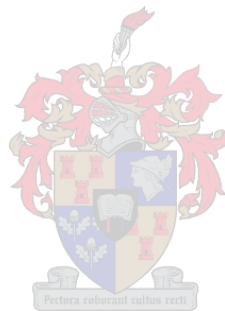


**AN EXPLANATORY STUDY OF WORK ENGAGEMENT AMONG SPECIAL
NEEDS TEACHERS: THE MODERATING ROLE OF JOB CRAFTING**

By

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*Thesis presented in the partial fulfilment of the requirements for the
degree of Masters of Commerce in the Faculty Economic and Management
Sciences at the Department of Industrial Psychology at Stellenbosch University*



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PLAGIARISM DECLARATION

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ABSTRACT

The labour market opportunities are increasingly becoming dependent on the knowledge and skills required by the job. In Namibia, persons with disabilities continue to face labour market disadvantages as a result of the low levels of qualifications that are needed to secure a job in the labour market. Persons with disabilities need to attend school, at its basic level, before advancing to tertiary institutions where qualifications can be obtained. Thus, special needs teachers play a key role in enhancing the learning process of persons with disabilities, hence the importance and engagement of the special needs teacher as a key focus of the study.

The objective of this research study was therefore, to pin point the work factors that are most salient in accounting for variance in the work engagement of special needs teachers in Windhoek, Namibia. A secondary objective of this research study was to test the effects of job crafting on the relationship between the identified work factors and work engagement.

Nine hypothesis were formulated based on literature discussions. An ex post facto correlation design was used as a research design. Data was collected using a self-administered hardcopy questionnaire from 89 special needs teachers in Windhoek, Namibia. It was uncovered that three of the eight hypotheses were found to be statistically significant. The results of the study uncovered that co-worker support significantly and positively impacts work engagement. The results also uncovered that job crafting has a significant moderating effect on the relationships between co-worker support and work engagement, as well as work autonomy and work engagement. These findings allow for interventions to be tailored at individual and organisational level to be developed to enhance work engagement. The study provides insight for stakeholders in the special education fraternity on ways in which work engagement of special needs teachers can be enhanced.

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CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION AND BACKGROUND

The global business world is increasingly becoming aware of its role in promoting a diversified workforce because of the positive impact of diversity in the workplace. Literature reveals that organisations are slowly moving away from only valuing diversity to developing ways to practically manage workplace diversity. It is crucial and a necessity that for organisations to increase performance and thus have a greater return on investments, they need to be more diversified (Cummings & Worley, 2008). An organisation's workforce is diverse in age, gender, disability, ethnicity, skills and knowledge.

Different forms of disabilities, such as being visually impaired, deaf, intellectual, speech or some form of limb impairment exist (Landolt, 2014). Landolt (2014) mentions that persons with disabilities are affected as per the disability because of the different needs associated with each of the impairments. Namibia's Labour Report by the Namibia Statistics Agency (2013) reveals that persons with disabilities are amongst the majority of those who experience significant labour market disadvantages as well as the worse labour market outcomes compared to other working age persons without disabilities. According to Smith (2002), disabled employees' biggest challenge remains that of securing and maintaining employment.

In efforts to reduce the labour market disadvantages associated with the various types of disabilities, the Employment Equity Act of Namibia (Act 29 of 1998) as captured in the Namibian Government Gazette (1998), states that all labour legislation laws that discriminate against persons with disabilities or obstacles hindering their employment opportunities will be removed (Namibia Statistics Agency, 2013). In view of the above, the Ministry of Education in Namibia introduced the concept of Special Education in 1992, with the main objective of helping persons with disabilities to acquire the necessary skills that are essential in integrating them into the larger economic global society (Namibia Government Gazette, 1998). Given the present economic

participation rate of persons with disabilities, it is evident that one of the most strategic and effective ways to remove any hindrances and obstacles to employment opportunities for persons with disabilities is access to educational opportunities. Even though the Employment Equity Act of Namibia advocates for an equitable representation of persons with disabilities in the workplace, it is an indisputable fact that for such representation to become a reality, persons with disabilities must be given an opportunity to engage in learning to acquire the necessary skills needed in the labour market. As currently stipulated in Namibia's Disability Report of the 2011 census (Figure 1.1), "49% of persons with disabilities aged 5 years and above left school, while about 29% never entered a classroom for the purposes of learning" (Namibia Statistics Agency, p.11, 2016).

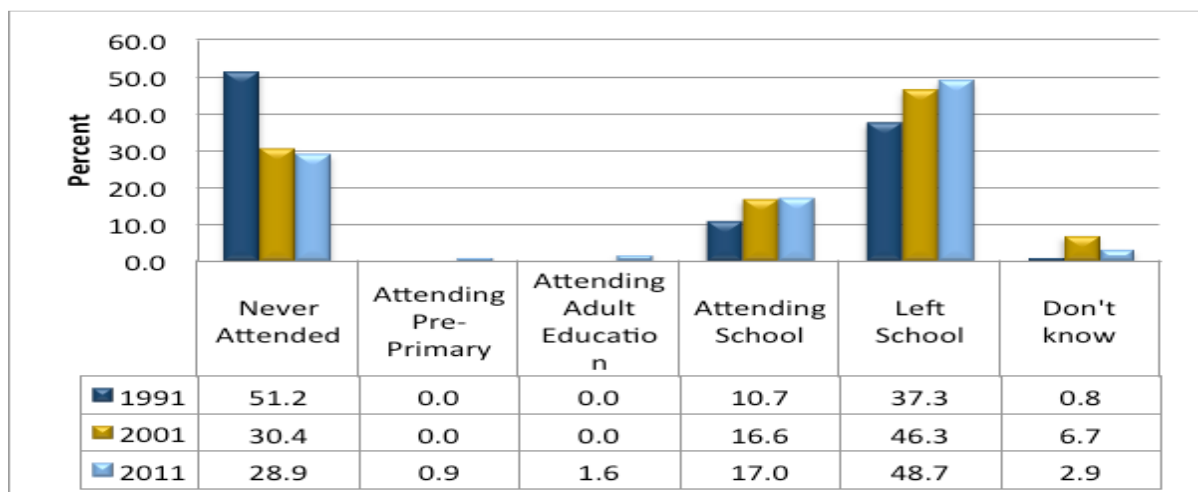


Figure 1.1. School attendance of persons with disabilities in Namibia. Adapted from the Namibia Disability Report, by the Namibian Statistics Agency, 2016, Windhoek: Namibia Statistics Agency.

It is anticipated that the educational attainment levels of persons with disabilities as presented in Figure 1.2 is harmonious with the statistics of school attendance by persons with disabilities displayed in Figure 1.1. As such, it could be reasoned that the unemployment rate of persons with disabilities as stipulated in Namibia's Disability Report could be a result of the low educational attainment levels of persons with disabilities, which inevitably leads to lack of qualifications needed for them to be absorbed in the labour market.

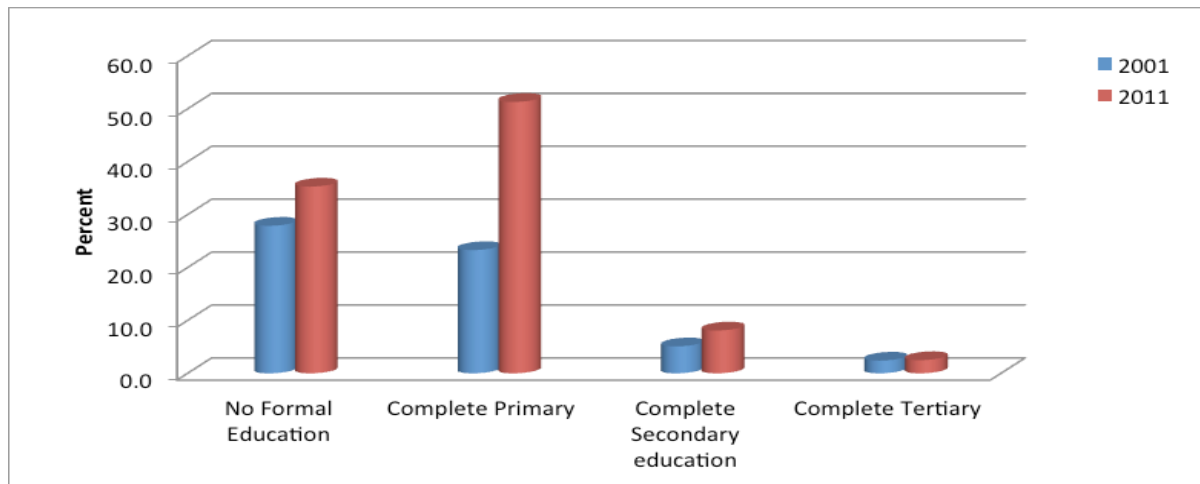


Figure 1.2. Educational attainment levels of persons with disabilities in Namibia. Adapted from the Namibia Disability Report, by the Namibian Statistics Agency, 2016, Windhoek: Namibia Statistics Agency.

Special needs teachers that are engaged to teach persons with disabilities play a role in shaping the future by indirectly influencing their learning capacities. Omede (2011), proffers that special needs teachers are vital in integrating persons with disabilities to national and social economic reforms. As such, persons with disabilities can possibly acquire skills and knowledge from formal training or informal learning environments such as special schools, hence the importance of special needs teachers, who are the heart of this study. More importantly, it could be further argued that the preferred educational attainment levels for persons with disabilities needed to secure employment in the labour market cannot happen and ultimately be achieved without the help of special needs teachers who are engaged in what they do. This requires such teachers to understand what their work entails, and to passionately pursue their work activities with high levels of commitment and dedication. Employees that are engaged are efficient and productive because the resources that are available allow them to physically, emotionally and cognitively engage with the task at hand (Kahn, 1990). Literature discloses that the unengaged employees are the kind that shows no interest and enthusiasm in their work and thus downplaying the overall aim (i.e. efficiency and productivity) of the organisation (Robbins, Judge, Odendaal & Roodt, 2009).

Special education requires modifications, adjustments, creativity and innovation (Obani, as cited in Omede, 2011), which are proposed to ensure the accommodation

of persons with disabilities in efforts to enhance the learning capacity of persons with disabilities. More so, special need learners can be said to acquire skills and knowledge at different paces and in different ways. According to Bendova and Fialova (2015), this points to one of the major reasons as to why special needs teachers need to continually analyse the needs of each learner to be able to plan accommodation as per the different needs of the special needs learner. This furthermore, alludes to the role of the special needs teacher in finding possible ways and strategies to simplify and enhance the learning process of persons with disabilities, hence the importance of special needs teachers (Obani, as cited in Omede, 2011). As such, an engaged teacher will initiate job crafting, innovation and creativity in the workplace (Anitha, 2014), which can be considered as key ingredients that teachers at special schools use to ensure the academic success of persons with disabilities. A number of studies echo, the benefits of job crafting and its relation to work engagement. This is illustrated by Berg, Dutton and Wrzesniewski (2013, p. 2) who stress that job crafting “involves employees altering the set of responsibilities prescribed by a formal job description, by adding or dropping tasks, altering the nature of tasks or changing how much time and energy the tasks require”. It could be argued that the extent to which individual employees engage in job crafting while at work has the potential to influence the extent to which such employees become and remain engaged in their work.

Research further shows that teachers who experience low work engagement react with early retirement, absenteeism, frustration, depression as well as resigning from their work duties (Dehaloo & Schulze, 2013), which are obstacles to the learning process of learners. Janik (2013) mentions in a study on wellbeing among Namibian teachers, that high turnover rates are found more at special schools compared to mainstream teachers. Turnover rates of both special and mainstream teachers can be attributed to amongst others, lack of administrative support, lack of preparation time, the ill-discipline of learners, and lack of community and collegial support (Ingersoll, 2002). In addition, Janik and Rothmann (2015) state that in most cases teachers are overloaded with work, have bigger classes, lack resources, have limited promotional and developmental opportunities, and are poorly remunerated. This can also be considered as the factors that cause teachers to become unengaged in their work, and as mentioned by Janik (2013), this has the potential to fuel turnover rates.

Persons with disabilities are reported to start school late and they are thus also less likely to finish school (Namibia Statistics Agency, 2016). This inevitably is bound to influence their employability rate in the labour market which, as alluded to by Smith (2002), depends largely on their qualifications and skills. The assumed problem contributing to such low levels of educational attainment amongst persons with disabilities is low work engagement among special school teachers. The kind of work and learning activities as well as the pressure needed to engage persons with disabilities requires teachers at special schools to have high engagement as teachers need to constantly plan for reasonable accommodation as per each disability (Omede, 2011). The effects of having special needs teachers who are not engaged could have a tremendous impact on persons with disabilities. The ideal state is to therefore have persons with disabilities acquire the knowledge and skills needed in the labour market, to eventually secure employment and become full participants in the country's economy. This is however not the case in Namibia as the status quo still indicates that persons with disabilities continue to face major challenges with matters pertaining to employment, most specifically because the labour market requires some form of qualification for any person, irrespective of disabilities, for them to be absorbed in the labour market (Namibia Statistics Agency, 2013).

The inability to secure a job in the labour market can also possibly denote a lack of income or no income at all. The inability to provide for one's basic needs such as food, a place to stay, clothing and access to tertiary educational programmes can be categorised as poverty in Namibia, and this is not the ideal state for persons with disabilities. The gap that exists between the ideal and current state therefore, needs to be bridged through education where special needs teachers are not only responsible for the quality of education that the students receive but also so that they can be the key people that can influence learners' intentions to continue with schooling (Iyer, 2016) and eventually reach tertiary level. The vicious cycle of poverty is bound to exacerbate if teachers at special schools do not effectively engage. The ideal situation is to have teachers at special schools, who are engaged for them to enhance the learning experience of persons with disabilities and eventually bridge the gap between the ideal and current state of persons with disabilities.

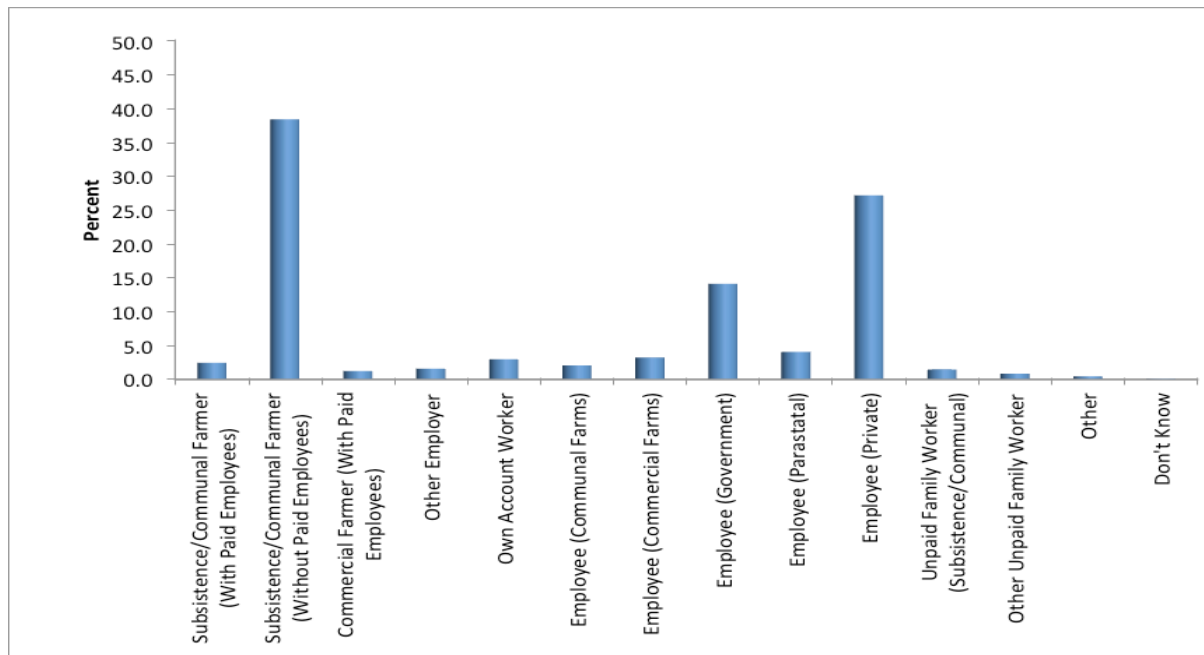


Figure 1.3. Status of sectors of employment for persons with disabilities in Namibia. Adapted from the Namibia Disability Report, by the Namibian Statistics Agency, 2016, Windhoek: Namibia Statistics Agency.

