). The most significant differences in mean scores were seen

between T_1 and T_4 (indicated by letters *c* and *a*) ($p < 0.01$), with a small effect size of 0.24. However, a less strong result was seen in the *in-breadth exploration (IB)* and *identification with commitment-making (ICM)* subscales. A significant time effect was found for the *IB* subscale $F(3, 1\,208) = 3.44$, $p < 0.05$, where a difference was visible in mean scores between T_1 and T_4 ($p<0.05$), but with a negligible effect size of 0.15. Lastly, a significant time effect was found for the *ICM* subscale $F(3, 1\,208) = 3.44$, $p < 0.05$, where there was significant difference between T_1 and T_4 with a negligible effect size of 0.14 ($p < 0.05$).

5.4.3.3 Gender differences in VISA subscales.

A two-way mixed-model ANOVA was conducted to determine if mean scores of the *VISA* subscale showed main gender effects and if there were significant gender*time interaction effects. The results will first be presented by second-order subscales, namely *career exploration*, *career commitment* and *career reconsideration*, followed by the first-order subscales of each subscale.

In the second-order subscale of *VISA career exploration*, no significant main gender effect was observed between male and female participants $F(1, 612) = 1.82$, $p = 0.18$. There also was no significant gender*time interaction effect $F(3, 1\,143) = 0.79$, $p = 0.50$. In the *VISA in-breadth career exploration (IB)* subscale, there was no main gender effect $F(1, 611) = 0.95$, $p = 0.33$. There was also no significant gender*time interaction effect $F(3, 1\,149) = 1.20$, $p = 0.30$. In the *VISA in-depth career exploration (ID)* subscale, there was no main gender effect $F(1, 605) = 2.33$, $p = 0.13$. There was also no significant gender*time interaction effect $F(3, 1159) = 0.98$, $p = 0.40$,

In the second-order subscale of *VISA career commitment*, there was no main gender effect $F(1, 611) = 0.42$, $p = 0.52$. There was also no significant gender*time interaction effect, $F(3, 1\,127) = 1.19$, $p = 0.31$. In the *VISA career commitment-making (CCM)* subscale, there was no main gender difference observed between male and female participants $F(1, 608) = 0.01$, $p = 0.93$. There was also no significant gender*time interaction effect $F(3, 1\,150) = 1.33$, $p = 0.26$. In the *VISA identification with career commitment (ICM)* subscale, no main gender effect was observed between the male and female participants $F(1, 613) = 1.56$, $p = 0.21$. There was no significant gender*time interaction effect reported $F(3, 1138) = 1.05$, $p = 0.37$.

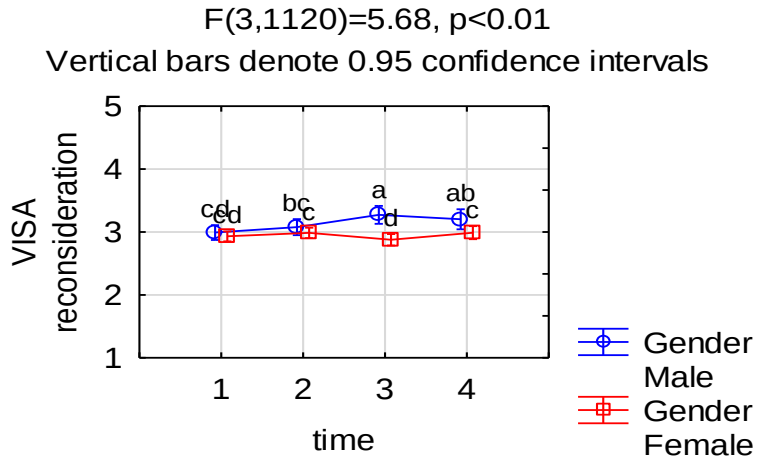

Figure 27. Plot Line Graph for Gender Differences in *VISA CR* Subscale

However, in the second-order subscale of *VISA career reconsideration (CR)*, there was a significant main gender effect (seen Figure 27) between male and female participants F (1, 616) = 9.59, $p < 0.01$, with a small effect size (0.23), with male participants exhibiting higher scores. In addition, a significant gender*time interaction effect was found F (3, 1 120) = 5.68, $p < 0.01$. A visible increase occurred over time in male participants' scores. There was a significant difference ($p < 0.01$) in mean scores for male participants between T_1 and T_3 (as seen in the letters in Figure 27), with a small effect size of 0.39.

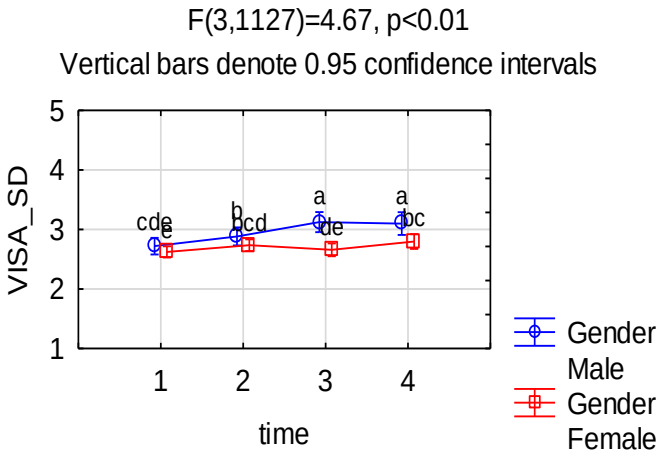

Figure 28. Plot Line Graph for Gender Differences in the *VISA SD* Subscale

In the *VISA Self-doubt (SD)* subscale (see Figure 28), there was a significant main gender effect F (1, 615) = 12.34, $p < 0.01$, with a small effect size of 0.24, with females scoring lower on this subscale. There was a significant gender*time interaction effect F (3, 1127) = 4.67, $p < 0.01$, and male participants' scores increased across time points. The most significant differences

in male participants' mean scores ($p < 0.01$) were seen between T_1 and T_4, with as indicated by the lettering in Figure 28, with a medium effect size of 0.44.

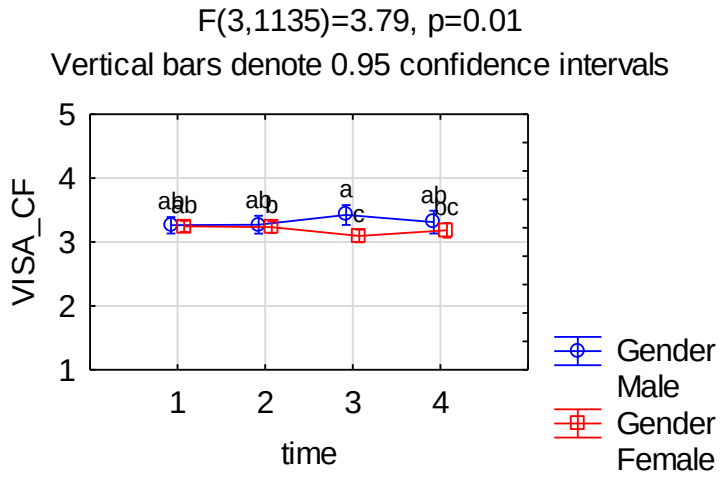

Figure 29. Plot Line Graph for Gender Differences in the *VISA CF* Subscale

In addition, there was a significant main gender effect F (1, 612) = 3.86, p = 0.05 in the *VISA career flexibility (CF)* subscale, with a small effect size of 0.15, where males were seen to score higher than female participants (see Figure. 29). A significant gender*time interaction effect was observed F (3, 1 135) = 3.79, p = 0.01. The most significant differences in female participants' mean scores (as indicated by the letters *b* and *c*) ($p < 0.05$) were between T_2 and T_3 (small effect size of 0.29), which were lower than male participants scores.

5.4.3.4 Grade differences in VISA subscales.

A mixed-model two-way ANOVA was conducted to determine if mean scores of the *VISA* showed differences according to school and if there was a significant school*time interaction effect. No significant main school effects or any school*time interaction effects were found for the *VISA* scale. Thereafter, mixed-model two-way ANOVAs were conducted to determine if mean scores of the *VISA* subscales showed significant main grade effects and if there were significant grade*time interaction effects.

In the second-order subscale of *VISA career exploration (CE)*, there was a significant main grade effect between Grade 10, 11 and 12 participants F (2, 617) = 6.63, $p < 0.01$ (see Figure 30). A significant difference was seen in mean scores ($p < 0.01$) between Grade 10 and 11 participants, with a small effect size of 0.15. In addition, there also was a significant difference in mean scores ($p < 0.01$) between Grade 10 and 12 participants (as indicated by the letters *b* and *a*) with a medium effect size of 0.43. Although Grade 12 participants were seen to

have the highest scores, the mean scores were similar to those of the Grade 11 participants as seen in the lettering below. There was no significant grade* time interaction effect F (6, 1185) =1.79, p = 0.10, which means that the grade scores increased similarly over time.

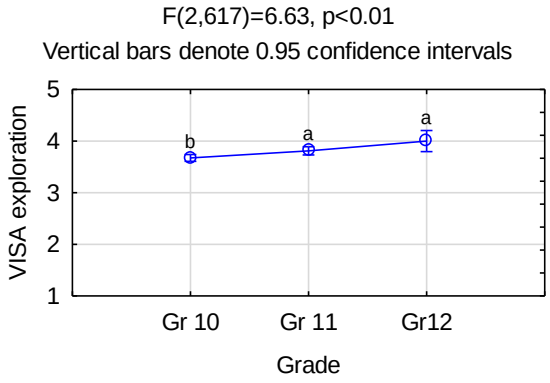

Figure 30. Plot Line Graph for Grade Differences in the *VISA CE* Subscale

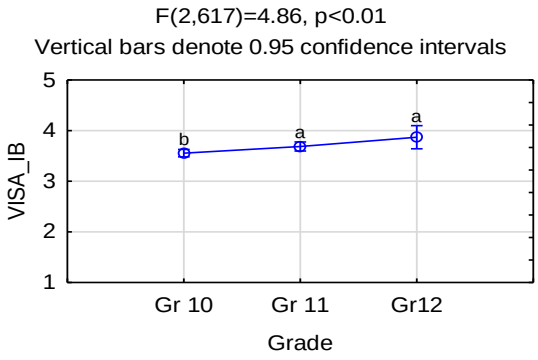

Figure 31. Plot Line Graph for Grade Differences in the *VISA IB* Subscale

The *IB* subscale was seen to have a significant main grade effect F (2, 617) =4.86 p < 0.01 (see Figure 31). There was also a significant difference in mean scores (p < 0.01) between the Grade 10 and 12 participants (see letters *b* and *a*), with a small effect size of 0.36. There was no significant grade*time interaction effect F (6, 1 190) =1.71, p= 0.11 but the Grade 12 scores increased the most. In addition, the *ID* subscale had a significant main grade effect F (2, 606) = 6.18, p < 0.01 (see Figure 32). A significant difference in mean scores between the Grade 10 and 11 participants, seen in the lettering *b* and *a*, with a negligible effect size of 0.14 (p < 0.01). In addition, there was also a significant difference in mean scores between Grade 10 and 12 participants (see *b* and *a*), with a medium effect size of 0.42 (p < 0.01). There was no significant grade*time interaction effect F (6, 1 203) = 1.14, p = 0.34.

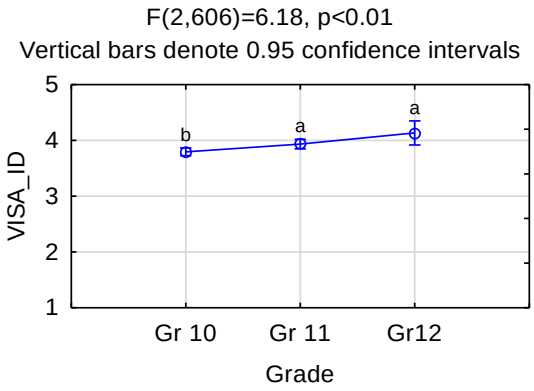

Figure 32. Plot Line Graph for Grade Differences in the *VISA ID* Subscale

In the second-order subscale of *VISA career commitment (CC)*, there were no main grade effects F (2, 617) = 1.17, p = 0.31, although the Grade 12s had the highest scores at T_4. There was also no significant grade*time interaction effect F (6, 1 168) = 1.97, p = 0.07. The first-order subscale, *CCM*, was seen to have no significant main grade effect F (2, 614) = 0.64, p = 0.53. There was also no significant grade*time interaction effect F (6, 1 192) = 1.69, p = 0.12.

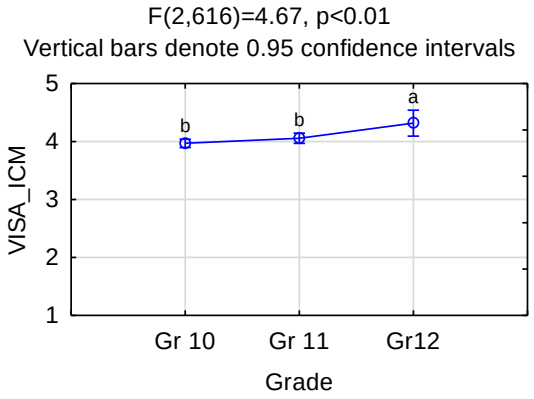

Figure 33. Plot line graph for grade differences in the *VISA ICM* subscale

The first-order subscale, *ICM*, was seen to have significant main grade effects F (2, 616) = 4.67, p < 0.01 (see Figure 33). A significant difference in mean scores (see letters *b* and *a*) can be observed between the Grade 10 and 12 participants, with a medium effect size of 0.42 (p < 0.01), and between the Grade 11 and 12 participants (see letters *b* and *a*), with a small effect size of 0.38 (p < 0.01). However, there was no significant grade*time interaction effect F (6, 1 179) = 1.25, p = 0.28.

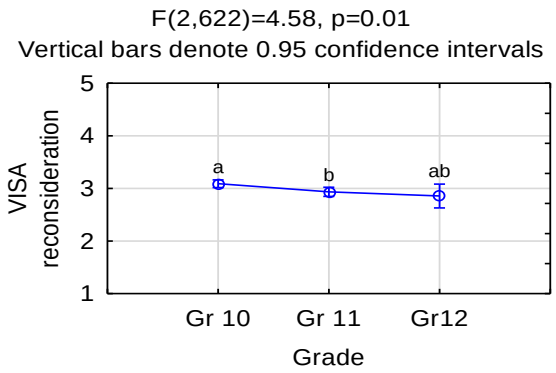

Figure 34. Plot line graph for grade differences in the *VISA CR* subscale comparison

In the second-order subscale of *VISA career reconsideration (CR)*, there were significant main grade effects F (2, 622) = 4.58, p = 0.01 (see Figure 34). This indicates a significant difference in mean scores between Grade 10 and 11 (see letters *b* and *a*), with a small effect size of 0.21 (p<0.05). There was no significant grade*time interaction effect F (6, 1 160) = 1.09, p = 0.36. The Grade 10 scores were seen to be the highest in comparison to Grade 12, who had the lowest scores.

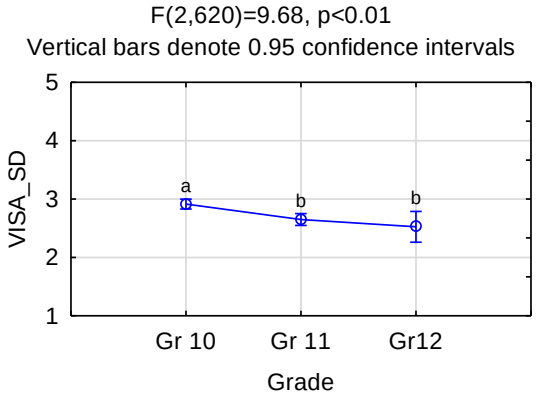

Figure 35. Plot line graph for grade differences in the *VISA SD* subscale

The first-order subscale, *SD*, was seen to have significant main grade effects F (2, 620) = 9.68, p < 0.01 (see Figure 35). There seems to be a significant difference in mean scores between Grade 10 and 12 (see letters *b* and *a*), with a small effect size of 0.36 (p < 0.01), and between Grade 10 and 11, with a small effect size of 0.28 (p < 0.01). However, there was no significant grade*time interaction effect F (6, 1 169) = 1.96, p = 0.07. The first-order subscale, *CF*, was seen to have no significant main grade effect F (2, 616) = 0.34, p = 0.71. There was also no significant grade*time interaction effect F (6, 1 174) = 0.67, p = 0.68.

5.4.3.5 VISA results summary.

Firstly, time effects were observed in three *VISA* subscales. There were significant differences between T_1 and T_4 for the *SD*, *ICM* and *IB* subscales, showing that the intervention contributed to an increase in the scores for these subscales. This section indicates that males and females scored similarly, except that the male participants scored significantly higher on three subscales, namely the *CF*, *SD* and *CR*. Gender implications will be discussed in the next chapter. In addition, grade differences were documented. There were grade effects on the *CE*, *IB*, *ID*, and *ICM* subscales, for which the scores increased the most for the Grade 12 participants, and there were significant differences between the mean scores of the different grades. In *CR*, a significant difference was seen in the mean scores between the Gr 10 and 11 participants and, lastly, *SD* showed that the Grade 12 participants had the lowest scores in comparison to the Grade 10 participants, who had the highest scores on this subscale.

5.4.4 Associations between *VISA* and *CAAS*.

An investigation was undertaken to determine if there were any associations between the *CAAS* and *VISA*, as career adaptability and vocational identity constructs have been cited as the two core components of adolescent or youth vocational development (Negru-Subtirica et al., 2015).

5.4.4.1 Correlations between CAAS and VISA.

In order to establish concurrent validity, a correlation analysis was conducted between the subscales of the *CAAS* and the *VISA.* The correlations ranged from -0.04 to 0.21 ($p < 0.01$). These correlations were viewed as too small to be practically significant (see Appendix AA for the correlation matrix). The results indicated that the *VISA* and *CAAS* measure separate constructs that are not strongly correlated with each other.

5.4.4.2 Vocational identity statuses over time points.

A cluster analysis was performed at each time point to examine if the vocational identity clusters would change in the pre- and post-intervention points in time. A cluster solution was chosen based on the suggestions made by Crocetti et al. (2008a, 2008b) and Gore (2000). Firstly, hierarchical cluster analyses using Ward's method and squared Euclidean distances was conducted (Steinley & Brusco, 2007). Thereafter, three- to six-cluster solutions were evaluated in terms of substantive interpretability, parsimony, and explanatory power (i.e., the cluster solution had to explain approximately 50% of the variance in each of the constituting dimensions). At time point one (T_1), six clusters were extracted, at T_2 six clusters were extracted,

at T_3 five clusters were extracted, and at T_4 five cluster were extracted (see Appendix U for the clusters extracted).

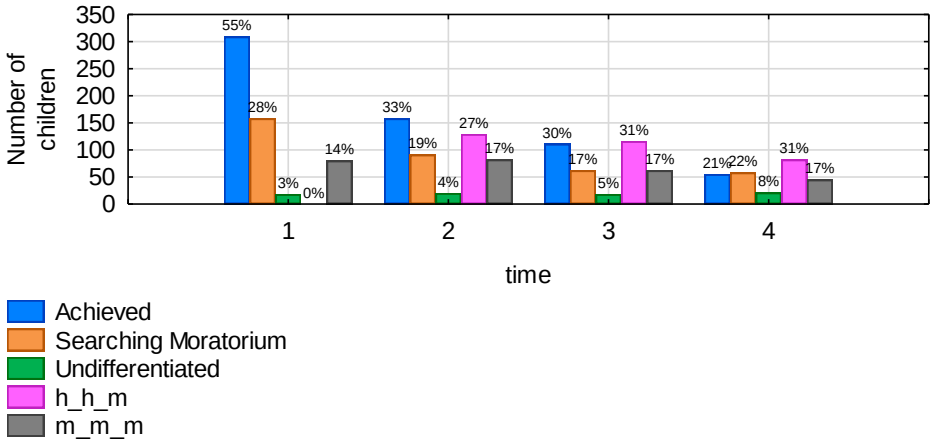

Figure 36. Differences in Vocational Identity According to Time Point

In Figure 36, different vocational identity statuses are grouped according to time point, with percentages attached to indicate how many participants had this particular vocational identity status at a specific time point. What is noteworthy is the movement from an *achieved identity status* (i.e., high levels of career exploration, high levels of commitment and low levels of reconsideration) from 55% at T_1 to 33% at T_2. This status seems to be decreasing at each time point observed (i.e., 30% at T_3 to 21% at T_4). The *searching moratorium* vocational identity status (i.e., high levels of career exploration, high career commitment and high career reconsideration) also seemed to decrease from T_1 (28%), and T_2 (19%), to T_3 (17%), and then increased at T_4 (22%).

There are two vocation identity statuses that do not conform to the six statuses proposed by Porfeli et al. (2011), viz. h_h_m, which refers to high career exploration, high career commitment and medium career reconsideration, and m_m_m, which refers to medium scores across career exploration, career commitment and career reconsideration. The h_h_m status did not exist at T_1, but was seen to increase across time points starting at T_2 (27%), and then increasing to T_3 (31%) and ending at T_4 (31%). The m_m_m vocational identity status indicated a slight increase, which began at T_1 with 3%; at T_2 it was 4%, with 5% at T_3 and ending with 8% at T_4. The implications of these two new vocational identity statuses will be discussed in the next chapter.

In order to examine changes observed between the time points and the changes in vocational identity statuses in more detail, time points will be compared using the Stewart-Maxwell chi-square test. A significant difference was observed in Figure 37 between vocational

identity statuses at time points T_1 and T_2, χ (4) = 132.47, p < 0.001). As can be seen in Figure 37 the greatest changes can be seen in the achieved identity status, where there was a decrease from 56% (T_1) to 31% (T_2), and the h_h_m identity status that emerged at T_2 (26%).

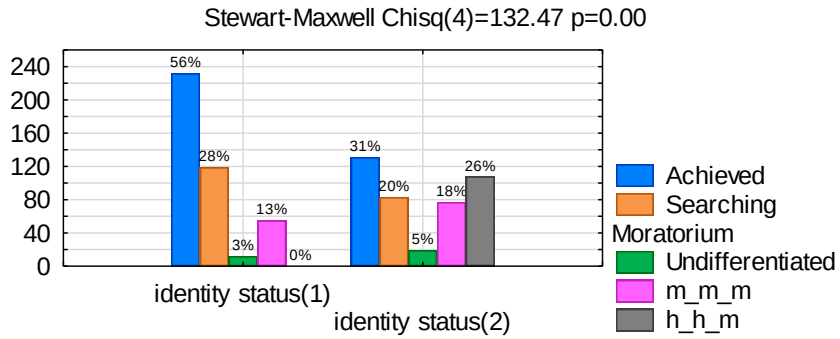

Figure 37. Vocational Identity Comparisons Between Time 1 and Time 2

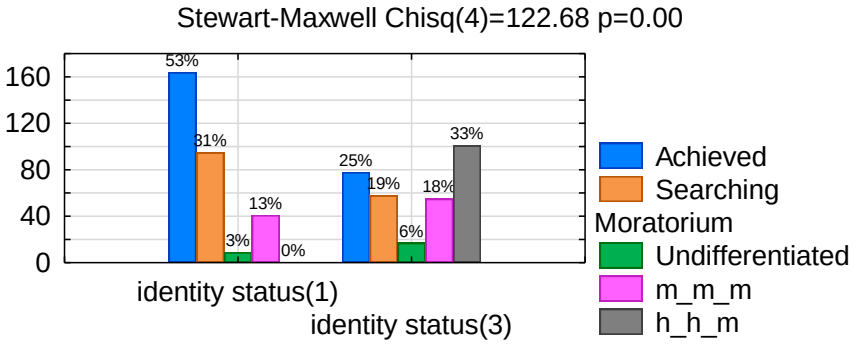

Figure 38. Vocational Identity Comparisons Between Time 1 and Time 3

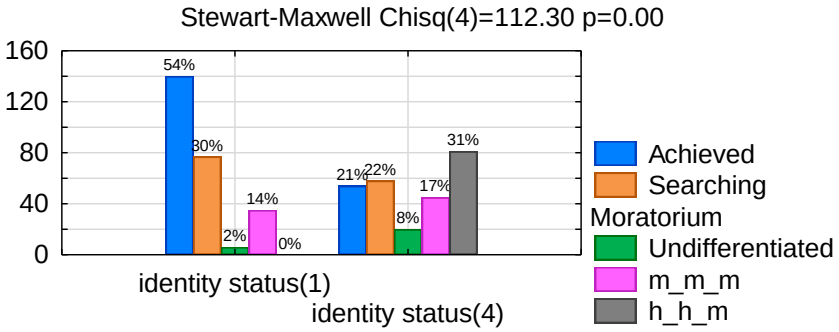

Figure 39. Vocational Identity Comparisons Between Time 1 and Time 4

In addition, significant differences were observed in Figure 38 in vocational identity statuses between time points T_1 and T_3, χ (4) = 112.30, p < 0.001). The greatest changes were seen in the achieved identity status, where there was a decrease from 53% (T_1) to 25% (T_2) and the h_h_m identity status, which was not present at T_1 but was at 33% at T_3. Furthermore, significant differences were observed between vocational identity statuses between time points T_1 and T_4, χ (4) = 132.47, p < 0.001). As can be seen in Figure 39, the greatest changes observed

occurred in the achieved identity status, where there was a decrease from 54% (T_1) to 21% (T_2), and the h_h_m identity status which was not present at T_1 but was at 31% at T_3. In summary, identity statuses were seen to begin changing after the first administration at T_1 and kept shifting until T_3, which is when the intervention ended. Upon follow-up at T_4, the identity statuses had not changed much from T_3, but remained significantly different than from before the start of the intervention. This will be discussed further in the next chapter.

5.4.4.3 Vocational identity status examined according to CAAS subscales.

In order to understand if there were additional links between the *CAAS* subscales and the vocational identity statuses derived from the *VISA*, a mixed-model ANOVA was performed. In this manner, group differences could be examined between the five vocational identity clusters extracted during the cluster analysis and the *CAAS* subscales. In this section only group interactions will be analysed, because one vocational identity status (h_h_m) only emerged at T_2. Otherwise this vocational identity would have to be excluded to assess group*time effects. All six *CAAS* subscales showed a significant vocational identity group effect. The first subscale, *concern*, had a significant main group effect $F(4, 970) = 18.49$, $p < 0.01$ as seen in Figure 40. A significant difference in concern mean scores ($p < 0.01$) can be observed between the achieved identity status and h_h_m with a medium effect size (0.48).

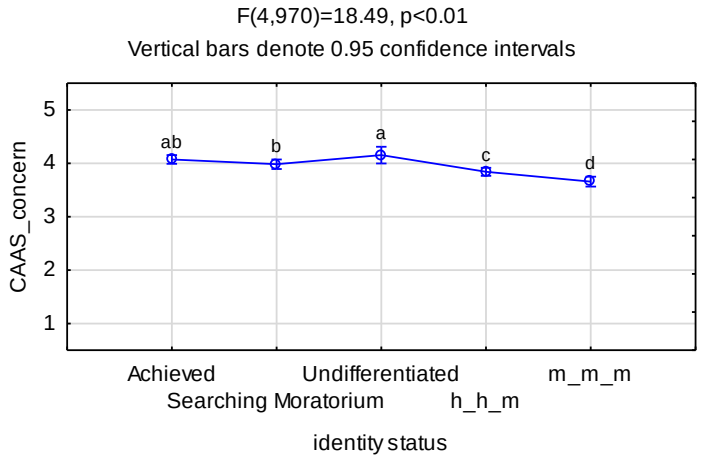

Figure 40. Vocational Identity Comparisons for the *CAAS Concern* Subscale

Furthermore, a significant difference in concern mean scores ($p < 0.01$) can be seen between the achieved identity status and m_m_m with a large effect size (0.91). A significant difference in concern mean scores ($p < 0.01$) can also be seen between the undifferentiated status and m_m_m (large effect size: 1.05), as well as between the undifferentiated status and h_h_m (medium effect size: 0.63). Lastly, a significant difference in concern mean scores ($p < 0.01$)

was observed between the searching moratorium status and m_m_m with a medium effect size (0.71).

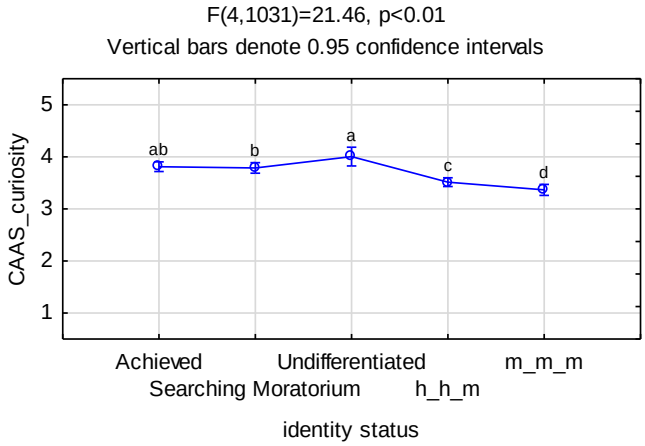

Figure 41. Vocational Identity Comparisons for the *CAAS Curiosity* Subscale

The second subscale, *curiosity*, had a significant main group effect F (4, 1031) = 21.46, p < 0.01 as seen in Figure 41. A significant difference in curiosity mean scores (p < 0.01) can be observed between the achieved identity status and h_h_m (small effect size: 0.38), as well between the achieved identity statuse and m_m_m (medium effect size: 0.75). A significant difference in curiosity mean scores (p < 0.01) can also be seen between the undifferentiated status and m_m_m (very large effect size: 1.17), as well as between undifferentiated status and h_h_m (large effect size: 0.82). Lastly, a significant difference in curiosity mean scores (p < 0.01) was also observed between the searching moratorium status and m_m_m with a large effect size (0.80).

The third subscale, *confidence*, had a significant main group effect F (4, 1042) = 17.41, p < 0.01, as seen in Figure 42. A significant difference in confidence mean scores (p < 0.01) can be observed between achieved identity status and h_h_m with a medium effect size (0.43), and a large effect size (0.82) between achieved identity status and m_m_m. A significant difference in confidence mean scores (p < 0.01) can also be seen between the undifferentiated status and m_m_m (large effect size: 1.08) as well as between undifferentiated status and h_h_m (medium effect size: 0.71). Lastly, a significant difference in confidence mean scores (p < 0.01) was also observed between the searching moratorium status and m_m_m with a large effect size (0.80).

The fourth subscale, *control*, had a significant main group effect F (4, 1018) = 16.45, p < 0.01 as seen in Figure 43. A significant difference in control mean scores (p < 0.01) can be observed between achieved identity status and h_h_m with a medium effect size (0.47).

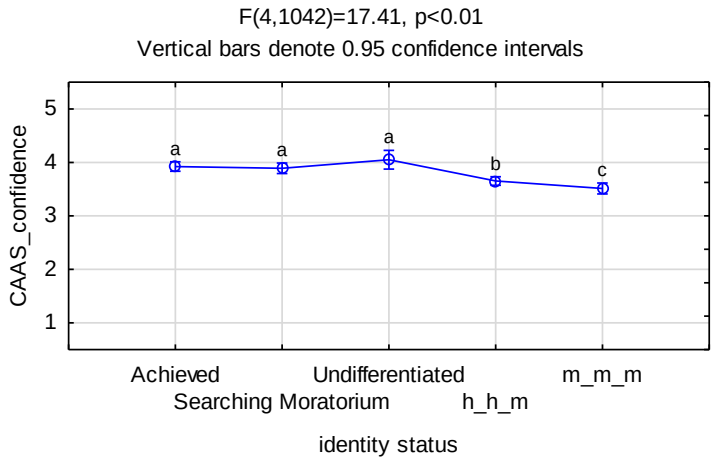

Figure 42. Vocational Identity Comparisons for the *CAAS Confidence* Subscale

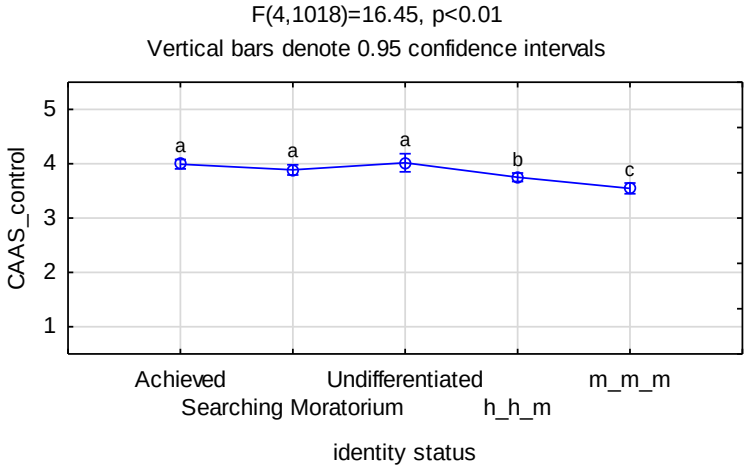

Figure 43. Vocational Identity Comparisons for the *CAAS Control* Subscale

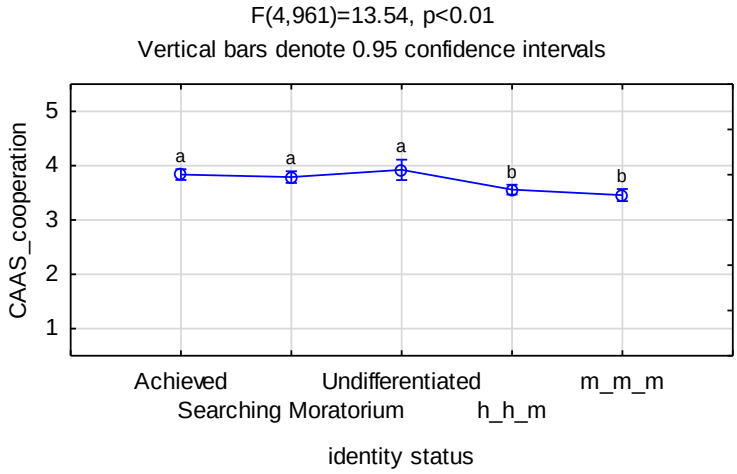

Figure 44. Vocational Identity Comparisons for the *CAAS Co-operation* Subscale

Furthermore, a significant difference in control mean scores ($p < 0.01$) can be seen between achieved identity status and m_m_m with a large effect size (0.87). A significant

difference in control mean scores ($p < 0.01$) can also be seen between the undifferentiated status and m_m_m (large effect size: 0.99), as well as between undifferentiated status and h_h_m (medium effect size: 0.59). Lastly, a significant difference in control mean scores ($p < 0.01$) was observed between the searching moratorium status and m_m_m with a medium effect size (0.67).

The fifth subscale, *co-operation* had a significant main group effect $F(4, 961) = 13.54$, $p < 0.01$, as seen in Figure 44. A significant difference in co-operation mean scores ($p < 0.01$) can be observed between achieved identity status and h_h_m with a medium effect size (0.47), as well as between achieved identity status and m_m_m with a medium effect size (0.70). A significant difference in co-operation mean scores ($p < 0.01$) can also be seen between the undifferentiated status and m_m_m (large effect size: 0.95), and between undifferentiated status and h_h_m (medium effect size: 0.68). Lastly, a significant difference in co-operation mean scores ($p < 0.01$) was observed between the searching moratorium status and m_m_m (medium effect size: 0.71), and between searching moratorium status and h_h_m (medium effect size: 0.44).

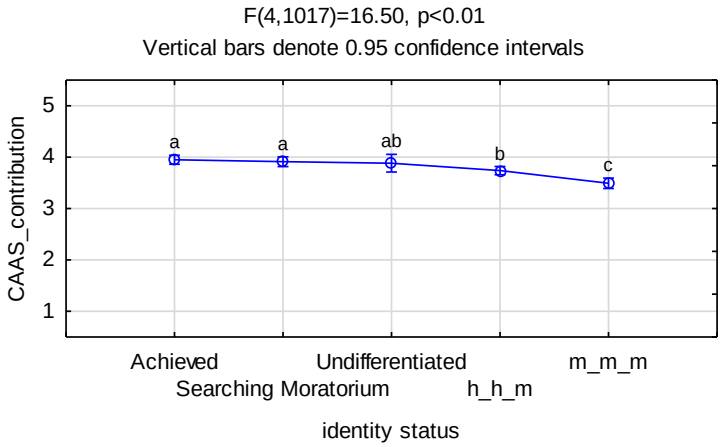

Figure 45. Vocational Identity Comparisons for the *CAAS Contribution* Subscale

The sixth subscale, *Contribution* had a significant main group effect $F(4, 1017) = 16.50$, $p < 0.01$ as seen in Figure 45. A significant difference in contribution mean scores ($p < 0.01$) can be observed between achieved identity status and m_m_m with a large effect size (0.89). A significant difference in contribution mean scores ($p < 0.01$) can also be seen between the undifferentiated status and m_m_m (large effect size: 0.77). Lastly, a significant difference in contribution mean scores ($p < 0.01$) was also observed between the searching moratorium status and m_m_m with a large effect size (0.84). In summary, there were significant mean score

differences in the *CAAS* subscales that corresponded with different vocational identity statuses. The implications thereof will be discussed in the next chapter.

5.5 *Phase 5* and *6*: Qualitative Intervention and Focus Group Feedback

Table 5.16 presents themes extrapolated from the intervention feedback forms and focus group.

Table 5.16

Themes and Subthemes Extrapolated from the Intervention Feedback Forms and the Focus Group

Source	Theme	Subtheme	CAAS subscale	VISA subscale
Intervention feedback	1. Increased self-worth beliefs	1.1 Increased self-efficacy beliefs	Confidence	ICM
		1.2 Increased personal Responsibility	Control	CCM
	2. Elimination of negative influences	2.1 Negotiating the community gaze	Co-operation	CCM
		2.2 Decreased self-doubt	Co-operation	CCM
	3. Acceptance of alternative career identities	3.1 New career opportunities	Curiosity	IB
		3.2 Readiness to adapt	Concern	CF
		3.3. Increased career flexibility	Curiosity	CF
	4. Need for co-operation	4.1 Need for an accessible mentor	Co-operation	ID
		4.2 Family as a support system	Co-operation	ICM
	5. Increased self-reflection	5.1 Identification of abilities	Curiosity	ICM
		5.2 Integration of personal variables in career choices	Curiosity	ICM
	6. Increased future planning	6.1 Linking the past, present and future	Concern	CR CR
		6.2 Taking steps to make changes	Concern	ICM
		6.3 Improve lifestyle	Control	
	7. Giving back	7.1 Share knowledge	Contribution	ICM
		7.2 Increase family lifestyle	Contribution	ICM
A six-month follow-up focus group additional theme	8. Cultural influences	8.1 Gender constructions	Contribution	ICM
		8.2 Family obligations	Contribution	ICM
		8.3 Expectations of materialistic Success	Contribution	ICM
Intervention and focus group shared theme	9. Negative feedback	9.1 Too little time to write		
		9.2 More one-on-one talks		
		9.3 More sessions wanted		
		9.4 More detailed career information (i.e., pamphlets)		
		9.5 Include more fun activities (i.e., games)		

A thematic analysis, using Braun and Clarke's (2006) six steps, allowed extracted themes to be grouped according to career adaptability and vocational identity dimensions. The post-intervention changes that the participants mentioned were combined with positive and negative feedback from the focus group due to repetition. There were few negative comments about the intervention, but those that were mentioned are listed. The overwhelming response was positive, as all the participants (n = 247) indicated that the career intervention had achieved its aims and was enjoyable. A focus group was held six months post-intervention to assess if the career intervention had sustainable effects according to the participants. The focus group enabled in-depth information to be gained about the intervention and perceptions of the way the intervention was received by the participants. Therefore, the focus group helped to triangulate data to add to the trustworthiness of the qualitative findings. The extracted themes indicated that the participants received the *Shaping Career Voices Intervention* positively, and that the intervention achieved its aim of facilitating career development.

5.6 Chapter Summary

In this chapter, the psychometric analyses of the *VISA* and *CAAS-Kaymandi* were presented as part of *Phase 2*. Delphi panel qualitative interviews informed changes that were included in *Phase 3*. The *CAAS Iceland* was used due to the social dimensions of career adaptability, which were not included in the previous *CAAS* version and renamed *CAAS-collectivistic* version. *Phase 3* presented pre- and post-findings of the *VISA* and *CAAS*, which seemed to indicate that the intervention contributed to increased post-intervention scores. At the end of *Phase 3*, qualitative feedback informed the final intervention. In *Phase 4*, a psychometric analysis of the *CAAS-collectivistic version* was conducted, and the instrument was seen to be moderately reliable and valid. Thereafter, mixed-model ANOVA findings were presented to assess time, grade and gender effects for the *CAAS* and *VISA* subscales. The results seem to indicate that the intervention contributed to significant increases in scores on the subscales of both instruments over time points, and that these increases were sustained at follow-up. Vocational identity status changes were assessed over time, and significant differences were found between time points, indicating that vocational identity statuses shifted as a result of the career intervention. The next chapter provides an in-depth discussion of these findings per phase in order to integrate the quantitative and qualitative strands to provide an in-depth contextualisation of career adaptation and vocational identity development processes in a marginalised population group.

CHAPTER 6

INTEGRATED RESEARCH DISCUSSION

6.1 Introduction

Western or developed world contexts are facing new issues of diversity and multiculturalism as never before due to increasing numbers of displaced and migratory population groups. Therefore, research conducted in multi-cultural contexts, such as South Africa, may prove extremely beneficial in providing examples of dealing with diversity to guide vocational decision-making processes in an ever-changing world-of-work. The present mixed-methods research aimed to provide further practical insights into the mechanisms of multicultural counselling with diverse groups presenting different career needs (Stead & Watson 2017). The inclusion of a client's educational, cultural, economic, social and historical contexts enhances the development of career adaptability and vocational identity, which allows better adaptation to rapid career-life transitions (Glavin, Haag, & Forbes 2017). In order to address both subjective and objective career development markers (McMahon & Watson, 2013), the merger of quantitative-qualitative approaches in career counselling has been called for (Maree, 2017) and this approach aligns closely with the CCT (Savickas, 2013a, 2013b).

Although established career theory, such as the CCT, may be applicable to diverse population groups, its applicability first needs to be determined instead of assumed (Stead & Watson, 2006). Watson (2013, p. 6) has urged for caution in applying CCT, as the basic tenets may not be versatile enough to include developing-country contexts or meet the needs of diverse cultural groups, such as underprivileged, underclass and disadvantaged population groups, as in the Kayamandi township participants in the present study. Previous failure to meet the career needs of Black adolescents has been documented, as well as numerous failed career interventions in a South African context (Grossen et al., 2017; Watson, Foxcroft, Horn, & Stead 1997). However, the challenge of creating contextually appropriate and useful interventions remains a necessity to equip clients, especially adolescents and young adults, with skills to transition repeatedly in work and other life contexts (Savickas, 2011b). The discussion that follows will attempt to critically assess, using each phase of this research process as a starting point, if a contextually appropriate and useful intervention was created.

6.2 *Phase 2* Psychometric Data Discussion

In order to pay special attention to contextual factors, such as gender, ethnicity, culture and socio-economic status (Mkhize, 2015), the present research followed an *etic-emic approach* to support the transfer of constructs, models and measures between cultures (i.e., etic approach), as well as to examine culture-specific meanings and the development of indigenous constructs (i.e., emic approach) (Ægisdóttir et al., 2009; Einarsdóttir et al., 2015). Instead of polarising the emic and the etic approaches, integration is advocated to allow the exploration and synthesis of different perspectives as the cornerstone of cross-cultural studies. Thereby, the universal aspects of career adaptability and vocational identity can be acknowledged, but also culturally specific limitations can be explored with the intention of follow-up research based on an emic approach.

There were six specific hypotheses that were examined in this phase of the study. Firstly, it was hypothesised (H_1) that contextual elements would indicate unique scoring patterns from which higher factor loadings of confidence would emerge, based on previous findings of high levels of self-efficacy were developed by overcoming daily obstacles (Swartz, 2011). The second hypothesis (H_2) was that low factor loadings would be observed in dimensions that measured career exploration, curiosity and openness to change in the Kayamandi sample. Previous studies have shown early career foreclosure due to limited exploration (Blustein et al., 1989), as well as the influence of significant others that youth are exposed to in their social levels of influence, which prevent openness to new career ideas (Watson, 2013). The third hypothesis (H_3) was that low factor loadings would be indicated in dimensions that measure levels of future orientation (i.e., career concern construct and related *VISA* constructs). This hypothesis was based on the dearth of future ideations, and the lack of goal-setting skills, that have been documented in disadvantaged youth (Alexander et al., 2010).

The fourth hypothesis (H_4) was that low factor loadings would be indicated in dimensions that measure control, which previous research has indicated may be lower in collectivistic cultures that focus less on personal agency but more on collective goals (Watson, 2013). Fifthly, it was hypothesised (H_5) that the *CAAS-South Africa Kayamandi* as well as the *VISA-South Africa Kayamandi* would exhibit lower factor loadings (i.e., under 0.5), and the sixth hypothesis (H_6) was that lower Cronbach's alpha reliability scores would be observed (i.e., under 0.7) in comparison to other samples, such as international samples. Previous studies in a South African context have documented this occurrence in low socio-economic and disadvantaged communities (Foxcroft & Roodt, 2013), and insights were drawn from other studies to set acceptable factor loadings above 0.3 (Hair et al., 2010) and acceptable reliabilities

at 0.6 (Kent, 2001). In addition, quantitative data will be supplemented with qualitative data that includes themes extracted from a Delphi focus group to allow the contextualisation of the career adaptability and vocational identity experiences of marginalised Kayamandi youth.

6.2.1 *CAAS* Psychometric properties.

The present study aimed to determine whether constructs of career adaptability and the measurement thereof, using the *CAAS-South Africa*, were applicable for Kayamandi adolescents. An exploration was undertaken how these competencies could manifest differently in comparison to the *CAAS-International*, the *CAAS-South Africa North West* and the *CAAS-Iceland* versions. The results of this study indicate that the *CAAS-South Africa Kayamandi* model performs similarly to the *CAAS-South Africa North West*, and *CAAS-International* models in terms of goodness-of-fit indices. The total *CAAS-South Africa Kayamandi* scale and its four constituent subscales each demonstrate an acceptable fit to the proposed hierarchical theoretical model describing the relations between the four subscales that constitute career adaptability resources.

The confirmatory factor analysis of the *CAAS-South Africa Kayamandi* demonstrated lower factor loadings when compared with the *CAAS-South Africa North West* sample. This was expected according to H_5 due to previous documentation of lower factor loadings amongst other disadvantaged South African population groups, including the Coloured and Black racial groups, on a variety of career assessments such as the *Career Maturity Inventory* (De Bruin & Bernard-Phera, 2002; Van Niekerk & Van Daalen, 1991; Watson & Van Aarde, 1986; Watson et al., 1995).

The particular sample used in this study had unique cultural and contextual factors that need to be considered in cross-sample comparative research. The confluence of socio-economic, linguistic and cultural factors may necessitate a less conservative interpretation of the reliability values and guidelines in order to acknowledge and document the effect that the context of this idiosyncratic sample may have on the psychometric properties of the *CAAS-South Africa*. The lower socio-economic status of the Kayamandi participants, for whom the township context is characterised by poverty and unemployment, could have played a role in lowering the reliability coefficient to below 0.7, which was expected according to H_6 (Foxcroft & Roodt, 2013).

In contrast, the *CAAS-South Africa North West* sample had a higher reliability coefficient (0.91), which could be due to the more varied socio-economic demographic of the sample, with both public and private school students represented. While the value of 0.7 is commonly viewed

as the acceptable lower alpha limit, Clark and Watson (1995) view an acceptable level of reliability to be above 0.6. Nunnally (1978) argues that acceptable levels of reliability could be as low as 0.60, depending on the purpose of the instrument, especially if used for research purposes. In this case, the *CAAS-South Africa Kayamandi* was used as a repeated-measure assessment to track changes before and after a life-designing career intervention was implemented, to determine whether the completion of a career intervention could be linked to an increase in career adaptability competencies.

However, lower reliability coefficients could also be linked to the linguistic challenges that were evident in the Kayamandi sample. Due to migration, isiXhosa is the primary language spoken in Kayamandi, but English, Zulu and Sotho are also spoken in the community (Toms, 2015). In comparison, the North West sample from Mafikeng consisted of predominantly Tswana- and Pedi-speaking population members (Statistics South Africa, 2011). Although Xhosa translations were prepared, these were rejected due to regional differences in dialects and convoluted terminology. Therefore, the final administration consisted of an adapted procedure using an English version of the *CAAS-South Africa* with Xhosa explanations provided for items that were identified to pose potential difficulty for the participants. Thus, the lower reliability scores in the Kayamandi sample could be a result of linguistic barriers, or could be indicative of poorly understood constructs or concepts, which could be due to the difficulty in finding equivalent terms in the isiXhosa language or as a result of lower literacy rates in English (as a second or third language) in township students.

In a post-measure Delphi focus group, fieldworkers were interviewed about their subjective experience of the linguistic difficulties, the manner in which these difficulties were resolved, and their interpretation of factor loadings. There were four main verbal substitutions made during administration. The word *"vocation"* was simplified and exchanged with the word *"career"* (concern item 4). In relation to the phrase *"keeping upbeat"*, a lot of confusion was experienced. Here the words *"keeping positive"* and *"keeping motivated"* were used to aid clarification (control item 2). Furthermore, curiosity item 5, "*probing deeply into questions that I have"* was replaced with *"thinking/ looking deeply into questions that I have"* to help students understand whether they were engaging in self-reflective questioning. The last substitution was for *"performing tasks efficiently"*, which was replaced with *"performing tasks well and fast"* (confidence item 1). Although these linguistic difficulties seem to have been identified and resolved, previous research examining South African school-going students' reading, literacy and numeracy skills have indicated deficits in these skills in comparison to age-appropriate

norms, especially in low socio-economic contexts, which may have had unprecedented effects in the present research study (Department of Basic Education, 2014).

In terms of the *concern* construct, two subthemes emerged, namely: 1) *a lack of future orientation* and 2) *a mismatch between present and future ideas*. Specifically, low concern factor loadings were interpreted to indicate a general *lack of future orientation* to be evident in Kayamandi adolescents, which was expected ($H_{3)}$. Previous research has indicated that a future orientation may not be adaptive in a context where day-to-day struggles exist (Swartz, 2011). This was confirmed by a fieldworker's comments (Fieldworker 1: F.1):

> *Kayamandi kids have daily obstacles. They take one day at a time. This means that they don't look too hard into the future. They have more current questions such as what am I going to eat? When you ask about obstacles, these kids have probably thought of all of the obstacles they face, not just career obstacles. Daily obstacles seem harder than career obstacles. The question of keeping alive and having confidence to find a way… to make a plan. To hustle until you have been hustled. But also they have no idea of the career obstacles that they can anticipate or will face. There are hardly any examples of career success, where all career obstacles were overcome.*

However, the implications of an attenuated future orientation for career development have not yet been discussed. This is an issue that needs attention, as the practice of career counselling is built on the assumption that an individual invests effort in actively planning the development of a future self and an occupational identity. Although the Kayamandi students were aware that educational and career choices needed to be made, they did not seem to have developed a future orientation. A fieldworker's comment (F.4) suggests that a lack of concern for a future time orientation had a protective function, as seen in the excerpt below:

> *When you think of being concerned about the future: The question is how the hell are you gonna study further when you know your mom is a domestic worker and she can't afford for you to go to university. It changes the way you think about the future. You wonder if it might not be more realistic to focus on getting a job at McDonalds in the future. So instead you dream of going to university without actually planning the future steps needed because you are scared those steps will take you straight to McDonalds instead.*

If having a future orientation is not adaptive behaviour in a specific context, then the development of concern for the future may be detrimental to the individual because short-term survival takes priority over long-term goals to manage bread-and-butter priorities and psychological stressors. The behavioural consequences of a lack of future orientation are apathy, avolition, a lack of delayed gratification, a paucity of reflection, and a time experience focused

on day-to-day survival, and these behaviours have been overlooked in career counselling with marginalised youth (Frankl, 1992; Swartz, 2011).

Due to the lack of future orientation, the second subtheme emerged as a *mismatch between present and future ideas*, which manifested in behaviours that detracted the students from career goals because they had not planned a step-by-step process of attaining career goals (Alexander et al., 2010). This is encapsulated in this excerpt: "*You don't spend any time thinking about what you need to do now to try and get there. You just think when the time is right I will know what to do*" (F.7). This indicates a complete lack of engagement with persistency beliefs, which is the sense of purposefulness and resolve in progressing towards a career goal and which can negatively affect career commitment and resolve (Arulmani, 2010a). However, this is an interesting finding because the participants exhibited high career self-efficacy beliefs (as described below), but did not seem to progress to the next step, which is hypothesised to be career goal setting and, lastly, engage with career-related activities (Lent et al., 2002). If Social Cognitive Career Theory (SCCT) is used to try to understand these findings, the problematic area seems to be *outcome expectations,* which refers to individuals' beliefs in the outcomes or results of a performed behaviour. Perhaps when participants think about the future they are overwhelmed by anxiety, which results in a negative answer to the question, "If I do it, what will happen?" and this deters the individual from progressing to the implementation of goal-related behaviour (Lent et al., 2002; Osipow & Fitzgerald, 1996).

Thereafter, the *confidence construct* was explored and two subthemes emerged, namely 1) *high self-efficacy beliefs* and 2) *family support*. Confidence had the highest loadings of the four subscales, which was expected (H_1). This could be a reflection of the high self-efficacy beliefs, described as underlying beliefs that individuals hold regarding their capabilities of performing certain tasks (Lent et al., 2002), which have been previously documented in township youth based on daily examples of mastering hardships (Albien & Naidoo, 2018; Theron, 2013). Values that were passed on through generations that helped deal with adverse apartheid conditions seem to have instilled a fighting spirit to get a better future, seen in the following fieldworker's (F.2) quote: *"This is about reminding yourself how far you've come. You look at your surroundings and your parents' occupations and you use it to improve yourself."* Vicarious examples of overcoming daily barriers associated with poverty are visible (Swartz, 2011), which could lead to a more advanced development of this career adaptability competency in this population group than in other population groups sampled.

In addition, the confidence construct seemed to include collectivistic elements that emerged under the theme of *family support.* This was an unprecedented finding, but previous research has indicated the importance of family members in career development (Seabi at al., 2010), as well as how self-esteem is built up on collective goals in collectivistic cultures (Watson, 2013). However, further adaptations are recommended to the *CAAS-South Africa Kayamandi* to include more collectivistic elements to be better able to identify the impact that families and significant others have on an individual's career choices. A future suggestion that emerged from this Delphi panel interview was to explore the subscales created in Iceland, which included *co-operation* and *contribution,* to allow the social, cultural and relational aspects to be included in the conceptualisation of career adaptability (Einarsdóttir et al., 2015). This suggestion was applied in *Phase 3*.

In contrast, the *control* construct exhibited the lowest control loadings in comparison to the two previous administrations of the *CAAS*, which was expected (H_4). The first theme that emerged was *fatalism,* which was interpreted to be a result of the unpredictable nature of township life, including poverty, crime, protests, shack fires, floods and other experiences of hardship. A fieldworker (F.3) confirmed this interpretation by stating that there were so many things that were out of an individual's control: *"Some problems are too big to solve (e.g., substance abuse or gangsterism) these contextual and social problems are out of my control."* Although notions of fatalism (i.e., resignation and a passive acceptance of life events) were supported (Arulmani, 2010b), it was still seen to be the individual's choice if the event caused him/her to give up. This is further explained in this excerpt: *"Sjoe, anything can happen in Kayamandi, from one moment to the next. You have no control over what happens to you, but you can't let those things stop you from reaching your goals in life"* (F.1).

The constant influence of unexpected events affected the development of the career adaptability competency of control, and future research is needed to examine associations between locus of control and career-related outcomes in township youth. If an individual assigns uncontrollable factors that resulted in failure to achieve his/her career aspirations as an overwhelming sense of personal responsibility, further attempts at career endeavors may be forestalled. This is a concern, as a *sense of responsibility* emerged as the second subtheme and the importance of this theme was evident in the control subscale item 3 (*Taking responsibility for my actions*), which had the highest loading in the *CAAS-South Africa Kayamandi* model. A fieldworker (F.7) supported this high level of responsibility by stating:

> *You had a choice and you made the wrong choice. You will also blame yourself when something goes wrong even if you know that it was not your fault or you had no control over what happened. You have to be responsible for yourself, it is a choice how you handle it even if you have other generations' experiences to guide or protect you.*

Therefore, an overwhelming sense of responsibility has been cited as a barrier (Albien & Naidoo, 2018), and career counsellors should address facilitation of a realistic perception of the benefits and limits of assuming personal responsibility within structural or macro-systemic constraints.

Furthermore, the *curiosity* construct was seen to have higher second-order loadings in the *CAAS-South Africa Kayamandi* compared to the two other factor models. This means that H_2, which stated that low scores would be observed in dimensions that measure career exploration, needs to be rejected. Therefore, perhaps these high loadings should be interpreted as a lack of career exposure instead of a lack of curiosity. This introduces the first subtheme, *a lack of career exposure*, as explained by one of the fieldworkers (F.6):

> *Kids in Kayamandi had late exposure, they didn't have career exhibitions in primary schools, they only received information in Gr11 or their matric year. This doesn't mean that they are not curious this just means that they didn't have opportunities to gain information, they received most of their career information by word of mouth.*

However, the second subtheme was *mimicking success*, which seemed to contradict career exploration or curiosity about new careers. Perhaps career curiosity in this context of limited exposure to careers means that careers are explored by observing other community members' career choices. The fieldworkers gave this phenomenon a name, *"copycatting success"*, where the career paths of individuals were observed and the ones that achieved success, defined by a higher standard of living based on economic stability, were mimicked to avoid failure. This is explained in the following excerpt: *"People in the Kayamandi community are all the same, with the same capabilities and so if someone fails at something, it is mostly a guarantee that I too will fail at the same thing"* (F.5).

This finding could explain why previous research has found early career foreclosure in the career development of township youth (Alexander et al., 2010). Early foreclosure may frustrate or inhibit career exploration, leading to career choices based on inaccurate, stereotypical career ideals that are predominantly driven by a desire for materialistic status (Mdikana, Seabi, Ntshangase, & Sandlana, 2008). However, there may also be hidden psychological benefits in choosing a vocational identity of a future self, based on materialistic

indicators of success that serve to improve self-worth and keep self-efficacy beliefs high, whilst living in an environment of struggle, deprivation and despair.

6.2.2 Psychometric properties of *VISA*.

The present research aimed to determine whether constructs of vocational identity and the measurement thereof, using the *VISA*, were applicable for disadvantaged adolescents, as well as how these competencies could manifest differently in comparison to the *VISA-American* version. The results of this study indicate that the *VISA-Kayamandi* model performed similarly to the *VISA-American* model in terms of goodness-of-fit indices. The confirmatory factor analysis of the *VISA-Kayamandi* did have a lower fit when compared to the *VISA-American* sample (supporting H_5), but still an acceptable fit was demonstrated to the proposed hierarchical theoretical model.

The lower socio-economic status of the Kayamandi participants, who live in a township context characterised by poverty and unemployment, could have played a role in lowering the factor loadings and the reliability coefficients to below 0.7 throughout the present research study, which supported H_6 (Foxcroft & Roodt, 2013). This has been replicated in previous studies (De Bruin & Bernard-Phera, 2002; Van Niekerk & Van Daalen, 1991; Watson & Van Aarde, 1986; Watson et al., 1995). Therefore, acceptable levels of reliability in the current research have been lowered to a value of 0.6 and were not interpreted too stringently (Clark & Watson, 1995; Cronbach, 2001; Nunnally, 1978). This was acceptable because both the *CAAS* and *VISA* measures assessed were used as pre- and post- assessments after a career development intervention to explore whether career adaptability competencies or vocational identity scores had improved to allow the documentation of the psychometric properties of the VISA with this idiosyncratic sample.

In a post-measure administration, a Delphi focus group was held with fieldworkers to gain insight into linguistic barriers. The Kayamandi fieldworkers were interviewed about their subjective experiences of poorly understood constructs or concepts, which could be due to the difficulty of finding equivalent terms in the isiXhosa language or as a result of lower literacy rates in the township learners (Department of Basic Education, 2014). Six main verbal substitutions were made during administration. The phrase "*little dishonest*" was simplified and exchanged with the phrase "*not being honest*" (*SD* item 2). The word "*uneasy*" caused some confusion. Here the words "*scared*" and "*anxious*" were used to aid clarification (*SD* item 1). Furthermore, *CCM* item 2 "*appealing*" was replaced with "*attractive*" or "*desirable*". Item 1 of

the *ICM subscale* "*My career will help me satisfy deeply personal goals*" was replaced with "*My career will help me satisfy my goals.*" The confusion is centred around what "*deeply personal*" means in terms of goals being career-related, personal or a mixture of both. In addition, the word "*aspects*" of *ICM* item 5, was replaced with "*characteristics*." The last substitution was "*I need to learn a lot more before I can make a career choice*" with "*I need to get more information before I can make a career choice*" (*CF* item 5). The confusion in this statement was tied to the word *learn*, where learning is associated with school tasks and not a set of wider skills needed for making a career choice. Although these linguistic difficulties seem to have been identified and resolved, previous research examining South African school-going learners' literacy skills, especially in low socio-economic contexts, observed skill deficits in comparison to age-appropriate norms (Department of Basic Education, 2014).

The *VISA* second-order subscales (viz., *Career Commitment* (*CC*), *Career Exploration* (*CE*), and *Career Reconsideration* (*CR*)) were used to group themes that emerged during the Delphi panel focus group according to the vocational identity process theory put forward by Porfeli et al. (2011). Three subthemes emerged in the *CC* dimension, namely: 1) *career identity linked to future lifestyle*, 2) *commitment to escaping poverty*, and 3) *secrecy versus showing off a chosen career identity*. To begin this discussion of the *CC* dimension, it is important to state that theoretically, career choices are viewed as an implementation of a single self-concept, where a specific vocational identity has a related self-concept (Sharf, 2016; Super et al., 1996). This is in direct contrast to the development of multiple self-concepts, but this can easily occur when "the picture the person has of [him/her] self in numerous roles and situations" changes due to circumstances, social learning and personal growth (Super et al., 1996, p. 141). This was evident in the comments from the Delphi panel, where a self-concept was linked to a prestigious career choice, with no real understanding of what the intricacies of this occupation. This can be seen in the following excerpt where a fieldworker talks about prestigious career choices: "*Even if you know that you are good at teaching and should be a teacher, you will change your idea to something you have heard earns a lot of money even if you have no idea what they do"* (F.6).

Instead, Kayamandi youth wished to improve their future lifestyle by reducing the hardships faced that are associated with poverty and an environment of deprivation. This was supported by the results from the factor analysis, which highlighted the participants' preoccupation with *"escaping their current condition"* (F.1). The highest factor loading was seen in the *ICM subscale* item number 3 (*Becoming a worker in my chosen career will allow me to become the person I dream to be*). This item addressed the idea of improving the participants'

lifestyles, finding economic security and gaining materialistic indicators of success or status for themselves and their families (Swartz, 2011). The focus group helped shed light on this notion, as F.2 explained:

> *Often it doesn't matter what job you have, as long as you are earning money. Then somewhere along the line you think about passion. What would you actually enjoy doing? You change your career when you are not struggling so much. You only leave a job once you have another one to enter into. But sometimes people will stay trapped in a job. Once a security guard, forever a security guard. A career is often only seen as a means to an end. Your primary goal is to fix your circumstances.*

This comment brings to light that a future orientation may not be adaptive in this context, because the individual is primarily focused on short-term survival and managing numerous psychological stressors, which take priority over long-term goals (Albien, Kidd, Naidoo, & Maree, in press). In this case, the planning of an unimaginable future may be anxiety-provoking as well as overwhelming and instead a career identity is created as an 'anchor' to buffer against hardships with the idea that the future holds better economic circumstances. Thus, a career identity may be tied to monetary success rather than the intrinsic satisfaction of utilising skills and values in an occupation. Future research is needed to determine if other, diverse population groups such as immigrants or displaced people (due to conflict or natural disasters), share the same career beliefs. However, career counselling techniques are needed that can facilitate career development processes in clients who are pre-occupied with time in the present moment, in the form of day-to-day living, which has so far been overlooked in career counselling.

The last theme, of *secrecy versus showing off a chosen career identity*, provides insight into a tension that was observed in the fieldworkers' responses that I tried to tease apart. On the one hand it was all about "*making yourself someone*" (F.4), and this was associated with external appearances such as clothes, accessories, hairstyles, mannerisms and, most importantly, the visible showcasing of branded items, especially shoes. In this manner, an illusion of wealth is created, which "*you need to floss it* [slang for show off], *to show that this what I achieved, even if it is fake it doesn't matter, others respect you more if you wear brands and that makes you feel good*" (F.6). Materialistic indicators of success have previously been documented in township youth (Swartz, 2011), but the purposeful selection of what is shown and what is hidden has not yet been researched. For example, the fieldworkers described that you showed indicators of success that "*you had made it*", that you knew would get other people's attention and "*make them jealous of you and your success*". This jealousy, although desired, was also feared, as the fieldworkers explained:

"*You need to keep secret the things that mean the most to you or else someone will listen to your ideas, steal them and your success*". And, so often, career ideas were held secret for fear they would be taken before the individual had a chance to see the idea through.

Three subthemes emerged In the *CR* dimension, namely: 1) *pervasive self-doubt*, 2) *external locus of control*, and 3) *rejection of career choice flexibility*. Firstly, the constant influence of unexpected events affected the career development of township youth throughout their childhood, and the result was self-doubt. This was seen to be a prevalent career barrier in the sample, which was also identified with high factor loadings on items of the career self-doubt subscale. In this context, it may be adaptive to assign uncontrollable factors contributing to the unattainability of a career aspiration to an external locus of control, because assuming an internalised sense of personal responsibility may be psychologically detrimental (Albien & Naidoo, 2018).

An external locus of control was exhibited, with fieldworkers describing events as uncontrollable and that *"luck*" (F.6), *"Miracles"* (F.3), *"Praying to a higher power"* (F.4) or steps taken to *"please the ancestor spirits"* (P.7) were the last resort. Although individuals may have a low sense of control over their careers, which can be viewed as problematic, it can also be viewed as a realistic reaction to their experiences of high unemployment rates and the overnight insolvency of companies. F.6 explained: *"Parmalat, the factory shut down suddenly. They offered the factory workers a severance package or to move with them to the new location. Everyone took the money, but it soon ran out and there were no new jobs."* These examples of unemployment seem to feed insecurity, anxiety and doubt about *"not making it"* (F.1).

This clearly articulated the fear that these learners had about failing. This was supplemented by a fieldworker (F.4) who explained the fear and shame associated with letting your family down:

> *Your family is brutal. They tell you that you can't do it, don't waste your time, try find something that you can do. They give you no room to learn to do something. They will only support you when they see potential. And the last thing you want to do is embarrass your family name.*

The pressure to succeed is so great that people would lie to each other about what they were actually doing to avoid negative feedback or criticism, which explains the high factor loadings on *SD subscale* item number 2 (*When I tell other people about my career plans, I feel like I am being a little dishonest*). A fieldworker (F.3.) explained the drastic measures she undertook:

> *The community is like the paparazzi. I lie all the time. I tell people that I am studying different things at different places, so that I avoid that negativity if I can actually carry through my plans successfully. Often I will tell the elders about a career that I know they approve of just to leave me alone and stop asking questions. The less the community knows the better.*

This secrecy reduces the chance of peer mentoring or sharing career information. Useful information is only shared among social webs of trust in a hostile and competitive environment of limited resources, which explains the low factor loadings for *ID* item 4 (*Trying to find people that share my career interests*).

In terms of the *CE* dimension there were two subthemes, namely: 1) *disregard of unfamiliar career*s, and 2) *a seemingly fixed career identity.* Career exploration had low factor loadings, which could be due to the lack of accurate and up-to-date career information (Watson et al., 1995). Previously, low exploration scores have been linked to a lack of exposure, as well as mimicking successful behaviour in an attempt to avoid failure (Albien et al., in press). A fieldworker (F.5) explained this phenomenon as being linked to the lack of exposure to other careers and delving deeply into a limited range of career options that are *"the ones that get off the train in uniform"* or *"the ones that will make a lot of money"*. This can be seen in the *ID subscale* which had the highest factor loading, followed by the *ICM* subscale. F.4 provided evidence of the importance attached to a career commitment, namely that: *"your career ideas need to stick. They become fixed because of the lifestyle they could give you*." The importance of having a fixed career is explained as *"needing* [to] *be stubborn in a career even if you know it is wrong for you,"* which was repeated by all the fieldworkers. This supports career myth research that deals with the notion that a career is a once-off decision for life (Stead, Watson, & Foxcroft, 1993). The excerpts above and the factor loadings associated with career commitment-making underscored this belief.

However, ideas of change were easily accepted in the sample, with high factor loadings indicated in the *CF subscale* item number 2 (*What I look for in a job will change in the future*). The fieldworkers also readily spoke about change, but this change referred to details such as changes in location, pay and acquiring additional training, but not completely changing a career path. F.1 said: "*Change is normal and my goals will change, but my career is fixed. Township youth we seek stability, we will stick with it even if we are miserable and unhappy, until we find something better."* Another fieldworker shared her insight (F.4.):

> *The truth is that these kids don't have a clue about what they need to know to make a career choice, they think they know more than their parents because they can read and write and have a*

better education. It makes them arrogant and they think they can do any job that earns a lot of money, with no thought about job scarcity or what skills they need. Once they realise, they start grabbing at any job they can find.

This is also reflected in the factor loadings of below 0.5 for the *IB subscale*, namely item 1 (*Learning about careers that are unfamiliar to me to find a few to explore further*) (0.31) and item 3 (*Thinking about how I could fit into many different careers*) (0.41).

The scores on the second-order *VISA* subscales (i.e., *CC*, *CE* and *CR*) are classified as high or low and then, based on this classification, form vocational identity statuses, such as achieved, foreclosed, searching moratorium, moratorium, undifferentiated and diffused vocational identity statuses. A further reflection of a lack of exploration is the prevalent *foreclosed vocational identity* status (n = 97, 32%) seen in the sample, where a career is chosen without enough exploration of other careers. This is supported by previous South African research (Alexander et al., 2010). Early foreclosure may lead to career choices based on inaccurate career ideals and materialistic status (Mdikana et al., 2008). However, there may be hidden psychological benefits in choosing a vocational identity of a futureself based on materialistic indicators of success, which serves to maintain high self-worth and self-efficacy beliefs whilst living in dire circumstances. The high prevalence of the foreclosed vocational identity is unsettling due to the plethora of career opportunities available to South African youth in the 20 years since the introduction of democracy. This finding could point to a foreclosed vocational identity being reached much earlier than theorised, perhaps even during childhood and not in adolescence.

In terms of vocational identity statuses, the *achieved identity* was the least prevalent (n = 56, 18%). In contrast, *searching moratorium* (n = 79, 26%) indicates that adolescents have relatively high levels on all commitment and exploration dimensions, yet have high levels of self-doubt and flexibility. This is viewed as a tentative commitment between the achieved and moratorium statuses, where moratorium refers to commitment without exploration. Adolescent career development theory assumes that most adolescents have a *diffused vocational identity status*, and in the sample it was 23% (n = 71). Temporary career uncertainty has been hypothesised as developmentally appropriate with shifts resulting in the implementation of a clear vocational identity (Erikson, 1968; Super, 1990). This illustrates the usefulness of the *VISA*, because career exploration can be measured to help identify foreclosed career choices for further intervention, or to identify individuals with commitment difficulties, as well as develop career adaptabilities to manage work-transition anxieties by assessing an individual's career

flexibility. There are few other measures that can so successfully identify dimensions of vocational identity that may be influencing career development negatively. The process of developing vocational identity or career maturity thereby is made far more complex and realistic, in that the current research findings show that career decisions are not based only on the successful integration of world-of-work information and self-knowledge.

The present research makes the call to move away from "victim-blaming" individuals who have mastered unimaginable hardships and so may not comply with the same career developmental processes as advantaged or "standard" population groups (Blustein et al., 2005). More research is needed to determine to which extent developmental assumptions of career maturity or vocational identity are not applicable. Perhaps developmental assumptions could be reconceptualised as adaptive in socio-economically deprived environments that are characterised by a lack of resources, hardship and unpredictability. The present research, using qualitative data, has shown how loadings on subscale items that would be traditionally be seen as problematic, served protective functions in the township context. In addition, vocational identity statuses that were conceptualised as problematic were shown to be beneficial in the short-term. We, as career researchers and practitioners, need to find ways of addressing these coping mechanisms in adolescence, or even as early as in childhood, to prevent contextually adaptive behaviour from resulting in proscriptive career choices or long-term maladjusted psychological well-being. These findings need to be further expanded to include population groups that are in flux due to war, conflict or natural disasters, which may also not follow developmental assumptions. This will lead to much-needed changes in assessment, score interpretation and career counselling interventions.

The results of this study show that the *VISA-Kayamandi* and the *VISA-American* versions have similar good fit indices. However, lower reliabilities and factor loadings were observed due to contextual and socio-economic factors, which also affected the vocational identity statuses exhibited. The measurement model fitted the data closely, and the statistically significant factor loadings were generally of a moderate degree (Wilbers, 2015). The results of the confirmatory factor analyses suggest that the *VISA* subscale item measures hold a sizable amount of systematic and random error, which could be accounted for due to low socio-economic conditions associated with a township context. Therefore, caution needs to be exercised in assessing, interpreting and providing feedback. The findings of the present phase indicate that *VISA* scores should be treated as adaptive, allowing a much-needed shift away from the deficit-centred approach used during Apartheid, when scores were compared to a

white middle-class demographic (Foxcroft & Roodt, 2013). The intention of the present research is not to impose a Eurocentric measure of vocational identity, but rather to assess how this psychometric assessment could be best utilised and refined in a unique context.

Instead, by analysing how psychometric instruments perform in different socio-economic contexts, a reflection could be provided of the development of vocational identity according to context. The findings of this study demonstrate that the *VISA* may be reliable and valid in the South African context. Future research should expand on these findings by investigating the psychometric properties of the *VISA* across different sample groups, which should include different socio-economic statuses, racial and linguistic groups and different geographical locations. This study may lead to improvements in the understanding and identifying of vocational identity formation processes in South African township adolescents and other indigenous language-speaking South African adolescents.

In conclusion, the *VISA* seems to provide a measure of vocational identity amongst Black South African township adolescents that has moderate reliability and validity. This research has contributed to the available psychometric evidence, documenting that socio-economic disadvantage systematically affects the manner in which the predictor and criterion constructs express themselves in observed measures. Interventions can be informed according to vocational identity statuses, when adolescents who are disadvantaged due to environmental structures or acculturation challenges might need particular support in exploring their vocational identities and career goals, to move beyond moratorium to vocational identity achievement (Hirschi, 2009). In contrast, the intervention focus for youth who may be culturally adjusted and/ or structurally privileged in terms of available opportunities is the prevention of premature foreclosure (Hirschi, 2011). Therefore, the use of the *VISA* could encourage exploration and aid appropriate intervention goals according to the career needs presented to adolescents in diverse contexts, without being restricted to career developmental assumptions that may be outdated and irrelevant in socio-economic disadvantaged environments.

6.3 Pilot Intervention (*Phase 3*) Discussion

The intervention development (*Phase 1*) discussed in Chapter 4 highlighted the contextual constraints that resulted in extremely limited time parameters in order to accommodate all the role players who were crucial to this process. Although a collaborative leadership approach was taken to include multiple perspectives in the qualitative development process of the intervention, however, the Kayamandi context ultimately was characterised by unprecedented challenging

conditions. Through this, a rich contextual understanding was provided of the parameters within which Kayamandi adolescents and youth construct career trajectories. In *Phase 3*, a pilot study was conducted to test the structure, content and participants' perceptions of the career intervention materials by assessing whether scores increased post-intervention and what qualitative feedback was elicited. In this phase, the *CAAS-Iceland* was substituted instead of the *CAAS-South Africa Kayamandi,* based on qualitative findings from the Delphi panel interview held in the previous phase and renamed *CAAS-collectivistic* version.

The objective of this phase was to determine if the post-intervention scores were higher than the pre-intervention scores to gain a preliminary indication of the effect of the intervention in the pilot sample of Grade 11 learners. In examining the pre- and post- test scores of the *CAAS-Collectivistic* subscales, an overall trend was observed that indicated that post-measure scores were higher than pre-test measure scores, although only three subscales (i.e., *control*, *concern*, and *curiosity*) were seen to have significantly changed between pre- and post-test measures. It is important to state that there were no significant differences between the pre-control and pre-experimental group scores in any of the subscales. Furthermore, no significant differences were seen in the pre- and post-control group scores in comparison to the pre- and post-experimental group scores. This indicates that the groups were not significantly different before the intervention took place and that the intervention contributed to increased post-intervention scores.

Firstly, the participants had increased levels in the *concern* subscale *(*i.e., future orientation, in terms of how much they value and become involved in preparing for tomorrow) (Savickas & Porfeli, 2012a). This is a very significant finding because it means that the participants showed a disjuncture between the present and future, where behaviour and plans do not align, and there seemed to be little thinking or planning for a future time orientation, which the intervention seemed to change (Taber & Blankemeyer, 2015). Future orientation is crucial not only to career development, but also to vocational identity development and has even been linked to overall psychological well-being and positive adjustment (Savickas, 2005; Skorikov, 2007a, 2007b; Skorikov & Vondracek, 2011). In a low-resource context, this attenuated future orientation may be adaptive in managing self-defeating anxiety, but in the long run this will lead to avolition, apathy, and ultimately, failure to meet desired career ideals (Frankl, 1992; Swartz, 2011). This has implications for future career counselling practices, which should take emotional regulation into account when dealing with career uncertainty with the aim of developing a future time perspective.

The participants furthermore had increased scores in the *control* subscale (i.e., in the self-discipline, autonomy, and responsibility needed to make a vocational decision) (Savickas & Porfeli, 2012b). This can be interpreted in two ways. Firstly, a sense of personal responsibility can be reinforced in the participants, which could enforce self-efficacy beliefs, but, as a reflection of their self-worth or potential competency, it could also cause individuals to internalise events that detract them from reaching their goals. Thereby, individuals may overlook macro-systemic barriers and believe that, through hard work, they will be able to overcome barriers faced even if they are structural (Albien & Naidoo, 2018). This had been termed the meritocracy myth, which follows a "rags to riches" discourse built on an individual's determination to succeed (Swartz, 2011). However, a sense of self-identity could also have been fostered in the sample. This is an important finding, because managing the development of an autonomous self and a resulting choice informed by an implemented self-concept may be a developmental task for individuals in collectivistic cultures that has not been explored in depth. The identity construction process that results in a career identity will have to include a negotiation of social comparison, social conformity and the construction of the self, primarily in reference to social relations (Ames, Dissanayake, & Kasulis, 1994).

Lastly, in the *curiosity* subscale (i.e., an orientation in which individuals increasingly explore the match between self and world-of-work), a significant increase occurred after the completion of the intervention (Savickas, 2005). One of the primary aims of the career intervention is to create openness to a new range of career opportunities, due to the early foreclosure that has been extensively documented in low-resource communities (Blustein et al., 2017). However, this curiosity did not seem to translate into career-exploration activities, but merely stayed in the reflection-on-learning stage according to Kolb (1984), and did not result in any reflection-related action according to the feedback immediately after the completion of the intervention. Longitudinal research, however, may better capture the factors involved in turning this reflection into action in township youth to inform future career interventions.

In terms of the *VISA* pre- and post-scores, the pilot study indicated an overall trend in which *VISA* post-measures were higher than pre-test measures. Only two *VISA* subscales (viz. *career commitment-making (CCM*) and *identification with career commitment (ICM)*) changed significantly between the pre- and post-test measures. *Career commitment-making* refers to the degree of certainty an individual has about a career decision that has been taken, whereas *identification with career commitment* describes how devoted the individual is to a career decision that has been made. This was interpreted to mean that commitment-making improved,

which means that individuals seemed more certain in their career choice. In addition, the participants' investment in a career choice increased.

The latter was a puzzling finding, because many participants had not reached a specific career choice. Instead, these findings were interpreted to mean that the commitment to a high-prestige career choice increased and that the identification with an improved lifestyle formed a subjective identity form (SIF) (Guichard et al., 2012; Savickas, 2015a, 2015b) that provided a self-efficacy anchor for the individual whilst exploring other high-prestige jobs. Therefore, the chosen career was used as a SIF to keep self-esteem and self-efficacy high so as to prevent individuals from giving up, but the chosen career was not necessarily the final choice. Whilst this behaviour may be adaptive, this tendency was a point of concern, as the career exploration dimension was not seen to increase.

Therefore, at the end of the intervention, it seemed as if a career choice was foreclosed or crystallised without the individual taking any steps to actively explore further career options. This inference was further supported by the observation that career reconsideration scores (i.e., the re-examination of current career ideas and viable alternatives to find a better fit between self and the world-of-work) only increased slightly. Furthermore, the openness to occupational and/or interest changes (i.e., career flexibility) only increased slightly, and career planning uncertainty or self-doubt also only increased slightly. This was an area that needed further emphasis in the final intervention and, as a result, more time was scheduled with pamphlets and interaction with fieldworkers to facilitate an active exploration.

The qualitative pilot data seemed to support the above inferences and tensions. There were eight themes mention under positive feedback, which were: 1) *new openness to career ideas*, 2) *enjoyment of discovering new career fields*, 3) *learning about career details*, 4) *future plan developed*, 5) *increased personal responsibility*, 6) *reduced self-doubt*, 7) i*ncreased life-plan flexibility*, and 8) *identification with role models* (i.e., fieldworkers). The first two themes can be linked under the *in-breadth career exploration* subscale (*VISA*) and the *curiosity* subscale (*CAAS*), as participants used phrases like: "*opened my eyes to options*" (P.11); "*there is so much more out there than I thought, I am excited to explore*" (P.23); "*If I open my eyes and ears, I could grab a better option that I didn't know existed*" (P.60). Themes 3 and 4 can be linked to *ID* and *CCM* of the *VISA*, respectively, or collectively to the *concern subscale* (*CAAS*). If an individual is invested in a career choice (*CCM*), then detailed information is sought; similarly, investment in gaining details about a career choice indicates an increase in future time perspective (Taber & Blankemeyer, 2015). Participants used phrases like: "*Yho! I need details*

about this career of mine!" (P.60); "*So if I want to make my future a success I need to get all the information now to make a detailed plan that will help me succeed*" (P.48); "*This just makes my future clearer in my mind*" (P.36).

Furthermore, the intervention also seemed to increase personal responsibility (*ICM*: *VISA* or *control* subscale: *CAAS*) and, in this theme, participants used phrases like: "*It's all on me to make this thing work*" (P.2); " *It's my choice not to give up no matter what and my responsibility to make a success of yourself*" (P.4); " *You can't blame anyone but yourself"*(P.16). Furthermore, there was a reduction in self-doubt (*SD*: *VISA* and *CAAS*: *confidence* subscale) and, in this theme, the following excerpts were extracted: "*I now doubt less that it could happen, I believe more that I could create a different future for myself*" (P.5); "*That voice that tells you that you can't do it, that voice has become more silent*" (P.37); "*I am now actively listening to what others say and if this increases my self-doubt, I close my ears*" (P.56). The next theme was increased life-plan flexibility (*CF*: *VISA* and *curiosity* subscale: *CAAS*) and was characterised by extracts such as the following: "*My career plans could change, and I need to grab chances even if I was not committed to them before*" (P.35); "*I realise I might have to change jobs a lot to get experience and skills and better pay*" (P.21) and " *This is not a once-off decision, I will have to keep looking for career opportunities as long as I live*" (P.46).

The last theme was identification with role models (*ID*/*ICM*: *VISA* and *co-operation*: *CAAS*), in which many participants cited the fieldworkers as role models. This can be seen as an example of co-operation, as the participants used phrases such as "*working together*" (P.11), "*need mentors to guide me*" (P.9), and "*I can learn details about the course from others*" (P.55). Also, in terms of *ICM* or *ID*, the participants mentioned that they felt an increase "*in the investment of my career choice after meeting someone who is doing what I want and I see myself in them*" (P.28), and that they now "*understand the fine details*" (P.13) and "*the puzzle pieces are coming together*" (P.27). There were three negative feedback themes that centred around the work-load in the short amount of time. This criticism was expected, due to the contextual constraints that were navigated throughout the intervention process. A suggested improvement was to include more "*fun things like games*" (P.22), but this was not possible due to time constraints. However, as a compromise, more role playing was included by the fieldworkers in the explanations or joke telling.

6.4 *Shaping Career Voices Intervention* (*Phase 4*) Data Discussion

In this section, the results are discussed to examine whether there were changes over the four assessment time points – two assessments before the 20-hour intervention (eight hours' facilitation and 12 hours' homework) (T_1 and T_2), one immediately after the intervention (T_3), and another a week later (T_4). The life-designing career intervention and repeated-measures assessments were conducted over four weeks to minimise the high attrition rates documented in township contexts (Albien, 2013), as well as to examine if the intervention could cause changes in the participants' scores in such a short time.

6.4.1 Differences in *CAAS* and *VISA* subscales over time.

Over the four time points, the CAAS subscales (i.e., concern, control, confidence, co-operation and curiosity) increased, with the most significant changes seen between T_1 and T_4. This was an important finding for the effect of the intervention, because there were significant differences that resulted from the intervention in a very limited time frame. Although, an initial difference was observed in all the subscales between T_1 and T_2, these changes were not significant and were taken to indicate the start of a reflection process (Stead & Subich, 2017). The completion of the assessments allowed insight to be gained into limitations that the participants had in their career knowledge, self-knowledge or career ideas, and this reflective process may have made them more receptive to the career intervention (De Bruin & De Bruin, 2017). The *contribution* subscale dealt with the ideal of contributing to a broader context, and this seemed foreign to participants, as their worldviews were based on the collectivistic networks in which they were embedded, and they only wanted to contribute to economic improvement in these communal networks (Owusu-Ansah & Mji, 2013).

In terms of the *VISA*, an overall trend was observed that indicated that increases occurred in the VISA first-order and second-order subscales. However, significant time effects were observed in three *VISA* subscales, namely there were significant differences between T_1 and T_4 for the *self-doubt* (SD), *identification with Career commitment-making (ICM),* and *in-breadth career exploration (IB)* subscales showing that the intervention contributed to an increase in the participants' scores in these subscales. This is a significant finding, because previous research has indicated that township youth do not explore a vast range of careers, but instead foreclose on a prestigious career that is part of the limited repertoire of careers shared by a specific community. This intervention was seen to increase *in-breadth career exploration (IB),* which means the participants increased both the perceived range of accessible career options as well as

exploratory actions taken to learn about different career options because of the career intervention, which is an achievement in such a short time.

At first, it was observed that the participants had a false sense of confidence or had incredibly "high hopes" about their desired career choice, but upon probing, they lacked any detailed information. However, if taken superficially, a career counsellor could assume that the individual has reached an achieved vocational identity status, when in fact this is not the case, and the *VISA* provided this unique screening opportunity. As a result of the intervention process, the *self-doubt* (SD) subscale showed increased scores, which was interpreted to mean that anxiety and uncertainty were experienced by the participants in the face of the numerous career options that had not been considered before the intervention and that had changed the participants' subjective parameters of career decision-making.

Although anxiety or uncertainty related to career decision-making increased, the investment in a career choice also increased, as seen in the increased *identification with Career commitment-making (ICM)* subscale scores. This is an interesting finding, because there was tension between an increase in the anxiety-provoking career exploration process and a simultaneous increase in commitment to a career idea. The career choice was often a high-prestige occupation that the participants had internalised as a subjective identity form (SIF). As such, the chosen career was used as a SIF of the participant's achieved future self and lifestyle. This identity form was regularly engaged with to keep self-esteem and self-efficacy high, to lower negative self-talk and, ultimately, to prevent individuals from giving up. Although the high-prestige career to which this SIF was pinned was not necessarily the final choice, it provided an anchor whilst other high-prestige jobs were explored.

6.4.2 Gender differences in *CAAS* and *VISA* subscales.

Career research has examined gender differences in career development with the aim of empowering women to pursue non-traditional gender occupations and to reduce career gender stereo-typing (Vondracek et al., 1983). In a South African context, the expectation was that male participants would score higher than females based on previous career research, which documented higher career-related attributes and skills in male participants (Seane, cited in De Bruin & Bernard-Phera, 2002). This is also in line with a patriarchal culture, in which men are believed to provide the main household income (Maesela, 1994), yet in reality female-headed households have become the norm in Kayamandi.

In the current study, the *CAAS* results indicated that there was a trend for female participants to score higher than male participants across all the subscales, but the female participants specifically had higher scores on the *CAAS concern* and *co-operation* subscales. Although this is a novel finding in a South African context, previous European studies have highlighted that girls scored higher than boys on career adaptability competencies and exhibited far more future planning than their male counterparts, but further gender research is needed in a South African context (Creed & Patton, 2003; Creed, Patton, & Hood, 2010).

Due to the limited research base that examines gender differences in vocational identity (Skorikov & Vondracek, 2007), the current research indicates that males and females scored similarly on the *VISA*. However, male participants scored significantly higher on three subscales, namely *career flexibility (CF)* (i.e., openness to and readiness for future changes in occupational preferences and choices) and *self-doubt (SD)* (i.e., the anxiety and uncertainty experienced in the face of career decision-making), which together form the second-order *career reconsideration (CR)* subscale. This is supported by a previous European study (Negru-Subtricia et al., 2015), which found that, over time boys reported less in-depth occupational exploration, and less identification with present vocational commitments, and this resulted in more career flexibility and self-doubt about their career choices.

In contrast, middle and late adolescent girls tend to be more involved in occupational exploration and exhibit stronger vocational commitments than boys (e.g., Hirschi, 2012; Skorikov & Vondracek, 2011). This could explain why the majority of the sample was female, and this raises concerns about township boys, who may be far more at risk in their career decision-making processes and more likely to be recruited into illegal activities. Therefore, future research is needed that examines gender patterns in vocational identity processes in different socio-economic milieus.

6.4.3 Grade differences in *CAAS* and *VISA* subscales

Existing research has indicated that older adolescents and emerging adults face increasingly complex career development tasks that require higher levels of career adaptability and a clearer vocational identity (Skorikov, 2007a, 2007b; Stringer, Kerpelman, & Skorikov, 2011). However, in the current research sample there were no main grade effects that indicated that different school grades scored differently on the *CAAS* subscales. There were significant grade*time effects in the *CAAS concern* and *CAAS contribution* subscales, which indicated that the scores of the Grade 10, 11 and 12 participants all increased differently over time.

Specifically, Grade 12 participants' scores seemed to increase the most. Previous research found that career maturity levels decreased in disadvantaged township schools between Grade 11 and 12 (Grobler, Lacante, & Lens, 2014). The opposite was found in this research study, where the intervention increased the levels of career adaptability competencies, as well as vocational identity scores, across the grades. It can be argued that, due to the immediacy of making a career decision amongst Grade 12s, the intervention might have seemed to be more relevant and contributed more to an increase in the Grade 12's scores.

In contrast, there were grade effects in the *career exploration (CE)* second-order subscale which consisted of the *IB* subscale (i.e., actions taken to learn about different career options) and the *ID* subscale (i.e., activities taken to extend the understanding of a specific occupational choice). In addition, grade effects were seen in the *ICM* subscale (i.e., how devoted the individual is to a career decision that has been taken). In the second-order *career reconsideration* (*CR)* subscale, a significant difference was seen in mean scores between the Grade 10 and 11 participants. The Grade 10 participants had not thought about career concerns; they had to choose subjects and this choice was often only based on their current scholastic abilities, with no future time perspective involved in this decision-making process. The limitations of subject choices would have been realised by the Grade 11s, who were applying to higher education institutions in that scholastic year.

In comparison, the Grade 12 participants exhibited less anxiety regarding the career choice process, as they were more familiar with career exploration and reconsideration to arrive at a career choice that was accessible to them using sequential-elimination processing (Gati et al., 1995). This was seen in the *self-doubt* (*SD)* subscale, which showed that the Grade 12 participants had the lowest scores in comparison to the Grade 10 participants, who had the highest scores on this subscale. The expectation was met that, as students became closer to an exit and prepared for high school graduation, they would spend more time and effort thinking about future choices (Savickas, 2005). As such, the developmental task of choosing an occupation became more salient when the immediacy of a career choice was perceived.

6.4.4 Vocational identity status changes.

The development of a vocational identity is an integral part of overall adolescent development, and reaching a tentative achieved vocational identity is a developmental task that has been linked to overall positive adjustment and development (Skorikov & Vondracek, 2007). Previous research on disadvantaged adolescents that indicated a vocational identity was based on

early foreclosure on a career choice, without any deep engagement with career exploration activities (Alexander et al., 2010; Blustein et al., 1989). In the current research, the *VISA* allows vocational identity statuses to be determined from the scores on the second-order subscales (i.e., *career reconsideration* (CR), *career commitment* (CC) and *career exploration* (CE)) of the *VISA*. Here, the individual was theorised to score dichotomously, either high or low, on each subscale, which would give an indication of how close or far this individual was from an achieved vocational identity. The high-low dichotomy scores created the following vocational identity statuses – *achieved, searching moratorium, moratorium, foreclosed, diffused* and *undifferentiated* (see Table 5.14 for a description of these statuses). However, in the current research, the results questioned this dichotomous high-low distinction, as the participants were seen to have medium scores in some of the second-order dimensions.

At T_1, the majority of participants were associated with an achieved vocational identity status. This was interpreted as indicative of a sense of false confidence, viz., that the participants believed that they knew all the information needed about a high-prestige career choice. They had chosen to commit themselves to a specific career choice and believed that they had conducted a deep exploration. However, their career commitment was based on their investment of a sense of identity (SIF) (Guichard, 2005, 2009), based on the future lifestyle that this occupation could afford. In a low-resource environment, finding examples or ideas of prestigious careers possibly requires a huge effort in career exploration that should be not underestimated. Previous research has indicated that these career choices are based on the effort of collecting snippets of information from media sources, teachers, parents and peers (Albien & Naidoo, 2016). However, this career exploration is very inadequate, and career counsellors need to reinstate that this career exploration process is on-going and life-long (Guichard, 2005), and that better career realities can result.

Vocational identity statuses had shifted over the four time points and the achieved vocational identity status was reduced. Vocational identity statuses were seen to begin changing after the first administration at T_1, and kept shifting until T_3, which is when the intervention ended. Upon follow-up at T_4, the identity statuses had not changed much from T_3, but remained significantly different from before the start of the intervention. These findings are significant, because previous research stipulated that vocational identity processes are less dynamic than initially proposed and would not exhibit changes over a short time frame (Meeus, 2011; Skorikov & Vondracek, 2011). The most interesting findings of the present research are that the first new identity status emerged at T_1 (m_m_m), and that the second new vocational identity

status (h_h_m) emerged at T_2 and remained the highest occupied status until T_4. These two new identity statuses were hypothesised to result from the participants' recognition of career-related limitations. These statuses were problematic because these results did not fit into any of the existing vocational identity statuses, and the decision was taken to create new vocational identity statuses to contribute to future research studies, in which the dichotomous vocational identity statuses may also not be replicable.

Initially, the idea was that m_m_m could be interpreted as a version of the diffused vocational identity status, because mean scores on the *CR*, *CE* and *CC* subscales were assumed to lie close to the mean. However, the diffused identity status has been subdivided into both carefree and diffused categories, based on the dual-cycle model (Luyckxet al., 2006a; Luyckx et al., 2006b; Luyckx et al., 2008). A debate resulted on whether carefree or diffused status could be encapsulated by this group. Both of these statuses are characterised by low scores on the exploration dimensions (*ID* and *IB*) and low scores on commitment dimensions, but are different on reconsideration dimensions (Luyckx et al., 2008). A very high score on the *CR* subscale characterises diffused diffusion and a very low score on *CR* dimensions describes carefree diffusion (Lannegrand-Willems, Perchec, & Marchal, 2015).

However, the final decision was that these two vocational identity statuses were both a subdivision of the moratorium vocational identity status, which is characterised by adolescents still in the process of exploring various alternatives and with an indication that they have not yet made a final commitment (Porfeli et al., 2011). The moratorium status has been described as more stressful than the searching moratorium status and also as the dark side of adjustment (Lannegrand-Willems et al., 2015). Research has compared and contrasted moratorium with searching moratorium to assess which of the two vocational identity statuses is associated with positive adjustment. Searching moratorium has been indicated as the more adjusted of the two statuses, because the point of departure in searching moratorium is based on highly identified commitments searching for more satisfying commitments, whereas moratorium begins at a more unfavourable starting point of less identified commitments (Crocetti, 2017).

In order to describe the variation in vocational identity statuses in the present sample, the different time perspectives associated with each identity status were explored, as theorised by Marcia (1993). A *diffused identity* status is characterised by the absence of exploration, commitments and a sense of identity, and these individuals are likely to have little sense of the future and primarily be focused on the present (Crocetti, 2017). In contrast, the identity *achievement status* is characterised by exploration, commitment, a self-constructed sense of

identity and a self-designed future (Taber & Blankemeyer, 2015). A *moratorium identity* status, which is characterised by exploration without commitment, causes individuals to waver between the past and the future time perspectives. These individuals are simultaneously consumed with the present in the struggle for an identity (Marcia, 1993). Individuals with a *foreclosed identity* status are characterised by an absence of exploration and accept a commitment that parents or other authority figures have created for them. These individuals view the future as a plan for life created by others that they seek to fulfil (Marcia, 1993; Taber & Blankemeyer, 2015).

The first vocational identity status of m_m_m was likened to the moratorium status, although the career commitment subscale was higher and the career reconsideration subscale was lower, and it was renamed *undifferentiated moratorium*. The classical moratorium status refers to high scores on *IB* and *CR* and low scores on *CC* dimensions (Porfeli et al., 2011), but in the present research in this group, the scores were all between high and low. Although the undifferentiated status, which has been described as encompassing low scores on all dimensions, may seem similar, these scores are moderate and above the mean for each dimension (i.e., *CR*, *CC* and *CE*) of the *VISA* (Porfeli et al., 2011). The qualitative strands of this research point to a lack of future perspective, with a struggle for making an identity decision in the present, which is best described by a moratorium status. Individuals in this status waver between past career choices and future career choices, but are more invested in a past career choice (Taber & Blankemeyer, 2015), although the scores in each dimension show a rapid progression that could result in differentiation into another vocational identity status.

Similarly, h_h_m was seen to fall between the *achieved status* (i.e., high on the *CE* and *CC* dimensions, and low on the *CR* dimensions), and the *searching moratorium* status (i.e., high on all dimensions) because of the moderate scores on the career reconsideration status. This status was renamed, *foreclosed moratorium.* The word foreclosed was chosen due to the moderate score on career reconsideration. This was interpreted as an indication of the acceptance of a commitment that parents or other authority figures have created for the individual. Instead of a self-constructed sense of identity and self-designed future time perspective (Taber & Blankemeyer, 2015), these individuals view the future as a plan created for life and that they seek to fulfil obligations related to others' expectations, which is very similar to the foreclosed identity status.

As part of the qualitative strand of the present research, a lack of future time perspective emerged as a recurrent theme. A lack of future time perspective has previously been linked to surviving extreme circumstances (Frankl, 1992). This was interpreted as an adaptation by the

participants to the unpredictable and daily hardships of the Kayamandi township context. However, caution needs to be exercised in determining when this coping strategy is useful and when it may become detrimental to building a future career-life trajectory, ultimately ending up in self-defeating behaviour which could make transcending poverty impossible.

In addition, with regard to the *ubuntu* or collectivistic cultural underpinnings emphasised in the qualitative phases of the current research study, it can be argued that there would be an internal struggle in the participants to fulfil family obligations or duties, to find a career that they suited in terms of their abilities, and to find a career that had enough prestige to base their SIF or self-worth. At the same time, the participants were expected to improve the family's lifestyle and make a success in the future. As a result, adolescents navigate by wavering between future time perspectives designed by others, as well as being consumed by present time perspectives in their struggle for an identity.

The present research has added two new identity statuses to capture the different time perspectives that emerged through the life-designing career intervention documented here. However, further research is needed to see if these statuses can be replicated in other collectivistic samples, where social comparison and social relations influence conceptions of career and self-hood.

6.4.5 Associations between career adaptability and vocational identity.

Previous research has indicated that career adaptability and vocational identity are dynamic and interrelated dimensions of adolescent career development (Negru-Subtirica et al., 2015). There were significant mean score differences in the *CAAS* subscales that corresponded with different vocational identity statuses, which indicates that individuals scored differently on the *CAAS* subscales according to vocational identity status. This is supported by research that hypothesises that vocational identity increases monotonically, from lower to higher degrees of adaptability (Porfeli & Savickas, 2012). An examination was undertaken on correlations between career adaptability and vocational identity over time.

A correlation analysis was conducted between the subscales of the *CAAS* and the *VISA* in order to establish concurrent validity in the present study. The results indicate that the *VISA* and *CAAS* measures separate constructs that are not strongly correlated with one another. These results were surprising, because positive relations have been found between career adaptability and the exploration and commitment dimensions of vocational identity, using cross-sectional (e.g., Creed & Patton, 2003; Creed et al., 2010; Savickas & Porfeli, 2012b) and longitudinal

research designs (e.g., Hirschi, 2009, 2012). Furthermore, negative links between career reconsideration and career adaptability have also been documented, because anxiety and self-doubt have been negatively related with indicators of positive development (Karaś, Cieciuch, Negru, & Crocetti, 2015).

Although vocational identity studies have been conducted in samples across diverse population groups, with the resultant replication of vocational identity statuses, the present study is unique for the following reasons. Firstly, the current study was conducted in a low socio-economic sample, and there are no varied demographics in this group, which means that distinctive findings resulted from this idiosyncratic sample in comparison to other socio-economic milieus. Secondly, the current research study has highlighted the influence of social comparison, social conformity and the construction of the self, primarily in reference to social relations, and how this has affected time perspectives as well as vocational identity development (Ames et al., 1994). This presents a unique finding, as social and collectivistic influences have not yet been documented in the formation of vocational identity statuses.

6.5 Intervention (*Phase 5*) and Focus Group (*Phase 6*) Discussion

Feedback from the intervention resulted in nine themes, each with subthemes that were extracted from the intervention feedback (*Phase 5*) and focus group (*Phase 6*). The first theme was *increased self-worth beliefs*. Within this theme there were two subthemes: 1) *increased self-efficacy beliefs*, and 2) *increased personal responsibility*. The first sub-theme was linked to *increased self-efficacy beliefs*, which participants attributed to the guided exploration that the intervention provided, especially as they were guided through entry requirements and the other necessary information in the higher education institution pamphlets provided. The participants mentioned that "*it just made me believe that no man I can do this career thing*" (P.11), *"I am no longer scared to try and keep trying until I get a career that will work for me*" (P.160), and "*I saw the steps needed in applying to a school and now I believe I can apply to get training for my choice*" (P.199). The second sub-theme was *increased personal responsibility*, which was mentioned before in the previous qualitative strands. In essence, the participants had made a choice that was "*committed to making a success of* [themselves]*"* (P.247), and that this choice did not allow "*laziness, getting distracted or not studying hard enough*" (P.138) and "*not listening to these people who tell you can that you can't*"; instead, "*you need to be serious and take responsibility for your future*" (P.78). However, only long-term follow-up studies would be able to assess if these intentions were carried out or if the participants wavered in their

convictions or their perseverance in the face of collective needs (Arulmani & Nag-Arulmani, 2004).

The second theme was *elimination of negative influences*, which included: 1*) negotiating the community gaze*, and 2) *decreased self-doubt*. The first sub-theme had to do with the pressure that the community itself placed on the participants. Community members were seen to "*make you doubt yourself*" (P.201), "*make you think it is not possible*" (P.246), and "*ask you why you think you are so special that you will succeed where others have failed*?" (P.74). Due to this negative gaze, individuals would mislead community members until they had achieved a visible measure of success, which then could prove to them and the others around them that they were making their dreams become reality. Therefore, there was a constant tension between showing off the materialistic indicators of success that were achieved and hiding failures or endeavours that had not yet led to fruition in order to prevent someone from "*stealing your success*" (P.27). A hugely negative social-comparison culture was evident that resulted in learners mimicking other learners who had some visible markers of success in the face of limited access to career information or other mentors or role models.

The second sub-theme showed that the participants felt as if they had less self-doubt. This was an interesting finding because the *VISA* assessment scores indicated an increase over time, but it could be that this increased uncertainty came with the active engagement with the future time perspective and that the participants felt more at ease with the uncertainty involved in the career exploration process (Maree, 2017). Participants used the following phrases to describe their decreased self-doubt: "*you know or have faith that you will make it happen if you take the right steps*"(P.239), "*I don't doubt myself anymore, I think I need to ask, learn and keep moving to get there*" (P.176), "*that voice that told me you can't, I have learnt to talk back to it and say with no doubt I can*" (P.185), and "*my self-doubt caused me to stop moving, I can allow fear to do that to me*" (P.90).

The third theme was the *acceptance of alternative career identities*. Within this theme there were three subthemes: 1) *new career opportunities*, 2) *readiness to adapt*, and 3) *increased career flexibility*. In the first sub-theme, the participants were seen to have visibly expanded their range of career options, by mentioning new careers that they still wanted to examine. The participants mentioned: "*there are so many bursaries for different careers, now I must look which one fits to me*" (P.10), " *I now get excited to look at what career I will have one day – what sort of person will I become*?" (P.70), "*my family did not have these options, so now I need to be brave enough to dive in and explore*" (P.69), and "*yes it's scary, but it's like hunting for*

treasure, you can't give up quick" (P.40). The second sub-theme was *readiness to adapt*, which referred to a general form of adaptation (Savicakas, 2005). Participants reported that "*the longer* [they] *stay on the wrong path, the longer it will take*" (P.12) and that they "*make decisions faster after this workshop*" (P.82), "*bounce back faster in order to make things happen faster*" (P.22), and this was because they had a better understanding of "*what was important to get things done and it was not waiting to see what would happen*" (P.79).

The last sub-theme was *increased career flexibility*, and here participants had shifted from their initial ideas of 'sticking to a career' to an acknowledgement of how many career changes people around them had undergone and their need to be flexible. The participants had shifted their ideas from a fixed career informing their SIF to an idea of success that could be reached in multiple ways following different career paths. An increased commitment was seen to making a success of themselves, regardless if "*I may start in one career and then land up somewhere else and that is ok, I have made peace with that*" (P.159) and "*I am more open to changes in my career ideas*" (P.175) and "*If I am open to new career ideas I may find something would never have found otherwise*" (P.129).

The fourth theme was the *need for co-operation*, which included: 1) *the need for accessible mentors* and 2) *family as a support system*. The first sub-theme of *the need for accessible mentors* was a significant change that resulted from the intervention as a result of the fieldworkers' presence, which had been planned to provide visible role models to engage with. The participants explained that they now understood "*how important it is to have someone to share your career ideas with to gain another point of view*" (P.91), "*it needs to be someone who understands the struggle*" (P.76) and "*has tips for you how to get to your dream*" (P.120). This was a significant change from the deception that was emphasised in theme two, and this caused participants to invest energy in developing social networks that could facilitate their career development (Maree 2015a, 2015b; Savickas 2011a, 2011c). Secondly, the subtheme of *family as a support system* indicated that, even if families had been cited as critical and hard on these adolescents, when the participants spent more time talking to family members about their hopes, dreams and career ideas, family members were more supportive than they had thought. Participants mentioned that "*so now they see I am busy making future plans and they say they will do whatever they can to help me*" (P.178), "*you know they really changed towards me, they became so supportive when they saw I am making an effort*" (P.99), "*they now share any information they hear about with me"* (P.50), and "*it has really opened channels of communication in my family*" (P.119).

The fifth theme was *increased self-reflection* and included: 1) *better self-awareness* and 2) *integration of personal variables in career choices*. The first sub-theme include a deeper look inward, as participants had not spent time "*listening to my inner voice – what is it that I want*?" (P.87) and also had not "*considered what I am actually good at and how this links to a career choice*" (P.97). The notion that a career was separate from what the participants enjoyed or were good at was a shared idea, where "*a career is a means to an end*" and "*a way to pay the bills*" (P.101). The second sub-theme was *integration of personal variables in career choices,* in relation to which participants mentioned that they had never considered that they "*had a unique set of skills*" (P.46). Instead, "*everyone in the community is seen as the same*" (P.129) and that they now "*spent time to think about what values, skills and personality traits they want to match with a career*" (P.87). This is a significant change elicited by the intervention. During the intervention, emphasis was placed on work environments and personal traits matching or not matching, as well as the consequences of a mismatch (Dawis, 1996; Dawis & Lofquist, 1976; Swanson & Schneider, 2013).

The sixth theme was *increased future planning*. Within this theme there were three subthemes: 1) *linking the past, present and future*; 2) *taking steps to make changes*; and 3) *improve lifestyle*. The first sub-theme, of *linking the past, present and future,* indicated that the previously mentioned lack of a future time perspective had been altered and the participants were now actively linking previous examples of success as vicarious examples of mastery and success to draw on in the face of career uncertainty and anxiety in order to work towards a clear SIF. Participants made the following comments: *"I used to spend so much time in the now, not thinking I what has shaped me not looking forward, now that has changed*" (P.145), "*I learnt to join the dots in my story and I need to keep linking the past, present and future events to make a complete story*" (P.26), "*The present is not enough, I need to link what I do today to create a different tomorrow*" (P.14) and "*At first I didn't understand, how the past influences the present which determines the future, but now I do and it has changed my life*" (P.151).

The second sub-theme was *taking steps to make changes* and this sub-theme encapsulated action-orientated career behaviour. At the beginning of the intervention there seemed to be more "*talk than action*", but after the intervention the participants indicated that "*I see now that talking about something may make me feel better but does nothing to help me get that dream*" (P.89), "*If I say one day, one day unless I plan small steps that I need to take every day that will turn into never*" (P.70) and "I *need to take action to make this happen and break down the steps*" (P.68). The third sub-theme was *improved lifestyle,* and this included an

improved "*economic situation"* (P.180) and "*less struggle*" (P.17), but also a way to show that "*you made it*" (P.28) and you would want to "*show off your success*" (P.167). This indicates the economic need faced, but also self-worth markers tied to material goods (Swartz, 2011) to show that the participants can be viewed as "somebody" (P.39).

The seventh theme was *giving back* and this included: 1) *sharing knowledge* and 2) *improving family's lifestyles*. This was in line with *ubuntu* cultural underpinnings (Kamwangamulu, 1999; Owusu-Ansah & Mji, 2013), and the participants felt as if they should "*help others to get career information*" (P.23) such as the information that they had received through the intervention in order to "*help others to make career choices*" (P.57). They wanted to be mentors to others because they had seen the value of "*talking to others from their community*" (P.134) (i.e., fieldworkers), who had "*been through the same challenges as me*" (P.19) and had "*managed to find a way*" (P.3), and that "*others can really benefit from the experiences of someone who has gone through this thing*" (P.48). In terms of the theme of *improving their family's lifestyle*, the participants were determined to honour their parents' and other family members' sacrifices that had enabled them to have a chance to be educated (Albien, 2013). This theme was explained in the following excerpts: "*I want to build a house in the Eastern Cape for my parents and my grandmother*" (P.20), "*I want to improve where my family lives now*" (P.33), "*I want to support my sister to be able to study"* (P.6) and *"I would like to support my mom financially she has worked so hard to give me every opportunity she never had"* (P.141).

At six months post-intervention, the focus group feedback remained consistent with the above mentioned themes. However, further reflections were added. One theme that was added was *identified cultural influences.* Within this theme there were three subthemes: 1) *gender constructions*; 2) *family obligations* and 3) *expectations of materialistic success*. The first sub-theme provided insight into why so few boys had attended the intervention. Participant 1 stated that: "*No man, the boys don't like to go where the girls go, they don't think it is for them if girls take part*" (P.6). In addition, another participant (P.4) stated that: "*The boys think they know about careers, they don't think they need it*." Also, the idea that boys had to be surrounded by their friends was elicited: "*You know being a boy in this community is hard, you need to find a gang to belong to, not a criminal gang but a group of boys and then stick to them because then you will be protected from the tsotsis*" (P.3). This showed the collective nature of peer groups in Kayamandi that were protective in function but also competitive in nature when it came to ongoing social comparisons (Ames et al., 1994; Li et al., 2015; Mau, 2000).

The second sub-theme was *family obligations*. This theme is linked to collectivistic cultures and was previously documented by Arulmani (2010a, 2010b). Participants have been socialised into collective self-hood, where these individuals are "*expected to respect the elders*", take their "*parents and family's advice and apply it*" as well as "*look after their parents when they are too old to work*". This also applies to other family members, whom they are expected to "*help with money*" (P.2), "*help with course work*" (P.5), "*provide opportunities for family members to study and get more money*" (P.3), and "*that they can live with me if they need to*" (P.4). Other family expectations included: "*not to embarrass the family name*" (P.2), "*not waste time trying to learn something*" (P.1), "*you either have the skill or you need to find something that you can do*" (P.6).

However, the third subtheme was *expectations of materialistic success* and seemed in direct contrast to the theme mentioned above. Participants indicated that if a job allowed visible materialistic markers of success to be obtained (i.e., cars, clothes and a house), then family members would not "*ask if they did not understand what the job entailed but accept their child's success*" (P.1). Even if they heard rumours that the money was obtained in illicit ways "*they would ignore the rumours until there was proof*" (P.4) that confirmed the rumours. This stands in contrast to the ideals mentioned before of not putting the family name to shame.