As depicted above, persons with disabilities can be absorbed in at least more than 10 sectors in the Namibian labour market. However, with a careful analysis of Figure 1.3, it is shocking to see where most persons with disabilities are accommodated in the labour market. As shown in Figure 1.3, most persons with disabilities resort to subsistence/communal farming without paid employment, pointing to the lack of educational qualifications needed in other sectors of employment. In holistically analysing the challenges of unemployment faced by persons with disabilities, it is necessary that the work engagement of special needs teachers also be equally analysed. The statistics presented in Figures 1.2 and 1.3 could possibly point to low work engagement among special schools teachers, who are key custodians of the learning environment of persons with disabilities.

It is important to note that the focus of the present study lies heavily on the work factors found in a special school environment, in an effort to pin point the factors that have a bearing on the work engagement of special needs teachers. The study also investigated the role of job crafting as a possible personal resource that teachers at special needs schools might utilise in their work, amidst the various work factors.

1.2 PROBLEM STATEMENT

Persons with disabilities can be said to be reliant on the educational opportunities that they receive to enable them to become full participants in the country's economy. As already established in Section 1.1, such educational opportunities are not at all possible without special schools and its teachers. According to the Namibian Statistics Agency (2016), persons with disabilities drop out of school and only a few eventually reach tertiary education, where they can attain the qualifications needed in the labour market. The assumed problem is low work engagement among teachers at special schools. The work factors that can be argued to contribute to their low work engagement levels therefore need to be investigated. The study, being fairly novel in Namibia, paves way for a literature database on special needs education employees.

1.3 RESEARCH – INITIATING QUESTIONS

To build on the existing research of employee engagement, the present study considered the most salient work factors that significantly account for variance in the work engagement among special needs school teachers. The following research initiating question is thus the motivation for the study;

What accounts for the variance in work engagement of special needs teachers in Windhoek, Namibia? In addition, what is the role of job crafting, as a critical personal resource on the work engagement of special needs teachers in Windhoek, Namibia?

1.4 RESEARCH OBJECTIVES

The study adopted an explanatory research approach aimed at investigating the relationship that is assumed to exist between work engagement and the various work factors identified for the study. The objective of the study was to develop and test an explanatory model that explains variance in work engagement of special needs teachers.

In summation, the objectives of this study is three fold:

- To investigate the various work factors that are most salient in accounting for the variance in the work engagement of special needs teachers;
- To investigate the role of job crafting as a critical personal resource on work engagement levels of special needs teachers; and
- To make recommendations based on the findings of the study, to the Directorate of Special Education in Namibia on the interventions that could possibly be employed to enhance work engagement among special needs teachers.

1.5 RELEVANCE OF THE STUDY

Research shows that there are various factors influencing the ability of persons with disabilities to acquire knowledge and skills needed in different domains (Obani, as cited in Omede, 2011). However, such factors cannot all be handled objectively at once in the efforts to curb the problem. This study used the bottom up approach of assuming that the special needs teacher play a role in the learning process of persons with disabilities, hence the interest in their work engagement. It is important to understand that the focus of the study could only be one of the many other approaches to dealing with the bigger problem faced by persons with disabilities in Namibia. Understanding the various work as well as job crafting behaviours that impact work engagement in special needs teachers is of importance to address the possible low work engagement of special needs teachers. It is thus important that the special needs teachers who are directly involved with persons with disabilities become engaged in their work to ensure the academic success of learners with special needs because it is the teacher's responsibility to organise, enrich, and guide the learning environment of learners (Rothmann & Hamukang'andu, 2013). Numerous policies are documented on appropriate intervention strategies that are aimed at increasing the efficiency of a diversified workforce in the workplace. Specific to persons with disabilities in the workplace, Cummings and Worley (2008) mention job redesign, performance evaluation, feedback, learner-ship programmes for career and self-development, coaching and mentoring to help in goal setting and guidance as key interventions that can increase productivity and efficiency amongst persons with disabilities in the

workplace. However, interventions such as the ones listed above require at least an employee to have some basic form of acquired skills to be able to fully participate and be a beneficiary. As mentioned earlier by Smith (2002), persons with disabilities are employed on the basis of their qualifications like any other employee, hence the importance of having skills and knowledge as a basis for securing employment. The study points to special school education as the learning environment where persons with disabilities acquire the necessary knowledge and skills that guarantee them access to educational programmes at tertiary level. As such, it is important for the special needs teachers to be physically, cognitively and emotionally engaged in the process of learning for persons with disabilities. The key stakeholders concerned (i.e. Ministry of Education: Special Education Directorate) can use the findings from the study as a blueprint from which interventions can be developed to enhance the work engagement of special needs teachers in Windhoek, Namibia.

1.6 KEY CONCEPTS DEFINED

The various concepts used in the study are defined differently by various authors. However, for purposes of this study, the following terms are conceptualised as follow;

1.6.1 Special school

A special school is designed to facilitate the learning of individuals who for a wide variety of reasons “require additional support and adaptive pedagogical methods in order to participate and meet the learning objectives in an educational programme. Special needs education takes into account the specific individual needs by providing specific resources in the form of specially trained personnel, equipment or space and if necessary, a modified educational content that is aimed at enhancing learning” (Disabilities in Southern Africa, p.22, 2012).

1.6.2 Work engagement

The harnessing of organisational members to their work roles, where the organisation’s members employ and express themselves physically, cognitively and emotionally during role performances when engaged (Kahn, 1990, p. 694).

1.6.3 Persons with disabilities

Persons with disabilities include those “who have long-term physical, mental, intellectual or sensory impairments which, in interaction with various barriers, may hinder their full and effective participation in society on an equal basis with others” (Namibia Statistics Agency, p.10, 2016).

1.6.4 Job crafting

Berg et al. (2013, p. 2) stresses that job crafting “involves employees altering the set of responsibilities prescribed by a formal job description, by adding or dropping tasks, altering the nature of tasks or changing how much time and energy the tasks require.”

1.7 CHAPTER SUMMARY

This chapter introduced the research background, which is key in understanding the nature of the problem the study sought to address. This chapter also presented the research initiating question, objectives and relevance of the study. The subsequent chapter explores literature on the various variables of the study.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

The concept of work engagement (WE) has gained tremendous research interest because of the many positive outcomes associated with it. An organisation's overall aim is directly linked to increasing its efficiency and its relevance (Robbins et al., 2009). More important is the human resource component whose aim is to contribute to organisational effectiveness. Additionally, because WE has been linked to performance improvement, organisations are on the lookout for employees that are engaged (Breevaart, Bakker & Demerouti, 2014). The focus in this section specifically lies in defining WE, exploring WE within the context of the study and lastly, presenting literature on the antecedents of WE.

2.2 DEFINING ENGAGEMENT

Engagement at work has received tremendous research interest from various authors. However, the key interest in WE regardless of author, is to improve efficiency, productivity and overall organisational effectiveness (Keyko, 2014). The earliest works on WE reveal that Kahn (1990) popularised the concept of WE to describe how employees in an organisation harness and employ themselves to their differing work roles physically, cognitively and emotionally while at work. Kahn (1990) maintains that the more the self is absorbed in their work, the more engaged the employee will eventually be. Kahn (1990) viewed WE as a construct that is comprised of three components (i.e. cognitive, physical and emotional) (Kular, Gatenby, Rees, Saone & Truss, 2008). According to Kular et al. (2008), the physical component entails the physical energy that employees engage with in their work roles to accomplish their work, whereas the emotional component denotes how employees feel about their work roles as well as the amount of energy needed to deal with the emotional demands that come with the work roles. In addition, Kahn (1990) argues that the emotional aspect of employee engagement also entails the positive and negative attitudes that employees have towards the place of work and their co-workers. Lastly, the cognitive component is more concerned with an employee's state of mindfulness, vigilance and attention deployed in the work role. Kular et al. (2008) add that employees also have

certain beliefs about their place of work as far as work conditions and management is concerned. Such beliefs can be categorised as part of the cognitive component of employee engagement. These components are to a large extent intertwined, and Kahn (1990), argues that employees use these components in varying levels to bring about engagement in their work roles.

Kahn (1990) further argues that three psychological conditions of meaningfulness, safety and availability must precede an employee's state of engagement. According to Shuck (2011), Padhi and Panda (2015), and Kahn (1990), meaningfulness essentially refers to the positive sense of return on investments that an individual experiences in their work role. This speaks to a large extent to the degree to which employees believe they are adding value and significance to an organisation through their work. Secondly, safety as a psychological condition refers to the employees' ability to express oneself without fear or negative consequences to self-image, status or career (Kahn, 1990). What Kahn (1990) argues is that employees need to be able to show trust towards their organisation cognitively, emotionally and behaviourally. Lastly, availability as a psychological condition refers to the sense of having the physical, emotional and psychological resources necessary to complete one's work. Kahn (1990) adds that employees must at all times feel that they have the necessary resources and tools to complete their work, irrespective of whether such tools are readily available or whether it will be obtained for them when they need the resources. This is supported by Amah (2016) who sums it up as how employees apply their whole self to the work.

A different perspective by Schaufeli, Salanova, Gonzalez-Roma and Bakker (2002) defines WE as a positive and fulfilling work related state of mind that is characterised by vigour, dedication and absorption. This perspective argues that the core of engagement at work is a high mental and physical energy, persistence and resilience that is found in employees in attempting challenging and difficult tasks at work, which is described as vigour. Another dimension of WE is employees' sense of belonging, acceptance as well as the pride and meaning they attach to their work role, this is termed dedication. Lastly, absorption is more concerned with an employees' full concentration and a deep engrossment in work (Xanthopoulou, Bakker, Demerouti & Schaufeli, 2007; Schaufeli et al., 2002).

In view of the above, Keyko (2014) emphasises that engagement at work is summed up in how one works and the attitude one works with. The assumption that engagement is first a personal engagement before it becomes WE was proposed by the works of Kahn (1990), who believed that employees are first individual entities before becoming a part of the organisation. Indeed, it can be argued that an employee comes to the workplace as a complete entity with unique traits in terms of personality, attitude and behaviour.

Meere (2005) argues that engaged employees perform their work tasks with enthusiasm and they are known to be devoted to their workplaces. These are the types of employees that have faith in what the organisation represents and entirely want to be part of a productive organisation and therefore make it their personal commitment to contribute directly and indirectly to an organisation's effectiveness. In addition, Anitha (2014) postulates that engaged employees go beyond the call of duty and they are passionate about what the organisation is about. Employees that are not engaged are the kind of employees who are unhappy (i.e. lack of job satisfaction) about their work but choose not to portray or display their emotions in the work context. These employees engage in what Liu, Perrewé, Hochwarter and Kacmar (2004) term emotional labour. Employees who engage in emotional labour are said to decisively express only certain emotions in exchange for their wages while at work regardless of whether an employee identifies less with their work or not; they choose the means of survival over the enthusiasm, zeal, dedication, absorption and vigour that is important for productivity and efficiency. Lastly, the unengaged employees are inclined to demonstrate an unswerving pattern of showing their unhappiness (i.e. dissatisfaction) in the workplace. They are also known for having interpersonal conflicts with other colleagues in the organisation. Kahn (1990) mentions that employees can become unengaged when they decouple their sense of self from the work role by withdrawing themselves cognitively, emotionally and physically. Such employees display poor role performance and exert less effort to ensure success in their work roles.

It is evident in literature that Kahn's (1990), Schaufeli et al.'s (2002) and Xanthopoulou et al.'s (2007) conceptualisation of WE involves the physical, cognitive and emotional aspects that employees engage in to bring about a state of meaningfulness with their work (Steger, Littman-Ovadia, Miller & Rothmann, 2013). It is also evident from the

literature that employee engagement is defined differently by various authors and as such, can have different conceptualisations depending on the context of the study. However, for purposes of this study, Kahn's (1990) conceptualisation of employee engagement is utilised as the theoretical basis underpinning the study.

2.3 THE NATURE OF TEACHING WORK IN NAMIBIA

The education sector is considered to be one of the key pillars of any nation's economy. It is through education that citizens are equipped with the required skills and knowledge to ensure that a country's economic goals are achieved. Omede (2011) argues that teachers play a key role in laying the foundation for social change and transformation as the economic, social, and emotional growth of a nation largely depends on the education level of its labour force (Iyer, 2016). It can thus be argued worldwide, that the success of the education domain is largely dependent on teachers' and learners' level of engagement with work and the process of learning.

In many developing countries such as Namibia, the education sector remains one of the sectors that continue to receive a huge cut of the national budget every year, due to its importance in facilitating sustainable economic growth (Deloitte Namibia, 2018). In addition, teachers are considered as role models for a number of things, which includes, amongst others, happiness, engagement and psychological meaningfulness in the workplace (Rothmann & Hamukang'andu, 2013) as they not only spend most of their time interacting with learners (Janik & Rothmann, 2015), but also view their entire work in interpersonal terms and thus a people management job (Iyer, 2016). Similarly, Warton, Goodnow and Bowes (1992) found that it is in the interactions with learners that teachers can ensure learners' understanding and grasping of the materials that are taught to them, and this is considered as the best aspect of teaching according to teachers interviewed in a study by Warton et al. (1992). Iyer (2016) reveals that teachers' interactions with students have the potential to shape learners' attitude, behaviour and perspectives about what life entails. A teacher's ability to understand that they have the potential to shape learners and steer them toward constructive change, affords the teacher meaning and purpose in their work which has been found by Fourie and Deacon (2015) to have a significant impact on their work engagement levels.

As alluded to earlier, WE irrespective of occupation, is influenced by various factors in or outside the workplace. As such, Dehaloo and Schulze (2013) explored the influences of work engagement of secondary school teachers in South Africa, Kwazulu Natal. Similar to what was uncovered by Zimba, Mufune, Likando and February (2013) in Namibia, Dehaloo and Schulze (2013) uncovered in South Africa, that poor remuneration packages, heavy workloads, fewer opportunities for learning and career development contributed significantly to low levels of work engagement among teachers. As argued by Zimba et al. (2013), the various work challenges that teachers face, compromise the essence of quality education. Zimba et al. (2013) furthermore uncovered that teachers in Namibia and across Africa are faced with numerous challenges that even after 28 years of independence, the majority of Namibian teachers are reported to have low motivation, heavy administrative duties, lack of learning and teaching materials which all prevent effective teaching. In addition, Ncube (2014) found that specific to special education provisions in most African countries, there is lack of resources that are needed to assist persons with disabilities for them to smoothly transition into employable persons. Despite the lack of resources, Amusa and Toriola (2013) brought to the surface that some teachers employed at special schools are not adequately trained for what the job really entails, which has the potential to decrease employee morale, autonomy and authority in terms of how effectively work should be done. This coincides with the research by Louw, George and Esterhuyse (2011), who posit that there is value in having teachers, doctors and mental health professionals who are equipped with the necessary resources to deal with the demands of their specific jobs.