Theme nine was the *negative feedback* voiced and this feedback mirrored the negative feedback in *Phase 3* of more time being needed, more one-on-one sessions, more information and more fun activities. None of these could be addressed within the contextual constraints that had been negotiated by including all role players in the creation of this life-designing intervention. However, these findings will be shared with the Department of Education and the NGOs in the community in order to try to create the spaces that are needed to help marginalised youth construct career-life trajectories and vocational identities to enable a sense of hope to be cultivated. The qualitative data was able to provide insight into the inherent complexities, tensions and contradictions in the moral ecology (Swartz, 2011) that informed the participants' subjective realities as framed by the township context. However, this feedback elicited from the intervention and focus group indicated the effectiveness of the intervention and provided evidence that the intervention had elicited long-term changes and facilitated reflective processes.

6.6 Chapter Summary

This chapter discussed the findings that were obtained from each phase and attempted to integrate the quantitative and qualitative strands into an integrated discussion. This integration

provided far deeper insight into the trends that occurred in the psychometric, pre- and post- pilot and intervention scores. Most importantly, the participants' subjective realities, career beliefs, anxieties and desired careers were brought to light in ways that indicate the value of multi-phase mixed-methods research. The life-designing intervention was seen to have had a significant effect on the career adaptability and vocational identity processes of the participants, and this effect was lasting at the follow-up assessment. Therefore, the current research provided a successful example at a tailor-made intervention that adapted Eurocentric career assessment and counselling methods in order to be applicable to a South African township context (Stead & Watson, 2017). This is important research that could inform future indigenisation approaches (Sinha, 1997). Recommendations for future research and practice will be discussed in the next chapter.

CHAPTER 7

REVIEW OF OBJECTIVES, SUMMARY OF THE FINDINGS, LIMITATIONS, RECOMMENDATIONS AND CONCLUSIONS

7.1 Introduction

The concluding chapter reviews the research objectives, provides a brief overview of the significant findings, and discusses the limitations, recommendations and implications for future research. In order to review this research process, it is important to restate that the research process was informed by the necessity of South African researchers to reflect on Eurocentric career development research and to examine whether these perspectives may be appropriate and useful to South African adolescents and young adults (Stead & Watson, 2017). The cornerstone of this research process was to develop more appropriate, equitable and fairer career assessment practices and career interventions that could contribute to reducing the educational and socio-economic inequalities that continue to be pervasive in South African society (Blustein et al. 2017).

The importance of contextualised career assessment and counselling practices, such as the ones developed in the present research, is that these practices can contribute meaningfully towards reducing socio-economic inequalities, promoting career-life course development and creating opportunities to transcend historical disadvantagement (and its sequelae). Increased demand for fair (non-discriminatory) assessment procedures, at a local and international level, has called for the need to cross-validate psychometric data with rich, qualitative data – which the present research has achieved (Cohen-Scali et al., 2018).

7.2 Review of Objectives

The overarching objectives of this study were three-fold. The first aim was to explore whether the *CAAS* and *VISA* were psychometrically reliable and valid in a low-resource South African township, as these career measures were administrated as part of the repeated-measures research design. This psychometric data was cross-validated with Delphi panel group interviews, and the *CAAS collectivistic* version was included as a result of the supplementation of quantitative data with qualitative data. Secondly, the present research aimed to include a variety of role players from the Kayamandi community, such as teachers, principals, NGO members and young adults (i.e., the fieldworkers), in a qualitative process that informed the content, structure

and process of a life-designing career intervention that was tailor-made to the career development needs of the youth in this disadvantaged community.

The resulting intervention was piloted to assess if there were significant differences between the pre- and post- scores, as well as between the intervention and control groups. Once, the pilot phase was complete, the finalised version of the life-designing career intervention was implemented in a repeated-measures design. The third aim was to investigate patterns of stability and change in career adaptability competencies and vocational identity statuses in disadvantaged adolescents who had completed the culturally sensitive life-designing intervention by examining changes in scores according to time, grade and gender effects. These results were supplemented with qualitative data to enrich understandings of the quantitative findings, which could inform future career counselling and research practices.

7.3 Summary of Research Findings

One of the significant strengths of the present research study is that it was informed by an etic-emic approach, which means that an exploration was undertaken to assess whether the Western conceptualisation of career adaptability and vocational identity, as well as the resulting vocational identity statuses, could be transferred to a non-Western, developing world context like South Africa. The intention behind this exploration was to contribute to research on universalism, where the necessity of transferring constructs, models and measures between cultures and countries is undeniable in developing cross-cultural measures of career behaviour (Einarsdottir et al., 2015). However, at the same time, the current research examined culturally specific meanings and contributed to understanding the career behaviour of a disenfranchised population group to inform the development of an indigenous South African career psychology knowledge base, which will allow indigenous theories and practices to emerge (Ægisdóttir et al., 2009; Church, 2010).

7.3.1 Psychometric findings.

Due to the collectivistic *ubuntu* values in this population group, different versions of the *CAAS* were explored for goodness-of-fit statistics and to see which of these versions provided a better 'fit'. The current research results showed that *CAAS-South Africa Kayamandi, CAAS-South Africa North West*, *CAAS-collectivistic* and *CAAS-International* had similar good fit indices. However, *CAAS-South Africa Kayamandi* had lower reliabilities and factor loadings due to contextual, linguistic and socio-economic factors, which were seen to affect the development and manifestation of career adaptability competencies. Although the measurement

model fitted the data closely, the statistically significant factor loadings were generally of a moderate degree. The results of the confirmatory factor analyses suggest that, while the intention of the *CAAS* to have sets of items reflecting specific primary career adaptability competencies succeeded, the subscale item measures hold a sizable amount of systematic and random error, which could be accounted for due to the low socio-economic conditions associated with a township context. The *CAAS-collectivistic* seemed to provide better goodness-of-fit statistics and included social elements that the previous *CAAS* administration did not, thus this instrument was shown to be culturally 'nearer' or more appropriate in this collectivistic context. As a result, universal aspects of career adaptability competencies could be acknowledged in the present research, but also cultural limitations were highlighted that could be explored for further refinement and follow-up research.

In terms of the *VISA*, this vocational identity assessment had never been administered in a South African context, nor was there any South African instrument that could be compared to the *VISA* due its focus on career exploration, commitment and reconsideration. The findings of this study demonstrate that the *VISA* was moderately reliable and valid in the South African context. These findings were further enriched by the supplementation of qualitative data to the first *VISA* administration in South Africa. Future research should expand on these findings by investigating the psychometric properties of the *VISA* across different sample groups, which could include different socio-economic statuses, racial and linguistic groups, and in different geographical locations of South Africa. Nonetheless, this research has contributed to the available psychometric evidence documenting that socio-economic disadvantage systematically affects the manner in which the predictor and criterion constructs express themselves in observed measures. The current research has provided an understanding of career phenomena in South Africa, which can enrich research developments in other countries.

7.3.2 Intervention development and pilot findings.

The development of the intervention highlighted the contextual constraints that are inherent in low-resource contexts. The greatest concern throughout the current research process was time limitations, as it was a challenge to adhere to a time structure that accommodated all the role players who were crucial in this environment. Decisions were taken through a collaborative leadership approach to include multiple perspectives in the development of the intervention; however decisions taken ultimately could not accommodate all the role players involved. In addition, the Kayamandi context was characterised by unpredictable forces, which coincided to interrupt the scheduled time. This was taken as indicative of the challenging

conditions under which Kayamandi adolescents and youth formulate their career development trajectories and vocational identities.

The pilot study was useful to test the structure, content and reception of the materials by the participants. In examining the pre- and post-test scores of the *CAAS-Collectivistic* subscales, an overall trend was observed that indicated that the post-measure scores were higher than pre-test measure scores, although only three subscales (viz., *control*, *concern*, and *curiosity*) were seen to have significantly changed between the pre- and post-test measures. This means that the participants had increased levels of *concern (i.e.*, future orientation, in terms of how much he/she values and becomes involved in preparing for tomorrow), *control* (i.e., the self-discipline, autonomy, and responsibility needed for make a vocational decision) and *curiosity* (i.e., an orientation in which individuals increasingly explore the match between self and world-of-work) after the completion of the intervention (Savickas, 2005).

The pilot study indicated an overall trend in which *VISA* post-measures were higher than pre-test measures. However, only two *VISA* subscales (viz. *career commitment-making (CCM*) and *identification with career commitment (ICM)*) significantly changed between the pre- and post-test measures. *Career commitment-making* refers to the degree of certainty about a career decision that was taken, whereas, *identification with commitment* describes how devoted the individual is to a career decision that has been taken. This was interpreted to mean that commitment-making improved and that the investment in a specific career choice increased. However, the career exploration dimension did not increase. This is problematic because it seems as if a career choice is foreclosed or crystallised without further exploration. This inference is further supported by the observation that career reconsideration scores only increased slightly, openness to occupational interest changes also only increased slightly, and career planning uncertainty or self-doubt only increased slightly.

The qualitative data seemed to indicate a lack of future time perspective (Taber & Blankemeyer, 2015), as the participants did not match the present to the future and did not engage in future time orientation thinking or planning before the intervention. Furthermore, the intervention facilitated the development a self-identity that was separate of social relations in these participants (Shin & Kelly, 2012). However, more engagement was needed with career reconsideration to encourage career exploration and flexibility about changes that could occur in career trajectories throughout a lifetime, as well as the management of the anxiety and self-doubt that accompany career decision-making when new situations are encountered that require adaptability. The pilot study indicated the importance of understanding the shifting dynamics of

career adaptability dimensions throughout adolescence and emerging adulthood, because these dimensions scaffold personal agency and goal-setting and contribute positively to vocational identity formation and overall well-being (Savickas, 2005; Skorikov & Vondracek, 2011).

7.3.3 Findings from the *Shaping Career Voices intervention*.

The life-designing career intervention consisted of 20 hours (eight hours' facilitation and 12 hours' homework) and was conducted over a period of a week. There were four assessment time points – two before the intervention (T_1 and T_2), one immediately after the intervention (T_3), and another one a week later (T_4). Thereby the whole process was completed in four weeks. The intervention and repeated-measures assessments were conducted over such a short time frame due to high attrition rates documented over longer periods of time in township communities (Albien, 2013), as well as an examination of what changes could be documented in such a short time.

7.3.3.1 Differences in CAAS subscales over time points.

Over the time points, the *CAAS* subscales (viz., *concern*, *control*, *confidence*, *co-operation* and *curiosity)*, except for the *contribution* subscale, increased, with the most significant changes seen between T_1 and T_4. Although an initial difference was observed in all the subscales between T_1 and T_2, they were not significant and were taken to indicate participants' initial "high hopes". The completion of the first assessments at T_1 may have resulted in the start of a reflection process, by which learners became acutely aware of the limitations in their career knowledge, self-knowledge or career ideas, which may have caused them to be more receptive to the career intervention. The Kayamandi context and culture influenced the increase in *CAAS* subscales because the participants were provided with opportunities to explore a range of career options that they had not known about before the intervention.

7.3.3.2 Gender differences in CAAS subscales.

The *CAAS* results indicate that there was a trend for female participants to score higher than male participants across all the subscales, with female participants specifically having higher scores on the *CAAS concern* and *co-operation* subscales. This finding was supported by a number of studies which highlighted that girls score higher than boys on career adaptability competencies (Creed & Patton, 2003; Creed et al., 2010). However, this is in contrast with previous South African research, in which male participants scored higher than females on other markers of career development, such as career self-efficacy, due to the cultural expectations of

male participants fulfilling the role of breadwinner (Maesela, 1994; Seane, cited in De Bruin & Bernard-Phera, 2002). This provides unique insight into the gender differences seen in the research sample, where the majority of respondents were female, and inferences can be made about increased self-efficacy and career planning among Kayamandi females.

7.3.3.3 Grade differences in CAAS subscales.

Previous research has indicated that older adolescents face increasingly complex career development tasks, which require the development of career adaptability competencies and vocational identity processes (Skorikov, 2007a, 2007b; Stringer et al., 2011). There were no main grade effects that indicated that grades scored differently on the *CAAS* subscales. However, the *CAAS concern* and *CAAS contribution* subscales had significant grade*time effects, where Grade 10, 11 and 12 participants' scores all seemed to increase differently over time; specifically the Grade 12 participants' scores seemed to increase the most. This is a significant finding, because previous research found that career maturity levels were seen to decrease in disadvantaged township schools between Grade 11 and 12 (Grobbelaar et al., 2014). The opposite was found in this research study, where the intervention increased levels of career adaptability competencies, as well as vocational identity scores, across the grades. It can be argued that, due to the immediacy of making a career decision amongst the Grade 12s, the intervention seemed to be more relevant and contribute more to an increase in the Grade 12's scores.

7.3.3.4 Differences in VISA subscales over time points.

In terms of the *VISA*, there was an overall trend that showed increases in the *VISA* first-order and second-order subscales. Significant time effects were observed in three *VISA* subscales, namely, there were significant differences between T_1 and T_4 for the *self-doubt* (SD), *identification with career commitment-making (ICM)* and *in-breadth career exploration (IB)* subscales, showing that the intervention contributed to an increase in the scores on these subscales. The *in-breadth career exploration (IB)* describes the actions taken to learn about different career options, which shows that participants were more actively involved in exploring the range of career options that were available because of the intervention. The *self-doubt* (SD) subscale refers to the anxiety and uncertainty experienced in the face of career decision-making, which was seen to increase in the face of the numerous career options, which had not been considered by the participants before the intervention.

The *identification with career commitment-making (ICM)* subscale refers to how invested the individual is in a career decision that is taken, and this subscale increased significantly. This created a tension between exploring and being committed to a career idea, which is where the qualitative data was illuminating. The career choice was often a high-prestige occupation that the participant had heard about from peers or family. The participants held on to this subjective identity form (SIF) whilst exploring other high-prestige jobs. Therefore, the chosen career was used as a SIF to keep self-esteem and self-efficacy high in order to prevent individuals from giving up, however, this career choice was not necessarily the final choice.

7.3.3.5 Gender differences in VISA subscales.

There is limited research that examines gender differences in vocational identity status. Furthermore, research is lacking that examines cross-cultural differences and similarities in vocational identity (Skorikov & Vondracek, 2007). Therefore, the present research contributes to research on gender differences in vocational identity, as well as cultural differences that are linked to a collectivistic culture. The current research indicated that males and females scored similarly on the *VISA*, except that male participants scored significantly higher on three subscales, namely the *career flexibility (CF)* (i.e., openness to and readiness for future changes in occupational preferences and choices) and *self-doubt (SD)* (i.e., the anxiety and uncertainty experienced in the face of career decision-making), which together form the second-order *career reconsideration (CR)* subscale. This is supported by a previous study (Negru-Subtricia et al., 2015), which found that, over time, male participants reported less in-depth occupational exploration, and less identification with present vocational commitments, resulting in more flexibility and self-doubt about their career choices. Therefore, middle and late adolescent female participants were more involved in occupational exploration and exhibited stronger vocational commitments than their male counterparts (e.g., Hirschi, 2012; Skorikov & Vondracek, 2011). Therefore, future research is needed that examines vocational identity across diverse population groups, and explores whether cross-cultural gender differences emerge.

7.3.3.6 Grade differences in VISA subscales.

The developmental task of choosing an occupation becomes more salient in higher grades, and the expectation was that as these students prepare for high school graduation, they will spend more effort and time thinking about future choices (Savickas, 2005). This is in line with the findings of the current study in which grade effects were evident. There were grade effects in the *career exploration (CE)* second-order subscale, which consisted of in-breadth

exploration (IB) (i.e., actions taken to learn about different career options), and *in-depth exploration (ID)* (i.e., activities taken to extend the understanding of a specific occupational choice). In addition, grade effects were seen in the *identification with commitment (ICM)* (i.e., how devoted the individual is to a career decision that has been taken) subscale. Scores increased the most among the Grade 12 participants, and there were significant differences between the mean scores of different grades. In *career reconsideration (CR),* a significant difference was seen in mean scores between the Grade 10 and 11 participants. Lastly, the *self-doubt* (*SD)* subscale showed that Grade 12 participants had the lowest scores in comparison to Grade 10 participants, who had the highest scores on this subscale. This finding was taken to indicate that Grade 12 participants had less anxiety about the career choice process and were aware of the career exploration that needed to be undertaken to make a decision that would fulfil their subjective identity form of being successful. The latter was central to the investment in their careers, and this investment was tied to improving their family's lifestyle.

7.3.3.7 Vocational identity status changes.

On the basis of previous research, few changes were expected in vocational identity processes over a short time frame (Meeus, 2011; Skorikov & Vondracek, 2011). The current study refutes these previous studies, as identity statuses were seen to begin changing after the first administration at T_1 and kept shifting until T_3, when the intervention ended. Upon follow-up at T_4, the identity statuses had not changed much from T_3, but remained significantly different from before the start of the intervention. The most interesting finding was the development of two new vocational identity statuses that did not fit into the high-low dichotomy that created the vocational identity statuses of *achieved, searching moratorium, moratorium, foreclosed, diffused* and *undifferentiated*. Instead, m_m_m was likened to a moratorium status, although the career commitment subscale was higher and the career reconsideration subscale was lower; instead, it was renamed *undifferentiated moratorium*. Similarly, h_h_m was seen to fall between the *achieved status* and *searching moratorium* status, and so was renamed *foreclosed moratorium.* Therefore, this research has added two new identity statuses to capture the different time perspectives that emerged through the life-designing career intervention documented in the current research. Further research is needed, however, to see if these statuses can be replicated in collectivistic samples, where social comparison and social relations influence conceptions of career and self-hood. In addition, the low socio-economic status of the participants could have had consequences that reduced career exploration behaviour due to a fear of failure or have

increased mimicking behaviour due to limited access to career information and alternative career realities. These insights were provided by the qualitative strands of this research process.

7.3.3.8 Associations between career adaptability and vocational identity.

Previous research has indicated that that career adaptability and vocational identity are dynamic and interrelated dimensions of adolescent career development (Negru-Subtirica et al., 2015). There were significant differences between mean scores in the *CAAS* subscales that corresponded with different vocational identity statuses, which indicates that individuals scored differently on the *CAAS* subscales according to their vocational identity status. This is supported by previous research that hypothesises that vocational identity increases monotonically from lower to higher degrees of adaptability (Porfeli & Savickas, 2012). In the present study, an examination was undertaken of how career adaptability and vocational identity influence each other over time. Previous findings were not replicated when a correlation analysis was conducted between the subscales of the *CAAS* and the *VISA* in order to establish concurrent validity in the present study. The results indicate that the *VISA* and *CAAS* measure separate constructs that were not strongly correlated with one another. However, what the current research study highlights is the influence of social comparison, social conformity and the construction of the self, primarily in reference to social relations (Ames et al., 1994). This presents a unique finding, as social and collectivistic influences have not yet been documented in the formation of vocational identity statuses.

7.3.3.9 Intervention feedback.

Participants indicated that the intervention had facilitated changes in their career planning and exploration approaches. They stated that they projected themselves more into their future, perceived fewer career barriers, and were better at making their intentions result in career behaviors (Soresi, Nota, & Ferrari, 2012). There was an increased awareness of the social embeddedness of the individual as well as how this may have limited his/her career exploration. A tension was observed between acknowledging the need for co-operation to gain detailed career information, and guard fragile career dreams from people in the community who were likely to reinforce self-doubt or fear of failure. The narrative therapy exercise was cited as a positive experience of re-authoring their experiences and helping to prepare them for negative self-talk or self-doubt.

As a result, the participants reported increased self-efficacy, self-worth and personal responsibility for being the authors of their own success stories. In addition, there was better integration of past, present and future behaviours, as well as insight into personal variables that had shaped their career decision-making processes. However, the negative feedback across the phases was that there was too little time to fully engage in the reflection activities, because the participants wished for more facilitated or guided reflection. This was inferred to result from the lack of reflective practices that has previously been documented among disadvantaged learners (Albien, 2013). At six months post-intervention, the feedback remained consistent, except that further reflections were added. In-depth reflections included examining cultural assumptions held of materialistic success and how cultural obligations could be reconciled with following a career choice that was not supported by family members initially. This feedback indicated the effectiveness of the intervention and provided evidence of the staying power of the intervention.

7.4 Limitations

The current study has many limitations, which will be discussed briefly below. Firstly, the repeated measures design might have contributed to participants responding more moderately over time (Little, 2013). The change in research design from a pre- and post- quasi-experimental design to a repeated-measures design is a limitation. The researcher had no control over this development, which arose out of learners assigning themselves to either the control or the intervention group due to previous experiences of exclusion. Therefore, group equivalence could not be assured and the research design was changed. The quasi-experimental design may have been more rigorous in indicating group differences that could be attributed to the effects of the intervention. Nonetheless, the repeated-measures design allowed participants to be observed four times over a short period of time (four weeks), and this added to the novelty of this research study because this short time has not yet been utilised in research studies. Longer time spans were used in previous research studies due to the belief that vocational identity and career adaptability changes occur slowly, which this research process has refuted.

In addition, due to the large sample size, findings that were theoretically significant may not be practically significant, and these findings need to be interpreted with caution. Another limitation of this study is the focus on a low-income Black population group and, as a result, the data obtained represents only a small segment of the heterogeneous South African population. The measures used were all self-report and were susceptible to subjective interpretations by the participants, which may have been further compounded by linguistic barriers. Furthermore, the English administration of the career assessments is also a limitation. Although the instruments

were translated into Xhosa (forward and backward), the abstract terminology used in the *CAAS* and *VISA* could not be adequately translated without the creation of long, ambiguous sentences that were deemed more confusing than the English version. Language experts and fieldworkers all recommended the use of the English versions, which was followed, but the English administration forms one of the limitations of this study. The necessary precautions were taken by identifying confusing terms and adding explanations in isiXhosa and English throughout the research process. However, there is always a danger that nuances may not have been captured in English, as they would have been in isiXhosa.

The workshop format on which the intervention was based had limited flexibility due to time constraints and the content that needed to be covered in specified session slots. This meant that in-depth, one-on-one facilitation was not always possible, even though there were always at least two fieldworkers present in every session. The pen-and-paper format may also have been a limitation in a community that values oral traditions. However, the peer scrutiny and community 'gaze' mentioned in the qualitative findings seem to prevent the disclosure of career ideals and dreams when career counselling occurs in a group format, yet a lack of trust can have the same effect in one-on-one career counselling sessions. Of paramount importance was building rapport for either the group or individual format to be interactive and successful, and the presence of the fieldworkers facilitated this process. This also affects the scalability of the research, because this intervention could be used in other settings provided the teachers and a selected group of young people from the community (i.e., a context-specific group of fieldworkers) are actively involved in adapting the current intervention and establishing rapport with participants.

7.5 Recommendations

Future mixed-method studies that include written components that support a narrative career counselling approach are strongly recommended, as this that will help to provide an understanding of the participants' experiences of the career measures administered, as well as provide insight into the development of assessment procedures that practically include issues of diversity in the interpretation and scoring of career assessments. In order to improve this research, a follow-up study could assess whether learners' vocational identity scores, statuses and career adaptability competencies had been sustained, or if further career-related behaviour may have caused changes. In addition, a longitudinal study design could be used over one academic year, which could better indicate changes or fluctuations in career adaptability and vocational identity constructs. Specifically, more research is needed to gain an in-depth understanding of how career adaptability and vocational identity evolve over time and how they

are linked longitudinally. If this research were to be reworked, I would use additional statistical analyses to gain more insight into scoring patterns over time. These additional statistical analyses (i.e., latent growth curve analyses and cross-lagged path analyses) could be conducted to determine differences in career adaptability and vocational identity subscales, as well as vocational identity statuses, which occurred over time.

Lastly, future research is needed to assess the applicability and efficacy of the career adaptability and vocational identity constructs across socio-economic milieus. This can be conducted as a follow-up study to the current research process by using the same life-design career intervention (albeit with adaptations once contextually specific role players have been interviewed) with high school students from a different socio-economic milieu to better assess how career adaptability and vocational identity constructs manifest across heterogeneous South African population groups.

7.6 Implications for South African Career Psychology

The present research study is pioneering because it contextualises the development of career adaptability and vocational identity within cultural and contextual realities. For example, career decision-making based on the expectations and opinions of others is included (Mau, 2000), as well as social comparison with peers (Li et al., 2015). Furthermore, traditions associated with the amaXhosa culture are also included, such as respecting elders as well as fulfilling family duties and obligations, instead of focusing purely on the development of an independent futureself. So far, these elements have been only researched in Asian communities, but the amaXhosa collectivistic community members of Kayamandi are also less autonomous, more conforming and more obedient to authority (Li et al., 2015; Mau, 2000). Although career interventions could be more useful if they included the voices of significant others directly (i.e., parents), this is often not possible due to geographical separations (i.e., participants in this sample had all relocated from the Eastern Cape), as well as other logistical constraints. However, future practical applications will have to consider how to include family members or significant others in career development processes.

In terms of practical application, these assessments could be used as screening tools, with which individuals with diffused career development or early foreclosure based on unrealistic career choices can be detected early in high school settings. This would prevent entry into higher education unprepared or ignorant of academic and/career demands, and ultimately thwart academic failure. There is a dire need to facilitate the exploration of career alternatives that

would fulfil social justice objectives by enabling at-risk learners fair and equal opportunities to progress educationally and contribute economically, both locally and globally (Hooley & Sultana, 2016).

7.7 Implications for International Career Psychology

The constant adaptations that are required in world-of-work transitions need a psychological and social set of skills that may not yet have been developed in adolescents or young people (Cohen-Scali et al., 2018). This puts the youth at risk, because they are at the beginning of their career trajectories, lack experience and are developmentally less certain of a vocational identity, or they may still be facing decisions between many vocational identities based on the contradictory influences of social comparison and family duties or obligations. Although these career decision-making difficulties amongst the youth are a shared world-wide phenomenon, lessons can be learnt from the current research study. The formation of vocational identity statuses in the present study was influenced by socio-economic status, social comparison, a collectivistic sense of self, as well as membership of a marginalised population group. This is a novel finding and needs replication in diverse worldwide population groups, which could include refugees, migrants, asylum seekers or immigrants.

7.8 Conclusion

In conclusion, when significant new career theories emerge such as career construction theory, the relevance of these theories needs to be examined in order to demonstrate the contextualisation of career adaptation within diverse population groups. The current research has undertaken this examination by applying the constructs of career adaptability and vocational identity to a non-Westernised and developing world context. The current research highlights the applicability and efficacy of the concept of career adaptability and vocational identity in a low-resource peri-urban township context. In spite of the limitations mentioned, the present study has significant implications for mapping adolescent career development by exploring the two core components, career adaptability and vocational identity, that affect adolescent vocational development. This research provides a novel contribution to overcoming the challenge of facilitating the construction of a self within a work role by providing a psychometric examination of the *CAAS* and *VISA*, developing a culturally sensitive life-designing career intervention, and including qualitative data to gain insight into diverse realities that may be collectivistic and career oppressive to foster emic-etic career research.

To conclude, the researcher would like to encourage countries in the developed world to consider whether this present study may or may not be relevant for their changing landscapes, which include more diversity than ever before (Stead & Watson, 2017).

References

Ackermann, C. J., & Botha, M. (1998). The relation between parental career status and career identity among Xhosa-speaking adolescents. *South African Journal of Education, 18*(4), 208-212.

Adair, J. G. (2006). Creating indigenous psychologies. Insights from empirical social studies of the science of psychology. In U. Kim, K. Yang, & K. Hwang (Eds.), *Indigenous and cultural psychology. Understanding people in context* (pp. 467-485). New York, NY: Springer.

Adams, G. R., Bennion, L., & Huh, K. (1989). *Objective measure of ego identity status: A reference manual*. Unpublished manuscript, University of Guelph, Canada.

Adams, B. G., Van de Vijver, F. J., De Bruin, G. P., & Bueno Torres, C. (2014). Identity in descriptions of others across ethnic groups in South Africa. *Journal of Cross-Cultural Psychology, 45*(9), 1411-1433.

Ægisdóttir, S., Gerstein, L. H., Leung, S. M. A., Kwan, K. L. K, & Lonner, W. J. (2009). Theoretical and methodological issues when studying culture. In L. H. Gerstein, P. P. Heppner, S. Ægisdóttir, S. M. A. Leung, & K. L. Norsworty (Eds.), *International handbook of cross-cultural counselling: Cultural assumptions and practices worldwide* (pp. 89-109). Thousand Oaks, CA: Sage.

Akhurst, J., & Mkhize, N. (2006). Career education in South Africa. In G. B. Stead & M. B. Watson (Eds.), *Career psychology in the South African context* (2nd ed., pp. 139-151). Pretoria: Van Schaik Publishers.

Albien, A., Kidd, M., Naidoo, A. V. & Maree, K. (in press). Psychometric properties of the Career Adapt-abilities Scale in isiXhosa-speaking South African township adolescents. *International Journal for Educational and Vocational Guidance*.

Albien, A., & Naidoo, A.V. (2018). Barriers and enablers for career development among marginalized South African youth. In L. Nota, J. Rossier, & V. Cohen-Scali (Eds.), *International perspectives on current research in career counselling and guidance*: *Building careers in changing and diverse societies* (pp.147-166). Cham: Springer Publishing.

Albien, A., & Naidoo, A.V. (2017). Deconstructing career myths and cultural stereotypes in a context of low resourced township communities. *South African Journal of Education, 37*(4), 1-12.

Albien, A., & Naidoo, A.V. (2016). Social career influences of Xhosa adolescents elicited using the systems theory framework in a peri-urban South African township. *South African Journal of Higher Education, 30*(3), 111-137. doi:10.20853/30-3-668

Albien, A. J. (2013). *Exploring grade 12 Kayamandi adolescents' career influences using the Systems Theory Framework of Career Development* (Master's thesis). Stellenbosch: Stellenbosch University, Stellenbosch. South Africa).

Alheit, P., & Daussien, B. (1999, February 25-27). *Biographicity as a basic resource of lifelong learning*. Paper presented at the Second European Conference on Lifelong Learning, Bremen, Germany.

Alexander, D., Seabi, J., & Bischoff, D. (2010). Efficacy of a post-modern group career assessment intervention of disadvantaged high school students. *Journal of Psychology in Africa, 20*(3), 497-500.

Ames, P. T., Dissanayake, W., & Kasulis, T. P. (1994). *Self as a person in Asian theory and practice*. Albany, NY: State University of New York Press.

Amundson, N. E. (1995). An interactive model of career decision making. *Journal of Employment Counselling*, *32*(1), 11-21.

Arnett, J. J. (2007). Emerging adulthood: What is it, and what is it good for? *Child Development Perspectives*, *1*(2), 68-73. doi:10.1111/j.1750-8606.2007.00016.xi:10.1111/j.1750-8606.2007.00016.x

Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American psychologist*, *55*(5), 469-480. doi:10.1037/0003-066X.55.5.469

Arnot, M., & Swartz, S. (2012). Youth citizenship and the politics of belonging: Introducing contexts, voices, imaginaries.*Comparative Education*, *48*(1), 1-10. doi: 10.1080/03050068.2011.637759

Arthur, N. (2014). Social justice and career guidance in the Age of Talent. *International Journal for Educational and Vocational Guidance*, *14*(1), 47-60.

Arthur, N. (2005). Building from diversity to social justice competencies in international standards for career development practitioners. *International Journal for Educational and Vocational Guidance*, *5*(2), 137-148.

Arulmani, G. (2014). Career guidance and livelihood planning. *Indian Journal of Career and Livelihood Planning*, *3*(1), 9-11.

Arulmani, G. (2011). Striking the right note: The cultural preparedness approach to developing resonant career guidance programmes. *International Journal for Educational and Vocational Guidance*, *11*(2), 79-93. doi:10.1007/s10775-011-9199-y

Arulmani, G. (2010a). Enough for my mealie-meal: The cultural preparedness approach to the delivery of careers service. In K. Maree (Ed.), *Career counselling: Methods that work* (pp. 24-33). Cape Town, South Africa: Juta Publishers.

Arulmani, G. (2010b). Career counselling: A mechanism to address the accumulation of disadvantage. *Australian Journal of Career Development*, *19*(1), 7-12.

Arulmani, G. (2007). Counselling psychology in India: At the confluence of two traditions. *Applied Psychology*, *56*(1), 69-82.

Arulmani, G. (2004). Career counselling. *Australian Journal of Career Development*, *19*(1), 7-12.

Arulmani, G., Van Laar, D., & Easton, S. (2003). The influence of career beliefs and socio-economic status on the career decision-making of high school students in India. *International Journal for Educational and Vocational Guidance*, *3*(3), 193-204.

Arulmani, G., & Nag-Arulmani, S. (2004). *Career counselling: A handbook*. New Delhi, India: Tata McGraw-Hill.

Arthur, N., & McMahon, M. (2005). Multicultural career counselling: Theoretical applications of the systems theory framework. *The Career Development Quarterly, 53*(3), 208-222. doi:10.1002/j.2161-0045.2005.tb00991.x

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: Freeman.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall, Inc.

Bandura, A. (2006). Guide for constructing self-efficacy scales. In F. Pajares & T. Urdan (Eds.), *Self-efficacy beliefs of adolescents* (pp. 307-337). Greenwich, Connecticut: Information Age Publishing.

Barclay, S. R., & Wolff, L. A. (2012). Exploring the career construction interview for vocational personality assessment. *Journal of Vocational Behaviour*, *81*(3), 370-377.

Bénit-Gbaffou, C. (2009). In the shadow of 2010: Democracy and displacement in the Greater Ellis Park Development project. In U. Pillay, R. Tomlinson, & O. Bass (Eds.), *Development and dreams: The urban legacy of the 2010 Football World Cup* (pp. 200-222). Cape Town: Human Sciences Research Council Press.

Betz, N. E., & Corning, A. F. (1993). The inseparability of "career" and "personal" counselling. *The Career Development Quarterly, 42*(2), 137-142.

Betz, N. E., & Hackett, G. (1981). The relationship of career-related self-efficacy expectations to perceived career options in college women and men. *Journal of Counselling Psychology, 28*(5), 399-410.

Betz, N. E., Klein, K. L., & Taylor, K. M. (1996). Evaluation of a short form of the career decision-making self-efficacy scale. *Journal of Career Assessment*, *4*(1), 47-57.

Bimrose, J. (2010). Adapting in a changing world: Dealing with repeated career transitions. In K. Maree (Ed.), *Career counselling: Methods that work* (pp. 118-127). Cape Town: Juta.

Bimrose, J., & Hearne, L. (2012). Resilience and career adaptability: Qualitative studies of adult career counselling. *Journal of Vocational Behaviour*, *8*(3), 338-344.

Bisschoff, R. (1987). *Self-directed search questionnaire: Adapted for South Africa.* Pretoria, South Africa: Human Sciences Research Council (HSRC).

Bless, C., Higson-Smith, C., & Sithole, S. L. (2013). *Fundamentals of social research methods: An African perspective* (5th ed.). Cape Town, South Africa: Juta.

Blustein, D. L. (2011). Vocational psychology at the fork in the road: Staying the course or taking the road less traveled. *Journal of Career Assessment*, *19*(3), 316-322. doi: 10.1177%2F1069072710395537

Blustein, D. L. (2001). Extending the reach of vocational psychology: Toward an inclusive and integrative psychology of working. *Journal of Vocational Behaviour, 59*(2), 171-182.

Blustein, D. L., Ellis, M. V., & Devenis, L. E. (1989). The development and validation of a two-dimensional model of the commitment to career choices process. *Journal of Vocational Behavior*, *35*(3), 342-378.

Blustein, D. L., & Flum, H. (1999). A self-determination perspective of interests and exploration in career development. In M. L. Savickas & A. R. Spokane (Eds.), *Developing self in work and career: Concept, cases and contexts* (pp.345-368). Palo Alto, CA: Davies-Black.

Blustein, D. L., Franklin, A. J., Makiwane, M., & Gutowski, E. (2017). Indigenisation of career psychology in South Africa. In G. B. Stead & M. B. Watson (Eds.), *Career psychology in the South African context* (3rd ed., pp. 196-209). Pretoria, South Africa: Van Schaik Publishers.

Blustein, D. L., Kozan, S., Connors-Kellgren, A., & Rand, B. (2015). Social class and career intervention. In P. J. Hartung, M. L. Savickas, & W. B. Walsh (Eds.), *APA Handbook of career intervention: Foundations* (Vol 1, pp. 243-257). Washington, DC: American Psychological Association.

Blustein, D. L., McWhirter, E. H., & Perry, J. C. (2005). An emancipatory communitarian approach to vocational development theory, research, and practice. *The Counselling Psychologist*, *33*(2), 141-179. doi:10.1177/0011000004272268

Bolles, R.N. (2009). *What Colour is your parachute? 2016: A practical manual for job-hunters and career-changers*. Berkeley, CA: Ten Speed Press.

Booi, F. N. (2011). *Learners' awareness of HIV/AIDS and their attitudes towards peer educators in Khayamandi High School* (Master's thesis). Stellenbosch University, Stellenbosh, South Africa.

Brand, H. J., Van Noordwyk, J. S. J., & Hanekom, J. D. M. (1994). Die toepassing van die Self-Directed Search op 'n groep swart adolessente. *South African Journal of Psychology*, *24*(2), 47-52.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77-101.

Bray, R. (2014). Layers of watching and protection in research with children. In D. Posel & F. C. Ross (Eds.), *Ethical quandaries in social research* (pp. 27-40). Cape Town, South Africa: Human Sciences Research Council Press.

Brott, P. E. (2001). The storied approach: A postmodern perspective for career counselling. *The Career Development Quarterly*, *49*, 304-313.

Brown, D. (2015). *Career information, career counselling and career development*. University of North Carolina, Chapel Hill: Pearson.

Brown, D. (1996). Brown's value-based, holistic model of career and life–role choices and satisfaction. In D. Brown & L. Brooks (Eds.), *Career Choice and development* (3rd ed, pp. 337-372). San Francisco, CA: Jossey-Bass.

Brown, D. (2002a). Introduction to theories of career development and choice. Origins, evolution, and current efforts. In D. Brown & Associates (Eds.), Career choice and development (4th ed., pp. 3-23) San Francisco, CA: Jossey-Bass.

Brown, D. (2002b). The role of work values and cultural values in occupational choice, satisfaction, and success. In D. Brown & Associates (Eds.), *Career choice and development* (4th ed., pp. 465-509). San Francisco, CA: Jossey-Bass.

Brown, D. (2002c). The role of work values and cultural values in occupational choice, satisfaction, and success: A theoretical statement. *Journal of Counselling and Development, 80*, 48-56.

Brown, D. (2003). *Career information, career counselling and career development*. Boston, MA: Pearson Education.

Brown, D., & Brooks, L. (1996). Career Choice and development (3rd ed.). San Francisco, CA: Josey-Bass.

Brown, D., & Crace, R. K. (2002). *Life values inventory: Facilitator's guide*. Williamsburg, VA: Applied Psychological Resources.

Brown, D., & Crace, R. K. (1996). Values in life role choices and outcomes: A conceptual model. *The Career Development Quarterly*, *44*, 211-223.

Brown, S. D., & McPartland, E. B. (2005). Career interventions: Current status and future directions. In W. B. Walsh & M. L. Savickas (Eds.), *Handbook of vocational psychology: Theory, research, and practice* (3rd ed., pp. 195-226). Mahwah, NJ: Lawrence Erlbaum Associates.

Campbell, C., & Ungar, M. (2004). Constructing a life that works. Part 1: Blending postmodern family therapy and career counselling. *The Career Development Quarterly*, *53*(1), 16-27.

Campbell, L. M., & Vainio-Mattila, A. (2003). Participatory development and community-based conservation: Opportunities missed for lessons learned? *Human Ecology*, *31*(3), 417-437.

Carr, P. R. (2015). Whiteness and White privilege: Problematizing race and racism in a "color-blind" world, and in education. *International Journal of Critical Pedagogy*, *7*(1), 51-74.

Chope, R. C., & Consoli, A. J. (2011). A storied approach to multicultural career counselling. In K. Maree (Ed.), *Shaping the Story: A guide to facilitating narrative counselling* (pp. 163-175). Rotterdam, the Netherlands: Sense.

Church, A. T. (2010). Current perspectives in the study of personality across cultures. *Perspectives on Psychological Science*, *5*(4), 441-449. doi:10.1177/1745691610375559.

Clark, V. L. P., & Creswell, J. W. (2011). *Designing and conducting mixed-methods research.* Thousand Oaks, CA: Sage.

Clark, L. A., & Watson, D. (1995). Constructing validity: Basic issues in objective scale development. *Psychological Assessment*, *7*(3), 309-319.

Clayton, K. A. (2013). Looking beneath the surface: A critical reflection on ethical issues and reflexivity in a practitioner inquiry. *Reflective Practice: International and Multidisciplinary Perspectives, 14*(4), 506–518. doi: 10.1080/14623943.2013.808180.10.1080/14623943.2013.808180

Cluver, L., Boyes, M., Bustamam, A., Casale, M., Henderson, K., Kuo, K., … & Sello, L. (2014). When knowledge turns to evidence and silence won't do. In D. Posel & F. C. Ross (Eds.), *Ethical quandaries in social research* (pp. 41-56). Cape Town, South Africa: Human Sciences Research Council Press.

Coetzee, M., & Harry, N. (2014). Emotional intelligence as a predictor of employees' career adaptability. *Journal of Vocational Behaviour*, *84*(1), 90-97.

Cochran, L. (1998). A narrative approach to career education. *Australian Journal of Career Development*, *7*(2), 12-16.

Cohen-Scali, V., Rossier, J., & Nota, L. (2018). Introduction: Building an international community of research in career guidance and counseling. In V. Cohen-Scali, J. Rossier, & L. Nota (Eds.), *New perspectives on career counseling and guidance in Europe* (pp. 1-19). Cham: Springer.

Collin, A., & Guichard, J. (2011). Constructing self in career theory and counselling interventions. In P. J., Hartung, & L. M. Subich, (Eds.), *Developing self in work and career: Concepts, cases, and contexts* (pp.89-106). Washington, DC: American Psychological Association.

Combs, G., & Freedman, J. (2012). Narrative, poststructuralism, and social justice: Current practices in narrative therapy. *The Counselling Psychologist*, *40*(7), 1033-1060.

Colvin, C. J. (2014). Who benefits from research? Ethical dilemmas in compensation in anthropology and public health. In D. Posel & F. C. Ross (Eds.), *Ethical quandaries in social research* (pp. 57-74). Cape Town, South Africa: Human Sciences Research Council Press.

Connell, R. W. (2014). *Gender and power: Society, the person and sexual politics*. Hoboken, NJ: John Wiley & Sons.

Cowan, N. (1998). *Attention and memory: An integrated framework*. Oxford, England: Oxford University Press.

Cowles, K. V. (1988). Issues in qualitative research on sensitive topics. *Western Journal of Nursing Research*, *10*(2), 163-179.

Crites, J. O. (1969). *Vocational psychology*. New York, NY: McGraw-Hill.

Crace, R. K., & Brown, D. (2002). *Life values inventory. A values assessment guide for successful living*. Williamsburg, VA: Applied Psychological Resources.

Creed, P. A., & Patton, W. (2003). Predicting two components of career maturity in school based adolescents. *Journal of Career Development*, *29*, 277-290.

Creed, P. A., Patton, W., & Hood, M. (2010). Career development and personal functioning differences between work-bound and non-work bound students. *Journal of Vocational Behaviour*, *76*, 37-41.

Creed, P. A., Patton, W., & Watson, M. B. (2002). Cross-cultural equivalence of the career decision-making self-efficacy scale-short form: An Australian and South African comparison. *Journal of Career Assessment*, *10*(3), 327-342.

Creed, P., Prideaux, L. A., & Patton, W. (2005). Antecedents and consequences of career decisional states in adolescence. *Journal of Vocational Behaviour*, *67*(3), 397-412. doi:10.1016/j.jvb.2004.08.008

Creswell, J. W. (2013*). Research design: Quantitative, qualitative and mixed-methods approaches* (4th ed.). Thousand Oaks, CA: Sage Publications.

Creswell, J. W. (2014). *A concise introduction to mixed-methods research*. Thousand Oaks, CA: Sage Publications.

Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed-methods approaches*. Thousand Oaks, CA: Sage publications.

Crites, J. O. (1996). Assessment and counselling for career mastery. In M. L. Savickas & W. B. Walsh (Eds.), *Handbook of career counselling theory and practice* (pp. 237-250). Palo Alto, CA: Davies-Black.

Crocetti, E. (2017). Identity formation in adolescence: The dynamic of forming and consolidating identity commitments. *Child Development Perspectives, 11(2),* 145-150.

Crocetti, E., & Rubini, M., & Meeus, W. (2008a). Capturing the dynamics of identity formation in various ethnic groups: Development and validation of a three-dimensional model. *Journal of Adolescence*, *31*, 207-22. doi:10.1016/j.adolescence.2007.09.002.

Crocetti, E., Rubini, M., Luyckx, K., & Meeus, W. (2008b). Identity formation in early and middle adolescents from various ethnic groups: From three dimensions to five statuses. *Journal of Youth and Adolescence, 37*, 983-996.

Cronbach, L. J., & Shavelson, R. (2004). My Current Thoughts on Coefficient Alpha and Successor Procedures. *Educational and Psychological Measurement, 64*, 391-418. doi:10.1177/0013164404266386.

Csikszentmihalyi, M., & Beattie, O. V. (1979). Life themes-theoretical and empirical exploration of their origins and effects. *Journal of Humanistic Psychology, 19*(1), 45-63.

Darkey, D., & Visagie, J. (2013). The more things change the more they remain the same: A study on the quality of life in an informal township in Tshwane. *Habitat International, 39*, 302-309.

Darkwa, I. (2006). *Post-occupancy evaluation of state-subsidised housing units in Kayamandi, Stellenbosch* (Master's thesis). Stellenbosch University, Stellenbosch, South Africa.

Dawis, R. V., & Lofquist, L. H. (1976). Personality style and the process of work adjustment. *Journal of Counselling Psychology*, *23*(1), 55-59.

Dawis, R. V., & Lofquist, L. H. (1984). *A psychological theory of work adjustment: An individual differences model and its application*. Minneapolis, MN: University of Minnesota Press.

Dawis, R. V. (1996). Vocational psychology, vocational adjustment, and the workforce: Some familiar and unanticipated consequences. *Psychology, Public Policy, and Law*, *2*(2), 229-248.

De Bruin, G. P. (1999). Social cognitive career theory as an explanatory model for career counselling in South Africa. In G. B. Stead & M. B. Watson (Eds.), *Career psychology in the South African context* (pp. 130-136). Pretoria: Van Schaik.

De Bruin, G. P., & Bernard-Phera, M. (2002). Confirmatory factor analysis of the CareerDevelopment Questionnaire and the Career Decision-making Self-efficacy Scale for South African high school students. *South African Journal of IndustrialPsychology*, *28*(2), 1-6.

De Bruin, G. P., & De Bruin, K. (2017). Career assessment. In G. B. Stead & M. B. Watson (Eds.), *Career psychology in the South African context* (3rd ed., pp. 187-195). Pretoria, South Africa: Van Schaik Publishers.

De Bruin, G. P., & De Bruin, K. (2006). Career assessment. In G. B. Stead & M. B. Watson (Eds.), *Career psychology in the South African context* (3rd ed., pp. 187-195). Pretoria: Van Schaik Publishers.

De Bruin, G. P., & Nel, Z. J. (1996). 'n Geïntegreerde oorsig van empiriese navorsing oor loopbaanvoorligting in Suid-Afrika, 1980–1990. *South African Journal of Psychology*, *26*(4), 248-252.

Del Corso, J., & Rehfuss, M. (2011). The role of narrative in career construction development in post-apartheid South Africa. *South African Journal of Psychology*, *27*(4), 250-266.

Denborough, D. (2014). *Retelling the stories of our lives*. New York, NY: WW Norton & Company.

Denborough, D. (2005). A framework for receiving and documenting testimonies of trauma. *International Journal of Narrative Therapy & Community Work*, (3/4), 34-42.

Department of Basic Education. (2014). *Report on the Annual National Assessment of 2014: Grades 1 to 6 & 9*. Pretoria, South Africa: Department of Basic Education.

Deumert, A. (2013). Xhosa in town (revisited)–space, place and language. *International Journal of the Sociology of Language*, 222, 51-75. doi:10.1515/ijsl-2013-0032

Dickson-Swift, V., James, E. L., Kippen, S., & Liamputtong, P. (2007). Doing sensitive research: What challenges do qualitative researchers face? *Qualitative Research*, *7*(3), 327-353.

Diekhoff, G. (1992). *Statistics for the social and behavioral sciences: Univariate, bivariate, multivariate*. New York, NY: McGraw-Hill.

Diemer, M. A., & Blustein, D. L. (2007). Vocational hope and vocational identity: Urban adolescents' career development. *Journal of Career Assessment, 15*(1), 98-118.

Di Fabio, A., & Maree, J. G. (2013). Effectiveness of the career interest profile. *Journal of Employment Counselling*, *50*(3), 110-123.

Di Fabio, A., & Maree, J. G. (2012). Group-based life-design counselling in an Italian context. *Journal of Vocational Behaviour, 80*(1), 100-107.

Do Céu Taveira, M., Ribeiro, E., Cardoso, P., & Silva, F. (2017). The therapeutic collaboration in life-design counselling: The case of Ryan. *South African Journal of Education*, *37*(4), 1-12.

Drejer, A. (2002). *Strategic management and core competencies: Theory and application*. Santa Barbara, CA: Greenwood Publishing Group.

Drennan, G., Levett, A., & Swartz, L. (1991). Hidden dimensions of power and resistance in the translation process: A South African study. *Culture, Medicine and Psychiatry, 15*(3), 361-381.

Duarte, M. E., Soares, M. C., Fraga, S., Rafael, M., Lima, M. R., Paredes, I., Agostinho, R., & Djaló, A. (2012). Career adapt-abilities scale–Portugal form: psychometric properties and relationships to employment status. *Journal of Vocational Behaviour, 80*(3), 725-729.

Dullabh, A. (2004). The career development of adolescents in a children's home: A career systems perspective (Master's thesis). Nelson Mandela Metropolitan University, Port Elizabeth, South Africa.

Dunn, L. (1991). Research alert! Qualitative research may be hazardous to your health! *Qualitative Health Research, 1*(3), 388-392. doi:10.1177/104973239100100307

Du Toit, R., & de Bruin, G. P. (2002). The structural validity of Holland's R-I-A-S-E-C model of vocational personality types for young Black South African men and women. *Journal of Career Assessment, 10*(1), 62-77. doi:10.1177/1069072702010001004.

Ebersöhn, L. & Mbetse, D. J. (2003). Exploring community strategies to career education in terms of the asset-based approach: Expanding existing career theory and models of intervention. *South African Journal of Education, 23*(4), 323–327.

Einarsdóttir, S., Vilhjálmsdóttir, G., Smáradóttir, S. B., & Kjartansdóttir, G. B. (2015). A culture-sensitive approach in the development of the Career Adapt-Abilities Scale in Iceland: Theoretical and operational considerations. *Journal of Vocational Behaviour, 89*, 172-181.

Epston, D., & White, M. (1992). *Experience, contradiction, narrative & imagination: selected papers of David Epston& Michael White, 1989-1991*. Adelaide, South Australia: Dulwich Centre Publications.

Erikson, E. H. (1968). Youth and crisis. New York, NY: WW Norton & Company.

Erikson, E. H. (1982). *The life cycle completed*. New York, NY: Norton.

Eshelman, A. J., & Rottinghaus, P. J. (2015). Viewing adolescents' career futures through the lenses of socioeconomic status and social class. *The Career Development Quarterly, 63*(4), 320-332.

Fadjukoff, P., Pulkkinen, L., & Kokko, K. (2005). Identity processes in adulthood: Diverging domains. *Identity: An International Journal of Theory and Research, 5*(1), 1-20. doi:10.1207/s1532706xid0501_1

Ferrari, L., Nota, L., & Soresi, S. (2010). Time perspective and indecision in young and older adolescents. *British Journal of Guidance & Counselling, 38*(1), 61-82.

Flederman, P. (2009). Navigational tools for learners, really? What is available, what are the challenges and what should be done? An environmental scan of the career guidance field in South Africa. In South Africa Qualifications Authority, *Career guidance challenges and opportunities* (pp. 21-43). Waterkloof: South African Qualifications Authority.

Fletcher, A., & Marchildon, G. (2014). Using the Delphi method for qualitative, participatory action research in health leadership. *International Journal of Qualitative Methods, 13*(1), 1-18.

Foxcroft, C., & Roodt, G. (2013). *An introduction to psychological assessment in the South African context* (4th ed.). Cape Town: Oxford University Press.

Foxcroft, C., & Roodt, G. (2005). *An introduction to psychological assessment in the South African context* (2nd ed.). Cape Town: Oxford University Press.

Frankl, V. E. (1992*). Man's search for meaning: An introduction to logotherapy*. Boston, MA: Beacon Press.

Fuchs, O. (2010). *Kayamandi community placement report 2010*. Unpublished community placement report. Department of Psychology: Stellenbosch University, South Africa.

Fugate, M., Kinicki, A. J., & Ashforth, B. E. (2004). Employability: A psycho-social construct, its dimensions, and applications. *Journal of Vocational Behaviour, 65*, 14-38.

Gati, I. (1986). Making career decisions: A sequential elimination approach. *Journal of Counselling Psychology, 33*(4), 408-4017.

Gati, I., Fassa, N., & Houminer, D. (1995). Applying decision theory to career counselling practice: The sequential elimination approach. *The Career Development Quarterly, 43*(3), 211-220.

Gelatt, H. B. (1995). Future sense: Creating the future. *The Futurist, 3*(2), 35-43.

Geijsendorpher, C. (2008). *The career development of low socioeconomic status black South Africab adolescents: A career systems perspective* (Master's thesis). Nelson Mandela Metropolitan University, Port Elizabeth, South Africa.

Gevers, J., Du Toit, R., & Harilall, R. (1997). Manual for the Self-Directed Search (SDS). *Pretoria, South Africa: Human Sciences Research Council*.

Ginevra, M. C., Pallini, S., Vecchio, G. M., Nota, L., & Soresi, S. (2016). Future orientation and attitudes mediate career adaptability and decidedness. *Journal of Vocational Behaviour*, 95, 102-110.

Glavin, K. W., Haag, R. A., & Forbes, L. K. (2017). Fostering career adaptability and resilience and promoting employability using life design counseling. In Maree, J. G. (Ed.), *Psychology of career adaptability, employability and resilience* (pp. 433-445). New York. NY: Springer.

Gore, P. A., Jr. (2000). Cluster analysis. In H. E. A. Tinsley, & S. D. Brown (Eds.), *Handbook of applied multivariate statistics and mathematical modeling* (pp. 297-321). San Diego, CA: Academic Press.

Gottfredson, L. S. (1981). Circumscription and compromise: A developmental theory of occupational aspirations. *Journal of Counselling Psychology, 28*(6), 545-579.

Gottfredson, L. S. (1983). Creating and criticizing theory. *Journal of Vocational Behaviour*, 23(2), 203-212.

Gottfredson, L. S. (2002). Gottfredson's theory of circumscription, compromise and self-creation. In D. Brown & Associates (Eds.), *Career choice and development* (4th ed., pp.85-148). San Francisco, CA: Jossey-Bass.

Graven, M. H. (2014). Poverty, Inequality and mathematics performance: The case of South Africa's post-apartheid context. *ZDM Mathematics Education, 46*, 1039-1049.

Gravetter, F. J., & Forzano, L. A. B. (2018). *Research methods for the behavioral sciences* (6th Ed). Adelaide Australia: Wadsworth Cengage Learning.

Grobelar, A., Lacante, M., & Lens, W. (2014). *Transition from secondary education to higher education: A three-year longitudinal cognitive-motivational analysis.* Bloemfontein, South Africa: Sun MeDIA

Grossen, S., Grobelar, A. A., & Lacante, M. (2017). Repeated retention or dropout? Disputing Hobson's choice in South African township schools. *South African Journal of Education, 37*(2), 1-11. doi:10.1080/0376835X.2013.830964

Guichard, J. (2005). Life-long self-construction. *International Journal for Educational and Vocational Guidance*, *5*(2), 111-124.

Guichard, J. (2009). Self-constructing. *Journal of Vocational Behaviour, 75*(3), 251-258.

Guichard, J., & Lenz, J. (2005). Career theory from an international perspective. *The Career Development Quarterly, 54*(1), 17-28.

Guichard, J., Pouyaud, J., De Calan, C., & Dumora, B. (2012). Identity construction and career development interventions with emerging adults. *Journal of Vocational Behaviour, 81*(1), 52-58.

Gushue, G. V., Clarke, C. P., Pantzer, K. M., & Scanlan, K. R. L. (2006). Self-efficacy, perceptions of barriers, vocational identity, and the career exploration behaviour of Latino/a high school students. *The Career Development Quarterly*, *54*, 307-317. doi:10.1002/j.2161-0045.2006.tb00196.x

Hair, J. F., Anderson, R. E., Babin, B. J., & Black, W. C. (2010). *Multivariate data analysis: A global perspective* (Vol. 7). Upper Saddle River, NJ: Pearson.

Hackett, G., & Lent, R. W. (1992). Theoretical advances and current inquiry in career psychology. In S. D. Brown & R. W. Lent (Eds.), *Handbook of counselling psychology* (pp. 419-452). Hoboken, NJ: John Wiley & Sons.

Hackett, G., Lent, R. W., & Greenhaus, J. H. (1991). Advances in vocational theory and research: A 20-year retrospective. *Journal of Vocational Behaviour, 38*(1), 3-38.

Hall, D. T. (Ed.). (1996). *The career is dead – Long live the career: A relational approach to careers*. San Francisco, CA: Jossey-Bass.

Halman, L., Luijkx, R., & van Zundert, M. (2005). *Atlas of European Values*. Tilburg, Netherlands: Brill.

Han, H., & Rojewski, J. W. (2015). Gender-specific models of work-bound Korean adolescents' social supports and career adaptability on subsequent job satisfaction. *Journal of Career Development, 42*(2), 149-164.

Hartung, P. J. (2013a). Career construction. In M. L. Savickas (Ed.), *Ten ideas that changed career development* (p. 11). Broken Arrow, OK; NCDA.

Hartung, P. J. (2013b). Career construction counselling. In A. Di Fabio, & J. G. Maree (Eds.), *Psychology of career counselling: New challenges for a new era* (pp. 15-28). Hauppauge, NY: Nova Science.

Hartung, P. J. (2011). Career construction: Principles and practice. In K. Maree (Ed.), *Shaping the story: A guide to facilitating narrative counselling* (pp. 103-120). Rotterdam, Netherlands: Sense.

Hartung, P. J. (2007). Career construction: Principles and practice. In K. Maree (Ed.), *Shaping the story: A guide to facilitating narrative counselling* (pp 103-120). Pretoria, South Africa: Van Schaik.

Hartung, P. J. (2005). Internationalizing career counselling: Emptying our cups and learning from each other. *The Career Development Quarterly*, *54*(1), 12-16. doi: 10.1002/j.2161-0045.2005.tb00136.x

Hartung, P. J., & Blustein, D. L. (2002). Reason, intuition, and social justice: Elaborating on Parsons's career decision-making model. *Journal of Counselling & Development*, *80*(1), 41-47.

Hartung, P. J., & Cadaret, M. C. (2017). Career adaptability: Changing self and situation for satisfaction and success. In K. Maree (Ed.), *Psychology of career adaptability, employability and resilience* (pp. 15-28). Cham: Springer.

Hartung, P. J., Porfeli, E. J., & Vondracek, F. W. (2008). Career adaptability in childhood. *Career Development Quarterly*, *57*, 63–74.

Hartung, P. J., & Taber, B. J. (2015). Narrating identity in career and self-construction. In A. Di Fabio & J. L. Bernaud (Eds), *The construction of the identity in 21st century: A festschrift for Jean Guichard.* (pp. 103-115). New York, NY: Nova Science.

Hartung, P. J., & Taber, B. J. (2008). Career construction and subjective well-being. *Journal of Career Assessment*, *16*(1), 75-85.

Henderson, K. A., Stalnaker, D., & Taylor, G. (1988). The relationship between barriers to recreation and gender-role personality traits for women. *Journal of Leisure Research*, *20*(1), 69-80.

Herr, E. L., & Cramer, S. H. (1992). *Career guidance and counselling through the lifespan: Systematic approaches* (4th ed.). New York, NY: Harper Collins.

Hiller, R.M., Meiser-Stedman, R., Lobo, S., Creswell, C., Fearon, P., Ehlers, A., Murray, L., & Halligan, S.L. (2017). A longitudinal investigation of the role of parental responses in predicting children's post-traumatic distress. *Journal of Child Psychology and Psychiatry*. https://onlinelibrary.wiley.com/doi/full/10.1111/jcpp.12846

Hirschi, A. (2012). Vocational identity trajectories: Differences in personality and development of well-being. *European Journal of Personality*, *26*, 2-12.

Hirschi, A. (2011). Vocational identity as a mediator of the relationship between core self-evaluations and life and job satisfaction. *Applied Psychology, 60*, 622-644. https://doi: 10.1111/j.1464-0597.2011.00450.x

Hirschi, A. (2009). Career adaptability development in adolescence: Multiple predictors and effect on sense of power and life satisfaction. *Journal of Vocational Behaviour, 74*, 145-155.

Holland, J. L. (1974). Vocational guidance for everyone. *Educational Researcher, 3*(1), 9-15. doi:10.3102/0013189X003001009

Holland, J. L. (1997). *Making vocational choices: A theory of vocational personalities and work environments* (3rd ed). Odessa, FL: Psychological Assessment Resources.

Holland, J. L., Johnston, J. A., & Asama, N. F. (1993). The Vocational Identity Scale: A diagnostic and treatment tool. *Journal of Career Assessment, 1*(1), 1-12.

Holdstock, T. L. (2000). *Re-examining psychology: Critical perspectives and African insights*. London, UK: Routledge.

Hooley, T., & Sultana, R. (2016). Career guidance for social justice. *Journal of the National Institute for Career Education and Counselling (NICEC), 36*, 2-11. doi: 10.20856/jnicec.3601

Hsu, C. C., & Sandford, B. A. (2007). The Delphi technique: Making sense of consensus. *Practical Assessment, Research & Evaluation, 12*(10), 1-8.

Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal, 6*(1), 1-55.

Inkson, K. (2004). Images of career: Nine key metaphors. *Journal of Vocational Behaviour, 65*(1), 96-111.

Ibhawoh, B., & Dibua, J. I. (2003). Deconstructing Ujamaa: The legacy of Julius Nyerere in the quest for social and economic development in Africa. *African Journal of Political Science, 8*(1), 59-83.

International Labour Organisation. (2014). *Global unemployment trends: The risk of a jobless recovery*. Retrieved from http://www.ilo.org/global/research/global-reports/global-employment-trends/2014/WCMS_233953/lang--en/index.htm

Isaacson, L. E., & Brown, D. (1993). *Career information, career counselling, & career development* (5th ed.). Boston, MA: Allyn & Bacon.

Janeiro, I. N. (2009). Motivational dynamics in the development of career attitudes among adolescents. *Journal of Vocational Behaviour, 76*, 170-177.doi: 10.1016.j.jvb.2009.12.003

Janeiro, I. N., & Marques, J. F. (2010). Career coping styles: Differences in career attitudes among secondary school students. *International Journal for Educational and Vocational Guidance, 10*(1), 35-48.

Janis, I. L., & Mann, L. (1977). *Decision making: A psychological analysis of conflict, choice, and commitment*. New York, NY: Free Press.

Jansen, J. D. (2009). *Knowledge in the blood: Confronting race and the apartheid past*. Palo Alto, CA: Stanford University Press.

Jaskyte, K. (2016). Work values of public, nonprofit, and business employees: A cross-cultural evidence. *International Journal of Public Administration*, *39*(3), 184-193.

Kamwangamulu, N. M. (1999). Ubuntu in South Africa: A sociolinguistic perspective to a pan-African concept. *Critical Arts*, *13*(2), 24-41.

Kapp, R., Badenhorst, E., Bangeni, B., Craig, T.S., Van Rensburg, V. J., Le Roux, K., Prince, R., Pym, J., & Van Pletzen, E. (2014). Successful students' negotiation of township schooling in contemporary South Africa. *Perspectives in Education*, *32*(3), 50-61.

Karaś, D., Cieciuch, J., Negru, O., & Crocetti, E. (2015). Relationships between identity and well-being in Italian, Polish, and Romanian emerging adults. *Social Indicators Research*, *121*, 727-743. doi: 10.1007/s11205-014-0668-9

Kazuyuki, M., & Kuo-Lin, W. (2006). Illusion of career development theories: For the departure of a developing a demonstrative career development theory. *The Economic Journal of Takasaki City University of Economics*, *49*(2), 17-30.

Keikelame, M. J. (2018). 'The Tortoise under the couch': An African woman's reflections on negotiating insider-outsider positionalities and issues of serendipity on conducting a qualitative research project in Cape Town, South Africa. *International Journal of Social Research Methodology*, *21*(2), 219-230.

Kent, R. (2001). *Data construction and data analysis for survey research*. New York, NY: Palgrave.

Kerperlman, J. L., & Mosher, L. S. (2004). Rural African American adolescents' future orientation: The importance of self-efficacy, control and responsibility, and identity development. *Identity: An International Journal of Theory and Research, 4*(2), 187-208.

Kiangi, A. N. (1998). *Habitat and health in Kayamandi* (Master's thesis). Stellenbosch University, Stellenbosch, South Africa.

King, R. M. (2002). Managing teaching loads – and finding time for feflection and renewal. *Inquiry, 7*(1), 11-21.

Kolb, D. (1984). *The process of experiential learning*. Engelwood Cliffs, NJ: Prentice Hall.

Konstam, V., Celen-Demirtas, S., Tomek, S., & Sweeney, K. (2015). Career adaptability and subjective well-being in unemployed emerging adults: A promising and cautionary tale. *Journal of Career Development*, *42*(6), 463-477

Kornspan, A. S., & Etzel, E. F. (2001). The relationship of demographic and psychological variables to career maturity of junior college student-athletes. *Journal of College Student Development*, *42*(2), 122-132.

Kroger, J., Martinussen, M., & Marcia, J. E. (2010). Identity status change during adolescence and young adulthood: A meta-analysis. *Journal of Adolescence, 33*(5), 683-698. doi: 10.1016/j.adolescence.2009.11.002.

Krueger, R. A., & Casey, M. A. (2014). *Focus groups: A practical guide for applied research*. Thousand Oaks: Sage.

Krumboltz, J. D. (1988). The key to achievement: Learning to love learning. In G. R. Walz (Ed.), *Building strong school counselling programs* (pp. 1-39). Alexandria, VA: American Association for Counselling and Development.

Krumboltz, J. D., Mitchell, A. M., & Jones, G. B. (1976). A social learning theory of career selection. *The Counselling Psychologist*, *6*(1), 71-81.

Krumboltz, J. D., & Nichols, C. (1990). Integrating the social learning theory of career decision making. In W. B. Walsh, & S. H. Osipow (Eds.), *Career counselling: Contemporary topics in vocational psychology* (pp. 159-192). Hillsdale, NJ: Erlbaum.

Kuit, W. (2006). The career development of South African Grade 11 adolescents: A career systems and discursive perspective (Master's thesis). Nelson Mandela Metropolitan University, Port Elizabeth, South Africa.

Laher, S., & Cockcroft, K. (Eds.). (2013). *Psychological assessment in South Africa: Research and applications*. Johannesburg, South Africa: Wits University Press.

Langley, R., Du Toit, R., & Herbst, D. L. (1992). *Manual for the career development questionnaire*. Pretoria: Human Sciences Research Council.

Lannegrand-Willems, L., Perchec, C., & Marchal, C. (2015). Vocational identity and psychological adjustment: A study in French adolescents and emerging adults. *Journal of Adolescence*, *47*, 210-219. doi: 10.1016/j.adolescence.2015.10.005

Law, J., Bunning, K., Byng, S., Farrelly, S., & Heyman, B. (2005). Making sense in primary care: Levelling the playing field for people with communication difficulties. *Disability & Society*, *20*(2), 169-184.

Lease, S. H. (2004). Effect of locus of control, work knowledge, and mentoring on career decision-making difficulties: Testing the role of race and academic institution. *Journal of Career Assessment*, *12*(3), 239-254.

Leavy, P. (Ed.). (2014). *The Oxford handbook of qualitative research*. New York, NY: Oxford University Press.

Leibbrandt, M., Woolard, I., McEwen, H., & Koep, C. (2010*). Employment and inequality outcomes in South Africa.* University of Cape Town, South Africa. Retrieved from http://www.oecd.org/employment/emp/45282868.pdf

Lent, R. W. (2013). Career-life preparedness: Revisiting career planning and adjustment in the new workplace. *The Career Development Quarterly*, *61*(1), 2-14.

Lent, R. W., Brown, S. D., & Hackett, G. (2002). Social cognitive career theory. In D. Brown & Associates (Eds.), *Career choice and development* (4th ed., pp. 255-311). San Francisco, CA: Jossey-Bass.

Lent, R. W., Brown, S. D., & Hackett, G. (2000). Contextual supports and barriers to career choice: A social cognitive analysis. *Journal of Counselling Psychology*, *47(*1), 36-49. doi: 10.1037//0022-0167.47.1.36

Lent, R. W., Brown, S. D., Nota, L., & Soresi, S. (2003). Testing social cognitive interest and choice hypotheses across Holland types in Italian high school students. *Journal of Vocational Behaviour*, *62*(1), 101-118.

Li. X., Hou, Z., & Jia, Y. (2015). The influence of social comparison on career decision-making: Vocational identity as a moderator and regret as a mediator. *Journal of Vocational Behaviour, 86,* 10-19. doi:10.1016/j.jvb.2014.10.003

Lindstrom, L., Kahn, L. G., & Lindsey, H. (2013). Navigating the early career years: Barriers and strategies for young adults with disabilities. *Journal of Vocational Rehabilitation*, *39*(1), 1-12.

Little, T. D. (2013). *Longitudinal structural equation modeling*. New York, NY: Guilford Press.

London, L., & MacDonald, H. (2014). Transnational excursions: The ethics of northern anthropological investigations going south. In D. Posel & F.C. Ross (Eds.), *Ethical quandaries in social research* (pp. 93-110). Cape Town: Human Sciences Research Council Press.

Lucas, E. B., Gysbers, N. C., Buescher, K. L., & Heppner, P. (1988). My Vocational Situation: Normative, psychometric, and comparative data. *Measurement and Evaluation in Counselling and Development, 20,* 162-170.

Luft, J., & Ingham, H. (1961a). The Johari window. *Human Relations Training News*, *5*(1), 6-7.

Luft, J., & Ingham, H. (1961b). The Johari Window: A graphic model of awareness in interpersonal relations. *Human Relations Training News*, *5*(9), 6-7.

Luft, J. (1969). *Of human interaction: The Johari model*. Palo Alto, CA: Mayfield.

Luyckx, K., Goossens, L., & Soenens, B. (2006a). A developmental contextual perspective on identity construction in emerging adulthood: Change dynamics in commitment formation and commitment evaluation. *Developmental Psychology*, *42*(2), 366-380.

Luyckx, K., Goossens, L., Soenens, B., & Beyers, W. (2006b). Unpacking commitment and exploration: Preliminary validation of an integrative model of late adolescent identity formation. *Journal of Adolescence*, *29*, 361-378. doi:10.1016/j.adolescence.2005.03.008

Luyckx, K., Goossens, L., Soenens, B., Beyers, W., & Vansteenkiste, M. (2005). Identity statuses based on 4 rather than 2 identity dimensions: Extending and refining Marcia's paradigm. *Journal of Youth and Adolescence, 34,* 605-618. doi:10.1007/s10964-005-8949-x.

Luyckx, K., Schwartz, S. J., Berzonsky, M. D., Soenens, B., Vansteenkiste, M., Smits, I., & Goosens, L. (2008). Capturing ruminative exploration: Extending the four-dimensional model of identity formation in late adolescence. *Journal of Research in Personality*, *42*, 58-82. doi: 10.1016/j.jrp.2007.04.004

MacDonald, K., & Greggans, A. (2008). Dealing with chaos and complexity: the reality of interviewing children and families in their own homes. *Journal of Clinical Nursing*, *17*(23), 3123-3130.

Madigan, S. (2011). *Narrative therapy*. Washington, DC: American Psychological Association.

Magruder, J. R. (2010). Intergenerational networks, unemployment, and persistent inequality in South Africa. *American Economic Journal: Applied Economics*, *2*(1), 62-85.

Mahoney, M. J. (2002). Constructivism and positive psychology. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 745-750). London, UK: Oxford University Press.

Maesala, J. P. (1994). *A study of Black matric pupils who make traditional career choices versus non-traditional career choices with regard to personality traits, vocational needs and family background* (Master's thesis). Stellenbosch University, Stellenbosch, South Africa.

Mäkinen, S., & Vanhalakka-Ruoho, M. (2018). Guidance center as sites for construction of agency among young people on the educational margins. In V. Cohen-Scali, J. Rossier & L. Nota (Eds.), *New perspectives on career counselling and guidance in Europe* (pp. 167-185). Cham: Springer.

Mampane, R., & Bouwer, C. (2011). The influence of township schools on the resilience of their learners. *South African Journal of Education 31*(1), 114-126.

Marcia, J. E. (1966). Development and validation of ego-identity status. *Journal of Personality and Social Psychology, 3*, 551-558. doi: 10.1037/h0023281

Marcia, J. E. (1993). The status of the statuses: Research review. In J. E. Marcia, A. S. Waterman, D. R. Matteson, S. L. Archer, & J. L. Orlofsky (Eds.), *Identity: A handbook for psychosocial research* (pp. 22-41). New York: Springer-Verlag.

Maree, K. (2017). Utilizing career adaptability and career resilience to promote employability and decent work and alleviate poverty. In J.G. Maree (Ed.), *Psychology of career adaptability, employability and resilience* (pp. 349-373). New York: Springer.

Maree, J. G. (2016). Career construction as a way of resolving career indecision. *South African Journal of Higher Education*, *30*(3), 170-192. doi: 10.20853/30-3-665.

Maree, J. G. (2015a). Research on life-design in (South) Africa: A qualitative analysis of outcomes of six case study participants. *South African Journal of Psychology*, *45*, 332-348.

Maree, J. G. (2015b). Poverty and life-designing. In L. Nota & J. Rossier (Eds.), *Handbook of the life-design paradigm: From practice to theory and from theory to practice* (pp. 233-248). Göttingen, Germany: Hogrefe.

Maree, J. G. (2014). Creating a sense of hope: The essence of career construction for life-designing in a developing country context. In M. Pope, L.Y. Flores, & J. Rottinghaus (Eds.), *The role of values in careers* (pp. 213-232). Charlotte, NC: Information Age.

Maree, J. G. (2013). Latest developments in career counselling in South Africa: Towards a positive approach. *South African Journal of Psychology*, *43*(4), 409-421.

Maree, J. G. (2012a). Career counselling in the 21st century: Merging qualitative and quantitative approaches to facilitate "best practice."*Cypriot Journal of Educational Sciences, 7*(1), 1-6. Retrieved from http:// www.world-education-center.org/index.php.cjes

Maree, J. G. (2012b). Career adapt-abilities scale—South African form: Psychometric properties and construct validity. *Journal of Vocational Behaviour*, *80*(3), 730-733.

Maree, J. G. (2010a). Brief overview of the advancement of postmodern approaches to career counselling. *Journal of Psychology in Africa*, *20*(3), 361-368. Retrieved fromhttp://repository.up.ac.za/bitstream/handle/2263/16150/Maree_Brief%282010%29.pdf?sequence=1.

Maree, K. (2010b). *Career counselling: Methods that work*. Cape Town: Juta and Company Ltd.

Maree, J. G. (2010c). Editorial: Reassessing career counselling in Africa in the 21st century: Breathing new life into qualitative approaches. *Journal of Psychology in Africa, 20*(3), 353-358.

Maree, J. G., & Beck, G. (2004). Using various approaches in career counselling for traditionally disadvantaged (and other) learners: Some limitations of a new frontier. *South African Journal of Education, 24*(1), 80-87. Retrieved from http://www.ajol.info/index.php/saje/article/viewFile/24970/20654

Maree, J. G., Ebersöhn, L. E., & Biagione-Cerone, A. (2010). The effect of narrative career facilitation on the personal growth of disadvantaged student: A case study. *Journal of Psychology in Africa*, *20*(3), 403-412.

Maree, K., Ebersöhn, L., & Molepo, M. (2006). Administering narrative career counselling in a diverse setting: Trimming the sails to the wind. *South African Journal of Education 26*(1), 49-60.

Maree, J. G., & Molepo, J. M. (2007). Changing the approach to career counselling in a disadvantaged context: A case study. *Australian Journal of Career Development*, *16*(3), 62-70.

Maree, J. G., & Morgan, B. (2012). Toward a combined qualitative-quantitative approach: Advancing postmodern career counselling theory and practice. *Cypriot Journal of Educational Sciences, 7*(4), 311-325.

Masten, A. S., & Tellegen, A. (2012). Resilience in developmental psychopathology: Contributions of the project competence longitudinal study. *Development and Psychopathology*, *24*(2), 345-361.

Matebeni, S. (2014). My best participants' informed consent. In D. Posel & F. C. Ross (Eds.), *Ethical quandaries in social research* (pp. 125-139). Cape Town, South Africa: Human Sciences Research Council Press.

Matshabane, O. P. (2016). *Exploring the influence of role models on the career development process of school-going adolescents from a low-income community in South Africa* (Master's thesis). Stellenbosch University, Stellenbosch, South Africa.

Mau, W. C. (2000). Cultural differences in career decision-making styles and self-efficacy. *Journal of Vocational Behaviour*, *57*(3), 365-378. doi: 10.1006/jvbe.1999.1745

McGrath, S., & Akoojee, S. (2007). Education and skills for development in South Africa: Reflections on the accelerated and shared growth initiative for South Africa. *International Journal of Educational Development*, *27*(4), 421-434.

McCosker, H., Barnard, A., & Gerber, R. (2001). Undertaking sensitive research: Issues and strategies for meeting the safety needs of all participants. In *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*, 2(1). doi: 10.17169/fqs-2.1.983

McIlveen, P., McGregor-Bayne, H., Alock, A. & Hjertum, E. (2003). Evaluation of a semi-structured career assessment interview derived from systems theory framework. *Australian Journal of Career Development, 12*(3), 1-24.

McIlveen, P., & Patton, W. (2007). Narrative career counselling: Theory and exemplars of practice. *Australian Psychologist*, *42*(3), 226-235.

McIlveen, P., & Patton, W. (2006). A critical reflection on career development. *International Journal for Educational and Vocational Guidance*, *6*, 15-27.

McMahon, M. (2005). Career counselling: Applying the systems theory framework of career development. *Journal of Employment Counselling*, *42*, 29-38.

McMahon, M., Arthur, N., & Collins, S. (2008a). Social justice and career development: Looking back, looking forward. *Australian Journal of Career Development*, *17*(2), 21-29.

McMahon, M., & Patton, W. (2002). Using qualitative assessment in career counselling. *International Journal for Educational and Vocational Guidance*, *2*(1), 51-66.

McMahon, M. L., Patton, W., & Watson, M. (2017). *My system of career influences-MSCI (Adolescent): A qualitative career assessment reflection process*. Camberwell, Victoria, Australia: Australian Academic Press.

McMahon, M. L., Patton, W., & Watson, M. (2004). Creating career stories through reflection: An application of the systems theory framework of career development. *Australian Journal of Career Development*, *13*(3), 13-17.

McMahon, M. L., Patton W., & Watson, M. (2003). Developing qualitative career assessment processes. *The Career Development Quarterly*, *51*, 194-202.

McMahon, M., & Patton, W. (2002). Using qualitative assessment in career counselling. *International Journal for Educational and Vocational Guidance*, *2*(1), 51-66. doi:10.1023/A:1014283407496

McMahon, M., & Watson, M. (2013). Story telling: Crafting identities. *British Journal of Guidance & Counselling*, *41*(3), 277-286.

McMahon, M. L. & Watson. M. B. (2008). Systematic influences on career development: Assisting clients to tell their career stories. *The Career Development Quarterly*, 56, 280-288.

McMahon, M., Watson, M., & Bimrose, J. (2012a). Career adaptability: A qualitative understanding from the stories of older women. *Journal of Vocational Behaviour*, *80*(3), 762-768.

McMahon, M., Watson, M., Chetty, C., & Hoelson, C. N. (2012b). Examining process constructs of narrative career counselling: An exploratory case study. *British Journal of Guidance & Counselling*, *40*(2), 127-141.

McMahon, M., Watson, M., Chetty, C., & Hoelson, C. (2012c). Story telling, career assessment and career counselling. *South African Journal of Higher Education*, *26*(1), 729-741.

McMahon, M., Watson, M., Foxcroft, C., & Dullabh, A. (2008b). South African adolescents' career development through the lens of the systems theory framework: An exploratory study. *Journal of Psychology in Africa*, *18*(4), 531-538.

McMahon, M., & Yuen, M. (2009). Career counselling and internationalization. *Asian Journal of Counselling*, *16*(2), 91-111.

Mdikana, A. A., Seabi, J., Ntshangase, S., & Sandlana, N. (2008). Career identity related decision making among IsiXhosa-speaking adolescents. *Journal of Psychology in Africa*, *18*(4), 615-619.

Meeus, W. (2011). The study of adolescent identity formation 2000–2010: A review of longitudinal research. *Journal of Research on Adolescence*, *21*(1), 75-94. doi: 10.1111/j.1532-7795.2010.00716.x

Meeus, W., Van de Schoot, R., Keijsers, L., Schwartz, S.J., & Branje, S. (2010). On the progression and stability of adolescent identity formation: A five-wave longitudinal study in early-to-middle and middle-to-late adolescence. *Child Development, 81*(5), 1565-1581.

Meeus, W., Iedema, J., Helsen, M., & Vollebergh, W. (1999). Patterns of adolescent identity development: Review of literature and longitudinal analysis. *Developmental Review, 19*, 419-461.

Mfecane, S. (2014). Friends in the field. In D. Posel & F.C. Ross (Eds.), *Ethical quandaries in social research* (pp. 125-139). Cape Town: Human Sciences Research Council Press.

Miller, M., Cowger, E., Young, T., Tobacyk, J., Sheets, T., & Loftus, C. (2008). Assessing Holland types on the internet: A comparative study. *College Student Journal*, *42*(2), 270-275.

Mitchell, A. M., & Jones, G. B. (Eds.). (1979). *Social learning theory and career decision making*. Cranston, RI: Carroll.

Mitchell, L. K., & Krumboltz, J. D. (1990). Social learning approach to career decision-making: Krumboltz's theory. In D. Brown, L. Brooks & Associates (Eds), *Career choice and development: Applying contemporary theories to practice* (2nd ed., pp. 145-196). San Francisco, CA: Jossey Bass.

Mitchell, L. K., & Krumboltz, J. D. (1996). Krumboltz's learning theory of career choice and counselling. In D. Brown & L. Brooks (Eds.), *Career choice and development* (3rd ed., pp. 233-280). San Francisco, CA: Jossey-Bass

Mkhize, N. (2015). Qualitative career assessment in African contexts. In M. McMahon & M. Watson (Eds.), *Career assessment: Qualitative approaches* (pp. 247-254), Rotterdam, Netherlands: Sense.

Mkhize, N. (2012). Career counselling and indigenous populations: Implications of worldviews. In M. Watson & M. McMahon (Eds.), *Career development: Global issues and challenges* (pp. 125-142). New York, NY: Nova Science.

Mkhize, N. J., & Frizelle, K. (2000). Hermeneutical-dialogical approaches to career development: An exploration. *South African Journal of Psychology, 30*, 1-8.

Mpofu, E., Maree, J. G., Kasayira, J. M., & Van der Westhuizen, C. N. (2011). School counselling. In E. Mpofu (Ed.), *Counselling people of African ancestry* (pp. 111-125). New York, NY: Cambridge University Press.

Moon, J. A. (1999a). *Learning journals: A handbook for academics, students and professional development*. London, UK: Routledge.

Moon, J. (1999b). *Reflection in learning and professional development*. Abingdon, Oxon: Routledge Falmer.

Monk, G. E., Winslade, J. E., Crocket, K. E., & Epston, D. E. (1997). *Narrative therapy in practice: The archaeology of hope*. San Francisco, CA: Jossey-Bass.

Morgan, B. (2010). Career counselling in the 21st century: A reaction article. *Journal of Psychology in Africa*, *20*(3), 501-503.

Morgan, D. L. (2007). Paradigms lost and pragmatism regained: Methodological implications of combining qualitative and quantitative methods. *Journal of Mixed-methods Research*, *1*(1), 48-76.

Morgan, A. (2000). *What is narrative therapy? An easy-to-read introduction*. Adelaide, Australia: Dulwich Centre Publications.

Morgan, B., De Bruin, G. P., & De Bruin, K. (2015). Constructing Holland's hexagon in South Africa: Development and initial validation of the South African career interest inventory. *Journal of Career Assessment*, *23*(3), 493-511.

Mosoetsa, S. (2006). *Urban livelihoods and intra-household dynamics: The case of Mpumalanga and Enhlalakahle townships, Kwazulu Natal, South Africa* (Doctoral dissertation). University of the Witswatersrand, Johannesburg, South Africa.

Moynagh, M., & Worsley, R. (2005). *Working in the twenty-first century*. Leeds, UK: ESRC Future of Work Programme and King's Lynn, The Tomorrow Project.

Msila, V. (2015). *Ubuntu: Shaping the current workplace with (African) wisdom*. Randburg: Knowres Publishing.

Munsaka, E. (2009). An investigation into the influence of family and community on school dropout among rural adolescents in Zambia. *New Voices in Psychology, 5*(2), 64-77.

Naicker, A. (1994). The psycho-social context of career counselling in South African schools. *South African Journal of Psychology, 24*(1), 27-34. doi:10.1177/008124639402400104

Naidoo, A. V., Pretorius, T. B., & Nicholas, L. (2017). The emergence of career psychology in South Africa: A socio-historical perspective. In G. B. Stead & M. B. Watson (Eds.), *Career psychology in the South African context* (3rd ed., pp. 1-25). Pretoria: Van Schaik Publishers.

Nauta, M. M. (2010). The development, evolution, and status of Holland's Theory of Vocational Personalities: Reflections and future directions for counselling psychology. *Journal of Counselling Psychology*, *57*, 11-22.

Negru-Subtirica, O., & Pop, E. I. (2016). Longitudinal links between career adaptability and academic achievement in adolescence. *Journal of Vocational Behavior*, *93*, 163-170.

Negru-Subtirica, O., Pop, E. I., & Crocetti, E. (2015). Developmental trajectories and reciprocal associations between career adaptability and vocational identity: A three-wave longitudinal study with adolescents. *Journal of Vocational Behaviour*, *88*, 131-142. doi: 10.1016/j.jvb.2015.03.004.

Ngcobo, T., & Tikly, L. P. (2010). Key dimensions of effective leadership for change: A focus on township and rural schools in South Africa. *Educational Management Administration & Leadership*, *38*(2), 202-228.

Nicholas, L., Naidoo, A. V., & Pretorius, T. B. (2006). A historical perspective of career psychology in South Africa. In G. B. Stead & M. B. Watson (Eds.), *Career psychology in the South African context* (2nd ed., pp. 1-10). Pretoria: Van Schaik Publishers.

Nunnally, J. (1978). *Psychometric methods*. New York, NY: McGraw-Hill

Nurmi, J. E., Salmela-Aro, K., & Koivisto, P. (2002). Goal importance and related achievement beliefs and emotions during the transition from vocational school to work: Antecedents and consequences. *Journal of Vocational Behaviour*, *60*(2), 241-261.

Nussbaum, B. (2003). African culture and ubuntu: Reflections of a South African in America. *Perspectives*, *17*(1), 1-12.

Nussbaum B., Palsule, S., & Mkhize, V. (2010). *Personal growth, African style*. Johannesburg: Penguin Books.

NVivo. (2012). *Qualitative data analysis Software; Version 10*. QSR International Pty Ltd. Retrieved from https://www.qsrinternational.com/nvivo.

O'Brien, K. M. (2001). The legacy of Parsons: Career counselors and vocational psychologists as agents of social change. *The Career Development Quarterly*, *50*(1), 66-76.

Okoli, C., & Pawlowski, S. D. (2004). The Delphi method as a research tool: an example, design considerations and applications. *Information & Management*, *42*(1), 15-29.

Öncel, L. (2014). *Career Adapt-abilties Scale*: Convergent validity of subscale scores. *Journal of Vocational Behaviour*, *85*, 13-17.doi: 10.1016/j.jvb.2014.03.006

Osipow, S. H. (1983). *Theories of career development* (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall.

Osipow, S. H., & Fitzgerald, L. F. (1996). *Theories of career development* (4th. ed.) Boston, MA: Allyn & Bacon.

O'Toole, S. (2015). Indigenous mentoring and coaching. *Training & Development*, *42*(5), 10-11.

Owusu-Ansah, F. E., & Mji, G. (2013). African indigenous knowledge and research. *African Journal of Disability*, *2*(1), 1-5.

Paredes-Canilao, N., & Babaran-Diaz, M. A. (2013). Sikolohiyang Pilipino: 50 years of critical-emancipatory social science in the Philippines. *Annual Review of Critical Psychology*, *10*, 765-783.

Parsons, F. (1909). *Choosing a vocation*. Boston, MA: Houghton Mifflin.

Patton, W. (2008). Recent developments in career theories: The influences of constructivism and convergence. In J. A. Athanasou & R. van Esbroeck (Eds.), *International handbook of career guidance* (pp. 133-156). Dordrecht, Netherlands: Springer.

Patton, M. Q. (1990). *Qualitative evaluation and research methods*. Thousand Oaks, CA: Sage Publications.

Patton, W., Bartrum, D. A., & Creed, P. A. (2004). Gender differences for optimism, self-esteem, expectations and goals in predicting career planning and exploration in adolescents. *International Journal for Educational and Vocational Guidance, 4*(3),193-209.

Patton, W., Creed, P.A., & Watson, M. (2003). Perceived work related and non-work related barriers in the career development of Australian and South African adolescents. *Australian Journal of Psychology, 55*(2), 74-82. doi:10.1080/00049530412331312924

Patton, W., & Lokan, J. (2001). Perspectives on Donald Super's construct of career maturity. *International Journal for Educational and Vocational Guidance, 1*(31), 31-48. doi:10.1023/A:1016964629452

Patton, W., & McMahon, M. (2014). *Career development and systems theory: Connecting theory and practice* (2nd ed). Dordrecht, Netherlands: Springer.

Patton, W., & McMahon. M. (2006). The systems theory framework of career development and counselling: Connecting theory and practice. *International Journal for the Advancement of Counselling, 28*(2), 153-166.

Patton, W., & McMahon, M. (1999). *Career development and systems theory: A new relationship*. Pacific Grove, CA: Brooks.

Peavy, R. V. (1993). Constructivist Counselling: A Prospectus. *Guidance & Counselling, 9*(2), 3-12.

Peavy, R. V. (1992). A constructivist model of training for career counsellors. *Journal of Career Development, 18*(3), 215-228.

Perry, J. C., & Smith, C. (2017). Career choice and poverty. In G. B. Stead & M. B. Watson (Eds.), *Career psychology in the South African context* (3rd ed., pp. 158-173). Pretoria: Van Schaik Publishers.

Peterson, G. W., Lumsden, J. A., Sampson, J. P. Jr., Reardon, R. C., & Lenz, J. G. (2002a). In S. G. Niles (Ed.), *Adult career development: Concepts, issues and practices* (3rd ed., pp 98-117). Alexandria, VA: National Career Development Association.

Peterson, G. W., Sampson, J. P. Jr., Lenz, J. G., & Reardon, R. C. (2002b). A cognitive information processing approach to career problem solving and career decision making. In D. Brown & Associates (Eds.), *Career choice and development* (4th ed, pp. 312-372). San Francisco, CA: Jossey-Bass.

Peterson, G. W., Sampson, J. P. Jr., & Reardon, R. C. (1991). *Career development and services: A cognitive approach*. Pacific Grove, CA: Brooks/Cole.

Peterson, G. W., Sampson, J. P. Jr., Reardon, R. C., & Lenz, J. G. (1996). Becoming career problem solvers and decision makers: A cognitive information processing approach. *Career Choice and Development, 3*, 423-475.

Porfeli, E. J., Lee, B., &Vondracek, F. W. (2013). Identity development and careers in adolescents and emerging adults. In W. B. Walsh, M. L. Savickas, & P. Hartung (Eds.), *Handbook of vocational psychology* (pp.133-154). New York, NY: Routledge Press.

Posel, D. (2014). In depth, out of my depth: Research and care in the field of HIV and AIDS research. In D. Posel & F. C. Ross (Eds.), *Ethical quandaries in social research* (pp. 153-167). Cape Town, South Africa: Human Sciences Research Council Press.

Posel, D., & Ross, F. C. (2014). Opening up the quandaries of research ethics: Beyond the formalities of institutional ethical review. In D. Posel & F. C. Ross (Eds.), *Ethical quandaries in social research* (pp. 1-26). Cape Town, South Africa: Human Sciences Research Council Press.

Porfeli, E. J., Lee, B., Vondracek, F. W., & Weigold, I. K. (2011). A multi-dimensional measure of vocational identity status. *Journal of Adolescence, 34*, 853-871. doi:10.1016/j.adolescence.2011.02.001

Porfeli, E. J., & Savickas, M. L. (2012). *Career Adapt-Abilities Scale-USA Form*: psychometric properties and relation to vocational identity. *Journal of Vocational Behaviour, 80*(3), 748-753. doi:10.1016/jvb.2012.01.009

Pouyaud, J., Vignoli, E., Dosnon, O., & Lallemand, N. (2012). Career adapt-abilities scale-France form: Psychometric properties and relationships to anxiety and motivation. *Journal of Vocational Behaviour, 80*(3), 692-697.

Powell, C. (2003). The Delphi technique: Myths and realities. *Journal of Advanced Nursing*, *41*(4), 376-382.

Pulakos, E. D., Schmitt, N., Dorsey, D. W., Arad, S., Borman, W. C., & Hedge, J. W. (2002). Predicting adaptive performance: Further tests of a model of adaptability. *Human Performance*, *15*(4), 299-323.

Prilleltensky, I., & Stead, G. B. (2012). Critical psychology and career development: Unpacking the adjust–challenge dilemma. *Journal of Career Development*, *39*(4), 321-340.

Pryor, R. (2008). Does career counselling matter/ A personal reflection. *Australian Journal of Career Development*, *17*(2), 55-59.

Rabe, M. (2006). Being a father in a man's world: The experiences of gold mine workers. In L. Richter, & R. Morrell (Eds.), *Baba men and fatherhood in South Africa* (pp. 250-264). Cape Town, South Africa: HSRC Press.

Ramphele, M. (2002). *Steering by the stars. Being young in South Africa*. Cape Town: Tafelberg.

Rankin, N. A., & Roberts, G. (2011). Youth unemployment, firm size and reservation wages in South Africa. *South African Journal of Economics*, *79*(2), 128-145.

Ratele, K. (2007). Make indigenes unconscious of Whiteness: A response to Green, Sonn, and Matsebula. *South African Journal of Psychology*, *37*(3), 431-436.

Reardon, R. C., Lenz, J. G., Sampson, J. P. Jr., & Peterson, G. W. (2011). Big questions facing vocational psychology: A cognitive information processing perspective. *Journal of Career Assessment, 19*, 240-250.

Reardon, R. C., Lenz, J. G., Sampson, J. P. Jr., & Peterson, G. W. (2009). *Career development and planning: A comprehensive approach* (3rd ed.). Pacific Grove, CA: Brooks/Cole.

Reardon, R. C., Lenz, J. G., Sampson, J. P. Jr., & Peterson, G. W. (2000). *Career development and planning: A comprehensive approach*. Belmont, CA: Wadsworth/Thompson Learning.

Richardson, M. S. (2012a). Counselling for work and relationship. *The Counselling Psychologist, 40*(2), 190-242.

Richardson, M .S. (2012b). The ongoing social construction of the counselling for work and relationship perspective. *The Counselling Psychologist, 40*(2), 279-290.

Rock, D. (2011). The location shall be called Kaya Mandi: A history of Kaya Mandi (Master's thesis). Stellenbosch University, Stellenbosch, South Africa.

Rossier, J. (2015). Career adaptability and life design. In L. Nota & J. Rossier (Eds.), *Handbook of life design: From practice to theory and from theory to practice* (pp. 153-167). Boston, MA: Hogrefe.

Rossier, J., Zecca, G., Stauffer, S. D., Maggiori, C., & Dauwalder, J. P. (2012). Career Adapt-Abilities Scale in a French-speaking Swiss sample: Psychometric properties and relationships to personality and work engagement. *Journal of Vocational Behaviour, 80*(3), 734-743.

Rottinghaus, P. J., Day, S. X., & Borgen, F. H. (2005). The Career Futures Inventory: A measure of career-related adaptability and optimism. *Journal of Career Assessment, 13*(1), 3-24.

Rounds, J. B., & Tracey, T. J. (1990). From trait-and-factor to person-environment fit counselling theory and process. In W. B. Walsh & S. H. Osipow (Eds.), *Career counselling: Contemporary Topics in Vocational Psychology* (pp. 1-45). Hillsdale, NJ: Erlbaum.

Ryan, L. (2015). "Inside" and "outside" of what or where? Researching migration through multi-positionalities. *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research, 16*(2). http://nbn-resolving.de/urn:nbn:de:0114-fqs1502175.

Ryan, L., & Lörinc, M. (2016). 'Getting your foot in the door': The role of serendipity, heightened sensitivity and social networks in recruiting education research participants. 1st International Symposium on Qualitative Research, *CIAIQ2016, 5*, 87-96.

Sampson, J. P. Jr. (2009). Modern and postmodern career theories: The unnecessary divorce. *The Career Development Quarterly, 58*, 91-96.

Sampson, J. P. Jr., Reardon, R. C., Peterson, G. W., & Lenz, J. G. (2004). Career counselling and services: A cognitive information processing approach. Belmont, CA: Brooks Cole.

Sandelowski, M. (2003). Tables or tableaux? Writing and reading mixed methods studies. In A. Tashakkori, & C. Teddie (Eds.), *Handbook of mixed methods in social & behavioral research* (pp. 321-350). Thousand Oaks, CA: Sage.

Santilli, S., Di Maggio, I., Marcionetti, J., & Grossen, S. (2018). Life-designing and positive youth development. In V. Cohen-Scali, J. Rossier & L. Nota (Eds.), *New perspectives on career counselling and guidance in Europe: Building careers in changing and diverse societies* (pp. 39-52). Cham: Springer.

Santilli, S., Grossen, S., & Nota, L. (in press). Career adaptability, resilience, and life satisfaction in Italian and Belgian middle school students. *Journal of Adolescence*.

Santilli, S., Ginevra, M. C., Sgaramella, T. M., Nota, L., Ferrari, L., & Soresi, S. (2015). Design my future. An instrument to assess future orientation and resilience. *Journal of Career Assessment*, *25*(2), 281-295.doi: 10.1177/1069072715621524.

Santilli, S., Nota, L., Ginevra, M. C., & Soresi, S. (2014). Career adaptability, hope and life satisfaction in workers with intellectual disability. *Journal of Vocational Behaviour*, *85*(1), 67-74. doi: 10.11/77/0894845316633793

Santilli, S., Marcionetti, J., Rochat, S., Rossier, J., & Nota, L. (2017). Career adaptability, hope, optimism, and life satisfaction in Italian and Swiss adolescents. *Journal of Career Development*, *44*(1), 62-76.

Santilli, S., Marcionetti, J., Rochat, S., Rossier, J., Nota, L. (2016). Career adaptability, hope, optimism, and life satisfaction in Italian and Swiss adolescents. *Journal of Career Development*, *44*(1), 62-76. doi: 10.1177/0894845316633793

Sarbin, T. (Ed.) (1986). *Narrative psychology: The storied nature of human conduct*. New York, NY: Praeger.

Savickas, M. L. (2015a). *Life-design counselling manual*. Publisher: Author.

Savickas, M. L. (2015b). Career counselling paradigms: Guiding, developing, and designing. In P. J. Hartung, M. L. Savickas, & W. B. Walsh (Eds.), *APA handbook of career intervention,* (Vol. 1, pp.129-144). Washington: American Psychological Association. doi: 10.1037/14438-000

Savickas, M. L. (2013a). The theory and practice of career construction. In S. D. Brown & R. W. Lent (Eds.), C*areer development and counselling: Putting theory and research to work* (2nd ed., pp. 147-186). Hoboken, NJ: Wiley.

Savickas, M. L. (2013b). The 2012 Leona Tyler award address: Constructing careers—Actors, agents, and authors. *The Counselling Psychologist*, *41*(4), 648-662.

Savickas, M. L. (2012). Life-design: A paradigm for career intervention in the 21st century. *Journal of Counselling & Development*, *90*(1), 13-19.

Savickas, M. L. (2011a). Prologue: Reshaping the story of career counselling. In K. Maree (Ed.), *Shaping the story: A guide to facilitating narrative career counselling* (pp. 1-3). Rotterdam, Netherlands: Sense Publishers.

Savickas, M. L. (2011b). *Career counselling*. Washington, DC: American Psychological Association.

Savickas, M. L. (2011c). Constructing careers: Actor, agent, and author. *Journal of Employment Counselling*, *48*(4), 179-181.

Savickas, M. L. (2011d). New questions for vocational psychology: Premises, paradigms, and practices. *Journal of Career Assessment, 19*(3), 251-258. doi:10.1177/1069072710395532

Savickas, M. L. (2009). Career-style counseling. In T. J. Sweeney (Ed.), *Adlerian counseling and psychotherapy: A practitioner's approach* (5th ed., pp. 201-205). New York, NY: Routledge.

Savickas, M. L. (2008). Helping people choose jobs: A history of the guidance profession. In J. A. Athanasou & R. Van Esbroeck (Eds.), *International handbook of career guidance* (pp. 97-113). Dordrecht, Netherlands: Springer.

Savickas, M. L. (2007). Prologue: Reshaping the story of career counselling. In K. Maree (Ed.), *Shaping the story: A guide to facilitating narrativecounselling* (pp. 1-3). Pretoria: Van Schaik Publishers.

Savickas, M. L. (2005). The theory and practice of career construction. In S. D. Brown & R. W. Lent (Eds.), *Career development and counselling: Putting theory and research to work* (pp. 42-70). Hoboken, NJ: Wiley & Sons.

Savickas, M. L. (2002). Reinvigorating the study of careers. *Journal of Vocational Behaviour, 61*, 381-385. doi:10.1006/jvbe.2002.1880

Savickas, M. L. (2001). A developmental perspective on vocational behaviour: Career patterns, salience, and themes. *International Journal for Educational and Vocational Guidance, 1*(1-2), 49-57.

Savickas, M. L. (1997). Career adaptability: An integrated construct for life-span, life-space theory. *The Career Development Quarterly, 45*, 247-259. doi:10.1002/j.2161-0045.1997.tb00469.x

Savickas, M., & Lent, R. W. (Eds.). (1994). *Convergence in career development theories: Implications for science and practice*. Palo Alto, CA: Consulting Psychologists Press.

Savickas, M. L., Nota, L., Rossier, J., Dauwalder, J. P., Duarte, M. E., Guichard, J., Soresi, S., Van Esbroeck, R., & Van Vianen, A. E. M. (2009). Life-designing: A paradigm for career construction in the 21st century. *Journal of Vocational Behaviour, 75*(3), 239-250. doi:10.1016/j.jvb.2009.04.004

Savickas, M. L., & Porfeli, E. J. (2012a). Career Adapt-abilities Scale: Construction, reliability, and measurement equivalence across 13 countries. *Journal of Vocational Behaviour, 80*(3), 661-673. doi:10.1016/j.jvb.2014.02.011

Savickas, M. L., & Porfeli, E. J. (2012b). Career Adapt-abilities Scale-USA form: Psychometric properties and relation to vocational identity. *Journal of Vocational Behaviour, 80*(3), 748-753.

Shin, Y-J., & Kelly, K. R. (2012). Cross-cultural comparison of the effects of optimism, intrinsic motivation, and family relations on vocational identity. *The Career Development Quarterly, 61*, 141-160. doi: 10.1002/j.2161-0045.2013.0043.x

Schön, D. (2017). *The Reflective Practitioner: How Professionals Think in Action.* London, UK: Routledge.

Schultheiss, D. E. P., & Stead, G. B. (2004). Construct validity of the career myths scale among South African adolescents. *Journal of Psychology in Africa*, *14*(1), 9-15.

Schwartz, S. J. (2005). A new identity for identity research: Recommendations for expanding and refocusing the identity literature. *Journal of Adolescent Research, 20,* 293-308.

Seabi, J., Alexander, D., & Maite, O. (2010). Parental involvement in career development among disadvantaged adolescents. *Journal of Psychology in Africa*, *20*(3), 491-496.

Severy, L. E. (2008). Analysis of an online career narrative intervention: "What's my story?" *The Career Development Quarterly*, *56*(3), 268-273. doi:10.1002/j.2161-0045. 2008.tb00041.x

Schwab, K. (2016). *The Fourth Industrial Revolution: What it means, how to respond*. World Economic Forum. Available at http://www.weforum.org/agenda/2016/01/the-fourth-industrial-revolution-what-it-means-and-how-to-respond

Sharf, R. S. (2013). *Applying career development theory to counseling* (6th ed). Pacific Grove, CA: Cengage Learning, Thomas Brooks/Cole

Shefer, T. (2011). Adolescence. In L. Swartz, C. de la Rey, N. Duncan, L. Townsend, & V. O'Neil (Eds.), *Psychology: An introduction* (3rd ed., pp. 86-98). Cape Town: Oxford University Press.

Sidiropoulou-Dimakakou, D., Mylonas, K., & Argyropoulou, K. (2015). Self-efficacy in career planning: A new approach to career exploration. *International Journal of Learning, Teaching and Educational Research*, *11*(2), 40-54.

Simon, H. A. (1976). *Administrative behavior: A study of decision making processes in administrative organizations* (3rd ed.). New York, NY: Free Press.

Simons, J., Vansteenkiste, M., Lens, W., & Lacante, M. (2004). Placing motivation and future time perspective theory in a temporal perspective. *Educational Psychology Review, 16*(2), 121-139. doi: 10.1023/B:EDPR.0000026609.94841.2f

Sinha, D. (1997). Indigenising psychology. In J. W. Berry, Y. H. Poortinga, & J. Pandey (Eds.), *Handbook of cross-cultural psychology* (2nd ed., Vol.1, pp. 129-169). Boston, MA: Allyn & Bacon.

Shyu, C. S., Li, Y. L., & Tang, Y. (2013). Applying Confirmatory Factor Analysis on the Measure for Restaurant Over-service. *The Journal of International Management Studies*, *8*(2), 10-16.

Skinner, D. (2000). *A practical application of psychological theory: Use of the theories of reasoned action and planned behaviour to gain a better understanding of HIV*. (Doctoral dissertation). University of Cape Town, South Africa.

Skorikov, V. B. (2007a). Continuity in adolescent preparation and its effects on adjustment. *Journal of Vocational Behaviour, 70,* 8-24. doi:10.1016/j.jvb.2006.04.007

Skorikov, V. B. (2007b). Adolescent career development and adjustment. In V. B. Skorikov & W. Patton (Eds.), *Career development in childhood and adolescence* (pp. 237-254). Rotterdam, Netherlands: Sense Publishers.

Skorikov, V. B., & Vondracek, F. W. (2011). Occupational identity. In S. J. Schwartz, K. Luyckx & V. L. Vignoles (Eds.), *Handbook of identity theory and research* (pp. 693-714). New York, NY: Springer.

Skorikov, V. B., & Vondracek, F. W. (2007). Positive career orientation as an inhibitor of adolescent problem behaviour. *Journal of Adolescence, 30*, 131-146.

Skorikov, V. B., & Vondracek, F. W. (1998). Vocational identity development: Its relationship to other identity domains and to overall identity development. *Journal of Career Assessment, 6*(1), 13-35. doi:10.1177/106907279800600102

Smith, L., & Redington, R. M. (2010). Lessons from the experiences of White antiracist activists. *Professional Psychology: Research and Practice*, *41*(6), 541-549.

Soresi, S., Nota, L., & Ferrari, L. (2012). Career Adapt-Abilities Scale-Italian form: Psychometric properties and relationships to breadth of interests, quality of life, and perceived barriers. *Journal of Vocational Behaviour*, *80*(3), 705-711.

Soresi, S., Nota, L., Ferrari, L., & Solberg, S. (2008). Career guidance for persons with disabilities. In J. A. Athanasou & R. van Esbroeck (Eds.), *International handbook of career guidance* (pp. 405-417). Dordrecht, Netherlands: Springer Science.

Sovet, L., Annovazzi, C., Ginevra, M. C., Kaliris, A., & Lodi, E. (2018). Life-design in adolescence: The role of positive psychological resources. In L. Nota, J. Rossier, & V. Cohen-Scali (Eds.), *New perspectives on career counselling and guidance in Europe* (pp. 23-37). Cham: Springer.

Spanierman, L. B., Poteat, V. P., Whittaker, V. A., Schlosser, L. Z., & Arévalo Avalos, M. R. (2017). Allies for life? Lessons from White scholars of multicultural psychology. *The Counselling Psychologist*, *45*(5), 618-650.

Spanierman, L. B., & Smith, L. (2017a). Roles and responsibilities of White allies: Implications for research, teaching, and practice. *The Counselling Psychologist*, *45*(5), 606-617.

Spanierman, L. B., & Smith, L. (2017b). Confronting White Hegemony: A Moral Imperative for the Helping Professions. *The Counselling Psychologist*, *45*(5), 727-736.

Spokane, A. R., Moya, M., & Faris, E. (2017). Vocational personalities in work environments: Perspectives on Holland's theory. In G. B. Stead & M. B. Watson (Eds.), *Career psychology in the South African context* (2nd ed., pp. 50-67). Pretoria: Van Schaik.

Statistics South Africa. (2018). *Demographic Profile of Adolescents in South Africa: 2018.* Pretoria: Statistics South Africa

Statistics South Africa. (2017). *Mid-year population estimates: 2017*. Pretoria: Statistics South Africa.

Statistics South Africa. (2016). *Mid-year population estimates: 2016*. Pretoria: Statistics South Africa.

Statistics South Africa. (2011). *Census 2011: Census in brief*. Pretoria: Statistics South Africa.

StatSoft, Inc. (2017). *STATISTICA (data analysis software system)*, Version 13.1. retrieved from https://support.quest.com/download-install-detail/6069887:www.statsoft.com

Stead, G. B. (2004). Culture and career psychology: A social constructionist perspective. *Journal of Vocational Behaviour, 64*(3), 389-406.

Stead, G. B. (1996). Career development of Black South African adolescents: A developmental-contextual perspective. *Journal of Counselling & Development, 74*, 270-275. doi:10.1002/j.1556-6676.1996.tb01864.x

Stead, G. B., Schultheiss, D. E., & Howcroft, G. (2004, July). *Role of parental attachment in adolescent career anxiety and self-efficacy*. Paper presemeted at the Annual Meeting of the American Psychological Association, Honolulu, Hawaii.

Stead, G. B., Els, C. & Fouad, N. A. (2004). Perceived career barriers among South African high school learners. *South African Journal of Psychology, 34*(2), 206-221.

Stead, G. B., & Nqweni, Z. C. (2006). Introduction to career education, career information and organisational psychology. In G. B. Stead & M. B. Watson (Eds.), *Career psychology in the South African context* (2nd ed., pp. 137-138). Pretoria: Van Schaik.

Stead, G. B., & Perry, J. C. (2012). Toward critical psychology perspectives of work-based transitions. *Journal of Career Development, 39*(4), 315-320.

Stead, G. B., & Subich, L. M. (2017). Career counselling practice. In G. B. Stead, & M. B. Watson (Eds.), *Career psychology in the South African context* (3rd ed., pp. 119-136). Pretoria: Van Schaik Publishers.

Stead, G. B., & Subich, L. M. (2006). Career counselling practice. In G. B. Stead, & M. B. Watson (Eds.), *Career psychology in the South African context* (2nd ed., pp. 81-91). Pretoria: Van Schaik Publishers.

Stead, G. B., & Watson, M. B. (2017). Indigenisation of career psychology in South Africa. In G. B. Stead & M. B. Watson (Eds.), *Career psychology in the South African context* (3rd ed., pp. 210-218). Pretoria: Van Schaik Publishers.

Stead, G. B., & Watson, M. B. (2006). Indigenisation of career psychology in South Africa. In G. B. Stead & M. B. Watson (Eds.), *Career psychology in the South African context* (2nd ed., pp. 181-190). Pretoria: Van Schaik Publishers.

Stead, G. B., & Watson, M. B. (1998). Career research in South Africa: Challenges for the future. *Journal of Vocational Behaviour, 52*(3), 289-299.

Stead, G. B., & Watson, M. B. (1993). The Career Myths Scale: Its validity and applicability. *International Journal for the Advancement of Counselling, 16*(2), 89-97. doi:10.1007/BF01418145

Stead, G. B., Watson, M. B., & Foxcroft, C.D. (1993). The relation between career indecision and irrational beliefs among university students. *Journal of Vocational Behavior, 42*(2), 155-169. doi: 10.1006/jvbe.1993.1011

Steinley, D., & Brusco, M. (2007). Initializing K-means batch clustering: A critical evaluation of several techniques. *Journal of Classification, 24*, 99-121. doi:10.1007/s00357-007-0003-0.

Steyn, A. F. (1993, 1994). *Family structures in the RSA*. Pretoria: Human Sciences Research Council.