Teachers who experience engagement at work, will continue to remain unresponsive in their work, which as argued by Iyer (2016), has the potential to indirectly influence learners' ability to continue schooling. A study on the wellbeing of Namibian teachers similarly revealed that teachers who become disengaged do so due to work overload, time pressure, poor co-worker relations, large class sizes, and lack of resources, limited promotional opportunities, lack of autonomy while at work, poor remuneration and poor image of the profession (Janik, 2013). Amutenya's (2016) study highlights the factors contributing to attrition among Namibian teachers in the Omusati region. According to Amutenya (2016), what constitutes teacher's workload should be unpacked to provide further understanding in terms of the pressures and inordinate

time demands that teachers face. Extra mural activities after school hours, parent-teacher evening sessions, training workshops during weekends, psychological and emotional pressures of classroom teachings, dealing with ill-disciplined learners, offering counselling sessions for learners with emotional and psychological problems are amongst what constitutes high work load, which taxes on employee's motivational processes at work and thereby diminishing work engagement.

Janik (2013) stresses that lack of training for special education teachers is documented as another cause of the turnover rates among teachers at special schools, where teachers leave the profession permanently for other professions. Marques and Janik (2013) argue that an engaged teacher, is one who willingly walks the extra mile, and is cognitively, physically and emotionally involved in his/her work and also experiences freedom at work. Having established the argument/s above, it is important to note the lack of literature that exists in Namibia as far as work engagement among teachers is concerned. However, the work done specifically on Namibian teachers, by Janik (2013), Marques (2013), Amutenya (2016) and Zimba et al. (2013) helps to provide some insight on the situation of teachers in Namibia.

As shown above, the teaching environment is influenced by a number of factors ranging from work factors to personal factors that are internal to the employee. The following section discusses various work factors that could potentially impact the work engagement of special needs teachers.

2.4 ANTECEDANTS OF WORK ENGAGEMENT

The various work factors that could potentially account for variance in the engagement levels of special needs teachers are discussed in this section. In addition, job crafting is discussed as a critical personal resource that special needs teachers could utilise amidst the various work that could potentially influence work engagement. The hypotheses are derived from the literature reviews discussed for each work factor identified accordingly.

The following work factors are discussed; Supervisor support, co-worker support, work autonomy, work ambiguity, and rewards and recognition and job crafting.

2.4.1. Supervisor support

The supervisor's support in the workplace can be regarded as an organisation's social resource and thus an important factor in enhancing the growth and development of employees (Jiang & Men, 2015). According to Rhoades and Eisenberger (2002), supervisor support is to a great extent contingent on how the employees perceive the supervisor to be supportive and also to what extent the supervisor contributes to their work performance. Supervisors in the context of the study represent school HODs and principals, whose job entails overseeing performance, giving feedback and guidance to teachers for performance improvement. It could be argued, based on Rhoades and Eisenberger (2002) assertion, that special needs teacher will most likely become motivated and engaged in their work if they not only perceive, but experience on a practical level, the various forms of supervisor support. It is vital that supervisors in any work context, understand that every employee is unique in terms of ability and expectations as well as the support that they need from their supervisors (Rosenberg, Griffin, Kilgore & Carpenter, 1997).

Wanguri (1996) adds that the supervisor-subordinate relationship is important in steering effective communication, enhancing workplace relations and employee productivity. It could be argued, that a supervisor who embraces communication and is willing to help subordinates in their unique needs will most likely have a constructive relationship with them. More so, it is an unquestionable fact that a dysfunctional relationship can easily erode the trust component between the supervisors and subordinates, which has the potential to impair feedback sessions, participation, and job involvement (Karatepe & Olugbade, 2009). According to Wanguri (1996), trust is one of the pillars that can enhance positive employee relations as it allows for open and transparent communication. It could be argued that leaders in a school environment have the ability to influence the extent to which employees experience hope, resilience, efficacy and optimism, which are considered key personal resources that are needed in any work environment, specifically at special needs schools where pressure is inevitable. Thompson, Lemmon and Walter (2015) argue that leadership that continually structures the work environment in a way that allows for employees to have control over their work by modelling appropriate behaviour and constantly giving constructive feedback to employees, is important.

The relationship between the supervisor's support and work engagement have long been established, as a number of studies echo that supervisor support has a significant positive impact on work engagement. Naruse et al. (2013) explored factors contributing to work engagement among visiting nurses in Japan and found that supervisor support was significantly and positively related to work engagement. Another study by Ahmed, Majid, Al-Aali and Mozammel (2019) explored work engagement in six large banks in Pakistan. The study found that supervisor support and work engagement are significantly and positively related. Karatepe and Olugbade (2009) found supervisor support to be a key job resource on hotel employees' work engagement as it was found to positively and significantly relate to all three dimensions of work engagement (i.e. vigour, dedication and absorption). The studies mentioned above are indicative of the fact that irrespective of occupation, supervisor support is essential to employees' work engagement.

Another study showed that for employees to be engaged, they need support from various levels as found in the organisational structure (Terzi, 2005). According to Terzi (2005), perceived organisational support can be found at the organisational level such as support in the form of pay, opportunities for career development and personal advancement as well as clear job structure, constructive feedback sessions and participation in decision making. It could therefore be reasoned that for supervisors to render effective supervisor support, they should continually advocate, on behalf of subordinates for the said forms of organisational support. Similarly, findings from a study by Bakker and Demerouti (2007) show that supervisor support as well as appreciation in the supervisor-employee work relationship has significant positive impacts on work engagement. Demerouti, Bakker, de Jonge, Janssen and Schaufeli (2001) state that a supervisor should continually advocate for a meaningful work environment that is viewed as breeding ground for motivation and subsequently work engagement. An employee's work environment is such a crucial element that can either help employees thrive in the workplace or impair performance. For instance, the work environment of special needs teachers is constantly a busy environment, characterised by individualised attention. Teachers are not only upholders of the learning process of learners in a special school, but also upholders of safety for all learners. If the assertion by Demerouti et al. (2001), is not taken cognisant of by the

HODs and principals of any special school, the ability of special needs teachers to uphold and foster a safe learning environment will equally become jeopardised.

Ordinarily, Rai, Ghosh, Chauhan and Mehta (2017) indicate that individuals who have a positive perception of perceived organisational support and perceived supervisor support are more likely to positively engage with the different characteristics of the job (i.e. job autonomy, task significance, feedback) which were also found to significantly impact employees' level of engagement (Lee, Rainey & Chun, 2010). Kopp (2013) looked at the effects of perceived supervisor support on employee work-life balance, job satisfaction, organisational commitment and organisational citizenship behaviour. Findings from Kopp's (2013) revealed that perceived supervisor support have a significant impact on employees work life balance and overall job satisfaction, which has long been established as a key indicator of work engagement.

Yukl (2013) argues that the Leader-member exchange (LMX) theory postulates how an individual in a management position (i.e. supervisor) develops an exchange relationship over time with other employees in the work place. The exchange relationship occurs over time as the two parties influence each other and negotiate the subordinate's role in the organisation. In the said exchange relationship, leaders develop a unique exchange relationship with each subordinate. Relationships are formed on the basis of personal compatibility (how well does the supervisor and the subordinate relate with each other) and subordinate competence (can the subordinate do the required task effectively) and dependability (can the supervisor depend on the subordinate for any work related matters). Over the course of time, a leader, based on several interactions, is likely to establish either a high exchange or a low exchange relationship with each subordinate. Van Dierendonck, Haynes, Boril and Stride (2004) mention that in the LMX relationship, leaders choose and categorise how they work with each of their subordinates, depending on whether they are high exchange or low exchange relationships. In exchange for a favourable relationship with the supervisor, the employee in turn works harder and becomes more committed. A study by Wikhamn and Hall (2012) looked at the concept of social exchange in a Swedish work environment and found that social exchanges can be in the form of support, care, respect, trust and loyalty that employers and employees exchange on a daily basis.

Demerouti et al. (2001) emphasise the role of the supervisor-employee relationship in improving levels of engagement at work. If the relationship between the supervisor and employee is marked by trust, constructive feedback and honesty, it could be expected that the employee will reciprocate with engagement. Research by Breevaart, Bakker, Demerouti and Van den Heuvel (2015) shows that high quality leader-member exchange relationships tend to report more social support as well as opportunities for learning and growth which positively impacts work engagement. Caesens, Stinglhamber and Luypaert (2014) indicate that social support as mentioned by Breevaart et al. (2014), has an intrinsic motivation component through enhancing an employee's feeling of belonging. It could be argued that when employees feel a sense of belonging, irrespective of occupation, their confidence and commitment to achieve work is enhanced, leading to work engagement. Walumbwa, Peterson, Avolio and Hartnell (2010) argue that supervisors act as models to employees regarding what behaviour is appropriate in the workplace. Accordingly, it could also be argued that certain behaviours and attitudes elicited by management have the potential to directly impact the degree to which a teacher leaves the teaching profession. In a critical review of literature by Vittek (2015) on special education teacher attrition and retention using journals dated back as far as 2004, administrative support, mentoring and induction of new teachers as well as matters pertaining to job satisfaction, were the key issues that emerged. In addition, Billingsley (2004) reported that inadequate induction and mentoring are attributed as the cause for special teachers' turnover. Mentoring and induction are in most cases the responsibility of supervisors and when the relationship between employees and supervisors is not strong or at its best, it is more likely that such key aspects of work will become neglected. Such key issues highlighted by Billingsley (2004) and Vittek (2015) depend largely on the school management to spearhead as well as to facilitate to ensure a conducive work environment where special needs teachers can thrive.

Leaders can make use of the relationships they have with employees to influence a number of key things. This includes, amongst others, the motivation of employees, the choice of objectives and strategies that employees can pursue, their motivation at work, the development of member skills and confidence, how members interpret external events, as well as the learning and sharing of new knowledge by members (Yukl, 2013). Accordingly, the role of management in ensuring organisational success

cannot be emphasised enough. Player, Youngs, Perrone and Grogan (2017) argue that principals should ensure that the vision of the school as well as strategies to accomplish the said vision, are clearly stated and explained to the teachers. Player et al. (2017) further add that a principal should be very supportive to the teachers and be able to recognise and reward hardworking and dedicated teachers to motivate for engagement at work. In a review of different research findings, Kini and Podolsky (2016) found that there is significant importance for school administrators to create the necessary conditions to ensure a positive and professional working environment as this is positively related to teacher effectiveness. Studies by Amutenya (2016) and Janik (2013) found that as far as Namibian teachers are concerned, poor supervisor support and management support contribute to teachers' attrition rates, thereby emphasising the importance of healthy and productive relationships between teachers and principals or HODs in the schools. Based on the aforementioned literature discussions, the following hypothesis is formulated;

Hypothesis 1: *The supervisor's support has a significant, positive impact on work engagement of special needs teachers in Windhoek, Namibia.*

2.4.2. Co-worker support

Every organisation is made up of a diversified workforce. However, the effectiveness of an organisation depends on the interdependence of unique individuals who make up such a workforce. Co-workers are defined as individuals who work alongside each other in the workplace, either in the same position or positions similar to one another (Yoon & Thye, 2000). Literature supports that the workplace is not only a source of income or opportunities for self-development but also a hub of social interaction and the formation of meaningful relationships (Yoon & Thye, 2000). Hodson (as cited in Hain, 2005) reveals that co-worker relationships serve the purposes of occupational socialisation, solidarity in the organisation and affirmation of group identities, which are key elements for positive co-worker relationships at work. Jo (2014) supports that co-workers can be a source of emotional, physical and psychological help in the school environment. According to Langford, Bowsher, Maloney and Lillis (as cited in Wright, 2009), co-worker support can manifest in various forms such as emotional (i.e. care, love, empathy), instrumental (i.e. assistance leading to a goal attainment), informational (i.e. problem solving and how to do better) and appraisal (i.e. praise from

others). Kopp (2013) further argues that apart from emotional support to others, co-workers can also assist others with their task roles, to allow others to focus on personal matters pertaining to life. In addition, Moreover, Hain (2005) mentions that co-workers develop relationships with others in the workplace to either gather resources to assist in their work role and also to fulfil their need for belongingness. Teachers' engagement with other co-workers is considered an antecedent of organisational commitment, which is key to work engagement (Jo, 2014). According to Rothmann and Rothmann (2010), such human resources can provide employees with meaningful and rewarding networking interactions if employees are treated with respect, dignity and are appreciated for their contributions in the workplace, which all lead to feelings of psychological safety and meaningfulness in the workplace. If the co-worker relations space is used as an avenue for fostering peace, respect and gratitude consistently in a school environment such as that of special needs teachers, employees will beyond doubt, begin to feel safe to express themselves in relation to each other. Psychological safety and psychological meaningfulness are psychological states that should precede an employee's state of engagement (Kahn, 1990).

A number of empirical studies echo the significant positive relationship that exists between co-worker support and work engagement. A study by Lin and Lin (2011) found that co-worker support positively relates to job satisfaction, which is a central element in engaged employees. Rothmann and Welsch (2013) investigated the antecedents of employee engagement in Namibian organisations. Their study uncovered that co-worker relations, alongside other antecedents showed moderate relationships with employee engagement. May, Gilson and Harter (2004) argue that when employees have positive relations with other co-workers and supervisors, the extent to which employees experience meaningfulness and engagement at work increases. Schaufeli and Bakker (2004) uncovered that co-worker support is significantly and positively related to two dimensions of work engagement (i.e. vigor and dedication). Korunka, Kubicek, Schaufeli and Hoonakker (2009) found that co-worker support is a strong predictor of work engagement. Moreover, Simpson (2008) reported that interaction among nurses was related to work engagement. It could be argued that interaction among employees is not only enough to foster work engagement, but interaction that is meaningful and rewarding as advocated for by Rothmann and Rothmann (2010) is key to work engagement.

As far as teaching effectiveness is concerned, Kini and Podolsky (2016) argue that collegial support increases the rate at which teachers become effective in their work. Based on the research conducted, it is evident that co-worker support plays an integral part in predicting work engagement and as such, it is therefore of importance that the management of schools create avenues to foster strong collegial relationships among staff members, due to the documented benefits of collegial support. Based on the aforementioned discussions, the following hypothesis is formulated;

Hypothesis 2: *There is a significant, positive relationship between co-worker support and work engagement among special needs teachers in Windhoek, Namibia.*

2.4.3 Work autonomy

Autonomy refers to the amount of independence, freedom and discretion that the employee has to schedule and perform work tasks (Cummings & Worley, 2008, p. 379). According to Cummings and Worley (2008), more organisations have begun to embrace the work design theory whose main supposition lies in creating jobs and work groups that facilitates enhanced levels of employee fulfilment and productivity. One approach to work design rests on motivational theories whose aim is to enrich employees' work experience. Job enrichment centres on designing jobs that are fitted with sufficient level of meaning and discretion. Dimitriou and Dimitriou (2013) argue that the goal of job enrichment is to provide employees with an enhanced autonomy. Furthermore, Parker (2015) makes emphasis on different conceptualisations of what autonomy entails in the workplace. Firstly, it entails maintaining control over activities in one's job. Secondly, it entails the freedom with which an employee can initiate creativity within the work role. Parker (2015), mentions that a teacher's level of independence at work has been found to significantly relate to the teacher's levels of empowerment, flourishing and professionalism. Autonomy at work is however contingent on so many factors that interplay such as duration of the task, whether it is an individual or group task, the regularity of supervision and monitoring of the task (Sia & Appu, 2015). Sia and Appu (2015) assert that work autonomy should entail freedom in one's ability to choose work related goals and how such goals will be strategically accomplished.

Van Droogenbroeck, Spruyt and Vanroelen (2014) argue that the freedom in decision making as far as work activities are concerned reduces the teacher's dissatisfaction with the non-teaching workload. Non-teaching workload entails administrative work, parent-learner meetings, and extracurricular activities such as sports etc., (Billingsley, 2004). In addition, Joo, Lim and Kim (2016) regard the autonomy that employees experience in their work as a form of empowerment which has been significantly and positively related to work engagement. The absence of autonomy could be argued to denote reliance on the structures and rules put in place in terms of how and when a teacher can perform the duties required. At times, such rules and structures as initiated by management puts teachers in a box-like-setting where deadlines must be met, even at the expense of employee wellbeing, hence the emphasis on the role of supervisors in advocating for a working climate that gives the employees considerable freedom in how they can craft their work.