Strauser, D. R., Lustig, D. C., & Çiftçi, A. (2008). Psychological well-being: Its relation to work personality, vocational identity, and career thoughts. *The Journal of Psychology*, *142*(1), 21-35.

Strauser, D. R., Lustig, D. C., Cogdal, P. A., & Uruk, A. Ç. (2006). Trauma symptoms: Relationship with career thoughts, vocational identity, and developmental work personality. *The Career Development Quarterly*, *54*(4), 346-360.

Stringer, K., Kerperlman, J., & Skorikov, V. (2011). Career preparation: A longitudinal, process-oriented examination. *Journal of Vocational Behaviour*, *79*, 158-169.

Struwig, F. W., & Stead, G. B. (2013). *Research: Planning, designing and reporting* (2nd ed.). Pretoria: Pearson Education.

Sue, D. W. (2017). The challenges of becoming a White ally. *The Counselling Psychologist*, *45*(5), 706-716.

Sultana, R. G. (2014). Pessimism of the intellect, optimism of the will? Troubling the relationship between career guidance and social justice. *International Journal for Educational and Vocational Guidance*, *14*(1), 5-19.

Super, D. E. (1957). *The psychology of careers: An introduction to vocational development*. New York: Harper Collins.

Super, D. E. (1980). A life-span, life-space approach to career development. *Journal of Vocational Behaviour*, *13*, 282-298.

Super, D. E. (1990). A life-span, life-space approach to career development. In D. Brown, L. Brooks & Associates (Eds.), *Career choice and development: Applying contemporary theories to practice* (2nd ed., pp. 197-261). San Francisco, CA: Jossey-Bass.

Super, D. E., Savickas, M. L., & Super, C. M. (1996). The life-span, life-space approach to career development. In D. Brown, L. Brooks, & Associates (Eds.), *Career choice and development: Applying contemporary theories to practice* (3rd ed., pp. 121-178). San Francisco, CA: Jossey-Bass.

Swanson, J. L., & Schneider, M. (2013). Minnesota theory of work adjustment. In S. D. Brown & R. W. Lent (Eds.), *Career development and counselling: Putting theory and research to work* (2nd ed., pp. 29-53). Hoboken, NJ: Wiley.

Swartz, L. (2014). Thinking about language and culture in psychological research and practice. In P. Rohleder & A. Lyons (Eds.), *Qualitative research in clinical and health psychology* (pp. 43-56). London, UK: Palgrave Macmillan.

Swartz, S. (2011). *Ikasi: The moral ecology of South Africa's township youth*. Johannesburg, South Africa: Wits University Press.

Swartz, S. (2009). *Ikasi: The moral ecology of South Africa's township youth*. Johannesburg, South Africa: Wits University Press.

Swartz, S., Harding, J. H., & De Lannoy, A. (2012). Ikasi style and the quiet violence of dreams: A critique of youth belonging in post-Apartheid South Africa. *Comparative Education*, *48*(1), 27-40.

Taber, B. J., & Blankemeyer, M. S. (2015). Time perspective and vocational identity statuses of emerging adults. *The Career Development Quarterly*, *63*(2), 113-125. doi:10.1002/cdq.12008

Tashakkori, A., & Teddlie, C. (Eds.). (2010). *Sage handbook of mixed-methods in social & behavioral research*. Thousand Oaks, CA: Sage.

Teixeira, M. A. P., Bardagi, M. P., Lassance, M. C. P., de Oliveira Magalhães, M., & Duarte, M. E. (2012). Career adapt-abilities scale—Brazilian form: psychometric properties and relationships to personality. *Journal of Vocational Behaviour*, *80*(3), 680-685.

Temple, B., & Edwards, R. (2002). Interpreters/translators and cross-language research: Reflexivity and border crossings. *International Journal of Qualitative Methods*, *1*(2), 1-12.

Temple, B., & Young, A. (2004). Qualitative research and translation dilemmas. *Qualitative Research*, *4*(2), 161-178.

Theron, L. C. (2016). Toward a culturally and contextually sensitive understanding of resilience: Privileging the voices of Black, South African young people. *Journal of Adolescent Research*, *31*(6), 635-670.

Theron, L. C. (2013). Black students' recollections of pathways to resilience: Lessons for school psychologists. *School Psychology International*, *34*(5), 527-539.

Theron, L. C., & Theron, A. (2013). Positive adjustment to poverty: How family communities encourage resilience in traditional African contexts. *Culture and Psychology*, *19*(3), 391-413.

Tlooko, N. (2011). *Kayamandi Community Placement Report 2011*. Unpublished community placement report. Department of Psychology: Stellenbosch University, South Africa.

Toms, E. (2015). *A community assessment identifying support organisations in Kayamandi, Stellenbosch* (Master's thesis). Stellenbosch University, Stellenbosch, South Africa.

Townsend, L., Flisher, A. J., & King, G. (2007). A systematic review of the relationship between high school dropout and substance use. *Clinical Child and Family Psychology Review*, *10*(4), 295-317.

Tripney, J. S., & Hombrados, J. G. (2013). Technical and vocational education and training (TVET) for young people in low- and middle-income countries: A systematic review and meta-analysis. *Empirical Research in Vocational Education and Training*, *5*(1), 3. https://files.eric.ed.gov/fulltext/ED558002.pdf

Tversky, A. (1972). Elimination by aspects: A theory of choice. *Psychological Review*, *79*(4), 281-299.

Uitto, A. (2014). Interest, attitudes and self-efficacy beliefs explaining upper-secondary school students'orientation towards biology-related careers. *International Journal of Science and Mathematics Education*, *12*(6), 1425-1444.

Usinger, J., & Smith, M. (2010). Career development in the context of self-construction during adolescence. *Journal of Vocational Behaviour*, *76*, 580-591. doi:10.1016/j.jvb.2010.01.010

Van der Merwe, C. N., & Gobodo-Madikizela, P. (2009). *Narrating our healing perspectives on working through trauma.* Newcastle, UK: Cambridge Scholars Publishing.

Van Hoof, A. (1999). The identity status field re-reviewed: An update of unresolved and neglected issues with a view on some alternative approaches. *Developmental Review, 19,* 497-556.

Van Niekerk, E. C., & Van Daalen, H. J. (1991). Career development of tertiary students: Some pertinent issues. *Vital (Vista teaching and learning), 6,* 7-13.

Van Vianen, A. E., Klehe, U. C., Koen, J., & Dries, N. (2012). Career adapt-abilities scale—Netherlands form: Psychometric properties and relationships to ability, personality, and regulatory focus. *Journal of Vocational Behavior*, *80*(3), 716-724.

Van Vuuren, A. (1997). *The strengths and problems of black families in informal settlements*. Pretoria: Human Sciences Research Council.

Van Wyk, I. (2014). The ethics of dislike in the field. In D. Posel & F. C. Ross (Eds.), *Ethical quandaries in social research* (pp. 199-214). Cape Town, South Africa: Human Sciences Research Council Press.

Versfeld, A. (2014). When knowledge turns to evidence and silence won't do. In D. Posel & F. C. Ross (Eds.), *Ethical quandaries in social research* (pp. 125-139). Cape Town, South Africa: Human Sciences Research Council Press.

Vilhjálmsdóttir, G., Kjartansdóttir, G. B., Sráradóttir, S. B., &Einarsdóttir, S. (2012). Career adapt-abilities scale-Icelandic form: Psychometric properties and construct validity. *Journal of Vocational Behaviour*, *80*(3), 698-704.

Vondracek, F. W., & Fouad, N. A. (1994). Developmental contextualism: An integrative framework for theory and practice. In M. Savickas, & R. W. Lent (Eds.), *Convergence in career development theories: Implications for science and practice* (pp. 207-214). Palo Alto, CA: Consulting Psychologists Press.

Vondracek, F. W., Lerner, R. M., & Schulenberg, J. E. (1983). On aspiring to present a developmental theory of occupational aspirations: A reader's guide to Gottfredson. *Journal of Vocational Behavior*, *23*(2), 213-218.

Vondracek, F. W., Lerner, R. M., & Schulenberg, J. E. (1986). *Career development: A life-span developmental model.* Hillsdale, NJ: Erlbaum.

Walton, M., & Hassreiter, S. (2014). Real friends and fake friends: Research relationships in an era of global social media. In D. Posel & F. C. Ross (Eds.), *Ethical quandaries in social research* (pp. 228-249). Cape Town, South Africa: Human Sciences Research Council Press.

Waterman, A. S. (1999). Identity, the identity statuses, and identity status development: A contemporary statement. *Developmental Review, 19,* 591-621.

Waterman, A. S. (1982). Identity development from adolescence to adulthood: An extension of theory and a review of research. *Developmental Psychology*, *18*(3), 341-358.

Watson, M. (2013). Deconstruction, reconstruction, co-construction: Career construction theory in a developing world context. *Indian Journal of Career and Livelihood Planning*, *2*(1), 3-14.

Watson, M. (2010). Career psychology in South Africa: Addressing and redressing social justice. *Australian Journal of Career Development*, *19*(1), 24-29.

Watson, M. (2009). Transitioning contexts of career psychology in South Africa. *Asian Journal of Counselling*, *16*(2), 133-148.

Watson, M. B. (2000). *Career theory shapes the context, context shapes the career theory: The interactive shape of things to come*. Inaugural professorial address, University of Port Elizabeth, Port Elizabeth, South Africa.

Watson, M. B., Brand, H. J., Stead, G. B., & Ellis, R. R. (2001). Confirmatory factor analysis of the career decision-making self-efficacy scale among South African university students. *South African Journal of Industrial Psychology*, *27*(1), 43-46.

Watson, M. B., Eaton, M. C., & Muller, G. A. (2002, September). *A cultural comparison of the perceived career barriers of South African female adolescents.* Paper presented at the 8th Annual Congress of the Psychological Society of South Africa, University of the Western Cape, Cape Town.

Watson, M.B., Foxcroft, C.D., Horn, M.A., & Stead, G.B. (1997). Occupational aspirations of Black South African adolescents. *Psychological Reports*, 80(2), 627-635. doi:10.2466/pr0.1997.80.2.627

Watson, M. B., & Fouche, P. (2007). Transforming a past into a future: Counselling psychology in South Africa. *Applied Psychology*, *56*(1), 152-164.

Watson, M., & McMahon, M. (2006). My systems of career influences: Responding to challenges facing career education. *International Journal of Educational and Vocational Guidance*, *6*, 159-166.

Watson, M., & McMahon, M. (2005). Children's career development: A research review from a learning perspective. *Journal of Vocational Behaviour*, *67*(2), 119-132.

Watson, M., McMahon, M., Mkhize, N., Schweitzer, R. D., & Mpofu, E. (2011). Career counselling people of African ancestry. In M. Mpofu (Ed.), *Counselling people of African ancestry* (pp. 281-293). New York, NY: Cambridge University Press.

Watson, M., Samuels, J., & Flederman, P. (2014). Transforming career development in South Africa. *Australian Career Development*, *25*, 13-15.

Watson, M. B., Schonegevel, C., & Stead, G. B. (1997). *Square pegs, square holes: Does Holland's hexagon fit South African environments?* Paper presented at the Society for Student Counselling in South Africa, Port Elizabeth.

Watson, M. B., & Stead., G. B (2017a). An overview of career theory. In G. B. Stead & M. B. Watson (Eds.), *Career Psychology in the South African context* (3rd ed., pp 22-49). Pretoria: Van Schaik Publishers.

Watson, M. B., & Stead, G. B (2017b). The career development of Donald Super. In G. B. Stead and M. B. Watson (Eds.), *Career psychology in the South African context (*3rd ed., pp. 68-84). Pretoria: Van Schaik Publishers.

Watson, M. B., & Stead, G. B. (2006a). Introduction to career theories. In G. B. Stead & M. B. Watson (Eds.), *Career psychology in the South African context* (2nd ed., pp. 11-13). Pretoria, South Africa: Van Schaik Publishers.

Watson, M. B., & Stead, G. B. (2006b). An overview of career theory. In G. B. Stead & M. B. Watson (Eds.), *Career Psychology in the South African context* (2nd ed., pp. 13-34). Pretoria: Van Schaik Publishers.

Watson, M. B., & Stead, G. B (2006c). The career development of Donald Super. In G. B. Stead & M. B. Watson (Eds.), *Career psychology in the South African context* (2nd ed., pp. 51-64). Pretoria: Van Schaik Publishers.

Watson, M. B., & Stead, G. B. (2002). Career psychology in South Africa: Moral perspectives on present and future directions. *South African Journal of Psychology, 32*(1), 26-31.

Watson, M. B., Stead, G. B., & De Jager, A. C. (1995). The career development of Black and White South African university students. *International Journal for the Advancement of Counselling*, *18*, 39-47. doi:10.1007/BF01409603

Watson, M. B., & Van Aarde, J. A. (1986). Attitudinal career maturity of South African Coloured high school pupils. *Journal of Vocational Behaviour*, *29*, 7-16. doi:10.1016/0001-8791(86)90025-4

Watts, A. G. (2009). *The relationship of career guidance to VET*. OECD Report, National Institute for Careers Education and Counselling, Cambridge. Retrieved from http://www.oecd.org/edu/skills-beyond-school/44246616.pdf

Weinberg, P., Posel, D., & Ross, F. C. (2014). When knowledge turns to evidence and silence won't do. In D. Posel & F. C. Ross (Eds.), *Ethical quandaries in social research* (pp. 250-264). Cape Town, South Africa: Human Sciences Research Council Press.

Wheeler, J. J. (1992). Occupational interest of Std 10 pupils in Black schools: A facet analysis. *South African Journal of Education*, *12*, 240-245.

White, M. (1998). *Narrative therapy*. Adelaide, South Australia: Dulwich Centre.

White, M. (1997). *Narratives of therapists' lives*. Adelaide, South Australia: Dulwich Centre Publications

White, M. K. (1995). *Re-authoring lives: Interviews & essays*. Adelaide, South Australia: Dulwich Centre Publications.

White, M. (1991). Deconstruction and therapy. Dulwich Centre Newsletter, No. 3. Reprinted in Epston, D. & White, M. (1992), *Experience, contradiction, narrative & imagination.* Adelaide, South Australia: Dulwich Centre Publications.

White, M., & Epston, D. (1990). *Narrative means to therapeutic ends*. New York, NY: Norton.

William, S. C. (2001). *Career decision-making self-efficacy and career identity amongst black senior high school learners* (Master's thesis). University of Port Elizabeth, Port Elizabeth, South Africa.

Wilbers, L. (2015). *An investigation into the first-order factor structure of the Personality and Preference Inventory Normative (PAPI-N) on a relatively large South African sample* (Doctoral dissertation). Stellenbosch University, Stellenbosch, South Africa.

Wilkins, K. G., Santilli, S., Ferrari, L., Nota, L., Tracey, T. J., & Soresi, S. (2014). The relationship among positive emotional dispositions, career adaptability, and satisfaction in Italian high school students. *Journal of Vocational Behaviour*, *85*(3), 329-338.

Young, R. A., & Popadiuk, N. E. (2012). Social constructionist theories in vocational psychology. In P. McIlveen, & D. Schultheiss (Eds.). *Social constructionism in vocational psychology and career development* (pp. 9-28). Rotterdam, Netherlands: Sense Publishers.

Yuen, M., & Yau, J. (2015). Relation of career adaptability to meaning in life and connectedness among adolescents in Hong Kong. *Journal of Vocational Behaviour*, *91*, 147-156.

Zunker, V.G. (2011). *Career counselling: A holistic approach*. Nashville, TN: Broadman & Holman Publishers.

APPENDICES

APPENDIX A
Cover letter

UNIVERSITEIT•STELLENBOSCH•UNIVERSITY
jou kennisvennoot • your knowledge partner

Dear Grade 11 learner! ***Mfundi webanga leshumi elinanye obekekileyo!***

Thank you for choosing to participate in this research study!
Enkosi ngokukhetha ukuthatha inxaxheba kwesi sifundo sophando.

This study is about exploring your career transitions and decisions that make up your career story! You will be asked to complete twoquestionnairesthat examine career adaptability processes. By participating you may gain insight that may help with your own career choice.
Esi sifundo simalunga nokuhlola ukuphumela kwikamva oyakuthi ulilandele nezigqibo ezenza ibali lekamva lakho! Uza kucelwa ukuba ugcwalise amaxwebhu amabini ophando ahlola ukuzilungiselela kwinkqubo yekamva lakho. Ngokuthatha inxaxheba ungathi ufumane ukuphangalala kwengqondo okunganceda ekukhetheni kwakho ikamva lakho.

To be able to participate in this study, please give the researcher a copy of the consent form that was signed by your parents or guardians to allow to you take part in this research! Please also hand in the copy of the assent form that you signed.
Ukuze ukwazi ukuthatha inxaxheba kumele unike umphandi elaphepha lemvume esuka kumzali wakho kwakunye nemvume suka kuwe.

You will be given a demographic questionnaire that will ask general questions about your age, race, gender, parents' occupations and educational levels, etc.
Uzokufumana iphepha elinemibuzo malunga neminyaka yakho, ukuba uyintombi okanye umfana, intlanga oyiyo kwakunye nemisebenzi yabazali bakho kwane mfundo yabo.

There will be a first session where you will complete career questionnairesof the career changes and decisions you have already undertaken..
Ngelanga lokuqala uzakunikwa ixwebhu elimalungana notshintsho lwezizigqibo othe wazithatha malungana nekamva lakho..Kwelilandelayo ilanga uzakunikwa amaxwebhu amabini malungana nezigqibo othe wazithatha kutshintsho lwezifundo zakho okanye ikamva lakho.

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jou kennisvennoot • your knowledge partner

Thereafter you may be picked to be part of a group of approximately 30 learners who will discuss questions, complete career development exercises and create a portfolio on four consecutivedays either in May or June 2016. Once the portfolio is completed, you will complete a survey again to see if some of your ideas have changed throughout this time. At the end of this process, you will be invited to attend a rewards ceremony and will be rewarded with a certificate for your effort. If you are not picked, you will still be invited to a one-day career development workshop in August and will also receive a certificate for your participation.
Emveni koko uzakufakwa kwiqela labafundi abangamashumi amathathu apho nizakuxoxa ngemibuzo kwaye niphendule imibuzo emalunga nomsebenzi okanye izifundo ofuna ukuzenza wenze nepotfoliyo kwiholidayi ka-May-noJune ka-2016. Ekugqibeni kwakho ipotfoliyo uzakuthi uphendule eminye imibuzo ukuze ubone ukuba zikhona na izigqibo zakho ezitshintshileyo na emveni kwexesha. Ekupheleni kwelithuba uzakumenywa ukuze ufumane isatifiketi sombulelo ngothatha inxaxheba.

If you want feedback on results this study, please contact me on my cell at 0722228740 or email me (Anouk) on anouka@sun.ac.za.
Ukuba ufuna ukwazi ngeziphumo zoluphando ungaqhakamshelana nam ku 0722228740 okanye nge- email ku anouka@sun.ac.za.

For further career counselling, please contact the Centre for Student Counselling and Development (CSCD) at cdc@sun.ac.za or (021) 808 4707. Or ask your Life Orientation teachers about the career counselling sessions after school at your school.
Ukuba unqwenela ukufumana iingcebiso malunga nezemfundo ungalufumana Kwiziko Leengcebiso Ngezemfundo Nenkqubela Ngezemfundo (021) 808 4707 okanye cdc@sun.ac.za

These career counselling sessions are provided free to you because you are a participant in this research study.*Ezingcebiso malunga ngemfundo yakho awuzibataleli kuba ungumthathi nxanxeba koluphando.*

Thank you for choosing to contribute to this research study!
Enkosi ngokukhetha uku nceda koluphando!

Anouk Albien
072 222 8740
Doctoral student, Psychology Department, Stellenbosch University

APPENDIX B
Assent Letter

	STELLENBOSCH UNIVERSITY

PARTICIPANT INFORMATION LEAFLET AND ASSENT FORM/ *Iphepha leenkcukacha malunga nolu phando kunye nelokufumana imvume kumthathi nxaxheba.*

TITLE OF THE RESEARCH PROJECT/ ***IGAMA LESISIFUNDO:***

A mixed-methods analysis of black adolescents' vocational identity status and career adaptability competencies in a low income township

RESEARCHER'S NAME/ ***Igama lomphandi*****:** *Anouk Jasmine Albien.*

ADDRESS/ ***Idilesi yomphandi*****:** *41 Fairview Golf Village, St Andrew's Drive, Gordon's Bay 7140.*

CONTACT NUMBER/ ***Incukacha zokuqhakamshelana nomphandi*****:** *072 222 8740 or Stellenbosch Psychology Department at (021) 808 3461/072 222 8740 okanye Isebe lePsychology kwiYunivesithi yaseStellenbosch ku- (021) 8083461*

What is RESEARCH?/*Kuyintoni ukuphanda?*

Research is something we do to find new knowledge about the way things (and people) work. We use research projects or studies to help us find out more about various things such as disease, illness, or in this case, career ideas. Research also helps us to find better ways of helping or treating children who are sick or helping children make better career decisions in finding their way into the job world.

Ukuphanda yindlela esifumana ngayo ulwazi olutsha malunga nendlela izinto (nabantu) ezisebenza ngayo. Senza izifundo zokuphanda ukuze sifumane ulwazi malunga nezigulo ezithile okanye ngengcinga ngezemfundo okanye ngomsebenzi.Uphando luyasinceda ukuba sikwazi ukufumana indlela zokunyanga abantwana abanezigulo okanye sincede abafundi abakumabanga aphezulu bathathe izigqibo ezingcono malunga nezemfundo okanye nezomsebenzi kwilizwe lempangelo.

What is this research project all about?/*Lungantoni oluphando?*

This research is about the changes that you may have undergone in career planning and you will be asked about previous work experience, advice you have received from others, different life roles, past role-models, your ideal career, your interests and opportunities that exist in your area.

Olu phando lumalunga neengcinga ongabe unazo malunga nemfundo yakho kwakunye namalungiselelo onawo. Uza kubuzwa ngezinto ezimalunga ngamava onawo omsebenzi obukhe wawenza,, iingcebiso okhe uzifumane ebantwini malunga neemfundo yakho,, imisebenzi obuthe wanayo apha ebomini,, abantu abakhe bayimizekelo yakho,, izifundo okanye umsebenzi ocinga ukufanele, izinto onomdla kuzo kwaye namathuba emfundo akhoyo kwindawo ohlala kuyo.

Why have I been invited to take part in this research project? / *Kutheni ndimenyiwe ukuba ndithathe inxaxheba kolu phando?*

You have been invited to take part because you are in Grade 11 and are considering career options as you are leaving school soon. This means that you are weighing up options based on different influences and this research is trying to find out the influences that lead you to make a specific career decision.

Umenywa ukuba uthathe inxaxheba kolu phando ngokuba ungumfundi webanga leshumi elinanye kwaye ukwixesha apho khona uzakuthelekisa izifundo okanye imisebenzi ehlukileyo. Oku kuthetha ukuba ukwixesha apho ujonga iindlela ezahlukileyo malunga nezifundo zakho kwaye olu phando luzama ukufumana izinto ezinefuthe elisiseko ekuthatheni isigqibo malunga ngobomi bakho bemfundo okanye bomsebenzi.

Who is doing the research? /*Ngubani owenza oluphando?*

My name is Anouk Albien, I am a Doctoral Psychology student at Stellenbosch University and am trying to research high school career decisions, career changes and the coping skills learnersdevelop to help them make better decisions when they leave school.

Igama lam ndingu Anouk Albein, ndingumfundi kwiyunivesithi yaseStellenbosch ndifunda isidanga se-PhD. kulwazi-ngqondo (doctoral in psychology). Ndizama ukuphanda ngeengcinga abafundi abakumabanga aphezulu abanazo malunga ngobomi babo bemfundo okanye bomsebenzi emva kokuba bephumile esikolweni ukuze ndikwazi ukubanceda bathathe izigqibo ezingcono xa bephuma esikolweni.

What will happen to me in this study? / *Yintoni ezokwenzeka kum kwesisifundo?*

Firstly, you will be asked to bring back the form with your parent's signature to let us know that you are given permission to take part in this research. Then we will ask you to sign this form so we can be sure that you have understood what the study is about and give us your permission to participate as well as record your answers. There is a questionnaire that you need to fill out, asking you about your name, age

and what jobs your parents have.Thereafter, the researcher will help you to fill out two questionnairesabout career changes, how you coped and adapted, with step-by-step instructions. This is the end of the first session of 60 minutes, which will take place as organised by your LO teacher and researcher.

Okokuqala, sizakucela ukuba usibuyisele elaa phetshana lesiqinisekiso semvume elisuka kumzali wakho. Sizakucela usayine iphepha elithile ukuze siqinisekise ukuba uyayiqonda ukuba esi sifundo singantoni, usinike nemvume yokuba uthathe inxaxheba kwesi sifundo nokuba sirekhode iimpendulo zakho. Kukho imibuzo malunga nawe (umzekelo, igama lakho, iminyaka yakho nokuba abazali bakho benza ntoni) ekufuneka uyiphendulile.Uncedo lokuphendula le mibuzo luza kube lufumaneka kumphandi u-Anouk nakumtoliki u-Lusanda kwaye nemizekelo ikhona kwakule ncwadi. Esi ke sisiphelo sendibano yokuqala ezakuthi ibekwiklasi ye-LO ezakuthatha imizuzu engama-60

Thereafter you may be picked to be part of a group of learners who will create portfolios based on group activities and questions. These sessions will be two hours held over four days during May or June 2016.After this is completed you will receive a certificate for your participation in the career development. Here follow-up questions will be asked and recorded about the experiences you had in completing the workshop and survey. Please answer as honestly as possible, we really do want to hear what you have to say! Discussions will be held around career changes, coping and adaptability to see if you have gained any insight into your unique career challenges, coping skills and any new career ideas.

Emva koko usenokukhethwa ufakwe kwiqela labafundi abazakwenza ipotfoliyo emalungana nomsebenzi enizakuwenza kweliqela nemibuzo enizakuyibuzwa. Oku kuzakuqhubekeka kwiiholideyi zika-Juni noJulayi kwaye kuthathe iintsuku ezintathu. Apha uzakuthi ubuzwe imibuzo malungana nemiva yakho ngomsebenzi othe wawenza nangamaxwebhu othe wawenza. Sicela uphendule ngokunyanisekileyo kuba sifuna ukwazi yonke into onokufuna ukuyithetha. Ukuba bacinga iye yabaluncedo na, ingaba kukhona abathe bakufunda malunga nezinto ezi chaphazela izifundo zabo.

Can anything bad happen to me? /*Ikhona into embi enokuthi yenzeke kum?*

You could feel scared initially, but the researcher will try her best to make you feel comfortable. If you do not understand anything, please ask to have it repeated because what you think is valuable to us! You could feel anxious or unsure about your future career ideas.If you need someone to talk to about getting career advice, we will provide you with contact details of people who could help you.

Ungaziva usoyika ekuqaleni kodwa umphandI u-Anouk nabatoliki baza kuzama kangangoko banako ukwenza uzive ukhululekile.Ukuba ikhona into ongayiqondiyo ungacela icaciswe ngesiNgesi okanye ngesiXhosa kuba yonke into oyicingayo ibalulekile kuthi. Ungaziva ungaqinisekanga ngengcinga zakhomalunga nobomi bakho bezemfundo kwaye ukuba udinga ukuthetha nomntu malunga ngalento singakunika iinkcukacha zabantu abanokuthi bakucebise ngezemfundo.

Can anything good happen to me?/ *Ingaba ikhona into entle enokwenzeka kum?*

You could gain knowledge about yourself by finding out what your career coping and adaptability processes are, as well as new career ideas or experiences that have made a lasting impression on you. You could also learn more about making career decisions and why it is so important to take control of your career story. These sessions are provided free to you, under normal circumstances standard career counselling fees would be charged for the same content.

Ungafumana ulwazi malunga nawe, wazi ukuba zintoni izinto ozithandayo, iingcinga ezithile obungakhange uziqonde ukuba unazo ngezemfundo okanye ngabantu abathe bakukhuthaza. Kwaye ungafunda ngokwenza izigqibo ngemfundo yakho nokuba kutheni kubalulekile ukuyithathela ezandleni zakho imfundo yakho. Oku kuziswa mahala kuwe nangona nje kwimeko eziqhelekileyo bekunofuneka ubhatale.

Will anyone know I am in the study?/*Ukhona umntu onokuyazi ukuba ndithatha inxaxheba kolu phando?*

No one will know that you have participated, and your name and details will be kept secret. Only the researcher and the Research supervisor will know who you are because they play an important part in the research project.

Akekho umntu ozakuthi ayazi ukuba uthathe inxaxheba kwesi sifundo kuba igama lakho nazo zonke iinkcukacha zakho zizakugcinwa ngokufihlakeleyo.Umphandi nomphandiongentla bayakuyazi ukuba ungubani kuba badlala indima ebaluleke khakhulu kolu phando.

Who can I talk to about the study? *Ndingathetha nabani malunga noluphando?*

The researcher Anouk */ umphandi uAnouk: 072 222 8740*

Research supervisor Prof. Naidoo*/ umphandi ongentla Prof. Naidoo:* (021) 808 3461.

What if I do not want to do this?/ *Kwenzeka ntoni ukuba andifuni ukuthatha inxaxheba ?*

You have every right to refuse to take part in this research, even if your parents have agreed that you can participate. You can stop being in this study at any time without getting into trouble.

Unalo ilungelo lokwala ukuthatha inxaxheba koluphando nokuba abazali bakho bavumile. Ungakwazi ukuyeka uthatha inxaxheba kwesisifundo nangeliphi na ixesha ngaphandle kokungena engxakini.

Do you understand what this research study is about and are you willing to take part in it?

Uyaliqonda ukuba lungantoni na oluphando kwaye uyavuma na ukuthatha inxaxheba?

YES *EWE*	NO *HAYI*

Has the researcher answered all your questions?

Ingaba umphandi uyiphendule yonke imibuzo yakho?

YES *EWE*	NO *HAYI*

Do you understand that you can pull out of the study at any time?

Uyaqonda na ukuba ungaphuma kwesi sifundo nangeliphi na ixesha ufuna?

YES *EWE*	NO *HAYI*

_____ _____

Signature of Child/
Umtyikityo wo mfundi

Date/ *Umhla*

APPENDIX C
Consent letter

UNIVERSITEIT•STELLENBOSCH•UNIVERSITY
jou kennisvennoot • your knowledge partner

STELLENBOSCH UNIVERSITY/IYUNIVESITHI YASESTELLENBOSCH
CONSENT TO PARTICIPATE IN RESEARCH
IMVUME YOKUTHATHA INXAXHEBA KUPHANDO

A MIXED-METHODS ANALYSIS OF BLACK ADOLESCENTS' VOCATIONAL IDENTITY STATUS AND CAREER ADAPTABILITY COMPETENCIES IN A LOW INCOME TOWNSHIP

Dear Parent / *Mzali obekekileyo,*

I am Anouk Albien, a Doctoral student in the Psychology Department at Stellenbosch University, doing voluntary work at Makupula High School and Kayamandi High School. I ask your permission to allow your child to participate in a research study conducted with Grade 11 learners at Makuphula High School and Kayamandi High School. The present study will help me complete the Psychology Doctoral Research programme and will result in a research dissertation. The study will also have benefits for your child in helping their with their career decisions and will help develop future career guidance programmes in Kayamandi./*Igama lam ndingu Anouk Albien, ndingumfundi kwiYunivesithi yaseStellenbosch ndifunda isidanga se-Doctorate kulwazi-ngqondo, ndenza umsebenzi wamahala kwisikolo iMakuphula/Khayamandi. Ndicela imvume yokuba umntwana wakho athathe inxaxheba kwisifundo esisebenzisa abafundi bebanga leshumi elinanye kwesi sikolo. Esi sifundo siza kundinceda ukuba ndikwazi ukufumana isidanga sam. Esi sifundo siya kumnceda umntwana wakho ekuthatheni isigqibo malunga nobomi bemfundo okanye bomsebenzi wakhe kwaye, singanceda kubekho nezinye izifundo ezilandelayo ezizakuthi zibancede abafundi.*

1. PURPOSE OF THE STUDY/ *Senzani Esisifundo?*

This research will explore the ideas, people and environment that influence career decisions, challenges and coping strategies of Kayamandi adolescents. This will help to gain insight into career development processes to improve future career programmes for Kayamandi high school learners./*Esi sifundo siza kuphanda iingcinga, zabantu kwakunye nendawo ezithi zibenefuthe elisiseko esakha ubomi bemfundo yabafundi besikolo sase Khayamandi okanye umsebenzi abanqwenela ukuwenza ebomini babo. Ezi zinto ziya kunceda ekwandiseni ulwazi malunga nenkqubela ngezemfundo esikolweni saseKhayamnandi.*

2. PROCEDURES/ *Inqubo yoluphando*

If you give permission for your child to participate in this study, the following will be asked of you and your child/*Ekuba uyamvumela umtwana athathe inxaxheba koluphando, kuzo kucelwa kuwe nomntana wakho oku:*

- To sign this form to give your child permission to take part in this research./*Ukuba utyikitye lencwadina ukuvumela umntwana wakho ukuba athathe inxaxheba koluphando.*
- Your child will sign a form to check if he/ she has understood what the study is about, has given permission to participate and has agreed to have the interviews recorded on a digital recorder./*Umntwana wakho kuzofuneka naye atyikitye enye incwadana ukusazisa ukuba uyaluqonda ukuba lungantoni oluphado kwaye uyavuma ukuthatha inxaxheba koluphando nokuba udliwano- ndlebe lurikhodwe*

- A questionnaire will be filled out by your child asking her name, age and career ideas. /*Umntwana wakho uzakuphendula imibuzo malunga ngaye (umzekelo igamalakhe,iminyaka yakhe neegcinga anazo malunga nobomi bakhe bemfundo okanye umsebenzi anqwenela ukuwenza.*
- Two career questionnaires will be filled out by your child during a session of 50 min with permission of the principal. The researcher will help your child to fill out these surveys. The career questionnaires contain questions about your child's career choices, with step-by-step instructions, to represent your child's career changes, career adaptability and coping skills./*Ngemvume yenqununu umntana wakho uzakuthi aphendule imixwebhu emibini kwiklasi ye-LO. Uzakuncediswa ngumphandi ukwenza lamaxwebhu. Lamaxwebhu azakuba nemibuzo malunga nomsebenzi womntwana wakho anqwenelela ukuwenza neendlela anokuthi akwazi ukumelana nezidingo zomsebenzi.*
- If your child is randomly selected, then your child will be asked to attend a career development workshop to develop career adaptability skills, during a four-day workshop in May or June. Otherwise, if your child is not selected, he/she will be invited to attend a one-day workshop that will be held in August to ensure an opportunity for career development, and participation will ensure a certificate../*Ukuba umntana wakho uthe wakhethwa uzakucelwa ukuba aye kwi-workshop yemisebenzi azokwazi ukufunda iindlela zokunyamezela izidingo zomsebenzi,. Konke oku kuzakwenziwa kwezantsuku zintathu ngeholideyizika May noJune okanye kwi-workshop ngoOkthobha.*
- At the workshop, learners will have discussions and complete activities in order to create a career portfolio that will help them to develop career adaptability and to gain clearer career ideas./*Kuzakubakho i-workshop apho abafundi bazakuba neengxoxo kwaye benze umsebenzi ozakubancede ekunyamezeleni izidingo zomsebenzi bakwazi nokuba nembono ecacileyo malunga nezigqibo zabo ngekamva labo. Yonke lento bazakuyifaka kwipotfoliyo yabo*

3. POTENTIAL RISKS AND POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY/ *Izinto eziyingozi kubathathinxaxheba nomphakathi kwakunye nezi zinokuthi zibeluncedo*

There are no risks or discomforts to your child taking part in the study. Your child may benefit by gaining awareness of the career changes, barriers and coping skills that affect his/her career decisions. The information gained from the learners will result in improved future career guidance programmes to help learners make career decisions./*Akukho nanye into enobungozi azokuthi ayifumane umntwana wakho ngokuthatha kwakhe inxaxheba koluphando.Umntwana wakho angafumana ulwazi malunga nezinto ezinefuthe elisiseko ezakha ubomi bakhe bemfundo okanye umsebenzi anqwenela ukuwenza ebomini bakhe kwakunye nezithi zime endleleni yakhe ukuthatha iizigqibo ezithile.Lonke ulwazi oluzofumaneka kwaba bafundi luzonceda kubekho iindlela ezingcono zokugada abafundi ukuze bathathe izigqibo ezilungileyo malunga nezifundo zabo okanye imisebenzi abanqwenela ukuyenza.*

5. PAYMENT FOR PARTICIPATION/ *Ukubhatalwa Kwemali Yokuthatha Inxaxheba*

There will be no payment for participating in this study. Your child, by participating in this study, will be receiving free career counselling that would normally be charged at standard career counselling rates./*Awuzu kuzihlawulela ezi ngcebiso malunga nemfundo okanye eyona misebenzi onqwenela ukusingisela kuyo xa sele ugqibile ukufunda, kuba ungumthabathi-nxaxheba (okanye uthabatha inxaxheba kwesi sifundo sophando).*

6. CONFIDENTIALITY, PARTICIPATION AND WITHDRAWAL / *Ukufihlakala, ukuthatha inxaxheba kwaye nokufuna ukuyeka.*

Your child's name will not be identified at all in this study. My supervisor, Professor Tony Naidoo at the Psychology Department, will have access to the information as well as an isiXhosa translator Ms Lusanda Tomose. You can choose whether your child should be in this study or not. If you volunteer your child to be in this study, you may withdraw your child at any time without consequences of any kind. The investigator may withdraw your child from this research if this becomes necessary./*Igama lomntana wakho alizukubizwa xakubhalwa esisifundo, abantu abayokuthi balazi ndim,umphandi, umphandi ongentla kum u-Professor Tony Naidoo, kwakunye netoliki yesixhosa u-MsVera Phike. Unako ukukhetha ukuba uyavumana umntwana wakho athate inxaxheba koluphando kwaye nokubasowumvumile unalo ilungelo lokumyekisa nanina.*

8. IDENTIFICATION OF INVESTIGATORS/ *Ukwaziwa kwabaphandi.*

If you have any questions or concerns about the research or would like to receive feedback, please feel free to contact the researcher, Anouk Albien, at anouka@sun.ac.zaor 072 222 8740, and the Research supervisor, Professor Naidoo, at avnaidoo@sun.ac.za or (021) 808 3461. If you have questions regarding your rights as a research subject, contact Ms Maléne Fouché [mfouche@sun.ac.za; 021 808 4622] at the Division for Research Development./*Ukuba ikhona imibuzo malunga noluphando ungakwazi ukuqhakamshelana nomphandi, uAnouk Albein, apha kuledilesi ye e-mail 14568527@sun.ac.za okanye ku0722228740,okanye nomphathi wam u-Professor Naidoo nge e-mail apha kuledilesi avnaidoo@sun.ac.za okanye ngocingo ku (021) 808 3461. Ukuba unemibuzo malunga ngamalungelo akho njengo mthathi nxaxheba koluphando ungaqhakamshelana no-Ms Maléne Fouché nge e-email kuledilesi [mfouche@sun.ac.za; 021 808 4622].*

SIGNATURE OF RESEARCH SUBJECT OR LEGAL REPRESENTATIVE/ *Umtyikityo womthathi nxaxheba okanye umeli womthetho.*

The information above is satisfactorily described to me, the participant's parent, in English and Xhosa in this letter, and I am in command of this language or it was satisfactorily translated. I, the participant's parent, understand that if I need to ask questions, I need to contact the researcher, and my questions will be answered to my satisfaction./*Ndonelisekile, nma mzali, ngolwazi elu nikiweyo kweliphepha ngesiNgesi njengokuba ndisiva kwaye ndisithetha nesiXhosa kwaye ithe yatolikwa kakuhle. Ndiyaqonda ukuba ikhona imibuzo endinayo, ndinako ukuba ndiqhakamshelane nomphandi kwaye imibuzo yam iyakuphendulwa ngokupheleleyo*

I hereby consent that the participant (i.e., my child) may participate in this study. I have been given a copy of this form. /Ndiyamvumela ukuba athathe inxaxheba umntwana wam kwaye ndiyinikiwe ikopi yeliphepha ukuze ndiligcine.

_____ _____

Name of Participant (i.e., my child)/ *Igama lomthathi nxaxheba(umntwana)*

Name of Parent/Guardian/ Igama lomzali

_____ _____

Signature Parent/ Guardian/ Umtyikito womzali

Date/umhla

SIGNATURE OF INVESTIGATOR /Umtyikityo womphandi

I declare that the information in this document was sufficiently explained to _____ [*name of the participant/]* and/or [his/her] representative_____ [*name of the representative]. [He/*She] was encouraged and given ample time to ask me any questions. This conversation was conducted in *English* and *will be translated into isiXhosa if necessary.*Ndiyavuma ukuba ezi nkcukacha kolu xwebhu zicaciswe kakuhle kum_____ [*Igama lomthathi nxaxheba]* kwakunye/okanye ummeli wakhe _____ [*igama lommeli]. Uye wakhuthazwa kwaye wanikwa ixesha elaneleyo lokundibuza iimibuzo .Le ncoko ibingesi Ngesi kwaye iza kuguqulelwa esiXhoseni.*

_____ _____

Signature of Investigator/ *Umtyikityo womphandi*

Date/ *Umhla*

APPENDIX D

Demographic Questionnaire/ *Imibuzo ngobomi bakho*

Name/*Igama:*			
Date of Birth/ *Umhla wokuzalwa:*		Grade/ *Ibanga:*	
Age/*Iminyaka yakho:*		Home Languages/*Ulwimi lwasekhaya:*	
Career ideas that you have thought about/*Iigcinga ngezemfundo okhe ubenazo:*	1. 2. 3. 4. 5.	Life roles (these include volunteer work, part-time work, school activities, outside school activities, caregiving family activities)/ *Iindima zobomi (oku kuquka imisebenzi yokuzithandela, imisebenzi yethutyana, imisebenzi yesikolo, imisebenzi yangaphandle kwesikolo, imisebenzi yokukhathalela usapho).*	1. 2. 3. 4. 5. 6. 7.
Mother's job/ *Umsebenzi kamama:*		Father's job/ *Umsebenzi ka tata:*	
Mother's education/ *Imfundo kamama:*		Father's education/ *Imfundo katata:*	

APPENDIX E
Research Ethics Committee Clearance (REC)

UNIVERSITEIT·STELLENBOSCH·UNIVERSITY
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Approved with Stipulations

Amendment

27-Oct-2015

Albien, Anouk AJ

Proposal #: HS1144/2014

Title: A mixed-methods analysis of black adolescents' vocational identity status and career adaptability competencies in a low income township.

Dear Miss Anouk Albien,

Your Amendment received on , was reviewed and Approved with Stipulations.

Please note the following information about your approved research proposal:

Proposal Approval Period: 27-Nov-2014 - 26-Nov-2015

The researcher may proceed with the envisaged research provided that the following stipulations, relevant to the approval of your project are adhered to or addressed. Some of these stipulations may require your response. Where a response is required, you are encouraged to respond to the REC within six (6) months of the date of this letter.

If a response is required, please respond to the points raised in a separate cover letter titled "Response to REC stipulations" AND if requested, HIGHLIGHT or use the TRACK CHANGES function to indicate corrections / amendments of ATTACHED DOCUMENTATION, to allow rapid scrutiny and appraisal.

PROVISIONS:

The current submission requests ethical clearance for a specific amendment to the original research design.

The researcher wishes to run a small pilot that was not initially foreseen with a sample of 40 learners at an NGO in the Kayamandi Township. This intervention has been confirmed between the 19th October and the 31st October 2015. Permission has been obtained from the NGO Vision K.

The pilot study will not be conducted at the school. The lapse of the DOE institutional permission for 2015 is therefore not applicable. However, if the study will continue at schools in 2016, the researcher should request an extension of permission from the WCED.

Informed assent and parental consent forms have been prepared in English and IsXhosa. The documents submitted to the REC, however, still contain numerous track changes. The researcher is requested to accept/reject these and submit final versions of the documents to the REC.

Please take note of the general Investigator Responsibilities attached to this letter.

Please remember to use your **proposal number (HS1144/2014)** on any documents or correspondence with the REC concerning your research proposal.

Please note that the REC has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

PROGRESS REPORT

Please note that a progress report should be submitted to the Research Ethics Committee: Humanities for the project as a whole before the project approval period has expired if a continuation of ethics approval is required. This applies to medium and high risk projects. The Committee will then consider the continuation of the project for a further year (if necessary).

This committee abides by the ethical norms and principles for research, established by the Declaration of Helsinki and the Guidelines for Ethical Research: Principles Structures and Processes 2015 (Department of Health). Annually a number of projects may be selected randomly for an external audit.

National Health Research Ethics Committee (NHREC) registration number REC-050411-032.

We wish you the best as you conduct your research.

If you have any questions or need further help, please contact the REC office at 218089183

Included Documents:

Permission letter_Vision K~Permission letter_Makupula High~Amendment request~AMENDMENT_Consent_assent forms_Pilot~Permission letter_Kayamandi High~Amendment_REC application form~REC Cover letter~AMENDMENT_Pilot study description~Permission letter_WCED~Amended_Research Proposal~Amendment_DESC checklist form~

Sincerely,

Clarissa Graham
REC Coordinator
Research Ethics Committee: Human Research (Humanities)

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Approval Notice

Stipulated documents/requirements

06-Jan-2015
Albien, Anouk AJ

Proposal #: HS1144/2014

Title: A mixed-methods analysis of black adolescents' vocational identity status and career adaptability competencies in a low income township.

Dear Miss Anouk Albien,

Your **Stipulated documents/requirements** received on **23-Dec-2014**, was reviewed by members of the **Research Ethics Committee: Human Research (Humanities)** via Expedited review procedures on **06-Jan-2015** and was approved.

Sincerely,

Clarissa Graham
REC Coordinator
Research Ethics Committee: Human Research (Humanities)

Investigator Responsibilities

Protection of Human Research Participants

Some of the general responsibilities investigators have when conducting research involving human participants are listed below:

1.Conducting the Research. You are responsible for making sure that the research is conducted according to the REC approved research protocol. You are also responsible for the actions of all your co-investigators and research staff involved with this research. You must also ensure that the research is conducted within the standards of your field of research.

2.Participant Enrollment. You may not recruit or enroll participants prior to the REC approval date or after the expiration date of REC approval. All recruitment materials for any form of media must be approved by the REC prior to their use. If you need to recruit more participants than was noted in your REC approval letter, you must submit an amendment requesting an increase in the number of participants.

3.Informed Consent. You are responsible for obtaining and documenting effective informed consent using **only** the REC-approved consent documents, and for ensuring that no human participants are involved in research prior to obtaining their informed consent. Please give all participants copies of the signed informed consent documents. Keep the originals in your secured research files for at least five (5) years.

4.Continuing Review. The REC must review and approve all REC-approved research proposals at intervals appropriate to the degree of risk but not less than once per year. There is **no grace period.** Prior to the date on which the REC approval of the research expires, **it is your responsibility to submit the continuing review report in a timely fashion to ensure a lapse in REC approval does not occur.** If REC approval of your research lapses, you must stop new participant enrollment, and contact the REC office immediately.

5.Amendments and Changes. If you wish to amend or change any aspect of your research (such as research design, interventions or procedures, number of participants, participant population, informed consent document, instruments, surveys or recruiting material), you must submit the amendment to the REC for review using the current Amendment Form. You **may not initiate** any amendments or changes to your research without first obtaining written REC review and approval. The **only exception** is when it is necessary to eliminate apparent immediate hazards to participants and the REC should be immediately informed of this necessity.

6.Adverse or Unanticipated Events. Any serious adverse events, participant complaints, and all unanticipated problems that involve risks to participants or others, as well as any research related injuries, occurring at this institution or at other performance sites must be reported to Malene Fouch within **five**
(5) days of discovery of the incident. You must also report any instances of serious or continuing problems, or non-compliance with the RECs requirements for protecting human research participants. The only exception to this policy is that the death of a research participant must be reported in accordance with the Stellenbosch Universtiy Research Ethics Committee Standard Operating Procedures. All reportable events should be submitted to the REC using the Serious Adverse Event Report Form.

7.Research Record Keeping. You must keep the following research related records, at a minimum, in a secure location for a minimum of five years: the REC approved research proposal and all amendments; all informed consent documents; recruiting materials; continuing review reports; adverse or unanticipated events; and all correspondence from the REC

8.Provision of Counselling or emergency support. When a dedicated counsellor or psychologist provides support to a participant without prior REC review and approval, to the extent permitted by law, such activities will not be recognised as research nor the data used in support of research. Such cases should be indicated in the progress report or final report.

9.Final reports. When you have completed (no further participant enrollment, interactions, interventions or data analysis) or stopped work on your research, you must submit a Final Report to the REC.

10.On-Site Evaluations, Inspections, or Audits. If you are notified that your research will be reviewed or audited by the sponsor or any other external agency or any internal group, you must inform the REC immediately of the impending audit/evaluation.

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Approval Notice
Progress Report

27-Jan-2016
Albien, Anouk AJ

Proposal #: HS1144/2014

Title: A mixed-methods analysis of black adolescents' vocational identity status and career adaptability competencies in a low income township.

Dear Miss Anouk Albien,

Your **Progress Report** received on **15-Jan-2016**, was reviewed by members of the **Research Ethics Committee: Human Research (Humanities)** via Expedited review procedures on **27-Jan-2016** and was approved.
Please note the following information about your approved research proposal:

Proposal Approval Period: **27-Jan-2016 -26-Jan-2017**

Please take note of the general Investigator Responsibilities attached to this letter. You may commence with your research after complying fully with these guidelines.

Please remember to use your **proposal number** (**HS1144/2014**) on any documents or correspondence with the REC concerning your research proposal.

Please note that the REC has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

Also note that a progress report should be submitted to the Committee before the approval period has expired if a continuation is required. The Committee will then consider the continuation of the project for a further year (if necessary).

This committee abides by the ethical norms and principles for research, established by the Declaration of Helsinki and the Guidelines for Ethical Research: Principles Structures and Processes 2004 (Department of Health). Annually a number of projects may be selected randomly for an external audit.

National Health Research Ethics Committee (NHREC) registration number REC-050411-032.

We wish you the best as you conduct your research.

If you have any questions or need further help, please contact the REC office at 218089183.

Sincerely,

Clarissa Graham
REC Coordinator
Research Ethics Committee: Human Research (Humanities)

Investigator Responsibilities

Protection of Human Research Participants

Some of the general responsibilities investigators have when conducting research involving human participants are listed below:

1.Conducting the Research. You are responsible for making sure that the research is conducted according to the REC approved research protocol. You are also responsible for the actions of all your co-investigators and research staff involved with this research. You must also ensure that the research is conducted within the standards of your field of research.

2.Participant Enrollment. You may not recruit or enroll participants prior to the REC approval date or after the expiration date of REC approval. All recruitment materials for any form of media must be approved by the REC prior to their use. If you need to recruit more participants than was noted in your REC approval letter, you must submit an amendment requesting an increase in the number of participants.

3.Informed Consent. You are responsible for obtaining and documenting effective informed consent using **only** the REC-approved consent documents, and for ensuring that no human participants are involved in research prior to obtaining their informed consent. Please give all participants copies of the
signed informed consent documents. Keep the originals in your secured research files for at least five (5) years.

4.Continuing Review. The REC must review and approve all REC-approved research proposals at intervals appropriate to the degree of risk but not less than once per year. There is **no grace period.** Prior to the date on which the REC approval of the research expires, **it is your responsibility to submit**
the continuing review report in a timely fashion to ensure a lapse in REC approval does not occur. If REC approval of your research lapses, you must stop new participant enrollment, and contact the REC office immediately.

5.Amendments and Changes. If you wish to amend or change any aspect of your research (such as research design, interventions or procedures, number of participants, participant population, informed consent document, instruments, surveys or recruiting material), you must submit the amendment to the REC for review using the current Amendment Form. You **may not initiate** any amendments or changes to your research without first obtaining written REC review and approval. The **only exception** is when it is necessary to eliminate apparent immediate hazards to participants and the REC should be immediately informed of this necessity.

6.Adverse or Unanticipated Events. Any serious adverse events, participant complaints, and all unanticipated problems that involve risks to participants or others, as well as any research related injuries, occurring at this institution or at other performance sites must be reported to Malene Fouch within **five**
(5) days of discovery of the incident. You must also report any instances of serious or continuing problems, or non-compliance with the RECs requirements for protecting human research participants. The only exception to this policy is that the death of a research participant must be reported in accordance with the Stellenbosch Universtiy Research Ethics Committee Standard Operating Procedures. All reportable events should be submitted to the REC using the Serious Adverse Event Report Form.

7.Research Record Keeping. You must keep the following research related records, at a minimum, in a secure location for a minimum of five years: the REC approved research proposal and all amendments; all informed consent documents; recruiting materials; continuing review reports; adverse or unanticipated events; and all correspondence from the REC

8.Provision of Counselling or emergency support. When a dedicated counsellor or psychologist provides support to a participant without prior REC review and approval, to the extent permitted by law, such activities will not be recognised as research nor the data used in support of research. Such cases should be indicated in the progress report or final report.

9.Final reports. When you have completed (no further participant enrollment, interactions, interventions or data analysis) or stopped work on your research, you must submit a Final Report to the REC.

10.On-Site Evaluations, Inspections, or Audits. If you are notified that your research will be reviewed or audited by the sponsor or any other external agency or any internal group, you must inform the REC immediately of the impending audit/evaluation.

APPENDIX F
Permission Letters: Makupula High School

UNIVERSITEIT•STELLENBOSCH•UNIVERSITY
jou kennisvennoot • your knowledge partner

9th October 2014

The Principal

Makupula High School

Kayamandi,

Dear Mr C. Ndlebe

Re: A mixed-methods analysis of vocational identity status and career adaptability competencies in a South African Township

I am PhD Psychology student at Stellenbosch University involved in the Career Life-Planning project. I will be conducting research on Grade 11 learners to develop career adaptability competencies at both Makupula and Kayamandi High School. The findings will help to develop future career interventions for Kayamandi adolescents.

ln order to do this, I am asking you for permission for the following in 2015:

- To gain access to the Grade 11 learners during a Life Orientation period to ask learners to participate and hand out consent and assent forms to gain parental permission.
- Once forms have been completed, to arrange a class after school to complete measures of the Career adaptabilities Scale (CAAS) and Vocational identity Scale (VISA) to determine if these assessments are psychometrically appropriate for this group of adolescents.
- These learners will be offered career counselling sessions upon completion of the assessments.
- Access to teachers to interview them to create a contextually and culturally appropriate intervention to take place in 2016.

Ethical clearance had been applied for and this research project will take place under the supervision of Prof Naidoo.

Departement Sielkunde • Department of Psychology

Privaatsak/Private Bag X1 • Matieland, 7602 • Suid-Afrika/South Africa, Tel: +27 (0) 21 8083461, Faks/Fax: +27 (0) 21 808 3584
epos/email: cej@sun.ac.za

Please sign below to indicate that permission has been granted.

Sincerely,

Anouk Jasmine Albien
PhD candidate
Stellenbosch University
072 222 8740
anouka@sun.ac.za

Permission granted for the **A mixed-methods analysis of vocational identity status and career adaptability competencies research project to take place in a South African Township**

Signature

09/10/2014
Date

Departement Sielkunde • Department of Psychology

Privaatsak/Private Bag X1 • Matieland, 7602 • Suid-Afrika/South Africa, Tel: +27 (0) 21 8083461, Faks/Fax: +27 (0) 21 808 3584
epos/email: cej@sun.ac.za

UNIVERSITEIT·STELLENBOSCH·UNIVERSITY
jou kennisvennoot • your knowledge partner

9th October 2015

The Principal

Makupula High School

Kayamandi,

Dear Mr C. Ndlebe

Re: A mixed-methods analysis of vocational identity status and career adaptability competencies in a South African Township

I am PhD Psychology student at Stellenbosch University involved in the Career Life-Planning project. I will be conducting research on Grade 11 learners to develop career adaptability competencies at both Makupula and Kayamandi High School. The findings will help to develop future career interventions for Kayamandi adolescents.

In order to do this, I am asking you for permission to conduct a pilot intervention study in 2016:

- To gain access to the Grade 11 learners during a Life Orientation period to ask learners to participate and hand out consent and assent forms to gain parental permission.
- Once forms have been completed, to arrange a class after school to complete measures of the Career adaptabilities Scale (CAAS) and Vocational identity Scale (VISA).
- Then learners will be randomly assigned to a control group (who will receive the intervention later) and an intervention group (who will receive the 20 hour intervention first). The intervention sessions will take place after school over a week, but the times will be organised according to the availability of the learners.
- In the last session, the CAAS and VISA will be written again to determine whether there are any differences seen in scores that show that the intervention had an effect.
- In the last session, learners will be asked for evaluative feedback to improve the intervention, as the final intervention is planned to be administered again towards the end of 2016

Departement Sielkunde • Department of Psychology

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epos/email: cej@sun.ac.za

Ethical clearance had been applied for and this research project will take place under the supervision of Prof Naidoo.