Autonomy at work allows an employee to bring in various ways to necessitate task accomplishment in the most fulfilling and meaningful manner possible. Work autonomy to a large extent points to the ability of an employee (as given by management) to institute new strategies of working to aid in achieving the task at hand (Lallement, 2015). In tandem with Lallement's (2015) conceptualisation of work autonomy, Tims, Bakker and Derks (2014) argue for the need for a resourceful work environment in facilitating work engagement. In attempts to diversify various work activities, Tims et al. (2014) argue that employees must be equipped with the necessary resources to enable them to change their work structure and if necessary their work design. The context of special education requires special needs teachers to take a proactive stance towards enriching their work environment. Any form of disabilities imposes certain limitations on persons with disabilities (Terzi, 2005). This points to one of the major reasons why special needs teachers need to continually analyse the needs of each learner to be able to plan accommodation accordingly (Bendova & Fialova, 2015). It is with this assertion that teachers need to be empowered with some degree of autonomy in their work environments to yield positive work outcomes.

A study by Allodi and Fischbein (2012) aimed at understanding teachers' perceptions of their work environment in Swedish junior high schools found that schools that were low in reward and low in satisfaction with their workloads contributed to teachers'

feelings of being overloaded and not rewarded. Interestingly, the same study uncovered that when teachers felt empowered with autonomy, such teachers did not feel overloaded in their work role. The finding by Allodi and Fischbein (2012), points to the ability of teachers to become innovative and strategise their work task, as long as they are empowered with autonomy. This is in tandem with Parker (2015), who argues that an employee's level of autonomy gives such an employee the ability to devise different meaningful as well as cost effective strategies to accomplish their work. This means that an employee can be overloaded, but because of the level of work autonomy vested in them, their perception of the work overload changes as they engage in creativity to manage the work overload. The workload of teachers, more specifically special needs teachers, goes beyond the efforts they are expected to make (i.e. number of working hours, administrative work and support) when one takes into account the amount of time and cognitive engagement it takes to devise strategies that can practically allow for the reasonable accommodation of persons with disabilities in the context of learning. Similarly, it is a known fact that teachers are faced with tremendous pressure from external sources such as school management, policy makers and parents, leading to an expansion of the scope and nature of what a teacher's work should entail. Hakanen, Bakker and Schaufeli (2006) investigated burnout and work engagement among teachers using a sample size of 2038 Finnish teachers. They found that teachers' work stress is caused by combining high job demands such as work overload and time pressure and low levels of job autonomy or control. As was already established by Tims and Bakker (2010), an employee who is overloaded with work and whose time is constantly negatively taxed by such demands can possibly make such work overload and time pressures fit his/her capabilities and abilities. However, if employees are not vested with autonomy, as stated by Hakanen et al. (2006), then the proactive engagement with one's work in efforts to change how work is done may also not be attained.

Slemp, Kern and Vella-Brodrick (2015) investigated the role of job crafting and autonomy support on workplace wellbeing. Their study relied heavily on the theoretical underpinnings of the self-determination theory by Deci and Ryan (2008), which postulates that employees need to be afforded with three intrinsic psychological needs that, if satisfied, will inevitably lead to employee growth and wellbeing. One of the three intrinsic psychological needs is autonomy, which is emphasised as the feeling that an

employee has over his/her work environment and a feeling that one has a degree of choice in the work methods, etc. Their study argue that vesting employees with autonomy is not just enough but rather points to the need of institutions and organisations taking on a stance of practically supporting employees to become autonomous in their work. Vera, Martinez, Lorente and Chambel (2016) investigated the direct effects of two types of job resources (i.e., job autonomy and social support) on nurses' work engagement using 313 Portuguese nurses. They explored job autonomy from an individual perspective and found that individual job autonomy and team-level social support (from the supervisor as well as from co-workers), are positively related to individual work engagement. They further uncovered that the relationship between individual level autonomy and individual work engagement is strengthened when there is team level social support. The authors argue that an individual exists within the team, which is the organisation, hence the importance of team level support for individual autonomy to be enhanced and for engagement to also be enhanced. It could be argued, using the premise of Vera et al. (2016) that when special needs teachers begin to work together as a team in various aspects of their work, there is strengthening of the individual teacher to do better in order to uniquely contribute to an effective work environment.

Autonomy support includes, but is not limited to; management recognising and valuing employees' way of seeing things and perspectives, providing employees with discretion to decide how to do their work, encouraging employees to embrace innovation and initiative in their work (Slomp et al., 2015; Rothmann & Rothmann, 2010). In view of the above mentioned literature discussions, the following hypothesis is formulated;

Hypothesis 3: *There is a significant, positive relationship between autonomy at work and work engagement among special school teachers in Windhoek, Namibia.*

2.4.4 Rewards and recognition

Organisations are constantly searching for competent and talented employees who will help them to achieve the overall mission of the organisation. In the same manner, employees are also looking for workplaces where they can be richly rewarded for their skills and knowledge (Pieters, 2016). Rewards include both monetary and non-

monetary rewards. Monetary rewards can be used to directly satisfy employees because financially, employees are able to take care of their immediate basic needs amongst other personal needs and wants. Non-monetary rewards are particularly important for employees to feel appreciated and recognised (Burgess & Ratto, 2003). As such, monetary rewards are the legal obligations that an organisation is obliged, as stipulated in the employment contract, to fulfil in exchange for an employee's knowledge and skills (Nujjoo & Meyer, 2012). This could take tangible forms such as pay, a promotion and a bonus, which the employee receives at a said time in exchange for their hard work and performance. On the other hand, non-monetary rewards are considered as non-tangible and they are intrinsic to the employee. This includes praises, appreciation and accomplishments that employees experience in the workplace. Like rewards, recognition could take tangible or non-tangible forms of appreciation that signals to the employee that they are recognised for the value they add to the organisation (Burgess & Ratto, 2003). Anitha (2014) mentions that remuneration involves financial (i.e. pay & bonuses) and non-financial rewards (i.e. gift vouchers, free educational opportunities and extra vacation days). Anitha (2014) posits that when employees are rewarded with either monetary or non-monetary rewards, they are more likely to feel obliged to respond with engagement in their work. It could be argued, taking into account Anitha's (2014) statement above, that when special needs teachers are rewarded individually and collectively as a team, for the unique contributions that each of them make to fulfil the mandate of special education, they in turn can feel valued and appreciated and reciprocate with work engagement.

The equity theory as proposed by Chuck (2013) argues that employees continuously compare themselves against others in terms of monetary and non-monetary rewards. In addition, equity is viewed along the dimensions of inputs and outputs. Inputs are the different investments and contributions an employee makes in the workplace whilst outputs are what an employee receives which either can be monetary or non-monetary. In Namibia, special needs teachers are constantly evaluating themselves with mainstream school teachers in terms of the work that they do and the pay accorded to such work (Janik, 2013). It is logical to assume that the work of a special needs teacher is totally different from that of a mainstream school teacher in terms of preparation and delivery. It is not a surprising fact that globally, most special needs

teachers leave the education domain for greener pastures with remuneration being one of the key driving force (Ingersoll, 2002; Billingsley, 2004).

According to Saks (2006), fair work practices are important to employee engagement. Day (2012) indicates that there are three dimensions of pay satisfaction which are satisfaction with pay level, pay raises and pay administration. Pay satisfaction is explained as the extent to which employees are satisfied with their work and the benefits they attain from executing their work effectively (Ducharme, Singh & Podolsky, 2005). The perception that employees have in terms of communication about pay has a significant impact on the attitudes and behaviours they display in the workplace. According to Memon, Salleh and Baharom (2017), employees' perception of equity is more likely to influence employees' level of satisfaction with pay, which, as argued by Anitha (2014) and also Memon et al. (2017), has a positive effect on the engagement levels of employees. Findings from Memon et al. (2017) reveal that satisfaction with pay has a positive significant effect on work engagement. Also, when special needs employees are satisfied with the pay level, turnover intention is reduced (Billingsley, 2004).

Different studies done by Saks (2006) and Simpson (2009) involving sampled populations of nurses and hotel workers found a positive significant relationship between work engagement and pay. When employees perceive fairness in distributive and procedural issues as far as rewards and recognition are concerned, it is more likely that employees will feel obligated to respond to such rewards and recognition with work engagement. According to Saks (2006), employees that do not perceive equity in the procedures of the organisation are more likely to not engage at all in their work roles. It therefore seems that it is not only how much an individual earns, but rather the distributive and procedural justice followed in determining the amount that matters. Curral, Towler, Judge and Khon (2005), using 6394 teachers in the public school domain, found that pay satisfaction was positively and significantly related to a school's academic performance. It could be reasoned, in efforts to justify findings by Curral et al. (2005) that teachers who are satisfied with the monetary reward for their efforts are more likely to engage with their work and with the learners, thereby increasing overall school performance in a particular school district. On the other hand, Hoppock (as cited in Curral et al., 2005), asserts that dissatisfaction with pay is related

to negative work outcomes such as increased turnover and turnover intention, employee theft, arriving late at work and reduced overall performance. More so, Billingsley (2004) argues that teachers will remain at their various employment designations if overall compensation is attractive and rewarding. Snelgar, Renard and Venter (2013) explored the reward preferences of employees in a South African organisation. They listed base pay, contingency pay, benefits, performance and career management, quality work environment and work-home integration as various reward options. Their findings revealed that employees preferred base pay in contrast to the others. In as much as base pay was considered the most, employees revealed that the level at which base pay is offered is poor and that this must be revisited to strategically retain talent.

Specific to Namibia, teachers in Namibia, backed by the Namibian Teachers Union organised a country wide strike in 2012 and 2016 during the country's national exam period for grade 10s and 12s. The strike's aim was to demand for better recognition of teachers in terms of remuneration. Namibian teachers felt that they too, compared to other professions in the country, need to enjoy better living conditions. However, they reasoned that better living conditions need money of which they had been denied of since 2012, hence the second organised strike in 2016 (Shipanga, 2012; Shapwanale, 2016). Namibian teachers felt that the government was aware of their hardships but had by then done nothing that carries weight to alleviate such hardships. Pieters (2016) mentions that every organisation's aim is to retain qualified staff and reduce all possible factors that could potentially lead to the high turnover rate of its employees. The literature review by Billingsley (2004) on Special Education retention and attrition uncovered that many special education teachers left the teaching profession permanently, stating inadequate salary as one of the reasons. Baakile (2011) adds that when teachers perceive inadequacies in their pay level compared to other jobs, indeed teachers leave the teaching job for better opportunities in the private sector or elsewhere. Another study by Fatima and Ali (2016) looked at the impact of teachers' financial compensation on their job satisfaction at secondary schools in both the private and public sectors. Their study uncovered that the attraction and retention of employees depends to a large extent on compensation. It is therefore possible to assume that some teachers, after having spent so much time and energy on non-teaching work load, will feel unrecognised and unappreciated for their efforts,

specifically if they are not compensated adequately. This speaks strongly to the fact that teachers often present with certain illegitimate tasks over and above the role of teaching and administration (their main job description) such as, extra-mural sporting and cultural activities, engaging social workers for learners experiencing trauma as a result of abuse, bullying etc. It could therefore be argued that appropriate rewards and recognition for the work they do will result in them feeling acknowledged for their dedication to the role, and ultimately leading to improved levels of work engagement. Waqas and Saleem (2014) explored the effect of monetary and non-monetary rewards on employee engagement and firm performance. Results disclosed the fact that the various forms of rewards (i.e. monetary or non-monetary) has ability to motivate and engage an employee, and inevitably increase performance. In the case of special schools in Namibia, it could be that monetary rewards are already fixed and clearly stipulated in the employment contract. However, school management can devise and tailor ways in which to appreciate special needs teachers in non-monetary ways. Other studies further confirm that rewards are able to predict work engagement (Victor & Hoole, 2017; Koskey & Sakataka, 2015). Following the above discussion, the following hypothesis is formulated;

Hypothesis 4: *Perceived competitive rewards and recognition have a significant, positive relationship on work engagement among special school teachers.*

2.4.5 Work ambiguity

Several studies confirm the importance of teachers' work environment in influencing teachers' job satisfaction, retention, attrition rate, organisational commitment and eventually engagement at work. Ambiguity at work would encompass double meaning or lack of clarity as far as the work role is concerned (Lee et al., 2009). This means that an employee will not know what his/her role requirements are and this has the potential to lead to poor quality work. This is reported to negatively affect productivity and also lead to underachievement (Furnham & Taylor, 2011), not because an employee wants to, but because what constitutes the work role is not clear. Role ambiguity and role conflict are often researched together as elements of role stress. Wright (2009) states that an employee experiences role ambiguity when it is not clear to the employee what actions and strategies such an employee should engage in to ensure that the task at hand is effectively done. Employees can be said to experience

role conflict when work related messages (i.e. how to do a specific task) are mixed and therefore unclear (Wright, 2009). It could therefore be reasoned that the special school environment is one characterised by constantly planning and strategising teaching lessons and appropriate ways to deliver. It is not just one of those work task where you come to class and use a routine that worked last week as there is a high demand for constant evaluation to ensure that learning is indeed taking place. This could imply that at some points, special needs teachers (more specifically the new incoming special needs teachers) will not have clear cut strategies on how to meet the expectations of their work role and thus not engage effectively.

Findings from empirical studies confirm the negative relationship that work ambiguity has with work engagement. Rothmann and Rothmann (2010) conducted a study on factors associated with employee engagement in South Africa. Their findings revealed that the more the work environment is not clearly defined, the more unpredictable events are, and the more inclined employees are to disengage in such work environments. This could possibly hold true for the special school environment, hence the emphasis on individualised attention as a key principle that governs special needs teachers' work in the school environment. Similarly, Kunte and Rungruang (2019), explored the antecedents of WE and found a negative relationship between role ambiguity and WE. This was supported by Moura, Organbidez-Ramos and Goncalves (2014), who found that role ambiguity is negatively related to work engagement.

Ambiguity of work among special education teachers arise as a result of the changes that evolved in terms of what constitutes special education (Crane & Iwanicki, 1986), an increase in the lack of administrative support, as well as the pace and amount of work such teachers face. In addition Warton et al. (1992) assert that a teacher's work is challenging to define and specify as the various activities teachers engage in vary depending on the nature of learners that a teacher has. For instance, the work structure of a class that has physically challenged learners is completely different from a class of learners having intellectual difficulties. Research by various authors explicate that the role of teachers is one of the most complex roles. It is one of the professions that, with time, have acquired differing responsibilities, adding more unclear structures that now define teacher's roles. For instance, special needs

teachers, apart from their teaching work, have to always be prepared to offer counselling to learners affected daily by various issues found at home and school.

In a critical analysis of literature pertaining to the attrition of special needs teachers, Billingsley (2004) uncovered that the job design of teachers as far as work structure and organisation is concerned are documented as reasons why special needs teachers decide to leave their work. Special needs teachers as alluded to earlier, work with learners with various kinds of disabilities, which inevitably limits the learning process of learners. Such limitations are left with the teacher to cognitively strategise on the best possible ways to enhance the learning process of the learners. Simply put, there is no said structure that a special needs teacher follows as far as teaching is concerned. This could possibly be attributed to the fact that special needs teachers, compared to mainstream teachers, deal with learners whose abilities may vary considerably, as any form of disability has limitations that taxes on the learning ability of the learner (Landolt, 2014). A special needs teacher has to find strategies each day to aid in the learning process of such learners. More so, the teacher is also responsible for ensuring that learners in his/her class are taken care of emotionally and physically. It is a reasonable assumption that no employee will willingly stay and endure the psychological, physical and emotional effects of burnout in any workplace, especially when other opportunities for work present themselves as more favourable.