Please sign below to indicate that permission has been granted.

Sincerely,

Anouk Jasmine Albien
PhD candidate
Stellenbosch University
072 222 8740
anouka@sun.ac.za

Permission granted for the **A mixed-methods analysis of vocational identity status and career adaptability competencies research project to take place in a South African Township**

Signature

09/10/2015
Date

Departement Sielkunde • Department of Psychology

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epos/email: cej@sun.ac.za

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9th October 2015

The Principal

Makupula High School

Kayamandi,

Dear Mr C. Ndlebe,

Re: A mixed-methods analysis of vocational identity status and career adaptability competencies in a South African Township

I am PhD Psychology student at Stellenbosch University involved in the Career Life-Planning project. I will be conducting research on Grade 11 learners to develop career adaptability competencies at both Makupula and Kayamandi High School. The findings will help to develop future career interventions for Kayamandi adolescents.

In order to do this, I am asking you for permission to conduct a final intervention study in 2016:

- To gain access to the Grade 10, 11 and 12 learners during a Life Orientation period to ask learners to participate and hand out consent and assent forms to gain parental permission.
- Once forms have been completed, to arrange a class after school to complete measures of the Career adaptabilities Scale (CAAS) and Vocational identity Scale (VISA).
- Then learners who wish to participate will take place in a 20 hour intervention session held over the time frame of as week, but will be tracked over five points in time to determine if their career ideas are changing.
- Upon completion, they will receive a certificate. The intervention sessions will take place after school over a week, but the times will be organised according to the availability of the learners.
- In the last session, learners will be asked for evaluative feedback to improve the intervention, as the final intervention is planned to be administered again towards the end of 2016.

Departement Sielkunde • Department of Psychology

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epos/email: cej@sun.ac.za

- In addition, they have the chance of being selected to take part in a focus group that will take place early 2017 at a venue at Stellenbosch University to gain their perceptions of the effectiveness of the intervention.

Ethical clearance had been applied for and this research project will take place under the supervision of Prof Naidoo.

Please sign below to indicate that permission has been granted.

Sincerely,

Anouk Jasmine Albien
PhD candidate
Stellenbosch University
072 222 8740
anouka@sun.ac.za

Permission granted for the **A mixed-methods analysis of vocational identity status and career adaptability competencies research project to take place in a South African Township**

Signature

09/01/2015
Date

APPENDIX G
Permission Letters: Kayamandi High School

UNIVERSITEIT•STELLENBOSCH•UNIVERSITY
jou kennisvennoot • your knowledge partner

9th October 2014

The Principal

Kayamandi High School

Kayamandi,

Dear Mr Ntshanga,

Re: A mixed-methods analysis of vocational identity status and career adaptability competencies in a South African Township

I am PhD Psychology student at Stellenbosch University involved in the Cares Life-Planning project. I will be conducting research on Grade 11 learners to develop career adaptability competencies at both Makupula and Kayamandi High School. The findings will help to develop future career interventions for Kayamandi adolescents.

In order to do this, I am asking you for permission for the following in 2015:

- To gain access to the Grade 11 learners during a Life Orientation period to ask learners to participate and hand out consent and assent forms to gain parental permission.
- Once forms have been completed, to arrange a class after school to complete measures of the Career adaptabilities Scale (CAAS) and Vocational identity Scale (VISA) to determine if these assessments are psychometrically appropriate for this group of adolescents.
- These learners will be offered career counselling sessions upon completion of the assessments.
- Access to teachers to interview them to create a contextually and culturally appropriate intervention to take place in 2016.

Ethical clearance had been applied for and this research project will take place under the supervision of Prof Naidoo.

Departement Sielkunde • Department of Psychology

Privaatsak/Private Bag X1 • Matieland, 7602 • Suid-Afrika/South Africa, Tel: +27 (0) 21 8083461, Faks/Fax: +27 (0) 21 808 3584
epos/email: cej@sun.ac.za

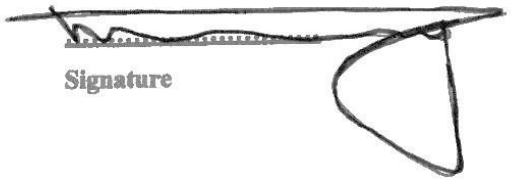
Ethical clearance had been applied for and this research project will take place under the supervision of Prof Naidoo.

Please sign below to indicate that permission has been granted.

Sincerely,

Anouk Jasmine Albien
PhD candidate
Stellenbosch University
072 222 8740
anouka@sun.ac.za

Permission granted for the **A mixed-methods analysis of vocational identity status and career adaptability competencies research project to take place in a South African Township**



Signature

09/10/2014

Date

UNIVERSITEIT•STELLENBOSCH•UNIVERSITY
jou kennisvennoot • your knowledge partner

9th October 2015

The Principal

Kayamandi High School

Kayamandi,

Dear Mr Ntshanga,

Re: A mixed-methods analysis of vocational identity status and career adaptability competencies in a South African Township

I am PhD Psychology student at Stellenbosch University involved in the Career Life-Planning project. I will be conducting research on Grade 11 learners to develop career adaptability competencies at both Makupula and Kayamandi High School. The findings will help to develop future career interventions for Kayamandi adolescents.

In order to do this, I am asking you for permission to conduct a pilot intervention study in 2016:

- To gain access to the Grade 11 learners during a Life Orientation period to ask learners to participate and hand out consent and assent forms to gain parental permission.
- Once forms have been completed, to arrange a class after school to complete measures of the Career adaptabilities Scale (CAAS) and Vocational identity Scale (VISA).
- Then learners will be randomly assigned to a control group (who will receive the intervention later) and an intervention group (who will receive the 20 hour intervention first). The intervention sessions will take place after school over a week, but the times will be organised according to the availability of the learners.
- In the last session, the CAAS and VISA will be written again to determine whether there are any differences seen in scores that show that the intervention had an effect.
- In the last session, learners will be asked for evaluative feedback to improve the intervention, as the final intervention is planned to be administered again towards the end of 2016

Departement Sielkunde • Department of Psychology

Privaatsak/Private Bag X1 • Matieland, 7602 • Suid-Afrika/South Africa, Tel: +27 (0) 21 8083461, Faks/Fax: +27 (0) 21 808 3584
epos/email: cej@sun.ac.za

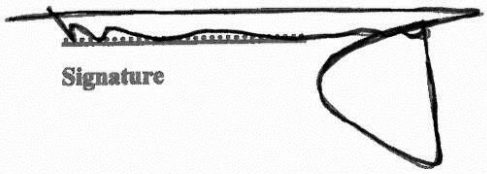
Ethical clearance had been applied for and this research project will take place under the supervision of Prof Naidoo.

Please sign below to indicate that permission has been granted.

Sincerely,

Anouk Jasmine Albien
PhD candidate
Stellenbosch University
072 222 8740
anouka@sun.ac.za

Permission granted for the **A mixed-methods analysis of vocational identity status and career adaptability competencies research project to take place in a South African Township**



Signature

09/10/2015

Date

Departement Sielkunde • Department of Psychology

Privaatsak/Private Bag X1 • Matieland, 7602 • Suid-Afrika/South Africa, Tel: +27 (0) 21 8083461, Faks/Fax: +27 (0) 21 808 3584
epos/email: cej@sun.ac.za

UNIVERSITEIT•STELLENBOSCH•UNIVERSITY
jou kennisvennoot • your knowledge partner

9th October 2015

The Principal

Kayamandi High School

Kayamandi,

Dear Mr Ntshanga,

Re: A mixed-methods analysis of vocational identity status and career adaptability competencies in a South African Township

I am PhD Psychology student at Stellenbosch University involved in the Career Life-Planning project. I will be conducting research on Grade 11 learners to develop career adaptability competencies at both Makupula and Kayamandi High School. The findings will help to develop future career interventions for Kayamandi adolescents.

In order to do this, I am asking you for permission to conduct a final intervention study in 2016:

- To gain access to the Grade 10, 11 and 12 learners during a Life Orientation period to ask learners to participate and hand out consent and assent forms to gain parental permission.
- Once forms have been completed, to arrange a class after school to complete measures of the Career adaptabilities Scale (CAAS) and Vocational identity Scale (VISA).
- Then learners who wish to participate will take place in a 20 hour intervention session held over the time frame of as week, but will be tracked over five points in time to determine if their career ideas are changing.
- Upon completion, they will receive a certificate. The intervention sessions will take place after school over a week, but the times will be organised according to the availability of the learners.
- In the last session, learners will be asked for evaluative feedback to improve the intervention, as the final intervention is planned to be administered again towards the end of 2016.

Departement Sielkunde • Department of Psychology

Privaatsak/Private Bag X1 • Matieland, 7602 • Suid-Afrika/South Africa, Tel: +27 (0) 21 8083461, Faks/Fax: +27 (0) 21 808 3584
epos/email: cej@sun.ac.za

- In addition, they have the chance of being selected to take part in a focus group that will take place early 2017 at a venue at Stellenbosch University to gain their perceptions of the effectiveness of the intervention.

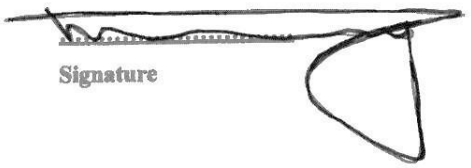
Ethical clearance had been applied for and this research project will take place under the supervision of Prof Naidoo.

Please sign below to indicate that permission has been granted.

Sincerely,

Anouk Jasmine Albien
PhD candidate
Stellenbosch University
072 222 8740
anouka@sun.ac.za

Permission granted for the **A mixed-methods analysis of vocational identity status and career adaptability competencies research project to take place in a South African Township**



Signature

09/10/2015

Date

APPENDIX H:
Western Cape Education Department Clearance

Directorate: Research

Audrey.wyngaard@Westerncape.gov.za
tel: +27 021 467 9272
Fax: 0865902282
Private Bag x9114, Cape Town, 8000
wced.wcape.gov.za

REFERENCE: 20141016-38239
ENQUIRIES: Dr A T Wyngaard

Miss Anouk Albien
PO Box 298
Gordon's Bay
7151

Dear Miss Anouk Albien

RESEARCH PROPOSAL: A MIXED-METHODS ANALYSIS OF BLACK ADOLESCENTS' VOCATIONAL IDENTITY STATUS AND CAREER ADAPTABILITY COMPETENCIES IN A LOW INCOME TOWNSHIP

Your application to conduct the above-mentioned research in schools in the Western Cape has been approved subject to the following conditions:

1. Principals, educators and learners are under no obligation to assist you in your investigation.
2. Principals, educators, learners and schools should not be identifiable in any way from the results of the investigation.
3. You make all the arrangements concerning your investigation.
4. Educators' programmes are not to be interrupted.
5. The Study is to be conducted from **15 January 2015 till 30 September 2015**
6. No research can be conducted during the fourth term as schools are preparing and finalizing syllabi for examinations (October to December).
7. Should you wish to extend the period of your survey, please contact Dr A.T Wyngaard at the contact numbers above quoting the reference number?
8. A photocopy of this letter is submitted to the principal where the intended research is to be conducted.
9. Your research will be limited to the list of schools as forwarded to the Western Cape Education Department.
10. A brief summary of the content, findings and recommendations is provided to the Director: Research Services.
11. The Department receives a copy of the completed report/dissertation/thesis addressed to:

    The Director: Research Services
    Western Cape Education Department
    Private Bag X9114
    CAPE TOWN
    8000

We wish you success in your research.
Kind regards.
Signed: Dr Audrey T Wyngaard
Directorate: Research
DATE: 16 October 2014

Western Cape Government
Education

Directorate: Research
Audrey.wyngaard@Westerncape.gov.za
tel: +27 021 467 9272
Fax: 0865902282
Private Bag x9114, Cape Town, 8000
wced.wcape.gov.za

REFERENCE: 20141016-38239
ENQUIRIES: Dr A T Wyngaard

Miss Anouk Albien
PO Box 298
Gordon's Bay
7151

Dear Miss Anouk Albien

RESEARCH PROPOSAL: A MIXED-METHODS ANALYSIS OF BLACK ADOLESCENTS' VOCATIONAL IDENTITY STATUS AND CAREER ADAPTABILITY COMPETENCIES IN A LOW INCOME TOWNSHIP

Your application to conduct the above-mentioned research in schools in the Western Cape has been approved subject to the following conditions:

12. Principals, educators and learners are under no obligation to assist you in your investigation.
13. Principals, educators, learners and schools should not be identifiable in any way from the results of the investigation.
14. You make all the arrangements concerning your investigation.
15. Educators' programmes are not to be interrupted.
16. The Study is to be conducted from **18 January 2016 till 30 September 2016**
17. No research can be conducted during the fourth term as schools are preparing and finalizing syllabi for examinations (October to December).
18. Should you wish to extend the period of your survey, please contact Dr A.T Wyngaard at the contact numbers above quoting the reference number?
19. A photocopy of this letter is submitted to the principal where the intended research is to be conducted.
20. Your research will be limited to the list of schools as forwarded to the Western Cape Education Department.
21. A brief summary of the content, findings and recommendations is provided to the Director: Research Services.
22. The Department receives a copy of the completed report/dissertation/thesis addressed to:

    The Director: Research Services
    Western Cape Education Department
    Private Bag X9114
    CAPE TOWN
    8000

We wish you success in your research.

Kind regards.
Signed: Dr Audrey T Wyngaard
Directorate: Research
DATE: 3 December 2015

APPENDIX I:
Teacher's Consent Forms

RESEARCH ASSISTANT CONFIDENTIALITY & CONSENT AGREEMENT

[A Mixed-methods Analyis of Black Adolescent's Vocational Identity Status and Career Adaptability Competencies in a South African Township]

I, _____, agree to assist the primary investigator with this study by _____. I agree to maintain full confidentiality when performing these tasks.

Specifically, I agree to:

1. keep all research information shared with me confidential by not discussing or sharing the information in any form or format with anyone other than the primary investigator;
2. hold in strictest confidence the identification of any individual that may be revealed during the course of performing the research tasks;
3. not make copies of any raw data in any form or format, unless specifically requested to do so by the primary investigator;
4. take part in interviews to inform the career research process and give all raw data, in any form or format, to the primary investigator when I have completed the research tasks and destroyall research information in any form or format that is not returned.
5. I understand that I may withdraw at any time without any consequence and that signing this form indicates my consent to take part in this research process.

Contact information for research assistant:

Name of research assistant_____

Address_____

Telephone number_____

Signature of research assistant_____ Date _____

Name of primary investigator_____

Signature of primary investigator_____ Date_____

APPENDIX J
Permission letter: Vision K

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jou kennisvennoot • your knowledge partner

20 September 2015
Vision Afrika
118A Masithandane Street,
Kayamandi, Stellenbosch 7600

Dear Vision Afrika managementteam,

Re: A mixed-methods analysis of vocational identity status and career adaptability competencies in Grade 11 learners

I am PhD Psychology student at Stellenbosch University involved in the Career Life-Planning project. I will be conducting research on Grade 11 learners to develop career adaptability competencies at both Makupula and Kayamandi High School in 2016. The findings will help to develop future career interventions for Kay-amandi adolescents.

In order to do this, I am asking you for permission for the following:

- To gain access to the Grade 11 learners to ask learners to participate and hand out consent and assent forms to gain parental permission.
- Once forms have been completed, self-assessments will be used to help learners gain insight into their current career development status. Learners will complete measures of the Career adaptabilities Scale (CAAS) and Vocational identity Scale (VISA).
- Thereafter, learners will take part in an intervention, consisting of 20 hours running in October, from the 19th October until the 31 stOctober , each day with a slot from 4:30-6:30pm, with two Saturday mornings from 9:00-13:00 pm.
- A final self-assessment of the CAAS and VISA with the Grade 11 's will be completed to determine whether the intervention has caused a difference in career adaptability competencies,
- Lastly, learners who completed the intervention will be interviewed informally in the last session about their experiences of the intervention to be used as constructive feedback.

Departement Sielkunde • Department of Psychology
Privaatsak/Private Bag Xl Matieland, 7602 • Suid-Afrika/South Africa, Tet +27 (0) 21 8083461 ,Faks/Fax: +27 (0) 21 808 3584 epos/email: cej@sun.ac.za

Ethical clearance has been applied for at the University of Stellenbosch's Review Board. Prof Naidoo will be supervising my research. This intervention, is a pilot study that will inform the intervention in 2016 with Makupula and Kayamandi High School learners.

Please sign in the area below to indicate your permission for this pilot intervention to take place at Vision Afrika.

Kind regards,

Anouk Jasmine Albien
University of Stellenbosch
PhD Psychology Student
anouka@sun.ac. za
072 222 8740

Permission of the Vision Afrika Management to participate in the research study.
A mixed-methods of analysis of black adolescents' vocational identity status and career adaptability competencies in a low income township.

T. Mbokodi
Signature

20/09/2015
Date

APPENDIX K
Vision K Staff Member's Consent Form

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RESEARCH ASSISTANT CONFIDENTIALITY & CONSENT AGREEMENT

[A Mixed-methods Analyis of Black Adolescent's Vocational Identity Status and Career Adaptability Competencies in a South African Township]

I, _____, agree to assist the primary investigator with this study by _____. I agree to maintain full confidentiality when performing these tasks.

Specifically, I agree to:

6. keep all research information shared with me confidential by not discussing or sharing the information in any form or format with anyone other than the primary investigator;
7. hold in strictest confidence the identification of any individual that may be revealed during the course of performing the research tasks;
8. not make copies of any raw data in any form or format, unless specifically requested to do so by the primary investigator;
9. take part in interviews that will inform the career research process and give all raw data, in any form or format, to the primary investigator when I have completed the research tasks and destroyall research information in any form or format that is not returned.
10. I understand that I may withdraw at any time without any consequence and that signing this form indicates my consent to take part in this research process.

Contact information for research assistant:

Name of research assistant_____

Address_____

Telephone number_____

Signature of research assistant_____ Date _____

Name of primary investigator_____

Signature of primary investigator_____ Date_____

APPENDIX L
Fieldworker's Contract and Confidentiality Form

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jou kennisvennoot • your knowledge partner

RESEARCH ASSISTANT CONFIDENTIALITY & CONTRACTUAL AGREEMENT

[A Mixed-methods Analyis of Black Adolescent's Vocational Identity Status and Career Adaptability Competencies in a South African Township]

I, _____, agree to assist the primary investigator with this study by _____. I agree to maintain full confidentiality when performing these tasks, for which I will be remunerated on an agreed hourly rate and I will commnit to a set number of hours per week as agreed with the principal investigator.

Specifically, I agree to:

1. keep all research information shared with me confidential by not discussing or sharing the information in any form or format with anyone other than the primary investigator;
2. hold in strictest confidence the identification of any individual that may be revealed during the course of performing the research tasks;
3. give all raw data in any form or format to the primary investigator when I have completed the research tasks and destroy all research information in any form or format that is not returned.
4. Faciliate the research process by verbally translating from English into isiXhosa and vice versa.
5. Attend the career intervention sessions that I have agreed to facilitate and answer participant's questions in-session.
6. Should I wish to voluntarily give any qualitative information to inform the career intervention or research process, I will indicate my interest and sign a separate consent form.
7. I understand that I may withdraw without any consequence from my contract of employment but need to inform the principal investigator of my intention to do so.

Contact information for research assistant:

Name of research assistant_____

Address_____

Telephone number_____

Signature of research assistant_____ Date _____

Name of primary investigator_____

Signature of primary investigator_____ Date_____

APPENDIX M
Fieldworker's Consent Form

UNIVERSITEIT·STELLENBOSCH·UNIVERSITY
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RESEARCH ASSISTANT CONFIDENTIALITY & CONSENT AGREEMENT

[A Mixed-methods Analyis of Black Adolescent's Vocational Identity Status and Career Adaptability Competencies in a South African Township]

I, _____, agree to assist the primary investigator with this study by _____. I agree to maintain full confidentiality when performing these tasks.

Specifically, I agree to:

1. keep all research information shared with me confidential by not discussing or sharing the information in any form or format with anyone other than the primary investigator;
2. hold in strictest confidence the identification of any individual that may be revealed during the course of performing the research tasks;
3. provide information about the Kayamandi context that could add to the value of the career intervention
4. take part in interviews that will inform the career research process and give all raw data, in any form or format, to the primary investigator when I have completed the research tasks and destroyall research information in any form or format that is not returned.
5. I understand that I may withdraw at any time without any consequence and that signing this form indicates my consent to take part in this research process.

Contact information for research assistant:

Name of research assistant_____

Address_____

Telephone number_____

Signature of research assistant_____ Date _____

Name of primary investigator_____

Signature of primary investigator_____ Date_____

APPENDIX N
Career Adapt-abilities Scale

Career Adapt-Abilities Scale

Name _____

Age _____ Circle one: Male or Female

DIRECTIONS

Different people use different strengths to build their careers. No one is good at everything, each of us emphasizes some strengths more than others. Please rate how strongly you have developed each of the following abilities using the scale below.

STRENGTHS	Strongest	Very Strong	Strong	Somewhat Strong	Not Strong
1. Thinking about what my future will be like					
2. Realizing that today's choices shape my future					
3. Preparing for the future					
4. Becoming aware of the educational and vocational choices that I must make					
5. Planning how to achieve my goals					
6. Concerned about my career					
7. Keeping upbeat					
8. Making decisions by myself					
9. Taking responsibility for my actions					
10. Sticking up for my beliefs					
11. Counting on myself					
12. Doing what's right for me					

Please rate how strongly you have developed each of the following abilities using the scale below.

STRENGTHS	Strongest	Very Strong	Strong	Somewhat Strong	Not Strong
13. Exploring my surroundings					
14. Looking for opportunities to grow					
15. Investigating options before making a choice					
16. Observing different ways of doing things					
17. Probing deeply into questions that I have					
18. Becoming curious about new opportunities					
19. Performing tasks efficiently					
20. Taking care to do things well					
21. Learning new skills					
22. Working up to my ability					
23. Overcoming obstacles					
24. Solving problems					

APPENDIX O
Career Adapt-abilities Scale (Iceland Version)

Name: Age: Circle one: Male or Female

Different people use different strengths to build their careers. No one is good at everything, each of us emphasizes some strengths more than others. Please rate how strongly you have developed eachof the following abilities using the scale below.

STRENGTHS	strongest	Very strong	strong	Somewhat strong	Not strong
1. Thinking about what my future will be like					
2. Realising that today's choices shape my future					
3. Preparing for the future					
4. Becoming aware of the educational and vocational choices that I must make					
5. Planning how to achieve my goals					
6. Concerned about my career					
7. Keeping upbeat					
8. Making decisions by myself					
9. Taking responsibility for my actions					
10. Sticking up for my beliefs					
11. Counting on myself					
12. Doing what's right for me					
13. Exploring my surroundings					
14. Looking for opportunities to grow					
15. Investigating options before making a choice					
16. Observing different ways of doing things					

STRENGTHS	**strongest**	**Very strong**	**strong**	**Somewhat strong**	**Not strong**
17. Probing deeply into questions that I have					
18. Becoming curious about new opportunities					
19. Performing tasks efficiently					
20. Taking care to do things well					
21. Learning new skills					
22. Working up to my ability					
23. Overcoming obstacles					
24. Solving problems					
25. Getting along with all kinds of people					
26. Cooperating with others on group projects					
27. Compromising with other people					
28. Going along with the group					
29. Sharing with others					
30. Understanding others point of view					
31. Finding purpose in my studies and work					
32. Wanting to be appreciated					
33. Wanting my work to be respected					
34. Expecting to be active in my community					
35. Wanting people to think I do good					
36. I know I have to perform well to obtain my future goals					

APPENDIX P
Vocational Identity Scale (VISA)

Name_____

Age_____ **Circle One: Male or Female**

Please respond as follows:strongly disagree, disagree, neutral, agree, strongly agree.

	Strongly disagree	**disagree**	**neutral**	**agree**	**Strongly agree**
In-Breadth (wide) Career Exploration 1. Learning about careers that are unfamiliar to me to find a few to explore further					
2. Trying different experiences so that I can find several jobs that might suit me					
3. Thinking about how I could fit into many different careers					
4. Learning about various jobs that I might like					
5. Keeping my options open as I learn about many different careers					
In-Depth (deep) Career Exploration 1. Identifying my strongest talents as I think about careers					
2. Learning as much as I can about the particular educational requirements of the career that interests me the most					
3. Learning what I can do to improve my chances of getting into my chosen career					
4. Trying to find people that share my career interests					
5. Thinking about all the aspects of working that are important to me					
Career commitment-making 1. I know what kind of work is best for me					
2. No other career is as appealing to me as the one I expect to enter					
3. I have known for a long time what career is best for me					
4. No one will change my mind about the career I have chosen					

	Strongly disagree	**disagree**	**neutral**	**agree**	**Strongly agree**
5. I have invested a lot of energy into preparing for my chosen career					
Identification with Career Commitment 1. My career will help me satisfy deeply personal goals					
2. My family feels confident that I will enter my chosen career					
3. Becoming a worker in my chosen career will allow me to become the person I dream to be					
4. I chose a career that will allow me to remain true to my values					
5. My career choice will permit me to have the kind of family life I wish to have					
Career ReconsiderationCareer Self-Doubt 1. Thinking about choosing a career makes me feel uneasy					
2. When I tell other people about my career plans, I feel like I am being a little dishonest					
3. People who really know me seem doubtful when I share my career plans with them					
4. I doubt I will find a career that suits me					
5. I may not be able to get the job I really want					
Career Flexibility 1. My work interests are likely to change in the future					
2. What I look for in a job will change in the future					
3. I will probably change my career goals					
4. My career choice might turn out to be different than I expect					
5. I need to learn a lot more before I can make a career choice					

APPENDIX Q
Career Intervention Booklet

VOICES OF CAREER DEVELOPMENT

A NARRATIVE WORKBOOK FOR CREATING CAREER-LIFE ADAPTABILITY

MAY-AUGUST 2016

Name.....
Age.....
Sex.....
School.....
Grade.....
Date.....

VOICES
Shaping Career Stories

CONTENTS

1) Introduction: Creating career adaptability	**2**
2) The five C's of Career Adptability	**2**
3) Stimulating stories and learning: A Case study	**3**
4) Concern	**4**
5)Control	**7**
6) Curiosity	**9**
7) Confidence	**14**
8) Co-operation	**16**
9) Actualising a career identity	**17**
10) Reflection	**18**

1. INTRODUCTION: CREATING CAREER ADAPTABILITY

Narrative career counselling aids individuals to understand themselves as authors who express their life experiences in story-form (Cochran, 1998; Inkson, 2004; Sarbin, 1986). The Career Construction Theory (CCT) will be used in the present workshop to facilitate understandings of an individual's ***vocational personality*** (who they are), ***career adaptability*** (how to adapt) and ***life themes*** (what work roles are valued) (Savickas&Porfeli, 2012). Therefore, this workshop will aim to developa description of vocational personality (what), career adaptability (how) and life themes (why), which are interwoven in individuals' narratives (Del Corso &Rehfuss, 2011).Career adaptability includes activities such as adjusting to different working environments, flexibility when facing change, proactivity in searching for new challenges and future career plans, career exploration and commitment-making (Bimrose& Hearne, 2012).

What is career adaptability?

Career adaptability is a set of resources that may enable an individual to self-regulate and adjust to developmental tasks, career transitions and traumas (Öncel, 2014). Here adaptation is described as a series of attempts and problem-solving strategies used by an individual in placing personal needs into work roles and opportunities (Savickas, 1997; Savickas&Porfeli, 2012).

2. THE FIVE C'S OF CAREER ADAPTABILITY

Savickas (2005; 2007) identified the ABC's of career adaptability, which include coping attitudes, beliefs and competencies. These attitudes, beliefs and competencies influence four dimensions of career adaptability. These four dimensions are, how ***concerned*** people are about their career, the ***control*** they believe to have over their career, the extent of their ***curiosity*** about existing work roles and opportunities and the ***confidence*** they have to initiate and complete career tasks (Del Corso &Rehfuss, 2011). Lastly, ***co-operation*** refers to the act of collaborating with others with a specific goal in mind. Favourable career planning and exploration attitudes are believed to result in positive attitudes towards the future, more internal attributions for success and higher levels of self-esteem (Janeiro, 2009; Gushue, Clarke, Pantzer, &Scanlan, 2006; Skorikov, 2007a, 2007b; Usinger& Smith, 2010).

3. STIMULATING STORIES AND LEARNING: A CASE STUDY

Drawing on other people's stories may stimulate thought and reflection. An example of the use of a story to promote learning is provided in the case study below about Nikiwe.

NIKIWE'S STORY

A case study provided by Maree (2010), introduces us to Nikiwe. She was in her matric year of high school when she told her teacher that she didn't know what to do when she left school. Her teacher encouraged her to tell stories about herself that at first seemed unrelated. As Nikiwe told her stories, her teacher asked "What does this say about you as a person?" There were similar themes in each of Nikiwe's stories. The comon themes provide clues about what would make Nikiwe happy in her future work. Nikiwe now saw the value of telling stories that were important to her as they contained important building blocks in order to construct a future career story. For example, an occupation that addresses most of Nikiwe's life themes suggests she will be satisfied.

These are her stories:

A family story from the past: *"When I was younger, at primary school, both my parents worked. I used to look after my brother and sister after school and make sure that they did their homework, I also prepared dinner for when my parents came home."*

A story from a work setting: *" I enjoyed my first part-time job in agift store. We specialsied in assisting people to find suitable gifts within a budget."*

A recent story from her school setting: *" At high school, I belonged to a committee that raised money for worthy causes. I was good at organising the other committee members and was often in charge of fundraising events. People just seemed to know they could depend on me."*

Identified life themes present in each story:

Caring	***Trustworthy***
Helpful	***Dependable/Reliable***
Responsible	***Good at working with people***
Good organiser	***Systematic about working towards a goal***

Much later Nikiwe decided to work for an international aid agency and believed that the life themes she idnetified with her teacher would be relevant to her new job. Until Nikiwe took the time to reflect on her stories, she was unaware of the commonthemes in her life that gave her satisfaction.

This workshop will help you to identify your common life themes to create your career story.

4. CONCERN

The first dimension of career adaptability is *concern* that includes the task of having a future orientation (Savickas & Porfeli, 2012).Concern involves a tendency to consider life within a time perspective anchored in hope and optimism. Career concern includes: time perspective, planfulness, anticipation, and achievability of future goals (Öncel, 2014). We will begin by looking at your current career concernsand how these may have changed from the past and what you anticipateyou're your future career concerns. You can write down what your current needs and aims are for attending this workshop.

I hope that this workshop will help me to:

……

……

……

……

You will have to write a story about what career choices or decisions you need to make to create your ideal future "you". Here you will outline the achievements you want mentioned. Think of it as a newspaper article that tells people what sort of person you are and what they can remember you for.

Exercise 1.The Future You

……

……

……

……

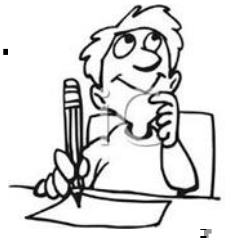
……

……

……

……

Lessons I have learnt: what seems to be very important to me for my future goals?



Exercise 2. MY CAREER VOICE: SHAPING MY CAREER STORY

Please fill in your career ideas, concerns and decisions as they have changed over time.

What steps have you taken for your career?

What decisions have you taken for your career so far?	What actions do you need to take now?	What will you have to take in the future?
PAST	**PRESENT**	**FUTURE**

5. CONTROL

Control is the second most important dimension of career adaptability that describes the responsibility individuals assume for constructing their own careers. Control is based on the conviction that individuals need to be able to use self-regulatory strategies to adjust to different contexts, but also that he/she is able to exert an influence on the context (Savickas, 2009).This includes decision-making, assertiveness, self-determination and agency (Öncel, 2014).

Exercise 3. Identifying the positive and negative voices of others in my career story

My family believe:

……
……
……
……

My friends believe:

……
……
……
……

My teachers believe that:

……
……
……
……

My community believes:

……
……
……
……

My culture shows that:

……
……
……
……

Media messages show that:

……
……

Exercise 4. Putting the voices of others into my story

This is a place for you to add the most significant positive and negative voices and stories that are included in your career story. Then cross the ones out that you should actively reject, leaving only the voices that you know to be a true reflection of your skills and abilities.

TEACHERS

FAMILY

FRIENDS

CULTURE

MEDIA

COMMUNITY

What will you do in future when you hear negative voices that could be a barrier to your career story?

……

……

……

6. CURIOSITY

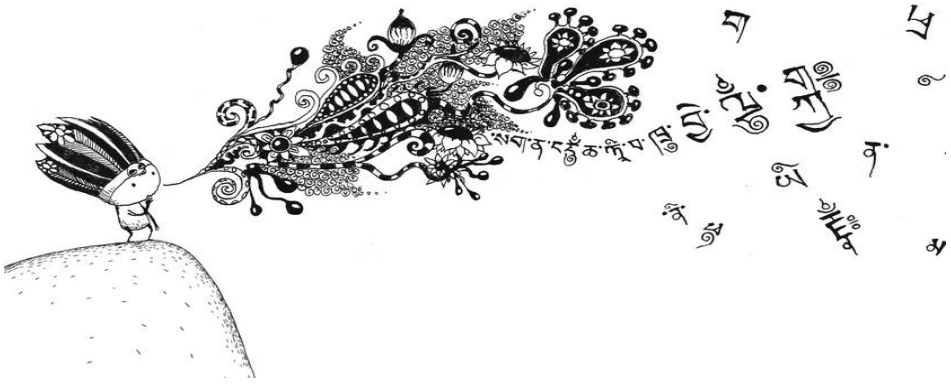
The third dimension, *career curiosity*, includes initiatives to engage in exploration of the world-of-work and the self in order to create a realistic career identity (Foxcroft&Roodt, 2005). Curiosity of possible selves and social opportunities increase an individual's active career exploration behaviours.

VOICES OF SELF: MY STORY

Stories are central to an understanding of how events are linked together across time to form a specific plot (Morgan, 2000). This means that you are the author of shaping your own story. Therefore, you are positioned as the expert in your own life, with the skills and beliefs that will assist you to reduce the influence of problems in your life and enable you to make successful career-life decisions. To begin, it is important to understand that creating your own narrative story is like travelling roads on a journey. At every step a new path can form and new possible directions can open up. However, you can always retrace your steps, stay on the same path for a while or take a different path. There is no right or wrong way to form your own career story, it is your journey with may different possible directions to choose from. The main thing that you need to know is that lives are understood and lived through the creation and telling of stories, of which a career story is the one we will focus on in this intervention.

Why is creating a career story important?

The stories that we tell about ourselves and our lives are created through linking certain events together over time, in a way that is meaningful and makes sense. Your narrative and your voice is the thread that weaves all the events together in order to form a story. So now what do you think are the most important events that have shaped who you are?



Who has helped shape who you are?

Think of all the people who you admire. These are all the individuals who have made a significant impact on you. It can be someone close to you, someone you only know from afar, it can someone in the media or even a specific character on TV or in a book.I would like you to think of at leat three. Please write down all three and then explain why these people have made such an impact on you. Please specify what quailities, skills or strengths these individuals have.

Exercise 5. Identifying the people who have shaped you

First person I admire and their advice:

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Second person I admire and their advice:

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Third person I admire and their advice:

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Please think about the events and people that have shaped you. Next to each cross in the diagram write a significant event that happened to you and the year. It can also be the event of meeting a person who had an impact on you and your career ideas. Then once you have filled in the diagram below, join the crosses in a line that has formed a specific story that you have about your identity . For example, if you had listed various obstacles, then you could link these events and create a plot of being resilient and being able to overcome obstacles.

Exercise 6. Creating the plot of my career story

x		x	x	
	X		x	
		X		x
	X		x	
X			x	

Once you have connected the crosses, please write down the belief or meaning that you made through connecting these events together. However, before you do that please add the skills that you think you have and then these too can be added into your career story.

Exercise 7. Choosing my skills

Category	Below average	Average	A real talent
1) Mechanical (taking things apart, building things, fixing things).			
2) Physical/athletic (having coordination, quikness, strength, size).			
3) Manual finesse (handling small objects with your fingers easily).			
4) Analytical (solving puzzles/brainteasers or problems, questioning how things work).			
5) Creative (inventive, good at coming up with new ideas, imaginative).			
6) Artistic (drawing pictures, painting, crafts, etc).			
7) Musical (singing, playing an instrument, producing music, listening to music, etc.)			
8) Social (making friends, meeting new people, helping others).			
9) Persuasive (selling things, getting people to see your point of view).			
10) Organising (keeping things neat, using a planner, managing time).			
11) Leadership (other look up to you and follow your example).			
12)Academic (learning things easily, performing well in tests).			

Now using the skills that you have identified above please write down the narrative or career plot that you have constructed using the advice that your role models would have given you.This will give you some insight into how you create meaning of events that have happened to you and that you can reauthor the events to create a new career narrative throughout your life.Pleas include the skills that you deveoped or learnt along the way.

Exercise 8. Plotting my career story

The plot of my career story:
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7. CONFIDENCE

Confidenceis the fourth dimension of career adaptability, which are the beliefs harboured about capabilities, otherwise known as self-efficacy (Bandura, 1986). Proactive career behaviour is indicated by self-confidence, self-esteem and self-efficacy in pursuing goal-related career activities (Betz & Hackett, 1981; Lent, Brown, & Hackett, 2000). However, confidence also includes the capacity to stand by an individual's own aspirations and objectives, even in the face of obstacles and barriers.

Exercise 9. Externalising Conversations(Madigan, 2015)

What is the greatest problem that you currently face in your career path?……
……

Picture this problem as a person. How does he/she act? What does he/she say to you ?

……
……
……
……

How does this problem influence different areas of your life? Your relationship with others? your thoughts? your story about who you are as a person?

……
……
……
……

Why is this justified for the problem to exert such a negative influence on your life?

……
……
……

What strategies and tricks does this problem use to gain control overyou?……
……
……

Where does the problem fail? What strategies and tricks do you use to overcome this problem?

……
……
……
……

Who is on your side against the problem? How can you reclaim your life from this problem?

……
……
……

Exercise 10.Mapping externalising conversations (White,1988)

Intentional understandings of experience & understanding what is given value		Intentional understandings of experience & understanding what is given value	
Personal experience of the problem		Personal experience of this development	
Effects of the problem		Effects of the iniative	
Characterisation of the problem		Characterisation of the new initiative	

8. CO-OPERATION

Co-operation is the last dimension of career adaptability, which are the beliefs harboured about working with others and collaboration. Johari's window shows the areas where we don't know ourselves to have certain skills, but others perceive these skills to be present. Or Johari's window can show you characteristics that you may be afraid to admit to anyone else close to you, but that may be very important to your career story.

Exercise 11. My personalised Johari's window of my career story

Known by self and known by others:	**Unknown by self and known by others:**
Unknown by others but known by self:	**Unknown by self and unknown by others:**

This is why you will need to share your career stories with others to gain feedback and ideas that could result in shared discovery. Please take a moment and think about how to fill in your personalised Johari window model below. In the diagram below you need to be honest about your own self-knowledge and world-of-work knowledge.

9. ACTUALISING A CAREER IDENTITY

This is about help you understand what you learnt and helping you create new career goal. Before you fill in this section, I want you to think about how you will create your career story and who you will need for support. Please think about who you can ask questions or gain other resources through the working with other individuals

Exercise11. Checklist of questions to consider

- ○ Have you got three different careers that you would consider getting training for?
- ○ Have you found training institutions where they are offered?
- ○ What are the entry requirements? Do you meet the entry requirements?
- ○ Do you know how to apply? Online? Or on paper?
- ○ What do applictaion fees cost? Can you pay later or get a waiver?
- ○ Do you know when application deadlines are?
- ○ Have you applied with your grade 11 results?
- ○ Have I checked the training institutions websites for bursaries?
- ○ Have I checked learnersguide for bursaries?
- ○ Am I eligible for a loan? NSFAS? Financial support bursaries?
- ○ What marks do I need to get to get accepted?
- ○ How will I work towards those marks? What will I do differently?
- ○ Who can I ask to be my mentor?
- ○ Who is studying to be what I want to be? Can I meet up with them and ask them questions that I have bout what I need to make my career choice a success?
- ○ What will I do if something negativeky affects my progress?
- ○ What will I do if I have more negative career voices in my career story?

10. REFLECTION

1. **Now I am considering the following career choices:**

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   .....
   .....

2. **I will be most happy and successful when I am:**

   Able to:

   .....
   .....
   .....

   In places where:

   .....
   .....

   So that I can:

   .....
   .....
   .....

3. **The case study was interesting because:**

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4. **My role models have taught me that:**

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5. **My career voices have showed me that:**

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6. **My externalising conversation helped me understand that:**

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7. **Plotting my career story gave me insight into:**

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8. **The checklist of questions helped me to think about:**

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.....

9. **What have you noticed that you were not previously aware of?**

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.....

10. **What stands out the most for you after this intervention?**

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.....
.....

11. **What would you like to change?**

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.....
.....

12. **Is there anything else you would like to mention?**

.....
.....

APPENDIX R
Intervention Feedback exercise

Feedback exercise:

Date:

Name of learner:

Did you enjoy being part of the career workshop?

No	Not really	Unsure	A little bit	Very much

Positive: What parts of the workshop did you like:

Negative: What aspects did you not like?

Interesting: What did you find interesting about the workshops?

APPENDIX S
Intervention Reflective Feedback

Name: **Date:**

1) What are your current career decisions that you have to make?

2) Do you think that these career ideas will stay the same in the future?

3) In discussing your past career ideas, have they changed at all? If so how and what has caused them to change?

4) Can you describe surrounding barriers that make you feel as if yourcareer goals are unreachable?

5) Are there any surrounding resources that motivate you and make you feel as if your career goals are possible?

6) What did you find the influence of significant others such as parents, teachers, role models and peers are on your personal career ideas?

7) Tell me how you would describe your self-awareness before this career exploration? And is your self-awareness different from then? If so how and what do you think contributed to this change?

8) What if anything did you think about your career before completing the intervention?

9) How, if at all, have your thoughts and feelings changed about your career influences since completing the intervention?

10) How would you describe your overall experience of the intervention as a career developmentprocess?

11) Is there something that stands out for you or that you would like to change?

Thank you for your participation!

APPENDIX T
Focus Group Interview Schedule

1) What if anything did you think about your career before completing the intervention?

2) Tell me how you would describe your self-awareness before this career exploration? And is your self-awareness different from then? If so how and what do you think contributed to this change?

3) How, if at all, have your thoughts and feelings changed about your career influences since completing the intervention?

4) How would you describe your overall experience of the intervention as a career development process?

5) Is there something that stands out for you or that you would like to change?

Thank you for your participation!

APPENDIX U
Phase Three Reliability Analyses

Table Q.1.

Reliability analyses of the Pilot study: Pre- and post-*CAAS-Collectivistic version* subscales

CAAS-Iceland subscale	**Pre**				**Post**			
	M	*SD*	*α*	*CI*	*M*	*SD*	*α*	*CI*
Concern	22.10	3.93	0.73	0.61-0.80	23.74	4.44	0.83	0.75-0.88
Control	23.13	3.55	0.72	0.57-0.80	23.63	4.33	0.83	0.76-0.87
Confidence	22.23	3.83	0.72	0.59-0.80	22.32	4.25	0.81	0.73-0.86
Curiosity	20.86	4.16	0.76	0.66-0.82	22.69	4.64	0.81	0.74-0.86
Co-operation	22.40	5.13	0.86	0.81-0.91	23.31	4.64	0.84	0.77-0.88
Contribution	23.21	3.64	0.63	0.42-0.72	23.70	3.48	0.67	0.49-0.72

Table Q.2.

Reliability analyses of the Pilot Study: Pre- and post- *VISA* subscales

VISA subscale	**Pre**				**Post**			
	M	*SD*	*A*	*CI*	*M*	*SD*	*α*	*CI*
IB	19.90	3.59	0.71	0.52-0.84	19.15	4.15	0.85	0.78-0.90
ID	20.57	2.86	0.68	0.39-0.87	20.27	3.84	0.83	0.70-0.91
CCM	17.43	4.09	0.74	0.62-0.83	18.12	3.90	0.74	0.61-0.84
ICM	20.80	2.95	0.70	0.55-0.79	20.99	3.40	0.80	0.71-0.85
CF	15.98	3.85	0.66	0.52-0.77	15.33	4.10	0.73	0.60-0.81
SD	12.34	4.09	0.71	0.58-0.80	12.24	4.47	0.77	0.67-0.84

APPENDIX V:
Phase 3 Pre- and Post-stastistics

CAAS co-operation
Group*time; LS Means

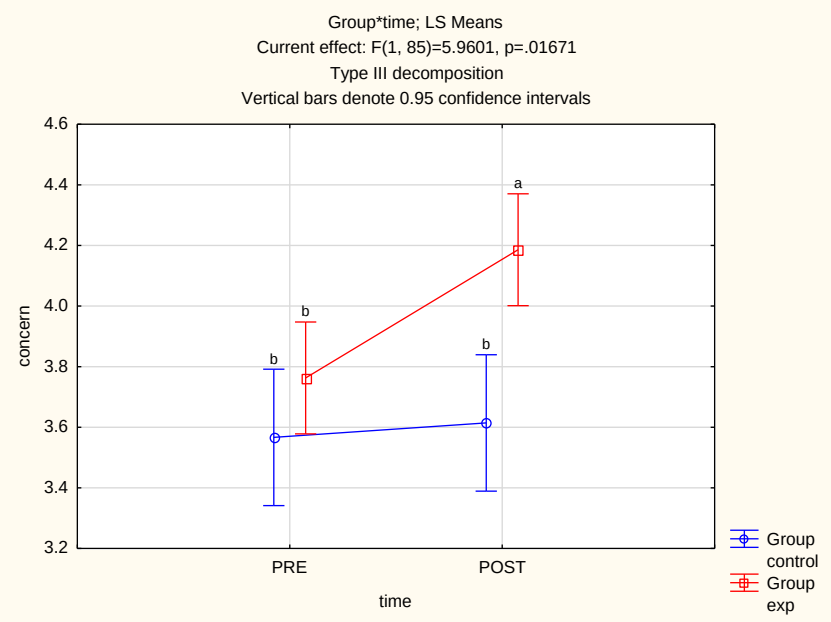
LSD test; variable co-operation

Comparisons Cell {#1}-{#2}	1st Mean	2nd Mean	Mean Differ.	Standard Error	p	-95.00% Cnf.Lmt	+95.00% Cnf.Lmt
	LSD test; variable co-operation (Spreadsheet172 in 17-07-2016 corrected pilot intervention ano Simultaneous confidence intervals Effect: Group*time						
{1}-{2}	control*PRE	control*POS	-0.07142	0.13402	0.59545	-0.33790	0.19504
{1}-{3}	control*PRE	exp*PRE	-0.12014	0.17795	0.50140	-0.47395	0.23366
{1}-{4}	control*PRE	exp*POST	-0.32527	0.17795	0.07107	-0.67908	0.02853
{2}-{3}	control*POS	exp*PRE	-0.04871	0.17795	0.78492	-0.40253	0.30509
{2}-{4}	control*POS	exp*POST	-0.25384	0.17795	0.15738	-0.60765	0.09996
{3}-{4}	exp*PRE	exp*POST	-0.20512	0.10995	0.06555	-0.42375	0.01349

Descriptive Statistics

Effect	Level of Factor	Level of Factor	N	co-operation Mean	co-operation Std.Dev.	co-operation Std.Err	co-operation -95.00%	co-operation +95.00%
	Descriptive Statistics (Spreadsheet172 in 17-07-2016 corrected pilot intervention anoukstw)							
Total			174	3.809387	0.816242	0.061879	3.6873	3.93152
Group	control		70	3.697619	0.815654	0.097489	3.5031	3.89210
Group	exp		104	3.884615	0.811885	0.079612	3.7267	4.04251
time	PRE		87	3.733716	0.854937	0.091659	3.5515	3.91593
time	POST		87	3.885057	0.773140	0.082889	3.7203	4.04984
Group*time	control	PRE	35	3.661905	0.821967	0.138938	3.3795	3.94426
Group*time	control	POST	35	3.733333	0.819692	0.138553	3.4518	4.01491
Group*time	exp	PRE	52	3.782051	0.881014	0.122175	3.5368	4.02733
Group*time	exp	POST	52	3.987179	0.730480	0.101299	3.7838	4.19055

CAAS concern
Group*time; LS Means



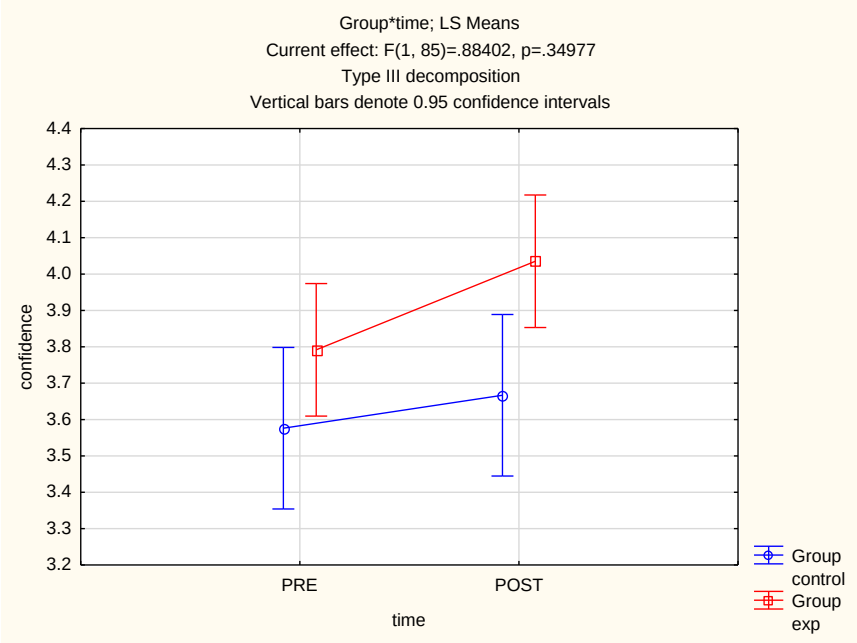
LSD test; variable concern

Comparisons Cell {#1}-{#2}	LSD test; variable concern (Spreadsheet172 in 17-07-2016 corrected pilot interv ention anouk.stw) Simultaneous confidence intervals Effect: Group*time						
	1st Mean	2nd Mean	Mean Differ.	Standard Error	p	-95.00% Cnf.Lmt	+95.00% Cnf.Lmt
{1}-{2}	control*PRE	control*POST	-0.047619	0.118899	0.689793	-0.284022	0.188784
{1}-{3}	control*PRE	exp*PRE	-0.196154	0.146452	0.184018	-0.487339	0.095031
{1}-{4}	control*PRE	exp*POST	-0.619231	0.146452	0.000059	-0.910416	-0.328046
{2}-{3}	control*POST	exp*PRE	-0.148535	0.146452	0.313354	-0.439720	0.142650
{2}-{4}	control*POST	exp*POST	-0.571612	0.146452	0.000190	-0.862797	-0.280427
{3}-{4}	exp*PRE	exp*POST	-0.423077	0.097546	0.000039	-0.617025	-0.229129

Descriptive Statistics

CAAS confidence

Group*time; LS Means



LSD test; variable confidence

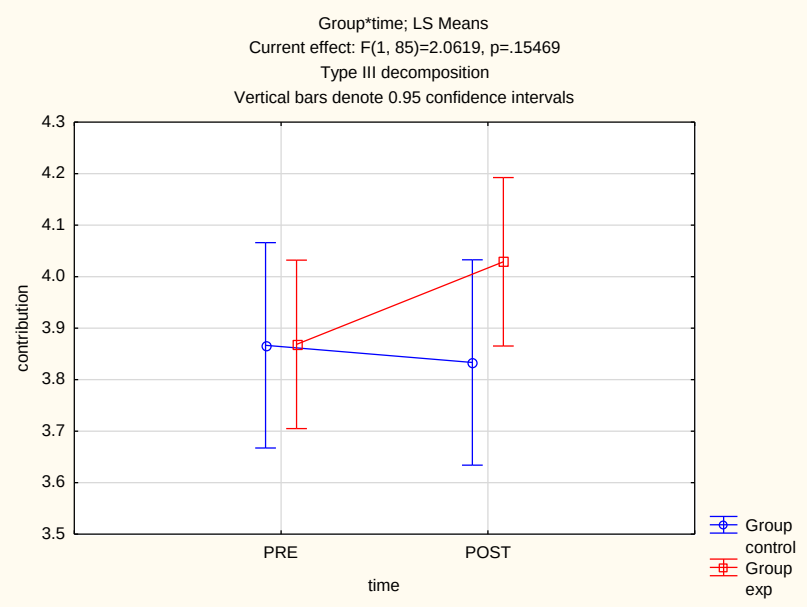
Comparisons Cell {#1}-{#2}	1st Mean	2nd Mean	Mean Differ.	Standard Error	p	-95.00% Cnf.Lmt	+95.00% Cnf.Lmt
	LSD test; variable confidence (Spreadsheet172 in 17-07-2016 corrected pilot intervention anouk Simultaneous confidence intervals Effect: Group*time						
{1}-{2}	control*PRE	control*POST	-0.090476	0.125900	0.474335	-0.340798	0.159846
{1}-{3}	control*PRE	exp*PRE	-0.215476	0.144496	0.139605	-0.502773	0.071821
{1}-{4}	control*PRE	exp*POST	-0.459066	0.144496	0.002075	-0.746363	-0.171769
{2}-{3}	control*POST	exp*PRE	-0.125000	0.144496	0.389433	-0.412297	0.162297
{2}-{4}	control*POST	exp*POST	-0.368590	0.144496	0.012537	-0.655887	-0.081293
{3}-{4}	exp*PRE	exp*POST	-0.243590	0.103290	0.020653	-0.448957	-0.038222

Descriptive Statistics

Effect	Level of Factor	Level of Factor	N	confidence Mean	confidence Std.Dev.	confidence Std.Err	confidence -95.00%	confidence +95.00%
	Descriptive Statistics (Spreadsheet172 in 17-07-2016 corrected pilot intervention anoukstw)							
Total			174	3.795977	0.677923	0.051393	3.6945	3.89742
Group	control		70	3.621429	0.664805	0.079459	3.4629	3.77995
Group	exp		104	3.913462	0.664227	0.065133	3.7843	4.04264
time	PRE		87	3.704981	0.637796	0.068379	3.5690	3.84091
time	POST		87	3.886973	0.707789	0.075883	3.7361	4.03782
Group*time	control	PRE	35	3.576190	0.660935	0.111718	3.3492	3.80323
Group*time	control	POST	35	3.666667	0.675191	0.114128	3.4347	3.89860
Group*time	exp	PRE	52	3.791667	0.612928	0.084998	3.6210	3.96231
Group*time	exp	POST	52	4.035256	0.696503	0.096588	3.8413	4.22916

CAAS contribution

Group*time; LS Means



LSD test; variable contribution

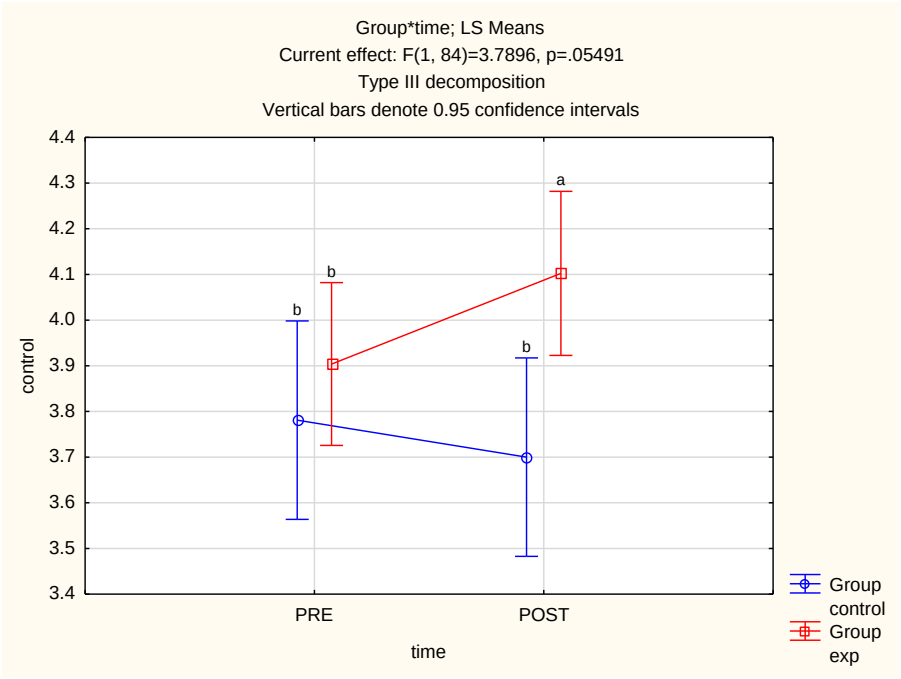
Comparisons Cell {#1}-{#2}	1st Mean	2nd Mean	Mean Differ.	Standard Error	p	-95.00% Cnf.Lmt	+95.00% Cnf.Lmt
LSD test; variable contribution (Spreadsheet172 in 17-07-2016 corrected pilot intervention anouk.st							
Simultaneous confidence intervals							
Effect: Group*time							
{1}-{2}	control*PRE	control*POST	0.033333	0.104230	0.749900	-0.173904	0.240571
{1}-{3}	control*PRE	exp*PRE	-0.001923	0.129701	0.988205	-0.259803	0.255957
{1}-{4}	control*PRE	exp*POST	-0.162179	0.129701	0.214580	-0.420059	0.095700
{2}-{3}	control*POST	exp*PRE	-0.035256	0.129701	0.786413	-0.293136	0.222623
{2}-{4}	control*POST	exp*POST	-0.195513	0.129701	0.135412	-0.453393	0.062367
{3}-{4}	exp*PRE	exp*POST	-0.160256	0.085512	0.064354	-0.330276	0.009764

Descriptive Statistics

Effect	Level of Factor	Level of Factor	N	contribution Mean	contribution Std.Dev.	contribution Std.Err	contribution -95.00%	contribution +95.00%
Descriptive Statistics (Spreadsheet172 in 17-07-2016 corrected pilot intervention anouk stw)								
Total			174	3.909004	0.593414	0.044987	3.82021	3.99780
Group	control		70	3.850000	0.585073	0.069930	3.71049	3.98951
Group	exp		104	3.948718	0.598486	0.058686	3.83233	4.06511
time	PRE		87	3.867816	0.607414	0.065122	3.73836	3.99727
time	POST		87	3.950192	0.579648	0.062145	3.82665	4.07373
Group*time	control	PRE	35	3.866667	0.564181	0.095364	3.67286	4.06047
Group*time	control	POST	35	3.833333	0.613039	0.103623	3.62275	4.04392
Group*time	exp	PRE	52	3.868590	0.640275	0.088790	3.69034	4.04684
Group*time	exp	POST	52	4.028846	0.548042	0.076000	3.87627	4.18142

CAAS control

Group*time; LS Means



LSD test; variable control

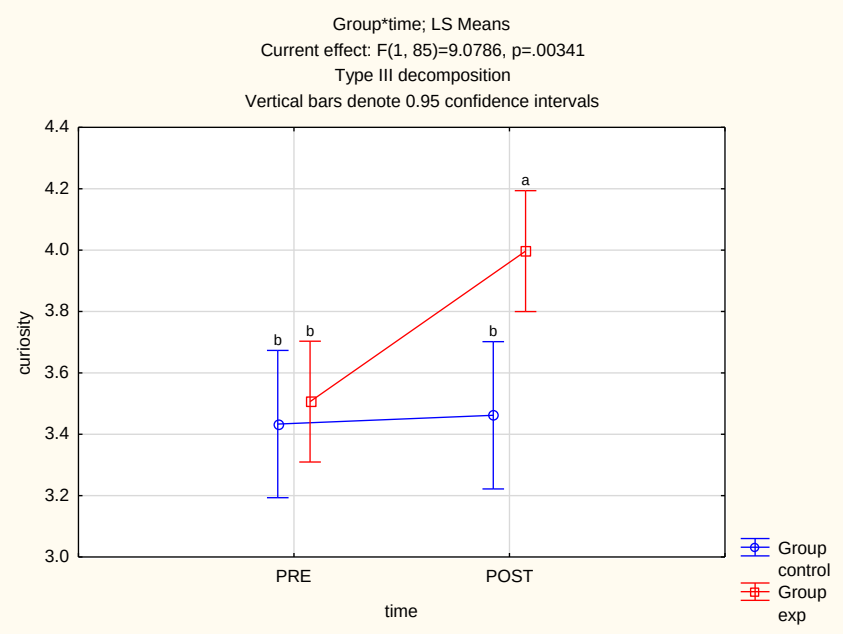
Comparisons Cell {#1}-{#2}	1st Mean	2nd Mean	Mean Differ.	Standard Error	p	-95.00% Cnf.Lmt	+95.00% Cnf.Lmt
	LSD test; variable control (Spreadsheet172 in 17-07-2016 corrected pilot intervention anouk.stw) Simultaneous confidence intervals Effect: Group*time						
{1}-{2}	control*PRE	control*POST	0.080952	0.110611	0.466286	-0.139009	0.300914
{1}-{3}	control*PRE	exp*PRE	-0.122894	0.141338	0.387051	-0.403960	0.158173
{1}-{4}	control*PRE	exp*POST	-0.321274	0.141762	0.026004	-0.603184	-0.039364
{2}-{3}	control*POST	exp*PRE	-0.203846	0.141338	0.152948	-0.484913	0.077220
{2}-{4}	control*POST	exp*POST	-0.402227	0.141762	0.005701	-0.684137	-0.120317
{3}-{4}	exp*PRE	exp*POST	-0.198380	0.091406	0.032805	-0.380151	-0.016610

Descriptive Statistics

Effect	Level of Factor	Level of Factor	N	control Mean	control Std.Dev.	control Std.Err	control -95.00%	control +95.00%
	Descriptive Statistics (Spreadsheet172 in 17-07-2016 corrected pilot intervention anouk.stw)							
Total			173	3.895954	0.658940	0.050098	3.79707	3.99484
Group	control		70	3.740476	0.647450	0.077385	3.58610	3.89486
Group	exp		103	4.001618	0.648652	0.063914	3.87485	4.12839
time	PRE		87	3.854406	0.591610	0.063427	3.72832	3.98050
time	POST		86	3.937984	0.721765	0.077830	3.78324	4.09273
Group*time	control	PRE	35	3.780952	0.596520	0.100830	3.57604	3.98586
Group*time	control	POST	35	3.700000	0.701073	0.118503	3.45917	3.94083
Group*time	exp	PRE	52	3.903846	0.588882	0.081663	3.73990	4.06779
Group*time	exp	POST	51	4.101307	0.696083	0.097471	3.90553	4.29708

CAAS curiosity

Group*time; LS Means



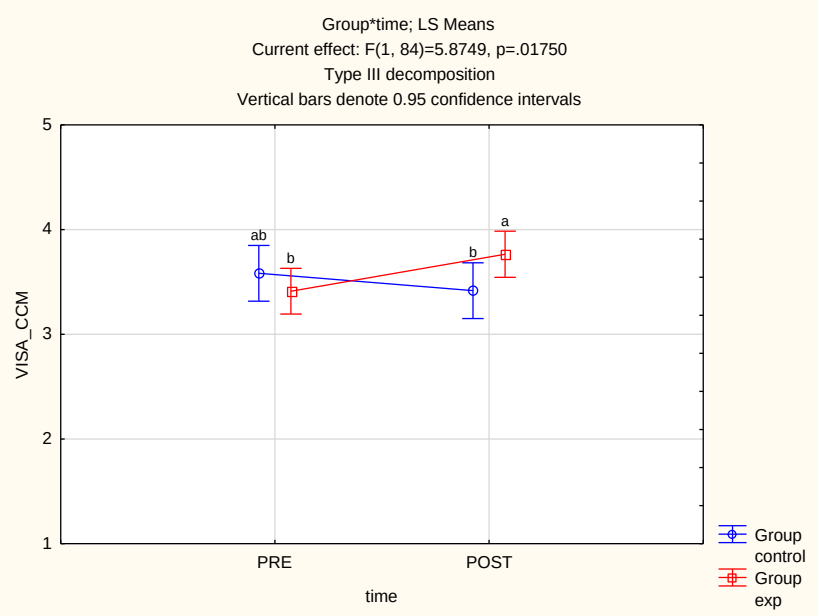
LSD test; variable curiosity

Comparisons Cell {#1}-{#2}	LSD test; variable curiosity (Spreadsheet172 in 17-07-2016 corrected pilot intervention anouk.st Simultaneous confidence intervals Effect: Group*time						
	1st Mean	2nd Mean	Mean Differ.	Standard Error	p	-95.00% Cnf.Lmt	+95.00% Cnf.Lmt
{1}-{2}	control*PRE	control*POST	-0.028571	0.118495	0.810043	-0.264171	0.207028
{1}-{3}	control*PRE	exp*PRE	-0.073077	0.156095	0.640871	-0.383436	0.237282
{1}-{4}	control*PRE	exp*POST	-0.563462	0.156095	0.000517	-0.873820	-0.253103
{2}-{3}	control*POST	exp*PRE	-0.044505	0.156095	0.776247	-0.354864	0.265853
{2}-{4}	control*POST	exp*POST	-0.534890	0.156095	0.000944	-0.845249	-0.224531
{3}-{4}	exp*PRE	exp*POST	-0.490385	0.097215	0.000003	-0.683674	-0.297096

Descriptive Statistics

Effect	Descriptive Statistics (Spreadsheet172 in 17-07-2016 corrected pilot intervention anouk.stw)							
	Level of Factor	Level of Factor	N	curiosity Mean	curiosity Std.Dev.	curiosity Std.Err	curiosity -95.00%	curiosity +95.00%
Total			174	3.629310	0.747964	0.056703	3.51739	3.74123
Group	control		70	3.447619	0.753170	0.090021	3.26803	3.62721
Group	exp		104	3.751603	0.722573	0.070854	3.61108	3.89212
time	PRE		87	3.477011	0.693348	0.074335	3.32924	3.62478
time	POST		87	3.781609	0.773140	0.082889	3.61683	3.94639
Group*time	control	PRE	35	3.433333	0.721065	0.121882	3.18564	3.68103
Group*time	control	POST	35	3.461905	0.794266	0.134256	3.18906	3.73474
Group*time	exp	PRE	52	3.506410	0.679582	0.094241	3.31721	3.69561
Group*time	exp	POST	52	3.996795	0.685590	0.095074	3.80593	4.18766

Phase Three VISA pre- and post- scores
VISA_CCM
Group*time; LS Means



LSD test; variable VISA_CCM

LSD test; variable VISA_CCM (Spreadsheet879 in 15-07-2016 corrected pilot intervention anouk.
Simultaneous confidence intervals
Effect: Group*time

Comparisons Cell {#1}-{#2}	1st Mean	2nd Mean	Mean Differ.	Standard Error	p	-95.00% Cnf.Lmt	+95.00% Cnf.Lmt
{1}-{2}	control*PRE	control*POS	0.16571	0.16508	0.31835	-0.16257	0.49400
{1}-{3}	control*PRE	exp*PRE	0.17131	0.17311	0.32520	-0.17294	0.51557
{1}-{4}	control*PRE	exp*POST	-0.18179	0.17375	0.29844	-0.52733	0.16374
{2}-{3}	control*POS	exp*PRE	0.00560	0.17311	0.97425	-0.33865	0.34986
{2}-{4}	control*POS	exp*POST	-0.34750	0.17375	0.04873	-0.69304	-0.00197
{3}-{4}	exp*PRE	exp*POST	-0.35311	0.13625	0.01126	-0.62407	-0.08215

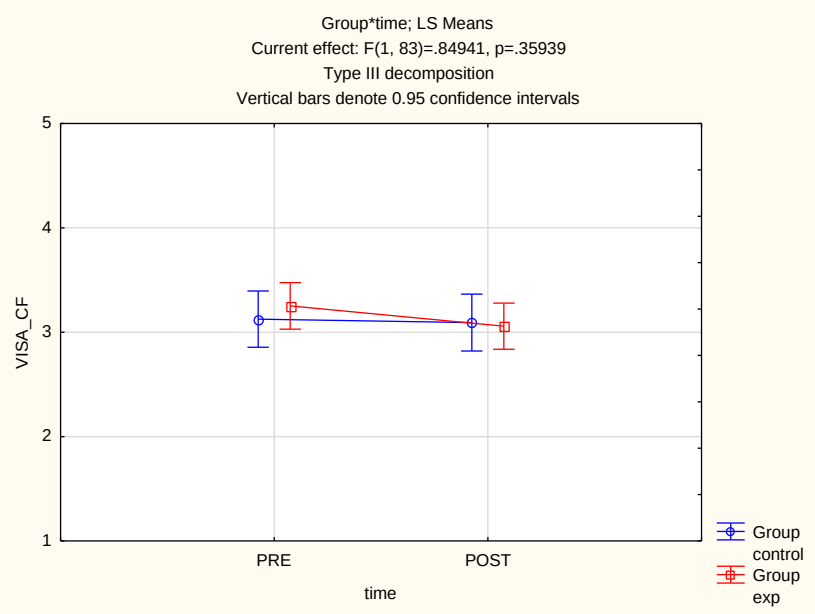
Descriptive Statistics

Descriptive Statistics (Spreadsheet879 in 15-07-2016 corrected pilot intervention anouk.stw)

Effect	Level of Factor	Level of Factor	N	VISA_CCM Mean	VISA_CCM Std.Dev.	VISA_CCM Std.Err	VISA_CCM -95.00%	VISA_CCM +95.00%
Total			173	3.55144	0.79968	0.06079	3.431	3.6714
Group	contro		70	3.50000	0.71404	0.08534	3.329	3.6702
Group	exp		103	3.58640	0.85463	0.08421	3.419	3.7534
time	PRE		87	3.48046	0.81751	0.08764	3.306	3.6547
time	POST		86	3.62325	0.77939	0.08404	3.456	3.7903
Group*time	contro	PRE	35	3.58285	0.81510	0.13777	3.302	3.8628
Group*time	contro	POST	35	3.41714	0.59679	0.10087	3.212	3.6221
Group*time	exp	PRE	52	3.41153	0.81976	0.11368	3.183	3.6397
Group*time	exp	POST	51	3.76470	0.86042	0.12048	3.522	4.0067

VISA_CF

Group*time; LS Means



LSD test; variable VISA_CF

LSD test; variable VISA_CF (Spreadsheet879 in 15-07-2016 corrected pilot intervention anouk
Simultaneous confidence intervals
Effect: Group*time

Comparisons Cell {#1}-{#2}	1st Mean	2nd Mean	Mean Differ.	Standard Error	p	-95.00% Cnf.Lmt	+95.00% Cnf.Lmt
{1}-{2}	control*PRE	control*POS	0.03298	0.13596	0.80891	-0.23744	0.30341
{1}-{3}	control*PRE	exp*PRE	-0.12681	0.17593	0.47305	-0.47674	0.22311
{1}-{4}	control*PRE	exp*POST	0.06802	0.17542	0.69918	-0.28088	0.41693
{2}-{3}	control*POS	exp*PRE	-0.15980	0.17707	0.36942	-0.51199	0.19238
{2}-{4}	control*POS	exp*POST	0.03503	0.17656	0.84318	-0.31614	0.38621
{3}-{4}	exp*PRE	exp*POST	0.19483	0.11114	0.08329	-0.02622	0.41590

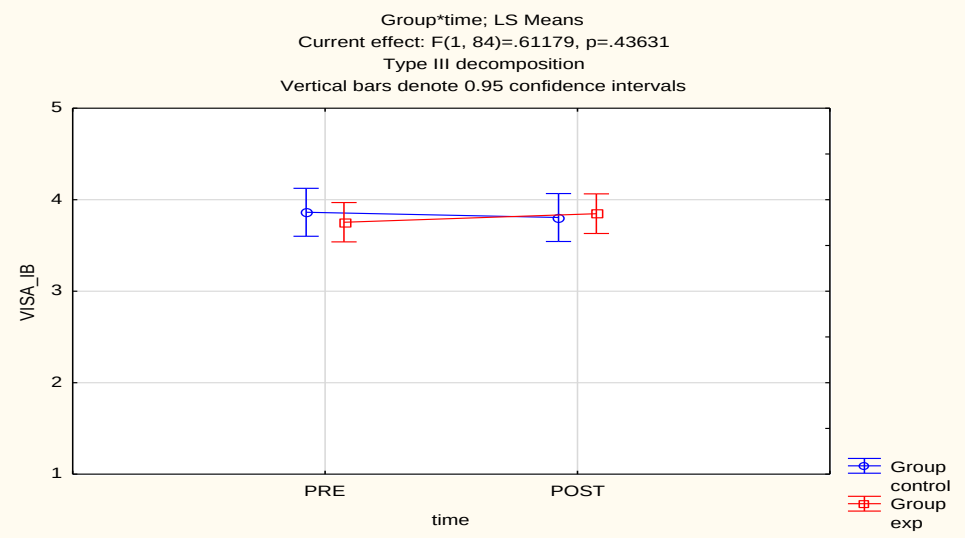
Descriptive Statistics

Descriptive Statistics (Spreadsheet879 in 15-07-2016 corrected pilot intervention anouksti

Effect	Level of Factor	Level of Factor	N	VISA_CF Mean	VISA_CF Std.Dev.	VISA_CF Std.Err	VISA_CF -95.00%	VISA_CF +95.00%
Total			172	3.12790	0.79613	0.06070	3.00808	3.24773
Group	contro		69	3.09565	0.63765	0.07676	2.94247	3.24883
Group	exp		103	3.14951	0.88902	0.08759	2.97576	3.32327
time	PRE		86	3.19534	0.77001	0.08303	3.03026	3.36044
time	POST		86	3.06046	0.82037	0.08846	2.88458	3.23635
Group*time	contro	PRE	35	3.12571	0.61755	0.10438	2.91358	3.33785
Group*time	contro	POST	34	3.06470	0.66555	0.11414	2.83248	3.29693
Group*time	exp	PRE	51	3.24313	0.86191	0.12069	3.00072	3.48556
Group*time	exp	POST	52	3.05769	0.91380	0.12672	2.80329	3.31210

VISA_IB

Group*time; LS Means



LSD test; variable VISA_IB

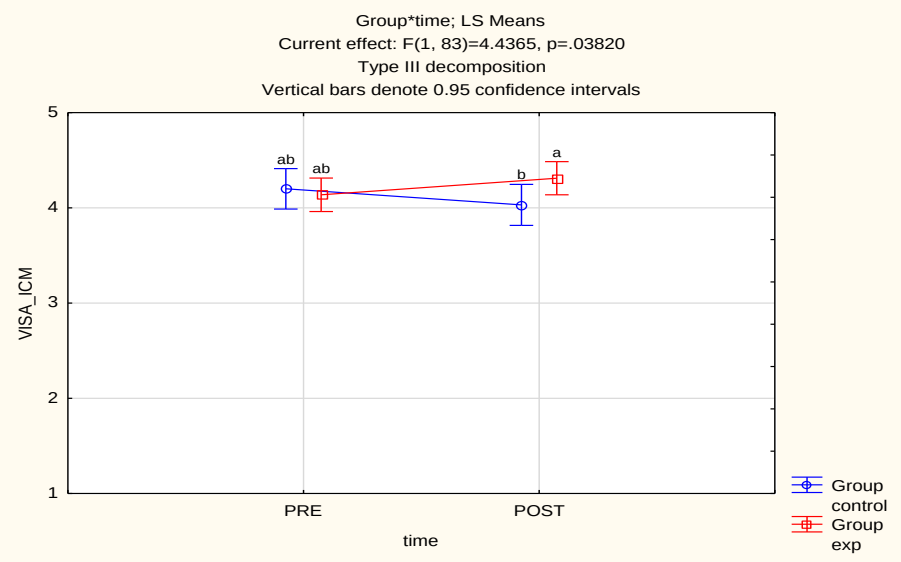
Comparisons Cell {#1}-{#2}	LSD test; variable VISA_IB (Spreadsheet879 in 15-07-2016 corrected pilot intervention anouk Simultaneous confidence intervals Effect: Group*time 1st Mean	2nd Mean	Mean Differ.	Standard Error	p	-95.00% Cnf.Lmt	+95.00% Cnf.Lmt
{1}-{2}	control*PRE	control*POS	0.05714	0.14854	0.70143	-0.23824	0.35253
{1}-{3}	control*PRE	exp*PRE	0.10901	0.17048	0.52429	-0.23001	0.44803
{1}-{4}	control*PRE	exp*POST	0.01546	0.17106	0.92816	-0.32471	0.35565
{2}-{3}	control*POS	exp*PRE	0.05186	0.17048	0.76169	-0.28715	0.39089
{2}-{4}	control*POS	exp*POST	-0.04167	0.17106	0.80812	-0.38185	0.29850
{3}-{4}	exp*PRE	exp*POST	-0.09354	0.12267	0.44789	-0.33750	0.15041

Descriptive Statistics

Effect	Descriptive Statistics (Spreadsheet879 in 15-07-2016 corrected pilot intervention anouk Level of Factor	Level of Factor	N	VISA_IB Mean	VISA_IB Std.Dev.	VISA_IB Std.Err	VISA_IB -95.00%	VISA_IB +95.00%
Total			173	3.81387	0.77447	0.05888	3.697	3.9301
Group	contro		70	3.83428	0.67499	0.08067	3.673	3.9952
Group	exp		103	3.80000	0.83829	0.08260	3.636	3.9638
time	PRE		87	3.79770	0.71884	0.07706	3.644	3.9509
time	POST		86	3.83023	0.83088	0.08959	3.652	4.0083
Group*time	contro	PRE	35	3.86285	0.62454	0.10556	3.648	4.0773
Group*time	contro	POST	35	3.80571	0.73000	0.12339	3.554	4.0564
Group*time	exp	PRE	52	3.75384	0.77875	0.10799	3.537	3.9706
Group*time	exp	POST	51	3.84705	0.90030	0.12606	3.593	4.1002

VISA_ICM

Group*time; LS Means



LSD test; variable VISA_ICM

LSD test; variable VISA_ICM (Spreadsheet879 in 15-07-2016 corrected pilot intervention anouk.
Simultaneous confidence intervals
Effect: Group*time

Comparisons Cell {#1}-{#2}	1st Mean	2nd Mean	Mean Differ.	Standard Error	p	-95.00% Cnf.Lmt	+95.00% Cnf.Lmt
{1}-{2}	control*PRE	control*POS	0.16899	0.12602	0.18359	-0.08166	0.41965
{1}-{3}	control*PRE	exp*PRE	0.06237	0.13870	0.65409	-0.21350	0.33826
{1}-{4}	control*PRE	exp*POST	-0.11153	0.13821	0.42199	-0.38645	0.16337
{2}-{3}	control*POS	exp*PRE	-0.10661	0.13979	0.44781	-0.38465	0.17142
{2}-{4}	control*POS	exp*POST	-0.28053	0.13930	0.04727	-0.55760	-0.00345
{3}-{4}	exp*PRE	exp*POST	-0.17391	0.10306	0.09527	-0.37890	0.03107

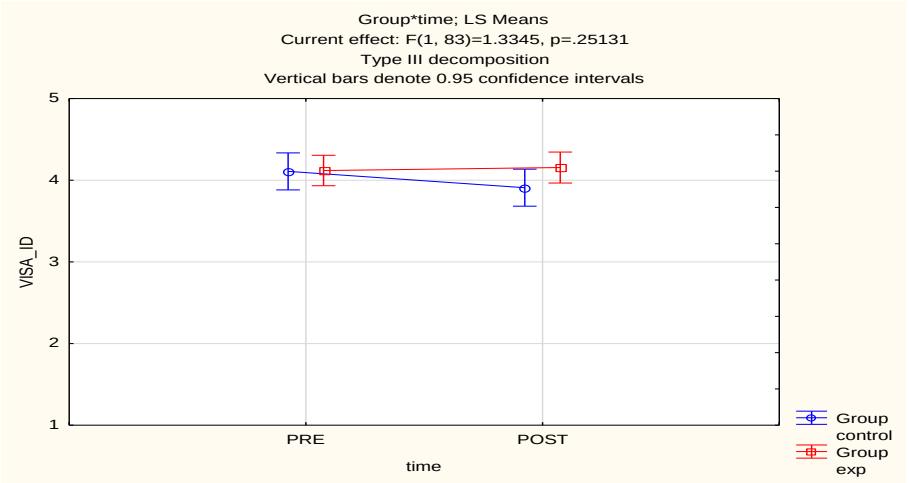
Descriptive Statistics

Descriptive Statistics (Spreadsheet879 in 15-07-2016 corrected pilot intervention anouk.stw)

Effect	Level of Factor	Level of Factor	N	VISA_ICM Mean	VISA_ICM Std.Dev.	VISA_ICM Std.Err	VISA_ICM -95.00%	VISA_ICM +95.00%
Total			172	4.179070	0.635061	0.048423	4.0835	4.27465
Group	control		69	4.113043	0.577498	0.069523	3.9743	4.25177
Group	exp		103	4.223301	0.669973	0.066014	4.0924	4.35424
time	PRE		86	4.160465	0.589173	0.063532	4.0341	4.28678
time	POST		86	4.197674	0.680826	0.073415	4.0517	4.34364
Group*time	control	PRE	35	4.200000	0.533578	0.090191	4.0167	4.38329
Group*time	control	POST	34	4.023529	0.614501	0.105386	3.8091	4.23794
Group*time	exp	PRE	51	4.133333	0.628225	0.087969	3.9566	4.31002
Group*time	exp	POST	52	4.311538	0.703396	0.097544	4.1157	4.50737

VISA_ID

Group*time; LS Means



LSD test; variable VISA_ID

LSD test; variable VISA_ID (Spreadsheet879 in 15-07-2016 corrected pilot intervention anouk
Simultaneous confidence intervals
Effect: Group*time

Comparisons Cell {#1}-{#2}	1st Mean	2nd Mean	Mean Differ.	Standard Error	p	-95.00% Cnf.Lmt	+95.00% Cnf.Lmt
{1}-{2}	control*PRE	control*POS	0.20000	0.15765	0.20812	-0.11356	0.51356
{1}-{3}	control*PRE	exp*PRE	-0.01065	0.14745	0.94254	-0.30394	0.28262
{1}-{4}	control*PRE	exp*POST	-0.04722	0.14863	0.75152	-0.34285	0.24841
{2}-{3}	control*POS	exp*PRE	-0.21065	0.14745	0.15687	-0.50394	0.08262
{2}-{4}	control*POS	exp*POST	-0.24722	0.14863	0.10003	-0.54285	0.04841
{3}-{4}	exp*PRE	exp*POST	-0.03656	0.13068	0.78035	-0.29648	0.22336

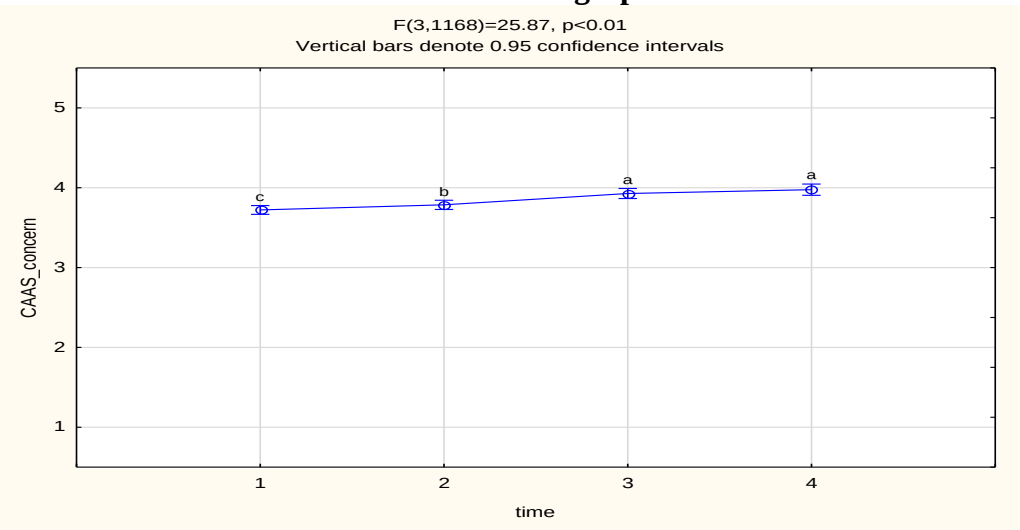
Descriptive Statistics

Descriptive Statistics (Spreadsheet879 in 15-07-2016 corrected pilot intervention anouk

Effect	Level of Factor	Level of Factor	N	VISA_ID Mean	VISA_ID Std.Dev.	VISA_ID Std.Err	VISA_ID -95.00%	VISA_ID +95.00%
Total			172	4.08488	0.67469	0.05144	3.983	4.1864
Group	contro		70	4.00857	0.58526	0.06995	3.869	4.1481
Group	exp		102	4.13725	0.72793	0.07207	3.994	4.2802
time	PRE		87	4.11494	0.57111	0.06123	3.993	4.2366
time	POST		85	4.05411	0.76866	0.08337	3.888	4.2199
Group*time	contro	PRE	35	4.10857	0.42659	0.07210	3.962	4.2551
Group*time	contro	POST	35	3.90857	0.70183	0.11863	3.667	4.1496
Group*time	exp	PRE	52	4.11923	0.65470	0.09079	3.937	4.3015
Group*time	exp	POST	50	4.15600	0.80335	0.11361	3.927	4.3843

APPENDIX W
Phase 4 Mixed-model results *CAAS* and *VISA*

CAAS_concern
time LS means graph



time LSD post hoc table

Cell	time	{1} 3.7216	{2} 3.7855	{3} 3.9279	{4} 3.9754
1	1		0.02	0.00	0.00
2	2	0.02		0.00	0.00
3	3	0.00	0.00		0.18
4	4	0.00	0.00	0.18	

LSD test; variable lsmean (Table 5)
Probabilities for Post Hoc Tests
Error: Between MS =

Descriptive Statistics

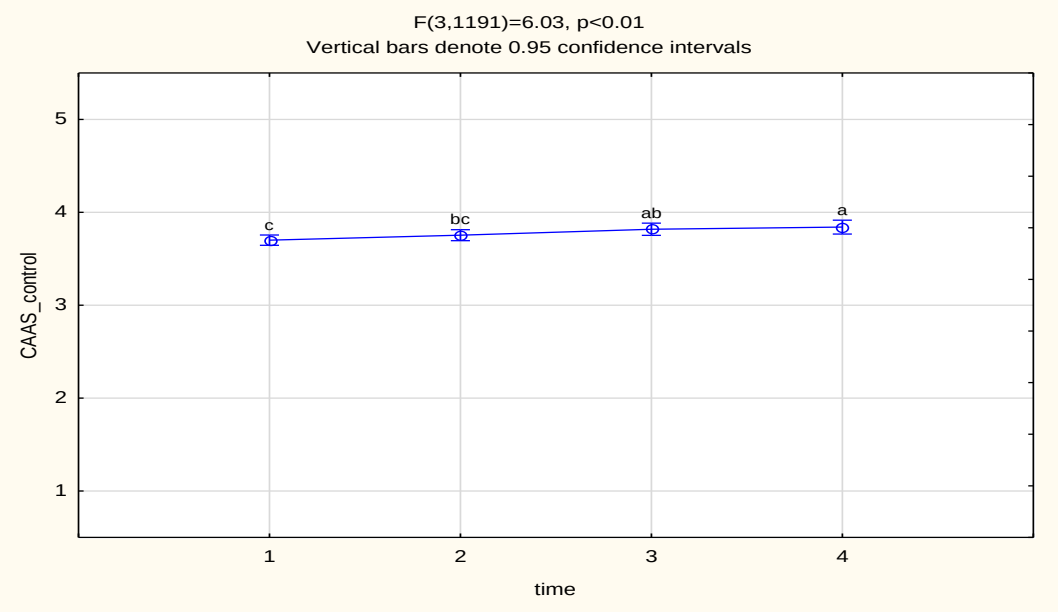
	1 Level of Factor	2 N	3 x Mean	4 x Std.Dev.
Total		1718	3.84	0.70
time	1	579	3.71	0.67
time	2	496	3.80	0.66
time	3	378	3.95	0.72
time	4	265	4.00	0.72

Descriptive Statistics

Cohen's D: time

	1 time	2 {1}	3 {2}	4 {3}	5 {4}
1	1		0.13(negligible)	0.35(small)	0.42(medium)
2	2	0.13(negligible)		0.23(small)	0.3(small)
3	3	0.35(small)	0.23(small)		0.07(negligible)
4	4	0.42(medium)	0.3(small)	0.07(negligible)	

CAAS_control
time LS means graph



time LSD post hoc table

Cell	time	{1} 3.7005	{2} 3.7540	{3} 3.8176	{4} 3.8409
		LSD test; variable lsmean (Table 11) Probabilities for Post Hoc Tests Error: Between MS =			
1	1		0.09	0.00	0.00
2	2	0.09		0.06	0.02
3	3	0.00	0.06		0.56
4	4	0.00	0.02	0.56	

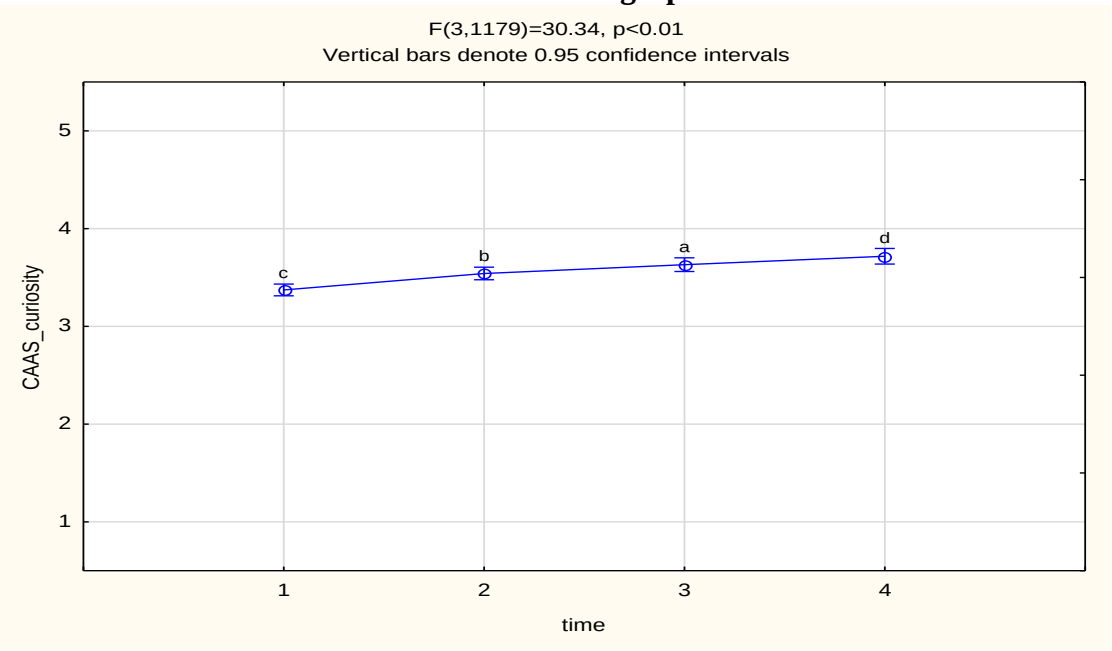
Descriptive Statistics

	1 Level of Factor	2 N	3 x Mean	4 x Std.Dev.
		Descriptive Statistics		
Total		1715	3.77	0.70
time	1	579	3.68	0.67
time	2	495	3.77	0.69
time	3	377	3.84	0.72
time	4	264	3.84	0.74

Cohen's D: time

	1 time	2 {1}	3 {2}	4 {3}	5 {4}
1	1		0.12(negligible)	0.22(small)	0.23(small)
2	2	0.12(negligible)		0.1(negligible)	0.11(negligible)
3	3	0.22(small)	0.1(negligible)		0.01(negligible)
4	4	0.23(small)	0.11(negligible)	0.01(negligible)	

CAAS_curiosity
time LS means graph



time LSD post hoc table

LSD test; variable lsmean (Table 17)
Probabilities for Post Hoc Tests
Error: Between MS =

Cell	time	{1} 3.3727	{2} 3.5411	{3} 3.6314	{4} 3.7173
1	1		0.00	0.00	0.00
2	2	0.00		0.01	0.00
3	3	0.00	0.01		0.04
4	4	0.00	0.00	0.04	

Descriptive Statistics

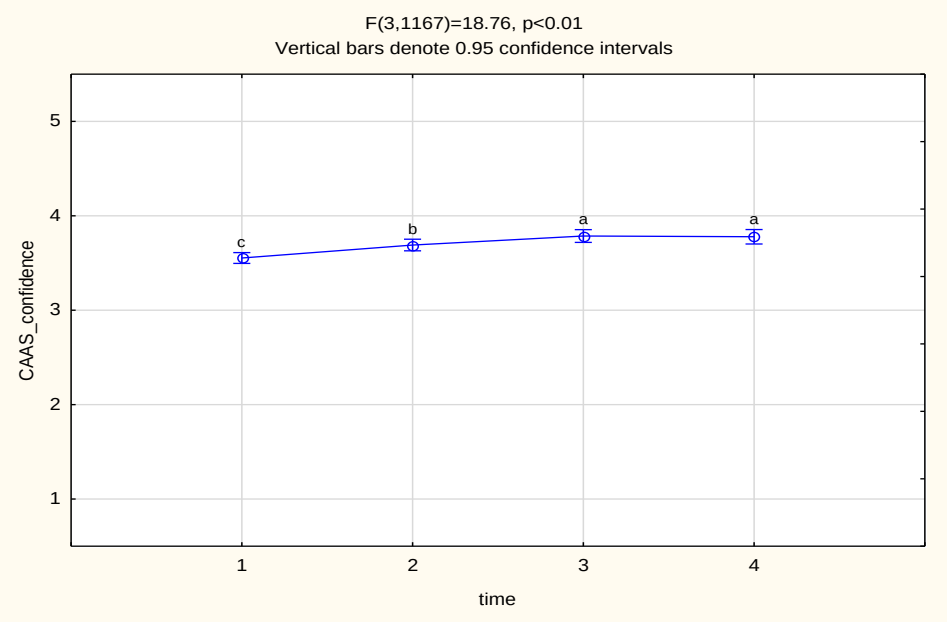
Descriptive Statistics

	1 Level of Factor	2 N	3 x Mean	4 x Std.Dev.
Total		1712	3.54	0.76
time	1	574	3.36	0.73
time	2	495	3.55	0.77
time	3	378	3.66	0.75
time	4	265	3.75	0.74

Cohen's D: time

	1 time	2 {1}	3 {2}	4 {3}	5 {4}
1	1		0.25(small)	0.4(medium)	0.53(medium)
2	2	0.25(small)		0.14(negligible)	0.26(small)
3	3	0.4(medium)	0.14(negligible)		0.12(negligible)
4	4	0.53(medium)	0.26(small)	0.12(negligible)	

CAAS_confidence
time LS means graph



time LSD post hoc table

LSD test; variable lsmean (Table 23)
Probabilities for Post Hoc Tests
Error: Between MS =

Cell	time	{1} 3.5530	{2} 3.6904	{3} 3.7861	{4} 3.7781
1	1		0.00	0.00	0.00
2	2	0.00		0.01	0.03
3	3	0.00	0.01		0.84
4	4	0.00	0.03	0.84	

Descriptive Statistics

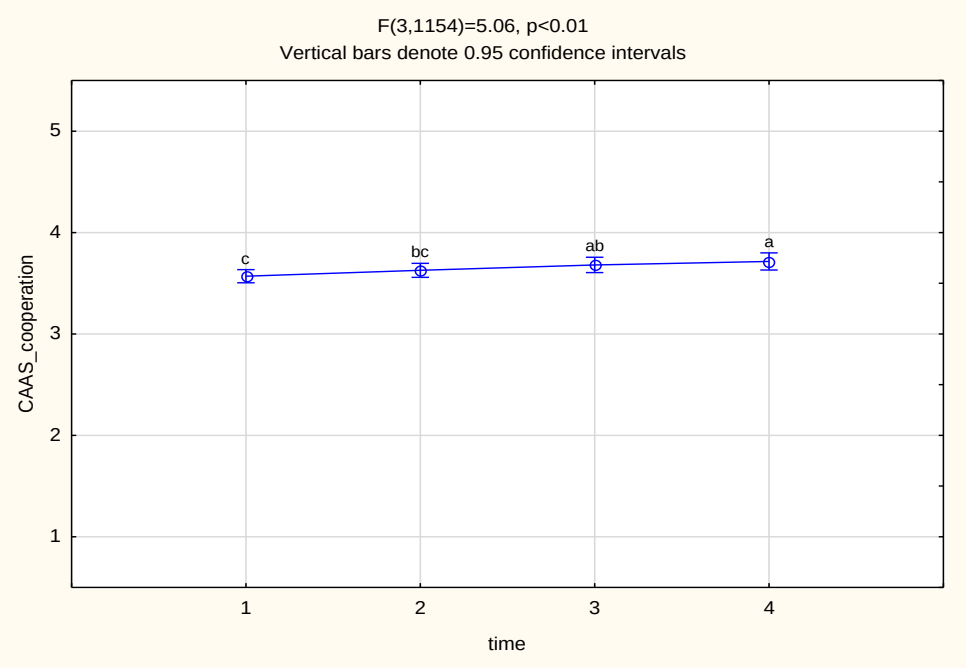
Descriptive Statistics

	1 Level of Factor	2 N	3 x Mean	4 x Std.Dev.
Total		1695	3.69	0.73
time	1	576	3.54	0.70
time	2	487	3.70	0.71
time	3	370	3.82	0.74
time	4	262	3.81	0.75

Cohen's D: time

	1 time	2 {1}	3 {2}	4 {3}	5 {4}
1	1		0.23(small)	0.38(small)	0.38(small)
2	2	0.23(small)		0.15(small)	0.15(negligible)
3	3	0.38(small)	0.15(small)		0.01(negligible)
4	4	0.38(small)	0.15(negligible)	0.01(negligible)	

CAAS_co-operation
time LS means graph



time LSD post hoc table

LSD test; variable lsmean (Table 29)
Probabilities for Post Hoc Tests
Error: Between MS =

Cell	time	{1} 3.5699	{2} 3.6277	{3} 3.6811	{4} 3.7155
1	1		0.09	0.00	0.00
2	2	0.09		0.15	0.04
3	3	0.00	0.15		0.43
4	4	0.00	0.04	0.43	

Descriptive Statistics

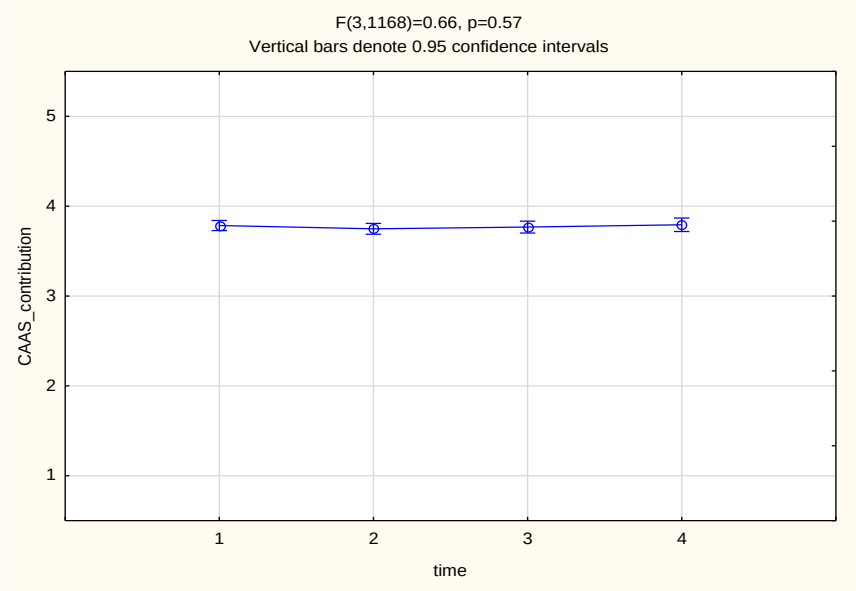
Descriptive Statistics

	1 Level of Factor	2 N	3 x Mean	4 x Std.Dev.
Total		1697	3.63	0.81
time	1	576	3.56	0.80
time	2	487	3.62	0.84
time	3	373	3.69	0.80
time	4	261	3.72	0.78

Cohen's D: time

	1 time	2 {1}	3 {2}	4 {3}	5 {4}
1	1		0.08(negligible)	0.17(small)	0.2(small)
2	2	0.08(negligible)		0.09(negligible)	0.12(negligible)
3	3	0.17(small)	0.09(negligible)		0.03(negligible)
4	4	0.2(small)	0.12(negligible)	0.03(negligible)	

CAAS_contribution
time LS means graph



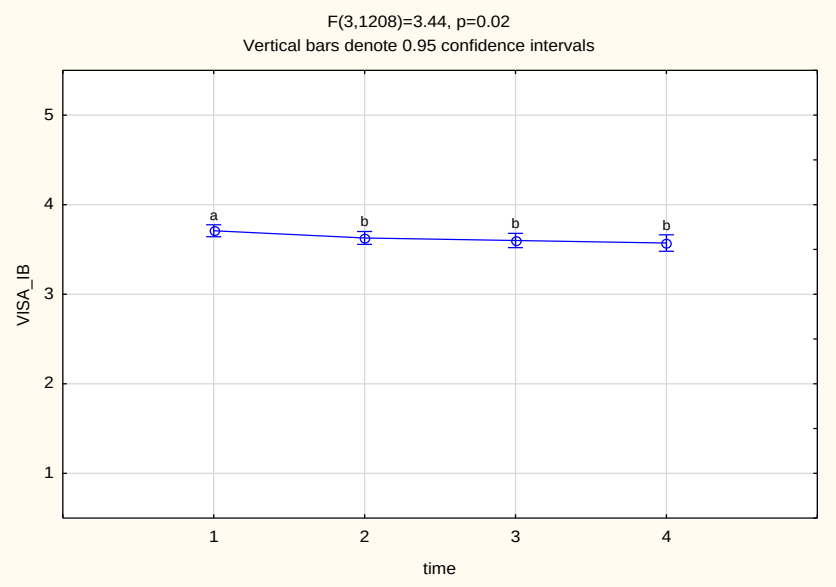
Descriptive Statistics

	Descriptive Statistics			
	1 Level of Factor	2 N	3 x Mean	4 x Std.Dev.
Total		1697	3.78	0.70
time	1	577	3.77	0.67
time	2	486	3.77	0.72
time	3	373	3.78	0.72
time	4	261	3.81	0.74

Cohen's D: time

	1 time	2 {1}	3 {2}	4 {3}	5 {4}	6 {5}
1	1		0.01(negligible)	0.01(negligible)	0.05(negligible)	0.13(negligible)
2	2	0.01(negligible)		0.02(negligible)	0.06(negligible)	0.13(negligible)
3	3	0.01(negligible)	0.02(negligible)		0.03(negligible)	0.11(negligible)
4	4	0.05(negligible)	0.06(negligible)	0.03(negligible)		0.07(negligible)
5	5	0.13(negligible)	0.13(negligible)	0.11(negligible)	0.07(negligible)	

VISA_IB
time LS means graph



time LSD post hoc table

LSD test; variable lsmean (Table 41)
Probabilities for Post Hoc Tests
Error: Between MS =

Cell	time	{1} 3.7092	{2} 3.6286	{3} 3.5997	{4} 3.5721
1	1		0.04	0.01	0.01
2	2	0.04		0.51	0.26
3	3	0.01	0.51		0.59
4	4	0.01	0.26	0.59	

Descriptive Statistics

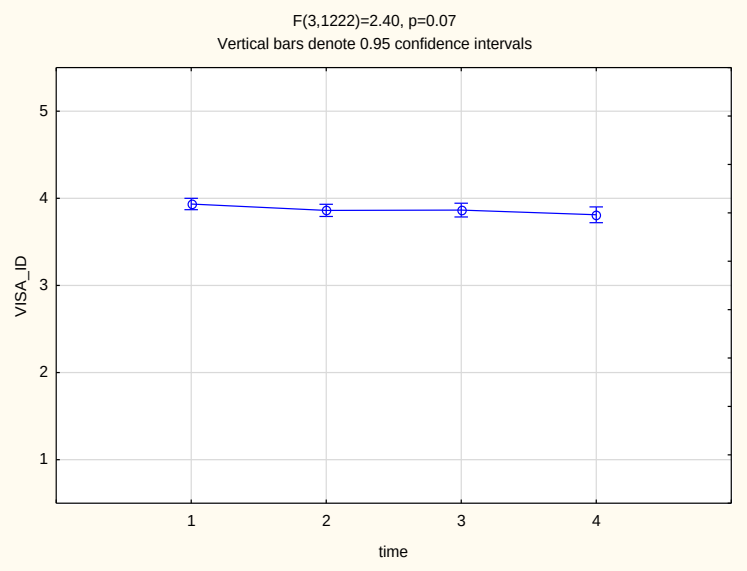
Descriptive Statistics

	1 Level of Factor	2 N	3 x Mean	4 x Std.Dev.
Total		1706	3.64	0.83
time	1	578	3.70	0.75
time	2	491	3.63	0.81
time	3	374	3.60	0.90
time	4	263	3.58	0.93

Cohen's D: time

	1 time	2 {1}	3 {2}	4 {3}	5 {4}
1	1		0.08(negligible)	0.11(negligible)	0.15(negligible)
2	2	0.08(negligible)		0.03(negligible)	0.06(negligible)
3	3	0.11(negligible)	0.03(negligible)		0.03(negligible)
4	4	0.15(negligible)	0.06(negligible)	0.03(negligible)	

VISA_ID
time LS means graph



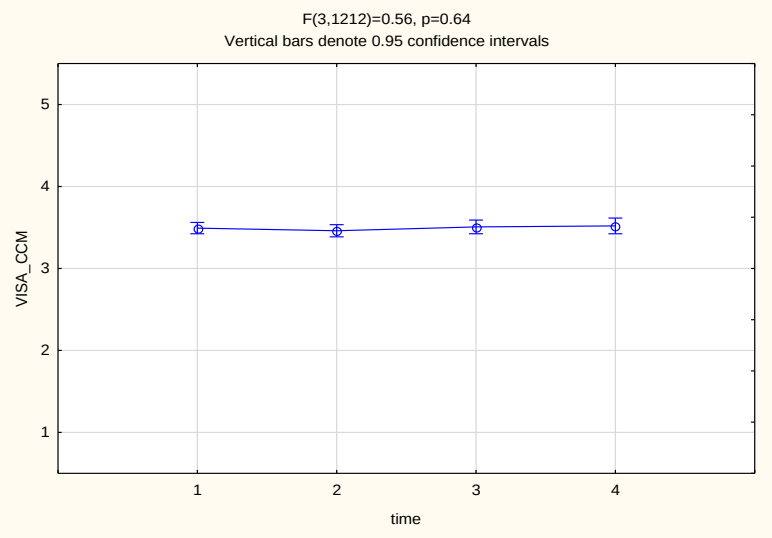
Descriptive Statistics

	Descriptive Statistics			
	1 Level of Factor	2 N	3 x Mean	4 x Std.Dev.
Total		1704	3.87	0.81
time	1	577	3.92	0.73
time	2	491	3.87	0.80
time	3	372	3.86	0.89
time	4	264	3.80	0.90

Cohen's D: time

	1 time	2 {1}	3 {2}	4 {3}	5 {4}
1	1		0.07(negligible)	0.07(negligible)	0.15(negligible)
2	2	0.07(negligible)		0.(negligible)	0.08(negligible)
3	3	0.07(negligible)	0.(negligible)		0.07(negligible)
4	4	0.15(negligible)	0.08(negligible)	0.07(negligible)	

VISA_CCM
time LS means graph



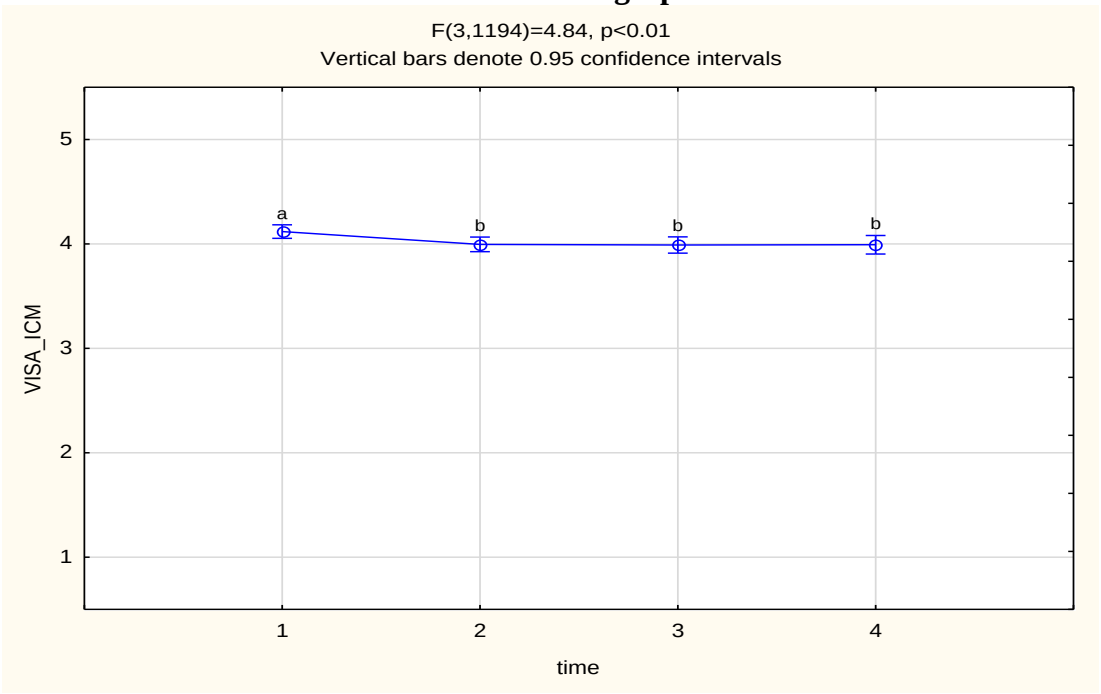
Descriptive Statistics

	Descriptive Statistics			
	1 Level of Factor	2 N	3 x Mean	4 x Std.Dev.
Total		1703	3.50	0.86
time	1	576	3.49	0.83
time	2	491	3.47	0.84
time	3	373	3.53	0.90
time	4	263	3.54	0.91

Cohen's D: time

	1 time	2 {1}	3 {2}	4 {3}	5 {4}
1	1		0.02(negligible)	0.05(negligible)	0.06(negligible)
2	2	0.02(negligible)		0.06(negligible)	0.08(negligible)
3	3	0.05(negligible)	0.06(negligible)		0.01(negligible)
4	4	0.06(negligible)	0.08(negligible)	0.01(negligible)	

VISA_ICM
time LS means graph



time LSD post hoc table

LSD test; variable lsmean (Table 59)
Probabilities for Post Hoc Tests
Error: Between MS =

Cell	time	{1} 4.1183	{2} 3.9955	{3} 3.9897	{4} 3.9921
1	1		0.00	0.00	0.01
2	2	0.00		0.89	0.94
3	3	0.00	0.89		0.96
4	4	0.01	0.94	0.96	

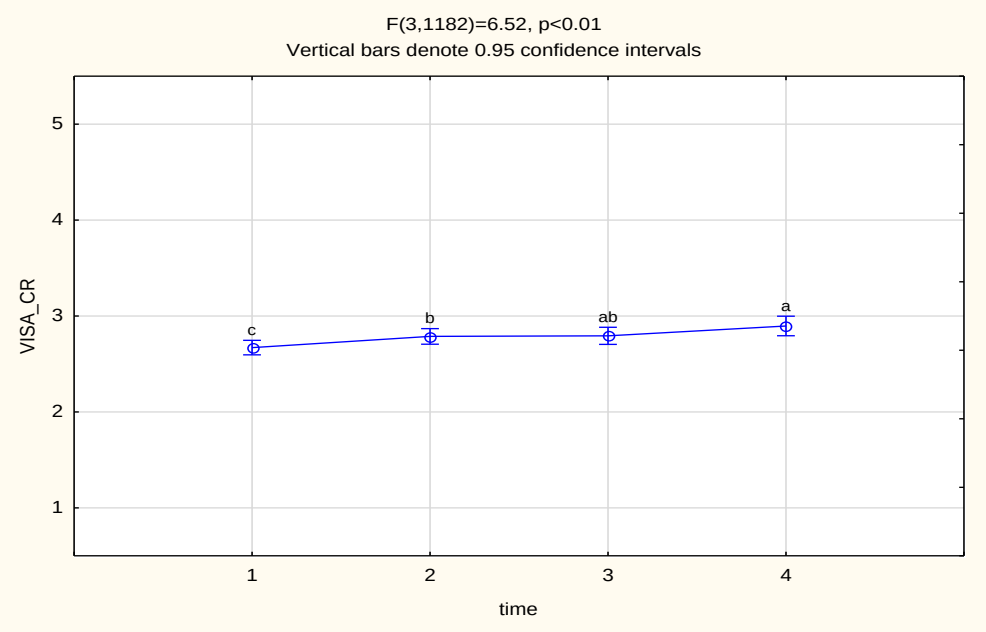
Descriptive Statistics

	Descriptive Statistics			
	1 Level of Factor	2 N	3 x Mean	4 x Std.Dev.
Total		1693	4.04	0.81
time	1	573	4.11	0.72
time	2	484	4.01	0.81
time	3	373	4.01	0.92
time	4	263	4.00	0.86