The nature of teaching at a special schools entails a number of changes to what teaching has traditionally been conceptualised, as Billingsley (2004) asserts that the role of the special needs teacher is based on individualised attention. There is constant need to restructure class arrangement and management to daily meet the educational needs of students (Boujut, Popa-Roch, Palomares, Dean & Cappe, 2017). The teacher is required to be as flexible as possible to tailor the different class activities as per the challenges that each disability manifests in the classroom. It could be argued that the mind of the special needs teacher, compared to mainstream schools, is constantly strategising, and are often left to their own devices in the absence of role clarity. In other words, the special needs teacher understands that the learners' under his/her care need to acquire some form of basic skills; however, the "how element" of the skills acquisition of learners with disabilities is not clearly defined and rests on the teacher

to strategise and figure out. Based on the evidence discussed above, the following hypothesis is formulated;

Hypothesis 5: *There is a significant, negative relationship between ambiguity of work and work engagement among special needs teachers in Windhoek, Namibia.*

2.5 JOB CRAFTING, A CRITICAL PERSONAL RESOURCE

It is imperative to understand that apart from the work factors discussed in Section 2.4 of the present study, which could potentially have a bearing on the work engagement of special needs teachers, employees' personal resources also play a role in the way such employees perceive and handle such work factors. Literature establishes that the work environment of special needs teachers is different from that of mainstream school teachers due to the various pressures involved in engaging persons with disabilities in the learning environment (Landolt, 2014). Teachers have the ability to learn and adopt various strategies that could possibly allow for a better work environment. Among such strategies is job crafting, which is discussed in detail in the subsequent section.

2.5.1 Defining job crafting

Berg et al. (2013, p. 2) stress that job crafting “involves employees altering the set of responsibilities prescribed by a formal job description, by adding or dropping tasks, altering the nature of tasks or changing how much time and energy the tasks require”. Tims and Bakker (2010) add that job crafting are changes employees make to balance the various job demands and resources found in their work, with their personal needs, preferences and abilities while at work. In addition, Solberg and Wong (2016) argue that job crafting is a proactive, individualised work behaviour that is often times regarded as a bottom up work strategy in which the employee makes key decisions regarding their own work. This means that employees are given considerable freedom to design the nature of their work to suit their passion, ability and preference.

Literature by Bakker and Demerouti (2014), document reasons as to why employees will want to engage in job crafting behaviours. Firstly, there is need for an employee to take control of various aspects of the job, especially when the work involves a lot of

stressful circumstances. Secondly, there is a motivation that arises in employees to craft change into various aspects of their work to bring about a sense of meaningfulness and a positive sense of self. Lastly, there is need for employees to fulfil their human connection with other co-workers in the workplace. The above reasons or motivations for job crafting suggest that job crafting is not a one day event but an ongoing process that should potentially become part of the lifestyle of employees at work.

Alongside reasons and or motivations that are provided for job crafting, literature by Tims and Bakker (2010) mention that there are four different categories that constitute job crafting. In other words, employees engage in job crafting to increase structural resources, increase social resources, increase challenging job demands and to decrease hindering job demands. Increasing structural job resources entails an employee's innovative behaviour of requesting to have a variety of resources in their work. With more resources, employees can strategise innovative work ideas to help them cope with various job demands. Decreasing hindering job demands entails employees reducing some aspects of the work that they feel have the potential to physically and emotionally drain them (i.e. strategising work such that one doesn't work for long hours). Furthermore, increasing social job resources encompasses the guidance, advice, feedback and encouragements from supervisors and co-workers that employees may seek in the work environment. Lastly, increasing challenging job demands entails employees taking on extra work and assignments in an effort to learn new skills and broaden one's scope of work. This could be working on projects with students and assigning oneself to the coaching and coordinating of the various extra-mural activities (i.e. sports coaching and debating clubs).

Siddiqi (2015) mentions that the four categories mentioned above by Tims and Bakker (2010) are task changes carried out by employees to decrease job demands and increase job resources. One could therefore argue that job crafting forms an important link between work engagement and the desired final outcome of work performance. Based on the aforementioned literature, advocating for job crafting in special schools is of necessity to facilitate not only work engagement but also work performance. In fact, Siddiqi (2015) hypothesised that the greater the level of job crafting in service employees, the greater their work engagement levels. The results of the study indicate

that among the four categories of job crafting as depicted by Tims and Bakker (2010), increasing social job resources was found to be a powerful driver of work engagement, which was followed by increasing challenging job demands, followed by increasing structural job demands, followed by decreasing hindering job demands.

Apart from reasons and strategies of job crafting listed above, Berg et al. (2008) argue that there are several crafting techniques that employees can employ at their work to ensure meaningful and enriching experiences at work. Firstly, employees can actively alter the type and nature of their tasks by emphasising or putting more effort in tasks related to what they are passionate about or adding tasks related to such a passion. For instance, a special needs teacher, who is passionate about music can devise ways to make music lessons more interesting for the learners. Secondly, special needs teachers can tailor the relationships they have with co-workers by building purposeful, meaningful and rewarding relationships with others or expanding what their work entails to ensure that special needs learners are afforded a greater impact. Meaningful and rewarding relationships could be developed among co-workers who are gifted or talented in tasks pertaining to special needs. Some co-workers can be good at bringing out the best in such learners, and for special needs teachers, that could be a lesson to learn one or two things from. This will therefore provide greater insight into streamlining practices, among teachers and as a result, minimise ambiguity. Thirdly, employees can reframe the perspectives they have of their work roles and tasks by changing negative attitudes and beliefs towards their work and to align their work tasks cognitively with their passion. For instance, some special needs teachers suffer a great deal as a result of the various stigma and untested assumptions that society claims to underlie the nature of their work. These assumptions have the potential to influence the attitude they have toward their work which inevitably disadvantages the end receivers of their service (i.e. persons with disabilities). In a context such as that of special needs teachers, employees could make use of either individual or collaborative job crafting. According to Chen, Yen and Tsai (2014), individual job crafting occurs when an individual employee evaluates their own work and then alter the boundaries of his/her job. The evaluations an employee engages in is closely tied to the task at hand. Collaborative job crafting takes place when two or more employees collectively make an effort to determine how to change the task boundaries to fulfil their shared work (Leana, Appelbaum & Shevchuck, 2009). Furthermore, special needs teachers

seriously want to improve their teaching methods for learners with disabilities (Leko & Brownell, 2009). Therefore, collegial support (i.e. collaborative job crafting) can be one of the ways teachers could possibly learn and become better at their work methods. The relationship between job crafting with work engagement is explored in the subsequent section.

2.5.2 Job crafting and work engagement

Job crafting and work engagement are constructs that have received tremendous interest from various researchers because of the assumption that job crafting can lead to higher engagement levels which is a necessary ingredient for effective performance at work. The benefits of job crafting as documented in literature are indicative of the importance of job crafting in any sector of work. It was found that job crafting leads to better work performance, increases employee work commitment, reduces employee turnover, increases employee work satisfaction, increases purpose and meaning in work, and enhances employee proactivity (Tims & Bakker, 2010), which if analysed holistically, are key determinants of work engagement.

Tims and Bakker (2010) hypothesised that employee job crafting behaviours is positively and significantly related to work engagement amongst employees in the mining and manufacturing sector. Findings from the study confirmed the hypothesis, and as such indicate further, the positive relationship that exists between employee crafting behaviours and engagement. In addition, research findings on job crafting by Tims et al. (2014) indicate that employees have the potential to increase their own engagement levels while at work and eventually leading to performance improvement. The study uncovered that job crafting intentions and work engagement are indeed related to employees' actual job crafting behaviours. When employees engage practically in crafting their work, their work engagement levels can be expected to be higher. According to Leana et al. (2009), employees can individually craft their work or tag along a co-worker to collaborate crafting behaviours. Findings from their study on job crafting and engagement using fulltime frontline hotel employees in Taiwan found that individual and collaborative job crafting are significantly related to job engagement. However, the authors suggest that individual crafting is a better predictor of job engagement. This could possibly be due to the fact that an individual employee knows better the needs of their own work and the key resources needed to craft their

work. Similarly, Peral and Geldenhuys (2016) in a study that looked at the effects of job crafting on the subjective wellbeing amongst South African high school teachers found a positive and significant relationship between job crafting and work engagement, with specific emphasis on increasing structural resources and challenging job demands.

Berg et al. (2008) assert that job crafting leads to employees who have positive experiences at work such as having meaning at work, enjoying tasks and achieving targets at work. It could be argued that employees can improve their work performance because they become proactive in structuring their work environment such that there is congruence between their abilities and the task at hand. In addition, literature argues that the more employees perceive and experience work as meaningful as a result of crafting their work, the more engaged they are likely to be. In addition, Janik and Rothmann (2015) using a sample of Namibian teachers found that work role fit coupled with job enrichment had a direct positive and significant impact on the extent to which employees experienced psychological meaningfulness at work. It is thus vital that work activities are in agreement with an employee's values and strengths as this contributes significantly to meaning at work (Janik & Rothmann, 2015), of which the outcomes of meaning in work bring about higher work enjoyment which certainly results in job satisfaction.

Slomp et al. (2015) suggest that crafting behaviours in employees can potentially increase the fit that employees have with their work and personal preferences to ensure work-role fit. In addition, individual employees are also afforded with an opportunity to align their work to fit their passion and preference, where they can on a daily basis, increase their work effectiveness and enjoy meaningful tasks, therefore allowing for personal growth and development. Steger et al. (2013) found a positive significant relationship between meaningful work and engagement at work. The authors reasoned that employees who regard their work as meaningful are more likely to engage in their work because of the personal attachment they form with their work and workplaces. Meaningful work augments purpose and value to an individual's life. Furthermore, a study by Van Wingerden, Derks and Bakker (2017) aimed to investigate the impact of a job crafting intervention on work engagement and performance immediately after the job crafting intervention and one year later with

primary school teachers, who on a daily basis work with children who have special educational needs. The study found that indeed, if teachers are introduced to job crafting and the various interventions associated with it, such teachers can find ways to constructively use the job demands, the job resources coupled with their own personal resources to improve work engagement and performance. Their assertion shows that finding ways to constructively deal with the various demands and resources found in the job needs an employee's personal resources (i.e. crafting behaviours) to effectively execute the task at hand is important. Peral and Geldenhuys (2016) argue that crafting behaviours among teachers is a useful strategy to mitigate the effects of high job demands on employee wellbeing and also to allow teachers to capitalise on the resources available to them. Specific to the special school environment, the inherent work pressure associated with being a special needs teacher is inevitable and job crafting could become a leading intervention in equipping the special needs teacher with key ways to cope and be productive. Similarly, a study by Agarwal (2014) linking justice, trust and innovative work behaviour to work engagement using 323 managers in India found that innovative work behaviour was positively related to work engagement. Agarwal (2014) further makes reference to the ability of organisations to empower employees to be creative and to apply innovative ideas in the work to enhance work engagement. As such, environments that afford employees with innovation allow for creativity to be enhanced, and this should by all means be maintained.

The perception that employees have of their work could have implications for their job crafting behaviours. Solberg and Wong (2016) argue that employees perceived role overload will negatively relate to job crafting. The basis of their argument stresses that when employees see their work roles as having too many task responsibilities, such employees are less likely to engage in job crafting behaviours. However, their study uncovered that job crafting behaviours tends to be higher when perceived role overload, and an employee's perceived adaptivity, as well as the leader's need for structure were all low. In principle, if employees understand and see that they can adapt their work to suit their resources and abilities, and if employees' immediate supervisors allow such freedom, job crafting initiatives will be higher. However, it is inevitable that some types of work require a certain routine and structure, and that this can sometimes be very boring and reduce job satisfaction in the long run. In attempts

to find out whether employees crafting behaviours reduce boredom and enhance work engagement, Harju, Hakanen and Schaufeli (2016) explored which of the four categories of job crafting will be most likely to increase employees' engagement levels and therefore reduce burnout. Their study uncovered, amongst others, that when employees seek challenges at work (i.e. seeking for more difficult tasks at work), their job crafting behavioural tendencies increased, which in turn increased their work engagement and inevitably reduced boredom. Irrespective of the pressures found in the job, special needs teachers can go an extra mile to bring in new ideas that would make teaching less strenuous and more enjoyable for the learners, based on the different needs associated with the various disabilities. Harju et al. (2016) argue that a bored employee will most likely not take initiative to craft their work. As such, job crafting initiatives have the potential to revitalise bored employees and move them towards engagement in their work role. Based on the aforementioned literature discussions, the following hypothesis is formulated;

Hypothesis 6: *There is a significant positive relationship between job crafting and work engagement among special needs teachers in Windhoek, Namibia.*

2.6 MODERATING EFFECTS

Amidst the various work factors, job crafting was considered a critical personal resource. The study made use of two subscales from the job crafting scale: increasing social job resources and increasing structural job resources. Increasing social job resources entails crafting more social support, feedback and coaching. Increasing structural job resources entails crafting more autonomy, variety at work and opportunity for self-development (Tims, Bakker & Derks, 2012). The present study proposes that there are ways in which job crafting can moderate, through specific interactions, the relationship between certain work factors and work engagement.

2.6.1 The first interaction effect

The first interaction is when job crafting significantly and positively moderates the relationship between co-worker support and the work engagement of special needs teachers. The present study proposes that the hypothesised positive effect of co-worker support on work engagement will be enhanced if special needs teachers are afforded with crafting opportunities. The job crafting dimension (crafting social job

resources) involves asking colleagues for help on tasks and other issues etc. It could be expected that special needs teachers that engage in consultation with their co-workers and make use of the co-worker relations space to craft more beneficial and meaningful connections to themselves and to their work, will be more engaged. Collaborative crafting, as alluded to by Chen et al. (2014), is one way in which employees craft their work within the co-worker space. It is proposed that co-worker support's impact on work engagement will be enhanced if special needs teachers are introduced to ways in which job crafting can become an integral part of their connections with other colleagues at work.

2.6.2 The second interaction effect

The second interaction is when job crafting significantly and positively moderates the relationship between work autonomy and work engagement among special needs teachers. The present study proposes that employees who are vested with more autonomy in their work (i.e. freedom), can craft their work more effectively, and become more engaged in their work. As alluded to in section 2.4.3 of this study, autonomy at work encompasses allowing employees to take the driving wheel in outlining their work methods and the resources needed for their work (Lallement, 2015). This is envisioned to enrich the work of the special needs teacher because an employee that has more independence at work, will be more inclined to engage in job crafting activities. This is bound to inevitably lead to more engagement at work.

2.6.3 The third interaction effect

The third interaction effect proposes that job crafting significantly and negatively moderates the relationship between work ambiguity and work engagement of special needs teachers. The work of the special needs teacher is expected to have seasons or periods of work ambiguity depending on the various strategies needed for learners with disabilities. This could possibly have a negative effect on the special needs teachers' ability to engage effectively in their work. Landolt (2014), emphasised that the work environment of special needs teachers is different from that of mainstream teachers as a result of the inherent pressures of the special needs teachers' work. The pressure associated with the work environment of special schools cannot be changed as its mandate is purely that of enhancing learning processes of learners with disabilities (Namibia Government Gazzette, 1998). However, special needs teachers can become equipped with knowledge of what job crafting is and its application in a

school setting. Job crafting could be considered a vital resource for affording the special needs teacher with the ability to arrange work in such a way that there is clarity of what needs to be done and how it needs to be done. This is bound to reduce, to a great measure, the negative effects that work ambiguity may have on the work engagement of special needs teacher.

As a result, the following hypothesis are formulated;

- **Hypothesis 7:** *Job crafting has a significant, positive, moderator effect on the relationship between co-worker support and work engagement.*
- **Hypothesis 8:** *Job crafting has a significant, positive, moderator effect on the relationship between work autonomy and work engagement.*
- **Hypothesis 9:** *Job crafting has a significant, negative, moderator effect on the relationship between work ambiguity and work engagement.*

The variables discussed in this chapter are depicted in a conceptual model in Figure 2.1.