Cohen's D: time

	1 time	2 {1}	3 {2}	4 {3}	5 {4}
1	1		0.13(negligible)	0.12(negligible)	0.14(negligible)
2	2	0.13(negligible)		0.(negligible)	0.01(negligible)
3	3	0.12(negligible)	0.(negligible)		0.01(negligible)
4	4	0.14(negligible)	0.01(negligible)	0.01(negligible)	

VISA_SD
time LS means graph



time LSD post hoc table

LSD test; variable lsmean (Table 65)
Probabilities for Post Hoc Tests
Error: Between MS =

Cell	time	{1} 2.6708	{2} 2.7874	{3} 2.7934	{4} 2.8960
1	1		0.01	0.01	0.00
2	2	0.01		0.90	0.04
3	3	0.01	0.90		0.06
4	4	0.00	0.04	0.06	

Descriptive Statistics

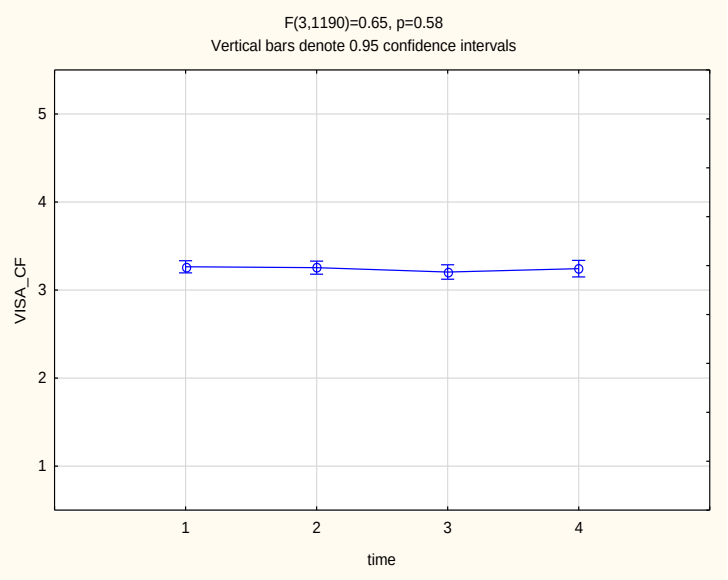
Descriptive Statistics

	1 Level of Factor	2 N	3 x Mean	4 x Std.Dev.
Total		1691	2.77	0.95
time	1	572	2.70	0.82
time	2	482	2.76	0.91
time	3	373	2.78	1.06
time	4	264	2.92	1.07

Cohen's D: time

	1 time	2 {1}	3 {2}	4 {3}	5 {4}
1	1		0.07(negligible)	0.08(negligible)	0.24(small)
2	2	0.07(negligible)		0.01(negligible)	0.16(small)
3	3	0.08(negligible)	0.01(negligible)		0.13(negligible)
4	4	0.24(small)	0.16(small)	0.13(negligible)	

VISA_CF
time LS means graph



Descriptive Statistics

	Descriptive Statistics			
	1 Level of Factor	2 N	3 x Mean	4 x Std.Dev.
Total		1689	3.25	0.86
time	1	571	3.27	0.78
time	2	483	3.24	0.85
time	3	372	3.21	0.92
time	4	263	3.26	0.93

Cohen's D: time

	1 time	2 {1}	3 {2}	4 {3}	5 {4}
1	1		0.04(negligible)	0.07(negligible)	0.02(negligible)
2	2	0.04(negligible)		0.03(negligible)	0.02(negligible)
3	3	0.07(negligible)	0.03(negligible)		0.05(negligible)
4	4	0.02(negligible)	0.02(negligible)	0.05(negligible)	

APPENDIX X
Phase 4 ANOVAS by Groups *CAAS* and *VISA*

gender*time

CAAS_concern

ANOVA

	Random effects: (1|Participant No)					
	1 Sum Sq	2 Mean Sq	3 Num DF	4 Den DF	5 F value	6 p value
Gender	0.77	0.77	1	619.54483	4.12	0.04
time	11.63	3.88	3	1114.8113	20.78	0.00
Gender:time	0.31	0.10	3	1114.8113	0.55	0.65

Cohen's D: Gender

	1 Gender	2 {1}	3 {2}
1	Male		0.15(negligible)
2	Female	0.15(negligible)	

Cohen's D: time

	1 time	2 {1}	3 {2}	4 {3}	5 {4}
1	1		0.14(negligible)	0.35(small)	0.44(medium)
2	2	0.14(negligible)		0.22(small)	0.31(small)
3	3	0.35(small)	0.22(small)		0.08(negligible)
4	4	0.44(medium)	0.31(small)	0.08(negligible)	

CAAS_control

ANOVA

	Random effects: (1|Participant No)					
	1 Sum Sq	2 Mean Sq	3 Num DF	4 Den DF	5 F value	6 p value
Gender	0.20	0.20	1	617.92578	0.87	0.35
time	4.27	1.42	3	1131.1213	6.13	0.00
Gender:time	0.17	0.06	3	1131.1213	0.24	0.87

Cohen's D: Gender

	1 Gender	2 {1}	3 {2}
1	Male		0.06(negligible)
2	Female	0.06(negligible)	

Cohen's D: time

	1 time	2 {1}	3 {2}	4 {3}	5 {4}
1	1		0.11(negligible)	0.22(small)	0.23(small)
2	2	0.11(negligible)		0.11(negligible)	0.12(negligible)
3	3	0.22(small)	0.11(negligible)		0.01(negligible)
4	4	0.23(small)	0.12(negligible)	0.01(negligible)	

CAAS_curiosity

ANOVA

	Random effects: (1|Participant No)					
	1 Sum Sq	2 Mean Sq	3 Num DF	4 Den DF	5 F value	6 p value
Gender	0.68	0.68	1	617.22507	2.64	0.10
time	20.64	6.88	3	1124.5620	26.84	0.00
Gender:time	0.25	0.08	3	1124.5620	0.33	0.80

Cohen's D: Gender

	1 Gender	2 {1}	3 {2}
1	Male		0.13(negligible)
2	Female	0.13(negligible)	

Cohen's D: time

	1 time	2 {1}	3 {2}	4 {3}	5 {4}
1	1		0.24(small)	0.42(medium)	0.54(medium)
2	2	0.24(small)		0.16(small)	0.28(small)
3	3	0.42(medium)	0.16(small)		0.13(negligible)
4	4	0.54(medium)	0.28(small)	0.13(negligible)	

CAAS_confidence

ANOVA

	Random effects: (1|Participant No)					
	1 Sum Sq	2 Mean Sq	3 Num DF	4 Den DF	5 F value	6 p value
Gender	0.69	0.69	1	619.70832	2.89	0.09
time	10.92	3.64	3	1112.4101	15.25	0.00
Gender:time	0.63	0.21	3	1112.4101	0.87	0.45

Cohen's D: Gender

	1 Gender	2 {1}	3 {2}
1	Male		0.12(negligible)
2	Female	0.12(negligible)	

Cohen's D: time

	1 time	2 {1}	3 {2}	4 {3}	5 {4}
1	1		0.24(small)	0.39(small)	0.39(small)
2	2	0.24(small)		0.16(small)	0.15(small)
3	3	0.39(small)	0.16(small)		0.(negligible)
4	4	0.39(small)	0.15(small)	0.(negligible)	

CAAS_co-operation

ANOVA

	Random effects: (1|Participant No)					
	1 Sum Sq	2 Mean Sq	3 Num DF	4 Den DF	5 F value	6 p value
Gender	1.99	1.99	1	623.60874	7.37	0.01
time	3.19	1.06	3	1100.9683	3.93	0.01
Gender:time	0.06	0.02	3	1100.9683	0.07	0.98

Cohen's D: Gender

	1 Gender	2 {1}	3 {2}
1	Male		0.22(small)
2	Female	0.22(small)	

Cohen's D: time

	1 time	2 {1}	3 {2}	4 {3}	5 {4}
1	1		0.08(negligible)	0.17(small)	0.21(small)
2	2	0.08(negligible)		0.08(negligible)	0.12(negligible)
3	3	0.17(small)	0.08(negligible)		0.04(negligible)
4	4	0.21(small)	0.12(negligible)	0.04(negligible)	

CAAS_contribution

ANOVA

	Random effects: (1|Participant No)					
	1 Sum Sq	2 Mean Sq	3 Num DF	4 Den DF	5 F value	6 p value
Gender	1.63	1.63	1	620.48866	7.23	0.01
time	0.58	0.19	3	1112.4963	0.86	0.46
Gender:time	0.26	0.09	3	1112.4963	0.38	0.77

Cohen's D: Gender

		1 Gender	2 {1}	3 {2}
1	Male			0.24(small)
2	Female		0.24(small)	

Cohen's D: time

	1 time	2 {1}	3 {2}	4 {3}	5 {4}
1	1		0.02(negligible)	0.(negligible)	0.05(negligible)
2	2	0.02(negligible)		0.02(negligible)	0.06(negligible)
3	3	0.(negligible)	0.02(negligible)		0.04(negligible)
4	4	0.05(negligible)	0.06(negligible)	0.04(negligible)	

VISA_IB

ANOVA

	Random effects: (1|Participant No)					
	1 Sum Sq	2 Mean Sq	3 Num DF	4 Den DF	5 F value	6 p value
Gender	0.37	0.37	1	611.36910	0.95	0.33
time	3.86	1.29	3	1148.5931	3.32	0.02
Gender:time	1.39	0.46	3	1148.5931	1.20	0.31

Cohen's D: Gender

		1 Gender	2 {1}	3 {2}
1	Male			0.08(negligible)
2	Female		0.08(negligible)	

Cohen's D: time

	1 time	2 {1}	3 {2}	4 {3}	5 {4}
1	1		0.11(negligible)	0.13(negligible)	0.17(small)
2	2	0.11(negligible)		0.03(negligible)	0.07(negligible)
3	3	0.13(negligible)	0.03(negligible)		0.04(negligible)
4	4	0.17(small)	0.07(negligible)	0.04(negligible)	

VISA_ID

ANOVA

	Random effects: (1|Participant No)					
	1 Sum Sq	2 Mean Sq	3 Num DF	4 Den DF	5 F value	6 p value
Gender	0.93	0.93	1	604.87759	2.33	0.13
time	4.34	1.45	3	1159.2268	3.62	0.01
Gender:time	1.18	0.39	3	1159.2268	0.98	0.40

Cohen's D: Gender

	1 Gender	2 {1}	3 {2}
1	Male		0.09(negligible)
2	Female	0.09(negligible)	

Cohen's D: time

	1 time	2 {1}	3 {2}	4 {3}	5 {4}
1	1		0.08(negligible)	0.08(negligible)	0.17(small)
2	2	0.08(negligible)		0.(negligible)	0.09(negligible)
3	3	0.08(negligible)	0.(negligible)		0.08(negligible)
4	4	0.17(small)	0.09(negligible)	0.08(negligible)	

VISA_CCM

ANOVA

	Random effects: (1|Participant No)					
	1 Sum Sq	2 Mean Sq	3 Num DF	4 Den DF	5 F value	6 p value
Gender	0.00	0.00	1	608.0103	0.01	0.93
time	1.78	0.59	3	1149.7173	1.38	0.25
Gender:time	1.73	0.58	3	1149.7173	1.33	0.26

Cohen's D: Gender

	1 Gender	2 {1}	3 {2}
1	Male		0.(negligible)
2	Female	0.(negligible)	

Cohen's D: time

	1 time	2 {1}	3 {2}	4 {3}	5 {4}
1	1		0.02(negligible)	0.06(negligible)	0.05(negligible)
2	2	0.02(negligible)		0.07(negligible)	0.07(negligible)
3	3	0.06(negligible)	0.07(negligible)		0.(negligible)
4	4	0.05(negligible)	0.07(negligible)	0.(negligible)	

VISA_ICM

ANOVA

	Random effects: (1|Participant No)					
	1 Sum Sq	2 Mean Sq	3 Num DF	4 Den DF	5 F value	6 p value
Gender	0.55	0.55	1	612.78764	1.56	0.21
time	3.16	1.05	3	1138.006	2.96	0.03
Gender:time	1.12	0.37	3	1138.006	1.05	0.37

Cohen's D: Gender

	1 Gender	2 {1}	3 {2}
1	Male		0.11(negligible)
2	Female	0.11(negligible)	

Cohen's D: time

	1 time	2 {1}	3 {2}	4 {3}	5 {4}
1	1		0.14(negligible)	0.13(negligible)	0.16(small)
2	2	0.14(negligible)		0.(negligible)	0.02(negligible)
3	3	0.13(negligible)	0.(negligible)		0.02(negligible)
4	4	0.16(small)	0.02(negligible)	0.02(negligible)	

VISA_SD

ANOVA

	Random effects: (1|Participant No)					
	1 Sum Sq	2 Mean Sq	3 Num DF	4 Den DF	5 F value	6 p value
Gender	5.53	5.53	1	614.94243	12.34	0.00
time	12.61	4.20	3	1126.9322	9.39	0.00
Gender:time	6.28	2.09	3	1126.9322	4.67	0.00

Cohen's D: Gender

	1 Gender	2 {1}	3 {2}
1	Male		0.24(small)
2	Female	0.24(small)	

Cohen's D: time

	1 time	2 {1}	3 {2}	4 {3}	5 {4}
1	1		0.09(negligible)	0.1(negligible)	0.24(small)
2	2	0.09(negligible)		0.02(negligible)	0.15(negligible)
3	3	0.1(negligible)	0.02(negligible)		0.12(negligible)
4	4	0.24(small)	0.15(negligible)	0.12(negligible)	

VISA_CF

ANOVA

	Random effects: (1|Participant No)					
	1 Sum Sq	2 Mean Sq	3 Num DF	4 Den DF	5 F value	6 p value
Gender	1.55	1.55	1	611.85016	3.86	0.05
time	0.02	0.01	3	1135.2054	0.01	1.00
Gender:time	4.58	1.53	3	1135.2054	3.79	0.01

Cohen's D: Gender

	1 Gender	2 {1}	3 {2}
1	Male		0.15(small)
2	Female	0.15(small)	

Cohen's D: time

	1 time	2 {1}	3 {2}	4 {3}	5 {4}
1	1		0.03(negligible)	0.07(negligible)	0.03(negligible)
2	2	0.03(negligible)		0.04(negligible)	0.(negligible)
3	3	0.07(negligible)	0.04(negligible)		0.04(negligible)
4	4	0.03(negligible)	0.(negligible)	0.04(negligible)	

VISA exploration

ANOVA

	Random effects: (1|Participant No)					
	1 Sum Sq	2 Mean Sq	3 Num DF	4 Den DF	5 F value	6 p value
Gender	0.54	0.54	1	611.82566	1.82	0.18
time	4.09	1.36	3	1142.5033	4.58	0.00
Gender:time	0.70	0.23	3	1142.5033	0.79	0.50

Cohen's D: Gender

	1 Gender	2 {1}	3 {2}
1	Male		0.09(negligible)
2	Female	0.09(negligible)	

Cohen's D: time

	1 time	2 {1}	3 {2}	4 {3}	5 {4}
1	1		0.11(negligible)	0.12(negligible)	0.19(small)
2	2	0.11(negligible)		0.01(negligible)	0.09(negligible)
3	3	0.12(negligible)	0.01(negligible)		0.07(negligible)
4	4	0.19(small)	0.09(negligible)	0.07(negligible)	

VISA commitment

ANOVA

	Random effects: (1|Participant No)					
	1 Sum Sq	2 Mean Sq	3 Num DF	4 Den DF	5 F value	6 p value
Gender	0.12	0.12	1	610.8663	0.42	0.52
time	1.32	0.44	3	1126.6377	1.56	0.20
Gender:time	1.01	0.34	3	1126.6377	1.19	0.31

Cohen's D: Gender

	1 Gender	2 {1}	3 {2}
1	Male		0.06(negligible)
2	Female	0.06(negligible)	

Cohen's D: time

	1 time	2 {1}	3 {2}	4 {3}	5 {4}
1	1		0.08(negligible)	0.04(negligible)	0.06(negligible)
2	2	0.08(negligible)		0.04(negligible)	0.02(negligible)
3	3	0.04(negligible)	0.04(negligible)		0.02(negligible)
4	4	0.06(negligible)	0.02(negligible)	0.02(negligible)	

VISA reconsideration

ANOVA

	Random effects: (1|Participant No)					
	1 Sum Sq	2 Mean Sq	3 Num DF	4 Den DF	5 F value	6 p value
Gender	2.94	2.94	1	615.85286	9.59	0.00
time	3.12	1.04	3	1119.9768	3.39	0.02
Gender:time	5.22	1.74	3	1119.9768	5.68	0.00

Cohen's D: Gender

	1 Gender	2 {1}	3 {2}
1	Male		0.23(small)
2	Female	0.23(small)	

Cohen's D: time

	1 time	2 {1}	3 {2}	4 {3}	5 {4}
1	1		0.04(negligible)	0.02(negligible)	0.13(negligible)
2	2	0.04(negligible)		0.01(negligible)	0.08(negligible)
3	3	0.02(negligible)	0.01(negligible)		0.09(negligible)
4	4	0.13(negligible)	0.08(negligible)	0.09(negligible)	

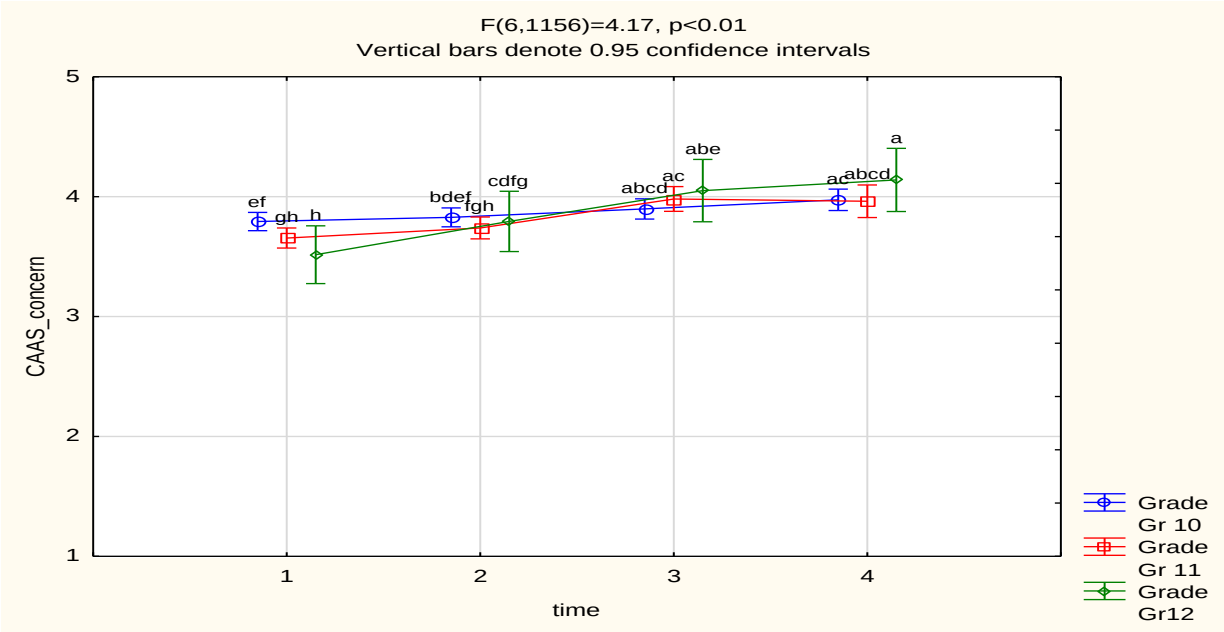
by grade*time

CAAS_concern

ANOVA

	Random effects: (1|Participant No)					
	1 Sum Sq	2 Mean Sq	3 Num DF	4 Den DF	5 F value	6 p value
Grade	0.11	0.05	2	640.03079	0.29	0.75
time	14.29	4.76	3	1132.6441	26.40	0.00
Grade:time	4.52	0.75	6	1155.9074	4.17	0.00

Grade:time LS means graph



Cohen's D: Grade

	1 Grade	2 {1}	3 {2}	4 {3}
1	Gr 10		0.13(negligible)	0.(negligible)
2	Gr 11	0.13(negligible)		0.13(negligible)
3	Gr12	0.(negligible)	0.13(negligible)	

Cohen's D: time

	1 time	2 {1}	3 {2}	4 {3}	5 {4}
1	1		0.13(negligible)	0.35(small)	0.42(medium)
2	2	0.13(negligible)		0.23(small)	0.3(small)
3	3	0.35(small)	0.23(small)		0.07(negligible)
4	4	0.42(medium)	0.3(small)	0.07(negligible)	

Cohen's D: identity status

	1 identity status	2 {1}	3 {2}	4 {3}	5 {4}	6 {5}
1	Achieved		0.06(negligible)	0.45(medium)	0.38(small)	0.75(medium)
2	Searching Moratorium	0.06(negligible)		0.38(small)	0.44(medium)	0.8(large)
3	Undifferentiated	0.45(medium)	0.38(small)		0.82(large)	1.17(very large)
4	h_h_m	0.38(small)	0.44(medium)	0.82(large)		0.37(small)
5	m_m_m	0.75(medium)	0.8(large)	1.17(very large)	0.37(small)	

Cohen's D: time

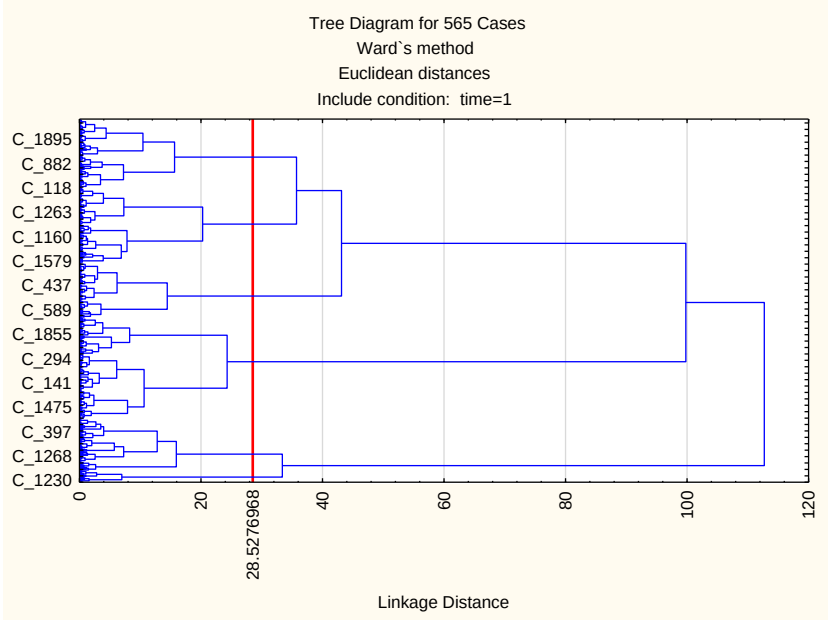
	1 time	2 {1}	3 {2}	4 {3}
1	2		0.13(negligible)	0.26(small)
2	3	0.13(negligible)		0.13(negligible)
3	4	0.26(small)	0.13(negligible)	

APPENDIX U
Phase 4 Cluster Analysis

Time 1 2nd order scales

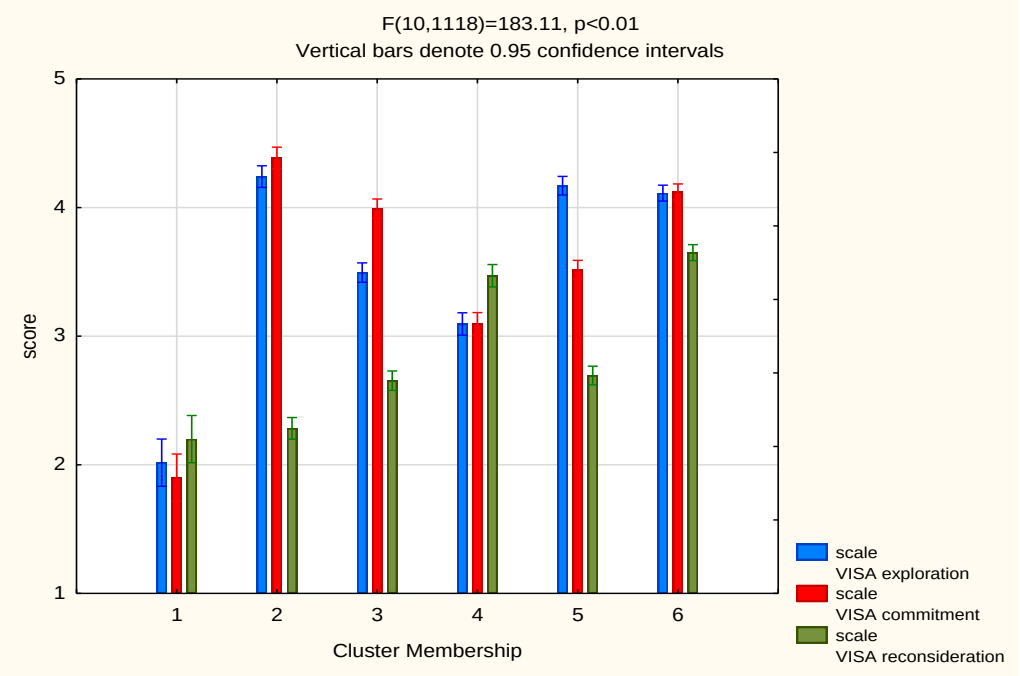
6 clusters

Tree Diagram for 565 Cases



score

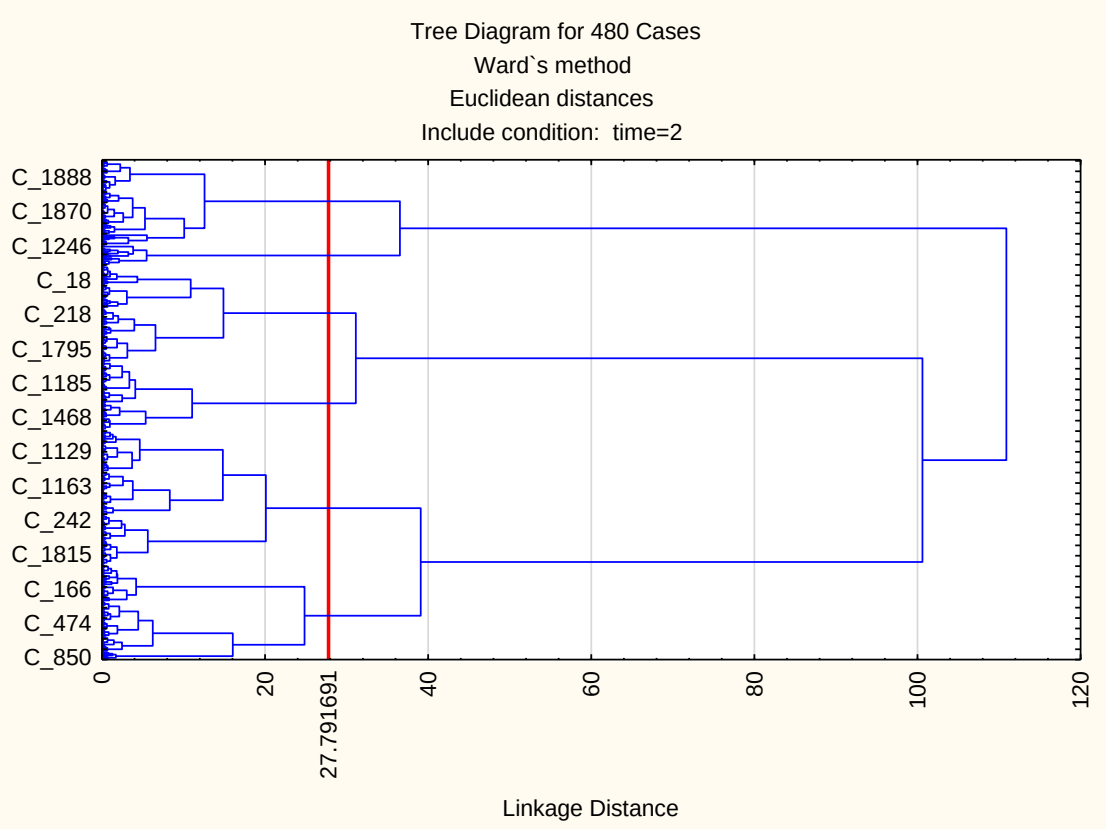
Cluster Membership: scale LS means graph



Time 2 2nd order scales

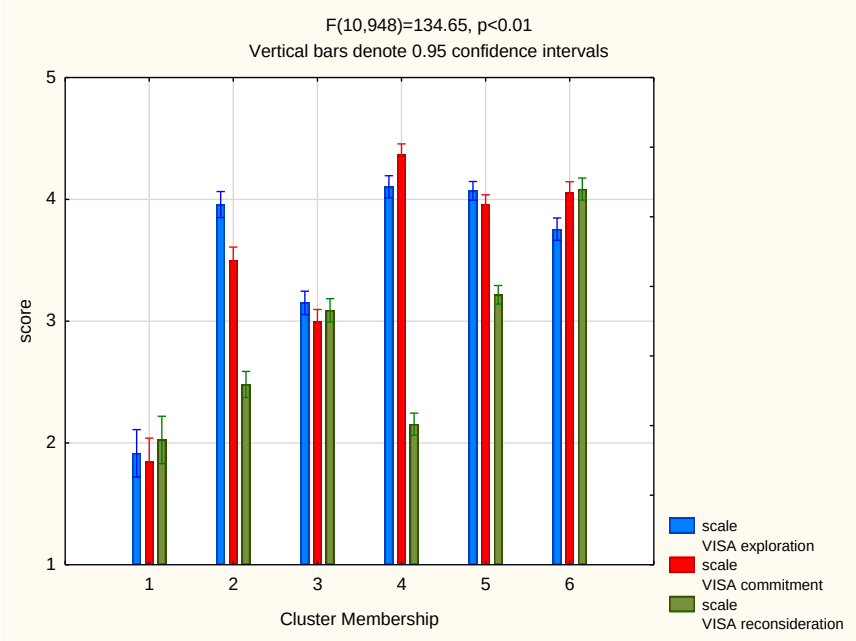
Joining (tree-clustering) results dialog

Tree Diagram for 480 Cases



Score

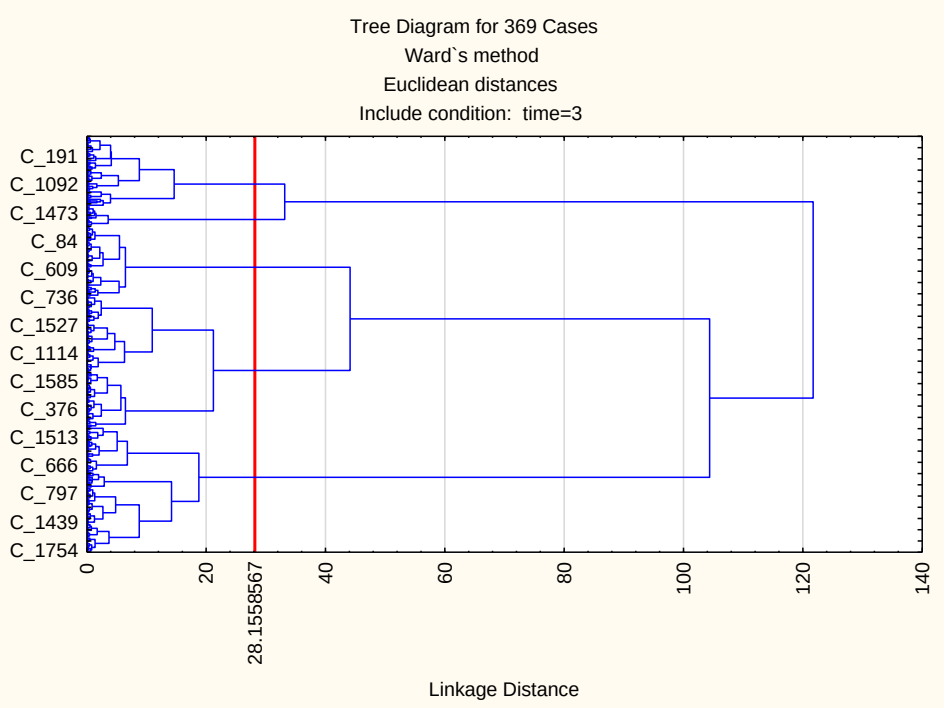
Cluster Membership: scale LS means graph



Time 3 2nd order scales

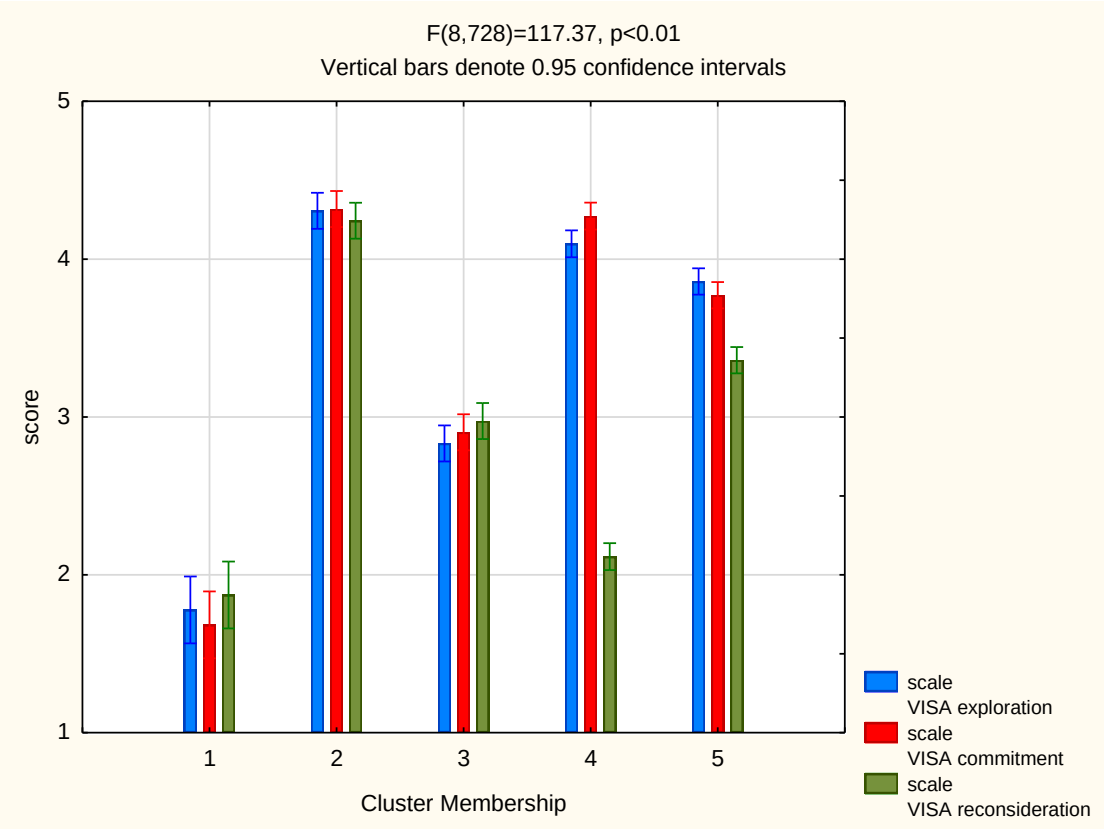
Joining (tree-clustering) results dialog

Tree Diagram for 369 Cases



Score

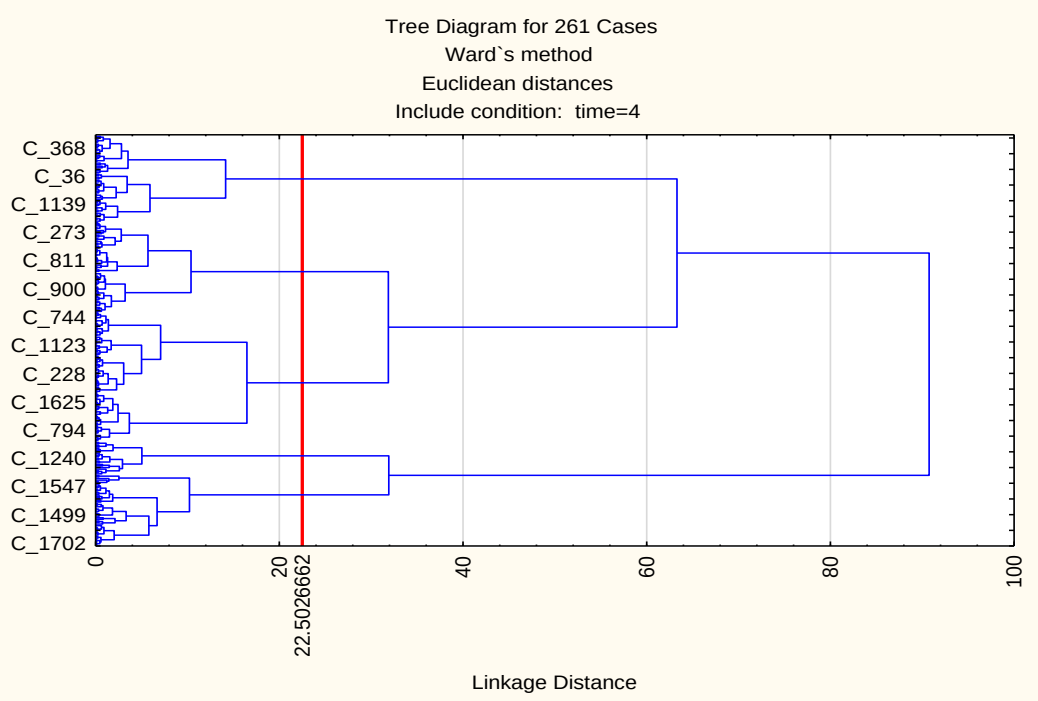
Cluster Membership:scale LS means graph



Time 4 2nd order scales

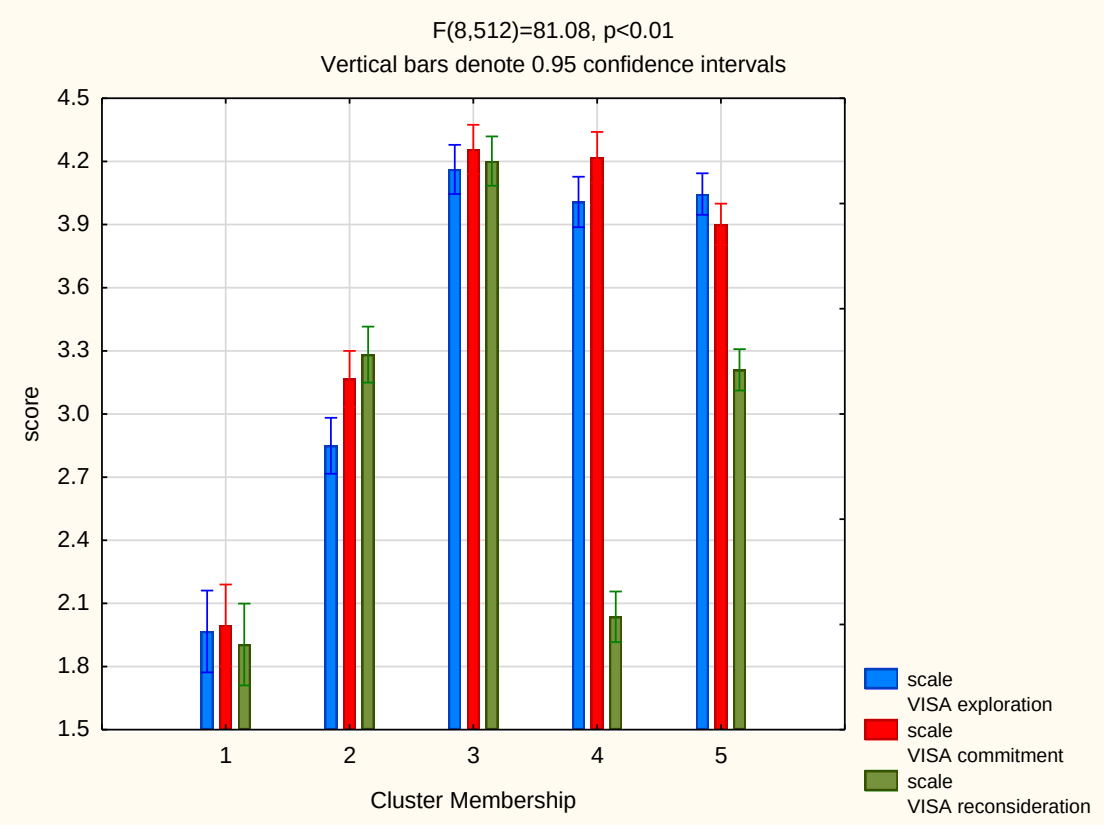
Joining (tree-clustering) results dialog

Tree Diagram for 261 Cases



Score

Cluster Membership: scale LS means graph



APPENDIX V
Vocational identity status comparisons

All identity statuses
CAAS_concern

ANOVA

	Random effects: (1|Participant No)					
	1 Sum Sq	2 Mean Sq	3 Num DF	4 Den DF	5 F value	6 p value
identity status	12.81	3.20	4	970.35905	18.49	0.00
time	3.41	1.71	2	677.03560	9.85	0.00
identity status:time	2.46	0.31	8	738.58844	1.78	0.08

Cohen's D: identity status

	1 identity status	2 {1}	3 {2}	4 {3}	5 {4}	6 {5}
1	Achieved		0.21(small)	0.18(small)	0.48(medium)	0.91(large)
2	Searching Moratorium	0.21(small)		0.39(small)	0.28(small)	0.71(medium)
3	Undifferentiated	0.18(small)	0.39(small)		0.63(medium)	1.05(large)
4	h_h_m	0.48(medium)	0.28(small)	0.63(medium)		0.41(medium)
5	m_m_m	0.91(large)	0.71(medium)	1.05(large)	0.41(medium)	

Cohen's D: time

	1 time	2 {1}	3 {2}	4 {3}
1	2		0.22(small)	0.31(small)
2	3	0.22(small)		0.09(negligible)
3	4	0.31(small)	0.09(negligible)	

CAAS_control

ANOVA

	Random effects: (1|Participant No)					
	1 Sum Sq	2 Mean Sq	3 Num DF	4 Den DF	5 F value	6 p value
identity status	14.26	3.56	4	1017.6018	16.45	0.00
time	0.71	0.36	2	690.44143	1.64	0.19
identity status:time	2.83	0.35	8	764.910	1.63	0.11

Cohen's D: identity status

	1 identity status	2 {1}	3 {2}	4 {3}	5 {4}	6 {5}
1	Achieved		0.21(small)	0.12(negligible)	0.47(medium)	0.87(large)
2	Searching Moratorium	0.21(small)		0.34(small)	0.27(small)	0.67(medium)
3	Undifferentiated	0.12(negligible)	0.34(small)		0.59(medium)	0.99(large)
4	h_h_m	0.47(medium)	0.27(small)	0.59(medium)		0.39(small)
5	m_m_m	0.87(large)	0.67(medium)	0.99(large)	0.39(small)	

Cohen's D: time

	1 time	2 {1}	3 {2}	4 {3}
1	2		0.09(negligible)	0.11(negligible)
2	3	0.09(negligible)		0.02(negligible)
3	4	0.11(negligible)	0.02(negligible)	

CAAS_curiosity

ANOVA

	Random effects: (1|Participant No)					
	1 Sum Sq	2 Mean Sq	3 Num DF	4 Den DF	5 F value	6 p value
identity status	21.95	5.49	4	1031.2980	21.46	0.00
time	2.09	1.05	2	697.41234	4.09	0.02
identity status:time	2.76	0.34	8	775.74342	1.35	0.22

CAAS_confidence

ANOVA

	Random effects: (1|Participant No)					
	1 Sum Sq	2 Mean Sq	3 Num DF	4 Den DF	5 F value	6 p value
identity status	17.52	4.38	4	1041.7457	17.41	0.00
time	1.78	0.89	2	701.47193	3.54	0.03
identity status:time	3.84	0.48	8	785.97524	1.91	0.06

Cohen's D: identity status

	1 identity status	2 {1}	3 {2}	4 {3}	5 {4}	6 {5}
1	Achieved		0.(negligible)	0.3(small)	0.43(medium)	0.82(large)
2	Searching Moratorium	0.(negligible)		0.3(small)	0.43(medium)	0.8(large)
3	Undifferentiated	0.3(small)	0.3(small)		0.71(medium)	1.08(large)
4	h_h_m	0.43(medium)	0.43(medium)	0.71(medium)		0.37(small)
5	m_m_m	0.82(large)	0.8(large)	1.08(large)	0.37(small)	

Cohen's D: time

	1 time	2 {1}	3 {2}	4 {3}
1	2		0.15(negligible)	0.14(negligible)
2	3	0.15(negligible)		0.(negligible)
3	4	0.14(negligible)	0.(negligible)	

CAAS_co-operation

ANOVA

	Random effects: (1|Participant No)					
	1 Sum Sq	2 Mean Sq	3 Num DF	4 Den DF	5 F value	6 p value
identity status	13.47	3.37	4	960.60450	13.54	0.00
time	0.57	0.28	2	670.10364	1.14	0.32
identity status:time	1.73	0.22	8	731.31883	0.87	0.54

Cohen's D: identity status

	1 identity status	2 {1}	3 {2}	4 {3}	5 {4}	6 {5}
1	Achieved		0.04(negligible)	0.2(small)	0.47(medium)	0.7(medium)
2	Searching Moratorium	0.04(negligible)		0.25(small)	0.44(medium)	0.68(medium)
3	Undifferentiated	0.2(small)	0.25(small)		0.68(medium)	0.95(large)
4	h_h_m	0.47(medium)	0.44(medium)	0.68(medium)		0.23(small)
5	m_m_m	0.7(medium)	0.68(medium)	0.95(large)	0.23(small)	

Cohen's D: time

	1 time	2 {1}	3 {2}	4 {3}
1	2		0.09(negligible)	0.12(negligible)
2	3	0.09(negligible)		0.03(negligible)
3	4	0.12(negligible)	0.03(negligible)	

CAAS_contribution

ANOVA

	Random effects: (1|Participant No)					
	1 Sum Sq	2 Mean Sq	3 Num DF	4 Den DF	5 F value	6 p value
identity status	15.13	3.78	4	1016.8524	16.50	0.00
time	0.33	0.16	2	690.00539	0.72	0.49
identity status:time	2.94	0.37	8	766.0780	1.60	0.12

Cohen's D: identity status

	1 identity status	2 {1}	3 {2}	4 {3}	5 {4}	6 {5}
1	Achieved		0.02(negligible)	0.06(negligible)	0.36(small)	0.89(large)
2	Searching Moratorium	0.02(negligible)		0.03(negligible)	0.33(small)	0.84(large)
3	Undifferentiated	0.06(negligible)	0.03(negligible)		0.29(small)	0.77(large)
4	h_h_m	0.36(small)	0.33(small)	0.29(small)		0.52(medium)
5	m_m_m	0.89(large)	0.84(large)	0.77(large)	0.52(medium)	

Cohen's D: time

	1 time	2 {1}	3 {2}	4 {3}
1	2		0.02(negligible)	0.04(negligible)
2	3	0.02(negligible)		0.02(negligible)
3	4	0.04(negligible)	0.02(negligible)	

APPENDIX AA: Correlation Table *CAAS* and *VISA*

Variable	Within-time correlations at Time 1 and Time 2														
	Career adaptability						Vocational identity								
CAAS Subscales	Conc	Cont	Confi	Curi	Coop	Contri	CE	ID	IB	CC	ICM	CCM	CR	CF	SD
Conc	-						0.15**	0.15**	0.12**	0.21**	0.19**	0.17**	-0.09	-0.04	-0.11**
Cont		-					0.15**	0.12**	0.14**	0.17**	0.17**	0.11**	-0.1	-0.05	-0.12**
Confi			-				0.17**	0.18**	0.12**	0.21**	0.19**	0.17**	-0.03	-0.01	-0.04
Curi				-			0.15**	0.11*	0.16**	0.18**	0.18**	0.14**	0	-0.03	0.04
Coop					-		0.14**	0.1	0.15**	0.13**	0.18**	0.06	0	0.02	-0.02
Contri						-	0.19**	0.18**	0.16**	0.23**	0.26**	0.14**	-0.03	0.02	-0.06
CE	0.09	0.15**	0.16**	0.09	0.09	0.18**	-								
ID	0.14**	0.13**	0.15**	0.07	0.09	0.18**		-							
IB	0.03	0.14**	0.13**	0.09	0.06	0.14**			-						
CC	0.2**	0.14**	0.16**	0.13**	0.12**	0.2**				-					
ICM	0.16**	0.16**	0.15**	0.12**	0.17**	0.22**					-				
CCM	0.2**	0.09	0.14**	0.11	0.05	0.14**						-			
CR	-0.12**	-0.11*	-0.06	-0.01	-0.07	-0.07							-		
CF	-0.09	-0.1	-0.07	-0.02	-0.07	-0.06								-	
SD	-0.12**	-0.1	-0.04	0	-0.06	-0.07									-

Note: Conc= Concern, Cont=Control, Confi=Confidence, Curi=Curiosity, Coop=Co-operation, Contri=Contribution, CE=Career exploration, ID=In-depth exploration, IB=In-breadth exploration, CC=Commitment, ICM=Identification with commitment, CCM=, CR=Career reconsideration, SD=Self-doubt, CF=Career Flexibility.
* p< 0.05
**p<0.01
***p<0.001

APPENDIX AA: Correlation Table *CAAS* and *VISA*

Variable	Within-time correlations at Time 2 and Time 3														
	Career adaptability						Vocational identity								
CAAS Subscales	Conc	Cont	Confi	Curi	Coop	Contri	CE	ID	IB	CC	ICM	CCM	CR	CF	SD
Conc	-						0.09	0.14**	0.03	0.2**	0.16**	0.2**	-0.12**	-0.09	-0.12**
Cont		-					0.15**	0.13**	0.14**	0.14**	0.16**	0.09	-0.11*	-0.1	-0.1
Confi			-				0.16**	0.15**	0.13**	0.16**	0.15**	0.14**	-0.06	-0.07	-0.04
Curi				-			0.09	0.07	0.09	0.13**	0.12**	0.11	-0.01	-0.02	0
Coop					-		0.09	0.09	0.06	0.12**	0.17**	0.05	-0.07	-0.07	-0.06
Contri						-	0.18**	0.18**	0.14**	0.2**	0.22**	0.14**	-0.07	0.06	-0.07
CE	0.2**	0.18**	0.14**	0.18**	0.17**	0.18**	-								
ID	0.23**	0.15**	0.11*	0.19**	0.14**	0.18**		-							
IB	0.15**	0.18**	0.14**	0.13*	0.18**	0.15**			-						
CC	0.2**	0.18**	0.15**	0.18**	0.16**	0.19**				-					
ICM	0.17**	0.17**	0.11*	0.17**	0.16**	0.22**					-				
CCM	0.18**	0.15**	0.16**	0.14**	0.12*	0.11*						-			
CR	-0.2**	-0.15**	-0.11*	-0.09	-0.14**	-0.09							-		
CF	-0.15**	-0.09	-0.08	-0.1	-0.09	-0.16**								-	
SD	-0.21**	-0.18**	-0.11*	-0.06	-0.03	-0.13*									-

Note: Conc= Concern, Cont=Control, Confi=Confidence, Curi=Curiosity, Coop=Co-operation, Contri=Contribution, CE=Career exploration, ID=In-depth exploration, IB=In-breadth exploration, CC=Commitment, ICM=Identification with commitment, CCM=, CR=Career reconsideration, SD=Self-doubt, CF=Career Flexibility.
* p< 0.05
**p<0.01
***p<0.001

APPENDIX AA: Correlation Table *CAAS* and *VISA*

Within-time correlations at Time 3 and Time 4

Variable	Career adaptability						Vocational identity								
CAAS Subscales	Conc	Cont	Confi	Curi	Coop	Contri	CE	ID	IB	CC	ICM	CCM	CR	CF	SD
Conc	-						0.2**	0.23**	0.15**	0.2**	0.17**	0.18**	-0.2**	-0.15**	-0.21**
Cont		-					0.18**	0.15**	0.18**	0.18**	0.17**	0.15**	-0.15**	-0.09	-0.18**
Confi			-				0.14**	0.11*	0.14**	0.15**	0.11*	0.16**	-0.11*	-0.08	-0.11*
Curi				-			0.18**	0.13*	0.19**	0.18**	0.17**	0.14**	-0.09	-0.06	-0.1
Coop					-		0.17**	0.14**	0.18**	0.16**	0.16**	0.12*	-0.14**	-0.09	-0.16**
Contri						-	0.18**	0.18**	0.15**	0.19**	0.22**	0.11**	-0.09	-0.03	-0.13*
CE	0.18**	0.09	0.15**	0.12	0.13*	0.22**	-								
ID	0.15**	0.04	0.13**	0.09	0.1	0.18**		-							
IB	0.18**	0.12	0.14**	0.14*	0.13*	0.23**			-						
CC	0.19**	0.11	0.09	0.1	0.19**	0.21**				-					
ICM	0.22**	0.14*	0.14**	0.13**	0.2**	0.26**					-				
CCM	0.12	0.06	0.03	0.05	0.14*	0.12						-			
CR	-0.21**	-0.18**	-0.07	-0.1	-0.04	-0.04							-		
CF	-0.17**	-0.12	-0.02	-0.12	-0.01	0.04								-	
SD	-0.2**	-0.2**	-0.1	-0.06	-0.07	-0.09									-

Note: Conc= Concern, Cont=Control, Confi=Confidence, Curi=Curiosity, Coop=Co-operation, Contri=Contribution, CE=Career exploration, ID=In-depth exploration, IB=In-breadth exploration, CC=Commitment, ICM=Identification with commitment, CCM=, CR=Career reconsideration, SD=Self-doubt, CF=Career Flexibility.
* p< 0.05
**p<0.01
***p<0.001

APPENDIX BB: CAAS Qualitative data coding schedule

CAAS Data Coding Schedule

Dimensions	Career adapt-abilities scale items	Qualitative descriptors
1) Curiosity	Exploring my surroundings	Investigative
	Looking for opportunities to grow as a person	Self-reflective/matching current skills with future opportunities
	Imagining what my future will be like	Future focused/orientated/perspective
	Investigating options before making a choice	Explorative
	Observing different ways of doing things	Observant/mimicking others
2) Control	Making decisions by myself	Independent/autonomous vs fatalistic
	Thinking before I act	Contemplative/pre-emptive
	Taking responsibility for my actions	Accountable/trustworthy vs fatalistic
	Being persistent and patient	Persistent/patient
	Sticking up for my beliefs	Self-principled
3) Confidence	Performing tasks efficiently	Efficient/ productive
	Learning from my mistakes	Self-perceptive
	Being dependable: Doing what I say I will do	Reliable
	Feeling pride in a job well done	Proud/self-efficacy
	Having self-confidence	Self-confident/family support
4) Concern	Planning important things before I start	Planful
	Thinking about what my future will be like	Forward thinking
	Realising that today's choices shape my future	Connects present and future
	Expecting the future to be good	Optimistic/ hopeful
	Preparing for the future	Prepared/ready
5) Co-operation	Becoming less self-centred	Inter-relational
	Acting friendly	Collegial/friendly
	Getting along with all kinds of people	Interpersonally skilled
	Cooperating with others on group projects	Accommodating
	Playing my part on a team	Collaborative

Notes. Taken from McMahon, M., Watson, M. B. & Bimrose, J. (2012a). Career adaptability: A qualitative understanding from the stories of older women. *Journal of Vocational Behavior*, 80 (3), 762-768.

APPENDIX CC: VISA Qualitative data coding schedule

VISA Qualitative Data Coding Schedule

Dimensions	Themes	VISA Subscales	CAAS Subscales
1. Career commitment	1.1 Career identity linked to future lifestyle	ICM	Conc
	1.2 Career identity linked to self-esteem	ICM	Conc
	1.3 Future plan developed	CCM	Conc/cont
	1.4 Increased personal responsibility	ICM	Conf
	1.5 Identification of abilities	ICM	Conc/conf
	1.6 Family as a support system	CCM	Co-op/conf
2. Career exploration	2.1 New openness to career ideas	IB	Curio
	2.4 Learning about career details	ID	Curio
	2.5 Identification with role models	ID	Co-op
3. Career reconsideration	3.1 Career self-doubt	SD	Conf
	3.2 career choice flexibility	CF	Curio
	3.3 Acceptance of work-related changes	CF	Conf/Conc

Note: Conc= Concern, Cont=Control, Confi=Confidence, Curi=Curiosity, Coop=Co-operation, Contri=Contribution, CE=Career exploration, ID=In-depth exploration, IB=In-breadth exploration, CC=Commitment, ICM=Identification with commitment, CCM=, CR=Career reconsideration, SD=Self-doubt, CF=Career Flexibility.