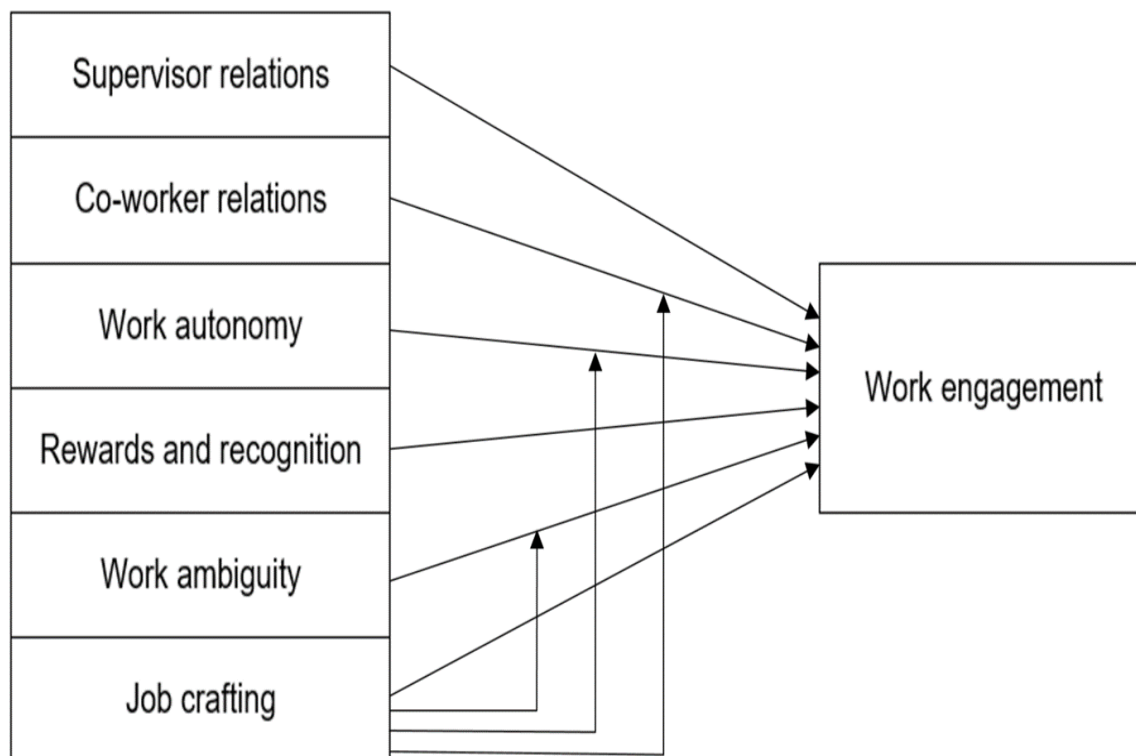


Figure 2.1. The conceptual model of the study

2.7 CHAPTER SUMMARY

This chapter explored literature on the various variables impacting work engagement, which permitted for research hypothesis to be formulated. In detail, job crafting as a personal resource for special needs teachers was also explored, which allowed for various ways in which job crafting can moderate the relationships between work engagement and identified work factors, to be formulated. The conceptual model of the study was also presented in this chapter. The following chapter looks at the research methods of the study, with emphasis on the research design and the statistical analysis that was performed in efforts to test the formulated hypotheses.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

The substantive research hypothesis and the research methodology used for the present study are outlined in this chapter. The sample characteristics and techniques for gathering and analysing data are also discussed in this chapter. Lastly, the ethical principles that guided the research process are discussed.

3.2 SUBSTANTIVE RESEARCH HYPOTHESIS

The proposed conceptual model presented in Figure 2.1 portrays the relationship between the variables which was developed through theorising in the literature review section. From this, the proposed structural model is drawn, detailing the substantive hypothesis. The specific path hypothesis as depicted in the structural model (Figure 3.1), are outlined below:

Hypothesis 1: Supervisor support is hypothesised to have a significant, positive impact on work engagement.

Hypothesis 2: Co-worker support is hypothesised to have a significant, positive impact on work engagement.

Hypothesis 3: Work autonomy is hypothesised to have a significant, positive impact on work engagement.

Hypothesis 4: Rewards and recognition are hypothesised to have a significant, positive impact on work engagement.

Hypothesis 5: Work ambiguity is hypothesised to have a significant, negative relationship with work engagement.

Hypothesis 6: Job crafting is hypothesised to have a significant, positive impact on work engagement.

Hypothesis 7: Job crafting is hypothesised to have a significant, positive moderator effect on the relationship between co-worker support and work engagement.

Hypothesis 8: Job crafting is hypothesised to have a significant, positive moderator effect on the relationship between work autonomy and work engagement.

Hypothesis 9: Job crafting is hypothesised to have a significant, negative moderator effect on the relationship between work ambiguity and work engagement.

3.3 STRUCTURAL MODEL

The various paths expressed as hypothesis in section 3.2 are expressed as statistical hypothesis in the structural model below. The structural model (Figure 3.1) shows the relationships between the variables in the study. The exogenous variables are expressed by the Greek letter ksi (ξ) and the endogenous variable is expressed by the Greek letter eta (η). The structural relationship between an endogenous and an exogenous variable is expressed in terms of a gamma path (γ) while the structural relationship between two exogenous variables is expressed in terms of phi path (ϕ). The various endogenous and exogenous variables are outlined in table 3.1.

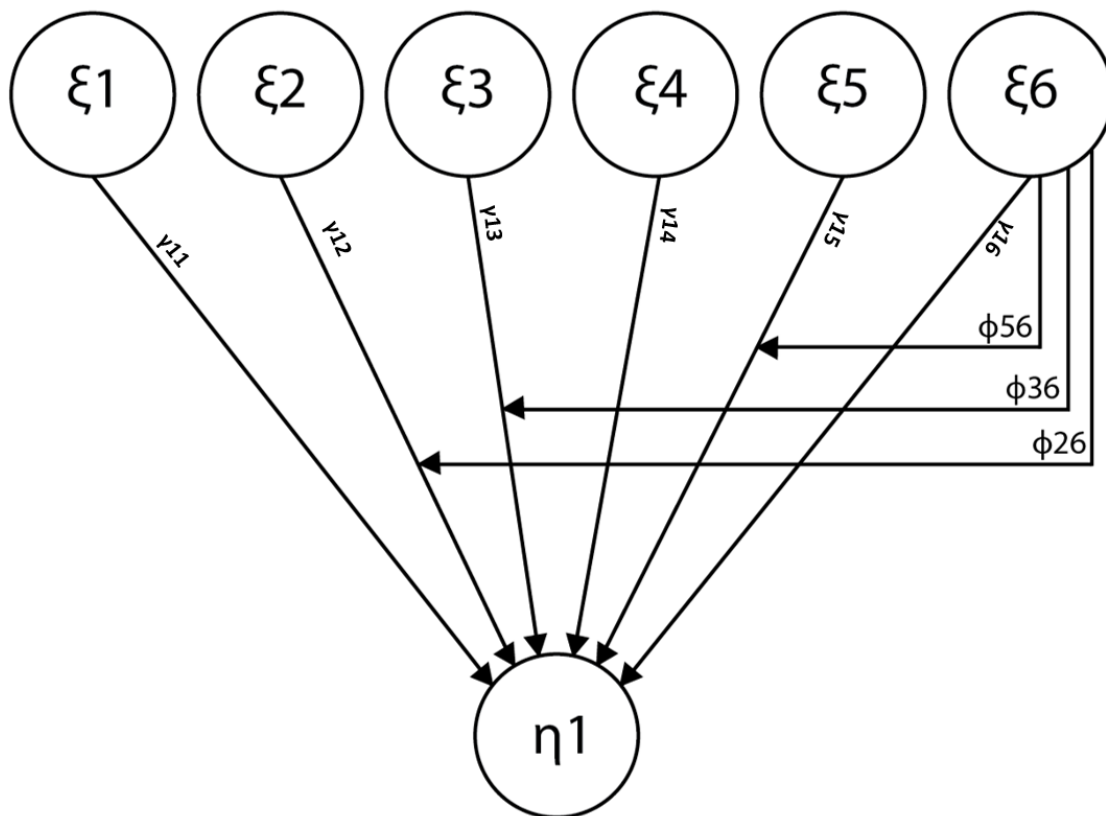


Figure 3.1. Special needs teacher's structural model

Table 3.1

Variables depicted in the Structural Model

$\eta 1$	Work engagement
$\xi 1$	Supervisor support
$\xi 2$	Co-worker support
$\xi 3$	Work autonomy
$\xi 4$	Rewards and Recognition
$\xi 5$	Work ambiguity
$\xi 6$	Job crafting

3.4 RESEARCH DESIGN

The end goal of any research study is to find answers to the research initiating question (Akhtar, 2016). Answering the research initiating question depends on testing the hypotheses that make up the structural model of the present study. In this study, the structural model was tested to see if the various work and organisational factors are indeed significant in accounting for variance in work engagement of special needs teachers. A research design provides the blueprint the researcher will utilise to test the various hypothesis and eventually provide answers to the research initiating question (Theron, 2016).

A quantitative research approach with an ex post facto correlation research design was used for the study. Kerlinger (as cited in Lord, 1973) postulates that an ex post facto research is a research design in which the various exogenous variables have already occurred and the researchers' main aim is to investigate relations between the exogenous and endogenous variables. The relationship between the variables is studied as is because no variables are manipulated or controlled by the researcher (Lord, 1973). The fact that the variables are not manipulated or controlled, cause and effect relationships cannot be established between the variables (Aron, Aron & Coups, 2014). For instance, if a statistically significant positive or negative relationship is found between the work factors and work engagement, the researcher cannot establish causation. As a result, the researcher cannot, with confidence establish that the

selected work factors of the present study have an effect on the selected endogenous variable, work engagement.

According to Aron et al. (2014), a correlation describes the relationship that exist between two or more variables. Stated differently, correlation provides the basic evidence that indeed a relationship exist between two or more variables. The type and strength of the relationship between the variables is expressed as a correlation coefficient also known as the Pearson correlation coefficient (Haslam & McGarty, 2003). The correlation coefficient can vary from -1.00 which denotes a negative correlation and + 1.00 which denotes a positive correlation. The sign of a correlation (+ or -) signals the strength of the relationship between the variables (Aron et al., 2014; Haslam & McGarty, 2003).

3.5 SAMPLE DESIGN AND RESEARCH PARTICIPANTS

Literature presents two types of sampling, the probability and non-probability sampling types (Haslam & McGarty, 2003; Maree, 2011). These authors mention that probability sampling is based on the theory of randomness and the selection of individuals from the population is done in such a way that every individual stands an equal chance of being selected. Contrastingly, non-probability sampling entails selecting participants because they are available, convenient or represent some characteristics that are key to a study. In this case, special needs teachers at the special schools are the most convenient and they were therefore considered to be the right people to give a true reflection of the research topic.

For the present study, a non-probability sampling method using the convenience and purposive sampling technique was used to select the sample. This type of sampling technique implies that based on the aim of the study, the researcher uses his/her own discretion and judgement about the type of participants needed for the study and therefore selected those who met the criteria befitting to the purpose of the present study. The advantage of this sampling technique is that it allows the researcher to take participants who have certain characteristics that are key for the study to meet its objectives (Haslam & McGarty, 2003; Punch, 2005; Denscombe, 2014). The participants were dispersed across 16 public schools in Windhoek, Namibia. It is important to note that there are no private special schools in Windhoek, Namibia.

Participants included teachers, HODs and principals, all who fell between the ages of 30 to 60. A total of 86% of the participants were teachers, 10% were HODs and 1 % were principals. The rest of the sample characteristics are summarised in Table 3.2.

Table 3.2

Descriptive statistics of the sample

Gender	
Female	74%
Male	26%
Qualifications	
Grade 10	1%
Grade 12	16%
Certificate	5%
Diploma	32%
Degree	37%
Masters	9%
Years at school	
0-1	9%
1-2	11%
2-3	9%
3-4	3%
4-5	8%
5-10	32%
10-15	17%
15-20	7%
20+	2%

3.6 MEASUREMENT INSTRUMENTS

Data was collected using a survey comprising of seven sections; demographic information of participants, employee engagement scale, supervisor support scale, co-worker support scale, rewards and recognition scale, work ambiguity scale, work autonomy scale and the job crafting scale.

Literature asserts that surveys can be generated by the researcher, or the researcher can use already existing standardised questionnaires for the purposes of research (Punch, 2005). As such, the study used the already existing questionnaires for work engagement, supervisor support, co-worker support, ambiguity at work, work autonomy, rewards and recognition and job crafting. These instruments formed part of the sections in the survey battery and each section is discussed thoroughly below.

3.6.1 Work engagement

The employee engagement scale developed by May et al. (2004) was utilised as a measuring instrument to measure work engagement in the present study. The scale has three subscales with a total of 13 items. Example of an item from each subscale is; cognitive engagement (performing my job is so absorbing that I forget about everything else), emotional engagement (I really put my heart into my job) and physical engagement (I exert a lot of energy performing my job). These items were measured on a five point Likert scale type with one representing strongly disagree and five representing strongly agree. Using a sample from a US Midwestern insurance company, the employee engagement scale was validated by May et al. (2004) who found Cronbach alpha of .77, indicating acceptable reliability. Also, as previously stated in the literature review, the present study used Kahn's (1990) conceptualisation of employee engagement (cognitive, physical and emotional engagement) as a theoretical underpinning, of which the scale is validated to measure.

3.6.2 Supervisor support

The supervisor relations subscale from the antecedents scale developed by May et al. (2004) was utilised as a measuring instrument to measure supervisor support in the present study. Supervisor support was measured by five items. The items were measured on a Likert scale type ranging from one to five, with one representing strongly disagree and five representing strongly agree. An example of an item from the supervisor support scale is; "my supervisor helps me solve work-related problems". The supervisor support scale was validated by May et al. (2004) who found Cronbach alpha of .95, indicating acceptable reliability.

3.6.3 Co-worker support

The co-worker relations subscale from the antecedents scale developed by May et al. (2004) was utilised as a measuring instrument to measure co-worker support. Co-

worker support was measured by 10 items. The items were measured on a Likert scale type ranging from one to five, with one representing strongly disagree and five representing strongly agree. An example of an item measuring co-worker support is; “my interactions with my co-workers are rewarding”. Cronbach alpha of .93 was found for co-worker support, indicating high reliability (May et al., 2004).

3.6.4 Work ambiguity

The ambiguity at work subscale from the JD-R scale developed by Jackson and Rothmann (2005) was used for the study. Work ambiguity was measured with two items. An example of the scale item is; “do you know exactly what other people expect of you in your work”? The items were measured on a five point Likert scale with one representing strongly disagree and five representing strongly agree. The items of the JD-R scale items were grouped into seven reliable factors by Jackson and Rothmann (2005). The work ambiguity items were grouped under the organisational support factor which obtained Cronbach alpha of .88. According to Jackson and Rothmann (2005), all items in the JD-R scale, inclusive of the items that measure work ambiguity, have high internal consistency.

3.6.5 Job crafting

The job crafting scale developed and validated by Tims et al. (2012) was used for the present study. The scale has four dimensions namely; increasing social job resources, increasing structural job resources, increasing challenging job demands and decreasing hindering job demands. However, for purposes of the study, only the subscales of increasing social job resources and increasing structural job resources were used. Examples of items of the selected subscales are; “I try to develop my capabilities” (increasing structural job resources), “I ask colleagues for advice” (increasing social job resources) (Tims et al., 2012). The two subscales were measured by 10 items. The items were measured on a five point Likert scale with one representing strongly disagree and five representing strongly agree. Each of the different scale dimensions of the job crafting scale have acceptable Cronbach alpha ranging from .75 to .82 (Tims et al., 2012) and can therefore be relied upon for the purposes of the study.

3.6.6 Rewards and recognition

The subscale “rewards and recognition” from the antecedents scale developed by Saks (2006) was used for the present study. The scale has 10 items designed to measure forms of rewards and the recognition that employees receive in the workplace. Examples of such items are; praise from the supervisor (recognition), and a promotion (a reward), which were measured on a five point Likert type scale with one representing “to a small extent” and five representing “to a large extent”. The scale was validated by Saks (2006) and yielded Cronbach alpha of .80, indicating acceptable reliability.

3.6.7 Work autonomy

The subscale work autonomy from the work design questionnaire developed by Morgeson and Humphrey (2006) was used for the present study. The scale has three dimensions namely; work scheduling autonomy, decision making autonomy, and work methods autonomy, with three items per dimension. Examples of items for each dimension are; the job allows me to make my own decisions about how to schedule my work (work scheduling autonomy), the job gives me a chance to use my personal initiative or judgement in carrying out the work (decision making autonomy), and lastly, the job allows me to make decisions about what methods I use to complete my work (work methods autonomy). The items were measured on a five point Likert type scale with one representing “strongly disagree” and five representing “strongly agree”. The scale was validated by Morgeson and Humphrey (2006) who found Cronbach alpha of .87.

3.7 STATISTICAL ANALYSIS

There are different techniques that were used to analyse the data, namely, item analysis, correlation analysis, exploratory factor analysis (EFA), and Partial Least Squares (PLS). Item analysis and EFA were employed to test whether the constructs measured what they were supposed to measure. Correlation analysis was employed to test whether a relationship exists between the variables.

According to Theron (2016), item analysis is necessary to determine if items in each of the measurement instrument used for measuring the variables in a study are appropriate in doing so. If items are inadequate or not satisfactory enough, then there is a problem of not measuring the constructs accurately. EFA is necessary to ensure

that items do not cross-load on two or more distinct latent variables (Farrell, 2010). This implies that if items cross-load, then the reliability and validity of the items that measure a specific construct is equally questioned and cannot be relied upon to produce reliable results. According to Aron et al. (2014) a correlation describes the relationship that exist between two or more variables. The type and strength of the relationship between the variables is expressed as a correlation coefficient also known as the Pearson correlation coefficient (r) (Haslam & McGarty, 2003). The correlation coefficient can vary from -1.00 which denotes a negative correlation and + 1.00 which denotes a positive correlation of which the sign of a correlation (+ or -) signals the strength of the relationship between the variables (Aron et al., 2014; Haslam & McGarty, 2003). Lastly, PLS will be used to test the significance of the hypotheses in order to confirm, and to test whether the structural model of the study can be relied upon for interventions development (Haenlein & Kaplan, 2004).

Item analysis, correlation analysis, EFA and PLS are discussed further in conjunction with the results of the study in the next chapter.

3.8 PROCEDURE FOR DATA COLLECTION

Ethical clearance was obtained from the Stellenbosch University Ethics Committee, after which permission was requested from the Ministry of Education, Arts and Culture in Windhoek, Namibia. Thereafter, institutional permission was requested from the school principals before the hardcopy questionnaires could be left with each school secretary. It was upon consultation with the school principal that hardcopy questionnaires were requested as it was deemed convenient. The survey comprising of the sections discussed in section 3.6 of the study was distributed to the various special needs schools by the researcher. The participants picked a questionnaire from the school secretary and thereafter returned it as such. The school secretary then notified the researcher once the participants had returned the questionnaires. The participants were informed that participation in the study was voluntary, and that they had the freedom to withdraw from the study at any point without any negative consequences.

3.9 RESEARCH ETHICS

In any research study, it is important to ensure that research does not involve any form of harm to the participants (Allan, 2005). The study ensured that the ethical guidelines

stipulated in the ethical clearance approval from the Stellenbosch University ethics committee were adhered to from the beginning of the study. All ideas and concepts borrowed and used from other scholars were acknowledged and referenced as such in the study. Approval was sought from the relevant ethics committee at Stellenbosch University, South Africa and at the Ministry of Education in Windhoek, Namibia. Informed consent was sought by the researcher from each school principal. After the school principal consented, the researcher also sought consent from the special needs teachers themselves. The special needs teachers who did not want to participate in the study did not take a questionnaire from the school secretary. No participant was awarded monetary or non-monetary gifts for their participation in the study. To ensure confidentiality, no identification details was requested from the participants and all responses were treated as anonymous.

3.10 CHAPTER SUMMARY

This chapter outlined the methodology of the study. This included the research design, the research population, sample size and sampling techniques used in selecting the sample for the study. Lastly, this chapter also covered the ethical principles that were observed during all stages of the research process. In the subsequent chapter, the results are stated and discussed.

CHAPTER 4

RESEARCH RESULTS, DISCUSSION AND CONCLUSIONS

4.1 INTRODUCTION

Chapter 3 discussed the research methodology which was used in the study. The purpose of the present chapter is to report on the results of the statistical analyses performed to test the model upon which the study is based. The reliability of the measuring instruments for work engagement, co-worker support, supervisor support, work autonomy, work ambiguity, rewards and recognition and job crafting was tested using item analysis. Partial Least Squares was used to confirm the measurement and the structural model fit of the present study.

4.2 VALIDATING THE MEASUREMENT MODEL

This section will discuss the soundness of the psychometric properties of the various measurement instruments used in the present study.

4.2.1 Item analysis

Item analysis allows one to identify and eliminate items not contributing to an internally consistent description of the various latent dimensions comprising the construct in question (Theron, 2016). The summary of item analysis performed on all subscales is reported in Table 4.1 and includes the summary for scale mean, standard deviation, standardised alpha and inter-item correlation for each scale. The reliability of a measuring instrument is expressed by means of a reliability coefficient where a value above .70 is deemed appropriate. The closer the value is to 1, the higher the reliability (Ullman & Bentler, 2013).

Table 4.1

Means, Standard Deviations, and Internal Consistency Reliabilities of Subscales

Scale	Number of items	Mean	Standard deviation	Cronbach Alpha	Average inter-item correlation
Work engagement	13	49.39	6.50	.68	.15
Work ambiguity	2	8.69	1.33	.68	.52
Job crafting	10	38.71	5.71	.76	.26
Rewards and Recognition	10	33.40	8.35	.81	.31
Co-worker support	10	34.97	8.65	.94	.62
Supervisor support	11	39.61	10.97	.95	.65
Work autonomy	9	35.37	7.68	.95	.66

Note. n = 89

4.2.1.1 Work engagement

Work engagement was measured with 13 items measuring cognitive, physical and emotional engagement. As depicted in Table 4.1, the scale yielded Cronbach alpha coefficient of .68 which is slightly below the acceptable benchmark of .70. This, however still indicates acceptable reliability. This was further supported by inter-item correlation of .15. An inter-item correlation of .15 indicates that the items in the work engagement scale correlate with each other to a lesser extent and as such are not harmonious in measuring the same construct. The ideal is to have items which correlate highly with each other and therefore have a higher average inter-item correlation. Items that correlate highly with each other indicate that they measure the same construct and the measurement instrument can thus be relied upon to produce consistent and stable results.

4.2.1.2 Work ambiguity

Work ambiguity was measured with two items from the JD-R scale. Once again a Cronbach alpha of .68 and a reasonable inter-item correlation of .52 was obtained. The reliability was slightly below the acceptable benchmark Cronbach alpha of .70 but the inter item correlation obtained is satisfactory (see Table 4.1). The Cronbach alpha

and inter-item correlation obtained indicate that the scale is considered reliable for use in the present study.

4.2.1.3 Job crafting

The job crafting scale is made up of four subscales. However, for purposes of this study, only two subscales; “increasing social job resources” and “increasing structural resources” measured by 10 items was utilised. The two subscales yielded Cronbach alpha of .76. This was further supported by an inter-item correlation of .26. The inter-item correlation of .26 is low and signals a problem of low correlation among the items that measure job crafting. However, based on Cronbach alpha, it was established that the subscales measure what they are supposed to measure and can be relied upon to produce consistent and stable results.

4.2.1.4 Rewards and recognition

Rewards and recognition have two subscales and they were measured with 10 items. As depicted in Table 4.1, a Cronbach alpha of .81 and inter -item correlation of .31 was obtained. The low inter-item correlation obtained possibly points to the fact that the items intended to theoretically measure rewards and recognition are not appropriate in doing so. Based on the inter-item correlation obtained, it could additionally imply that the structure of the rewards and recognition scale is questionable to be relied upon to produce consistent and stable results.

4.2.1.5 Co-worker support

Co-worker support was measured with 10 items from the antecedents scale. As depicted in Table 4.1, the scale yielded Cronbach alpha of .94 and inter item correlation of .62, which is indicative of high reliability. Based on the Cronbach alpha and inter-item correlation obtained in this study, the subscale can be considered a valid measure for the study and can be relied upon to produce consistent and stable results.

4.2.1.6 Supervisor support

Supervisor support was measured with 11 items from the antecedents scale. As depicted in Table 4.1, the scale yielded Cronbach alpha of .95. This was further supported by inter item correlation of .65, which indicates that the subscale is valid and measures what it is supposed to measure in the present study.

4.2.1.7 Work autonomy

Work autonomy was measured with nine items from the work design questionnaire. The scale yielded Cronbach alpha of .94 indicative of very high reliability. This was supported by a high inter item correlation of .66. This indicates that the scale measures what it is supposed to measure and can be considered a valid measure to produce consistent and stable results.

4.2.1.8 Concluding remarks on item analysis results

Item analysis performed on all research instruments utilised for the present study yielded satisfactory results except for the employee engagement and work ambiguity scales which yielded Cronbach alpha of .68. The Cronbach alpha obtained for both scales do not deviate extremely from the benchmark of .70 and for purposes of this study, the Cronbach alpha of .68 was considered acceptable, taking into account that the small sample size could have potentially contributed to the inconsistencies. In addition, inter-item correlation of the measuring instruments yielded satisfactory results except for the work engagement scale which obtained inter-item correlation of .15 and the job crafting scale which obtained an inter-item correlation of .26. The low inter-item correlations obtained indicate that the items in the two subscales utilised for the present study are not correlated and as such can be assumed to measure distinct constructs. Despite the two problematic inter-item correlations, the researcher deviated from deleting items from any of the measuring instruments used in the study.

The next section reports on the correlation coefficients of the study.

4.2.2 Correlation analysis

Different types of research designs seeks to establish the causes of variables or the relationship that exist between variables (Coetzee & Schreuder, 2016). As alluded to earlier by Aron et al. (2014) in section 3.7 of this study, a correlation describes the relationship that exist between two or more variables. The type and strength of the relationship between the variables is expressed as a correlation coefficient known as the Pearson correlation coefficient (r) (Haslam & McGarty, 2003). If a correlation coefficient obtained is positive, it could be concluded that there is a positive relationship between the variables. However, a correlation coefficient that is negative, indicates that there is a negative relationship between the variables.

As shown in Table 4.2, a positive, statistically, significant relationship between work ambiguity and work engagement ($r=.31, p < .05$) is reported. Additionally, a positive, statistically, significant relationship between co-worker support and work engagement ($r=.29, p < .05$) is reported. The relationship between autonomy and work engagement is also reported as positive and statistically significant ($r=.32, p < .05$). The positive correlation coefficient obtained means that work ambiguity, co-worker support and work autonomy are significant in impacting work engagement on a bivariate level. This further implies that when such work factors change, a change can also be observed in the work engagement of special needs teachers.

The relationship between job crafting and work engagement as well as supervisor support and work engagement is reported as statistically insignificant. This implies that the extent to which job crafting behaviours and supervisor support behaviours are changed (i.e. increased or decreased), work engagement levels is not expected to change in the same manner. Lastly, as shown in Table 4.2, there is a negative relationship between rewards and recognition and work engagement.

Table 4.2

Correlation Matrix

	WE	WA	JC	RR	CWS	SS	AU
WE	1.00						
WA	0.31	1.00					
JC	0.05	0.26	1.00				
RR	-0.02	0.23	0.17	1.00			
CWS	0.29	0.24	0.36	0.28	1.00		
SS	0.00	0.13	0.48	0.19	0.42	1.00	
AU	0.32	0.30	0.37	0.00	0.42	0.41	1.00
M	49.39	8.69	38.78	33.40	34.97	39.61	35.37
SD	6.50	1.33	5.71	8.35	8.65	10.97	7.68
Cronbach	.68	.68	.76	.81	.94	.95	.95

Note. Statistically significant correlation is where ($p < .05$) and are indicated in bold.

WE-Work engagement; WA- Work ambiguity; JC- Job crafting; RR- Rewards and recognition; CS- Co-worker support; SS- Supervisor support; AU- Autonomy.

4.3 PARTIAL LEAST SQUARES (PLS) ANALYSIS

The covariance based approach (CB-SEM) and the variance based approach (PLS-SEM) are two approaches to structural equation modelling (Haenlein & Kaplan, 2004). PLS focuses more on maximising the variance of the endogenous variable as explained by the exogenous variables while the covariance based approach focuses on reproducing the empirical covariance matrix (Haenlein & Kaplan, 2004). Chin (1998) mentions that structural equation modelling (irrespective of approaches) is important for showing and modelling the different relationships that exist between the exogenous and endogenous variables. In addition, Schumacker and Lomax (2010) mentions that the goal of structural equation modelling is to test and confirm whether the sample data collected supports the theoretical model upon which the study is based. The SEM model is made up of the structural and the measurement model. The structural model shows the hypothesised relationships between the variables in a study whereas the measurement model depicts the relationship between items (as specified in the various measuring instruments) and the constructs intended to be measured by these items (Theron, 2016). Over the years, CB-SEM has gained popularity as the widely used approach in SEM (Theron, 2016). PLS-SEM on the other hand also has several advantages that cannot be discounted. PLS requires a small sample size and it can be used to test complex models with less than 200 cases (Chin, 1998). In addition, PLS is more exploratory and predictive of the various structural relationships that exist in a model. However, problems of multicollinearity and inconsistencies in scores in latent variables may result in inaccurate path coefficients when using PLS. In addition, because PLS can work with smaller sample sizes, the paths in the structural model should be highly valued (Henseler & Ringle, 2009; Henseler, Ringle & Sinkovics, 2009). The choice as to when to use the CB or PLS approach relies heavily on certain requirements needed by each approach. Henseler and Ringle (2009) argue that if the study population will yield a smaller sample and if there is no complex model to be tested (i.e. with more than 200 observations), it is more appropriate to use PLS, such as in the case of the present study.

4.3.1 Evaluation and interpretation of the measurement model

The measurement model is a sub model in SEM and looks at the relationship that exists between the latent variables and the items measuring it (Wong, 2013).

Composite reliability and average variance extracted (AVE) were used to evaluate the measurement model. According to Hyland, Shevlin, Adamson and Boduszek (2013), composite reliability is used to present evidence about the structure of the scale and that the items measuring a specific construct are harmonious in measuring that specific construct. Composite reliability value should be equal to or higher than .70 for it to be considered significant (Wong, 2013). All latent variable scores for this study obtained composite reliability of $>.70$, except for rewards and recognition which yielded a composite reliability of .14. The low composite value obtained for the rewards and recognition scale indicate that there is a problem with the theoretical structure of the scale. This could imply that the items which were theoretically intended to measure rewards and recognition when the scale was developed by Saks (2006) are in fact not doing so. It could also be that the participants do not understand the wording of the items and have difficulty assessing themselves accordingly.

The AVE is defined as the average proportion of the variance that a latent variable is able to explain in the indicator variables that were tasked to represent it (Farrell, 2010). Farrell (2010) further argues that the average variance extracted should be greater than .50 for acceptable reliability. If the AVE is below the acceptable benchmark of .50, then the latent variable is not adequate enough to distinguish the proportion of variance in the indicator variable. The indicator variables are in essence supposed to measure accurately the latent variable inferred. In the present study, the AVE for all latent variables scores were above .50 except for job crafting with an AVE of .31, work engagement with an AVE of .23 and rewards and recognition with an AVE of .01. This indicates that, except for the three latent variables that are below the required level of AVE of .50, the rest of the other variables explain more than 60% of the variance in the items that measure them. It is important to note that the rewards and recognition scale is flagged as problematic in both the composite reliability and AVE statistics shown in Table 4.3.

Table 4.3

Reliability Statistics of the PLS Measurement Model

Scale	AVE	Composite reliability
Work engagement	.23	.73
Work ambiguity	.65	.86
Job crafting	.31	.76
Rewards and recognition	.01	.14
Co-worker support	.65	.95
Supervisor support	.66	.95
Work autonomy	.69	.95

Interesting to note is that the rewards and recognition scale yielded Cronbach alpha of .81 and inter item correlation of .31 as shown in Table 4.1. Based on Cronbach alpha and the inter item correlation results presented in section 4.1, the rewards and recognition scale can be considered a valid measure in the present study. However, the inconsistencies that exist in the composite reliability and the AVE statistics of the reward and recognition scale indicate that the scale could pose a challenge in further statistical analysis to be performed. As such, before further analysis could be performed, it was deemed necessary to perform exploratory factor analysis (EFA) on the rewards and recognition scale. The results of the EFA are reported in the subsequent section.

4.3.2 Exploratory Factor Analysis: Rewards and recognition scale

EFA is a class of factor analysis is used to uncover the items in a variable that are appropriate to allow for regrouping of the items based on shared variance Child (as cited in Yong & Pearce, 2013). Bacon, Sauer and Young (1995) mention that factor loading allows for one to detect which items are not harmonious with the rest of the items in measuring a specific construct. For a factor loading to be significant, a value of .30 or more can be considered (Bacon et al., 1995).

The reliability results (i.e. composite reliability and AVE), for the rewards and recognition scale revealed that the scale could be problematic in terms of the items measuring it, hence the need for EFA. Two unique factors emerged from the EFA. Factor 1 loaded on items 26, 27, 33, and 34 of the rewards and recognition scale and factor 2 loaded on items 28, 30, 31 and 32 of the rewards and recognition subscale.

However, item 29 and 35 did not load on any of the factors. As such, items 29 and 35 could potentially also contribute to the scale being flagged as problematic as it is unclear what they measure. As depicted on the rewards and recognition scale in the survey battery used for this study (Appendix A), item 29 measures the extent to which an employee receives respect from the people he/she works with while item 35 measures the extent to which an employee has job security. Item 29 could substantively be argued to measure collegial relations and not necessarily rewards and recognition. It could further be assumed that job security, as measured by item 35 is not theoretically clear in terms of what it exactly measures as job security could mean different things to different people. The items that loaded for each factor are specified in Table 4.4. The items (i.e. 29 and 35) that did not load on any of the two factors identified through EFA were removed from subsequent statistical analysis.

Table 4.4

Factor Loadings

Factor 1	Factor 2
26' A pay raise	28' More freedom and opportunities
27' A promotion	30' Praise from your supervisor
33' Some form of public recognition	31' Training and development opportunities
34' A reward or token of appreciation	32' More challenging work opportunities

Substantively, it could be argued, based on literature that items 26, 27, 33, and 34 could be said to refer to various financial rewards and could be termed monetary rewards for purposes of the present study. Monetary rewards have been found to refer to tangible objects such as pay, bonuses, promotions and formal recognitions (Nujjoo & Meyer, 2012; Victor & Hoole, 2017; Wagas & Saleem, 2017). These are considered part of the contractual agreement between the employee and employer. This could include, but is not limited to pay, promotion and bonuses (Victor & Hoole, 2017).

Similarly, the substantive underpinning of items 28, 30, 31 and 32 could be said to refer to non-financial rewards and could be termed non-monetary rewards for the purposes of the present study. Non-monetary rewards refer to non-tangible rewards and include praise and personal recognitions (Nujjoo & Meyer, 2012). This includes

acknowledgement from the part of the employer on the efforts and hard work of the employee in ensuring that the organisation meets its goals (Bussin & Thabethe, 2018).

4.4 RE-EVALUATION AND INTERPRETATION OF THE MEASUREMENT MODEL

EFA justified for reliability of the measurement model to be computed again, with exclusion of items 29 and 35 from the rewards and recognition scale. The measurement model was re-analysed and is discussed below.

4.4.1. Composite reliability and AVE

As shown in table 4.5, all variables obtained composite reliability of $> .70$. Important to notice in this section is that the two new factors (i.e. RR1 and RR2) that emerged from the EFA are above the cut-off of $.70$, indicating high reliability. Furthermore, the AVE for all latent variables scores were above $.50$, except for job crafting with an AVE of $.31$ and work engagement with an AVE of $.23$. Important to notice is that the AVE for the two new factors (i.e. RR1 and RR2) are above the cut of $.50$, indicating acceptable reliability. The AVE and composite reliability statistics obtained for the two new factors that were found to constitute the rewards and recognition scale indicate that the two factors are reliable measures of rewards and recognition.

Table 4.5

Reliability Statistics

Scale	AVE	Composite reliability
Work engagement	.23	.74
Work ambiguity	.76	.86
Job crafting	.31	.74
Rewards and recognition	.42	.87
RR1	.62	.87
RR2	.57	.84
Co-worker support	.65	.95
Supervisor support	.66	.95
Work autonomy	.76	.95

4.4.2 Discriminant validity

Discriminant validity looks at the construct validity of a measuring instrument, with emphasis on whether the measuring instrument succeeded in measuring the latent

variables in a way that permits one to differentiate the latent variables as unique constructs (Theron, 2016). Farrel (2010) comments that when insufficient discrimination is obtained, then there is a probability that the construct under question is not accurately measured. Then not only is the construct questioned, but also the items that measure it (Farrel, 2010).

The results on discriminant validity as shown in Table 4.6 showed acceptable discrimination on all subscales, except for the path from rewards and recognition to RR2. This path is however not of interest to the present study as the two new factors (i.e. monetary and non-monetary rewards) were not included in the original model that the present study sought to validate. The study continued with further analysis with the rewards and recognition subscale, with the two factors combined as one. Only items 29 and 34 were removed from further analysis. As indicated in the EFA section above, the rewards and recognition scale uncovered two distinct factors which were primarily used to prove that the structure of the rewards and recognition scale in the current form as used in the study, was problematic.

Table 4.6

Discriminant Validity

Scales	Ratio	95%lower	95%upper	Discriminate
Co-worker support to Autonomy	.44	.01	.24	yes
Job crafting to Autonomy	.54	.03	.38	yes
Job crafting to Co-worker support	.43	.03	.27	yes
RR1 to Autonomy	.21	.05	.11	yes
RR1 to Co-worker support	.18	.05	.01	yes
RR1 to Job crafting	.33	.06	.21	yes
RR2 to Autonomy	.19	.07	.11	yes
RR2 to Co-worker support	.31	.03	.16	yes
RR2 to Job crafting	.44	.06	.31	yes
RR2 to RR1	.65	.01	.45	yes
Rewards and Recognition to Autonomy	.24	.06	.17	yes
Rewards and Recognition to Co-worker support	.34	.04	.22	yes
Rewards and Recognition to Job craft	.43	.07	.34	yes

Scales	Ratio	95% lower	95% upper	Discriminate
Rewards and Recognition to RR1	1.06	.01	.99	yes
Rewards and Recognition to RR2	1.08	.01	1.01	no
Supervisor support to Autonomy	.44	0	.28	yes
Supervisor support to Co-worker support	.45	.01	.26	yes
Supervisor support to Job crafting	.53	.02	.39	yes
Supervisor support to RR1	.01	.09	.07	yes
Supervisor support to RR2	.39	.02	.22	yes
Work ambiguity to Autonomy	.41	.03	.19	yes
Work ambiguity to Co-worker support	.29	.02	.13	yes
Work ambiguity to Job crafting	.48	.07	.27	yes
Work ambiguity to RR1	.02	.07	.08	yes
Work ambiguity to RR2	.41	.03	.18	yes
Work ambiguity to Rewards and recognition	.35	.05	.19	yes
Work ambiguity to Supervisor support	.17	.05	.07	yes
Work engagement to Autonomy	.46	.04	.03	yes
Work engagement to Co-worker support	.47	.04	.32	yes
Work engagement to Job crafting	.07	.03	.05	yes
Work engagement to RR1	.28	.11	.23	yes
Work engagement to RR2	.03	.14	.23	yes
Work engagement to Supervisor support	.29	.08	.23	yes
Work engagement to Work ambiguity	.45	.06	.24	yes

4.4.3 Outer loadings

Outer loadings show the relationship between latent variables and their items (Theron, 2016). The ideal is to have all items relate qualitatively to the construct they are supposed to measure. A p-value of $<.05$ is considered statistically significant with zero falling outside the 95% lower and 95% upper confidence interval. If a p value of $>.05$ is obtained in an outer loading, it could be concluded that items of a particular latent

variable are not statistically significant in measuring the variable they are theoretically designed to measure. The results of the outer loadings are captured in Table 4.7.

The results indicate that a number of items showed insignificant reliability of the items designed to measure the constructs of the present study. Specific to the measuring instrument for work engagement, items a1, a2, a3, a4, a7(r), a8, a9, a11(r) and a13(r) as reflected in Appendix B, were indicated to be statistically insignificant in measuring work engagement. This implies that only items five and six in the work engagement scale indicated significant paths with work engagement. The reversed items could also account for inconsistencies of the results as participants might have struggled to understand the wording of the reversed items. Specific to the work ambiguity scale, item b15 did not indicate statistical significance in measuring work ambiguity. The results imply that only item b14 is statistically significant as a measure of work ambiguity. Specific to the job crafting scale, all the items (i.e. c16-c25 as shown in Appendix B) did not yield any significant paths with job crafting. The results indicate that no item in the job crafting scale is statistically significant as a measure of job crafting. This discounts the reliability of the job crafting scale which was clearly established in the earlier sections of the present chapter. Specific to the supervisor support scale, all items (i.e. e46-e56 as reflected in Appendix B) did not yield any significant paths with supervisor support. This means that no item in the supervisor support scale is statistically significant to measure supervisor support.

Despite the results of the outer loadings discussed above, it is key to understand that the scales used in the present study have been validated for use before by the authors and item analysis results also echoed the same. As such, the small sample size in the case of this study could possibly account for the inconsistencies.

Table 4.7

Outer Loadings

Manifest Variable	Latent Variable	Loading	95% lower CI	95% upper CI	Significant from CI	P-value from t-test
Item A1	Work engagement	.39	-.23	.64	No	.09
Item A2	Work engagement (r)	.21	-.36	.54	No	.38
Item A3	Work engagement	.24	-.27	.06	No	.25
Item A4	Work engagement	.43	-.16	.69	No	.07
Item A5	Work engagement	.75	.31	.87	Yes	0
Item A6	Work engagement	.74	.28	.87	Yes	0
Item A7	Work engagement (r)	.13	-.33	.51	No	.55
Item A8	Work engagement	.08	-.31	.44	No	.68
Item A9	Work engagement	.58	-.06	.79	No	.01
Item A10	Work engagement	.71	.22	.84	Yes	0
Item A11	Work engagement (r)	.19	-.04	.59	No	.43
Item A12	Work engagement	.62	.23	.75	Yes	0
Item A13	Work engagement (r)	.03	-.33	.68	No	.24
Item B14	Work ambiguity	.83	-.34	.94	No	.01
Item B15	Work ambiguity	.91	.41	1	Yes	0
Item C16	Job crafting	.86	-.74	.92	No	.04
Item C17	Job crafting	.88	-.72	.94	No	.03
Item C18	Job crafting	.08	-.67	.09	No	.03
Item C19	Job crafting	.85	-.73	.93	No	.04
Item C20	Job crafting	.26	-.41	.51	No	.22
Item C21	Job crafting	.05	-.46	.62	No	.85
Item C22	Job crafting	.27	-.53	.74	No	.39
Item C23	Job crafting	.19	-.52	.69	No	.51
Item C24	Job crafting	.08	-.59	.66	No	.78
Item C25	Job crafting	.15	-.49	.62	No	.57
Item D26	Rewards and Rec	.65	.49	.77	Yes	0
Item D26	RR1	.79	.65	.77	Yes	0
Item D27	Rewards and Rec	.69	.53	.81	Yes	0
Item D27	RR1	.79	.67	.87	Yes	0

Manifest Variable	Latent Variable	Loading	95% lower CI	95% upper CI	Significant from CI	P-value from t-test
Item D28	Rewards and Rec	.61	.04	.77	Yes	0
Item D28	RR2	.68	.45	.83	Yes	0
Item D29	Rewards and Rec	.46	.25	.65	Yes	0
Item D30	Rewards and Rec	.63	.44	.75	Yes	0
Item D30	RR2	.77	.06	.87	Yes	0
Item D31	Rewards and Rec	.72	.06	.81	Yes	0
Item D31	RR2	.81	.07	.88	Yes	0
Item D32	Rewards and Rec	.62	.41	.76	Yes	0
Item D32	RR2	.76	.57	.87	Yes	0
Item D33	Rewards and Rec	.74	.63	.83	Yes	0
Item D33	RR1	.08	.71	.87	Yes	0
Item D34	Rewards and Rec	.66	.48	.79	Yes	0
Item D34	RR1	.78	.64	.87	Yes	0
Item E36	Co-workers support	.72	.53	.84	Yes	0
Item E37	Co-workers support	.82	.69	.90	Yes	0
Item E38	Co-workers support	.82	.07	.89	Yes	0
Item E39	Co-workers support	.64	.41	.81	Yes	0
Item E40	Co-workers support	.88	.08	.92	Yes	0
Item E41	Co-workers support	.88	.08	.92	Yes	0
Item E42	Co-worker support	.73	.05	.85	Yes	0
Item E43	Co-worker support	.89	.81	.94	Yes	0
Item E44	Co-worker support	.09	.82	.95	Yes	0
Item E45	Co-worker support	.72	.56	.84	Yes	0
Item E46	Supervisor support	.82	-.87	.09	No	.23
Item E47	Supervisor support	.81	-.87	.09	No	.23
Item E48	Supervisor support	.65	-.74	.84	No	.24
Item E49	Supervisor support	.86	-.92	.91	No	.25
Item E50	Supervisor support	.88	-.92	.93	No	.25
Item E51	Supervisor support	.86	-.09	.91	No	.25
Item E52	Supervisor support	.69	-.76	.85	No	.23
Item E53	Supervisor support	.82	-.87	.91	No	.23
Item E54	Supervisor support	.79	-.85	.91	No	.24

Manifest Variable	Latent Variable	Loading	95% lower CI	95% upper CI	Significant from CI	P-value from t-test
Item E55	Supervisor support	.89	-.92	.93	No	.24
Item E56	Supervisor support	.84	-.89	.89	No	.24
Item F57	Autonomy	.86	.77	.93	Yes	0
Item F58	Autonomy	.87	.08	.94	Yes	0
Item F59	Autonomy	.89	.83	.93	Yes	0
Item F60	Autonomy	.89	.64	.94	Yes	0
Item F61	Autonomy	.77	.64	.87	Yes	0
Item F62	Autonomy	.73	.36	.85	Yes	0
Item F63	Autonomy	.84	.52	.91	Yes	0
Item F64	Autonomy	.79	.41	.89	Yes	0
Item F65	Autonomy	.08	.46	.88	Yes	0

4.5 EVALUATION AND INTERPRETATION OF THE STRUCTURAL MODEL

The structural model depicted in section 3.3 of the present study shows the hypothesised structural relationships between the variables in this study (Wong, 2013). The hypothesised relationships between the selected work factors and work engagement are depicted as paths and are expressed as path coefficients in the structural model. The r-square value and multicollinearity results are used to evaluate the structural model fit.

4.5.1 Evaluation of the R-square

The R-square value shows the total amount of variance in the endogenous variable that can be explained by the exogenous variables contained in the model. As shown in Table 4.8, work engagement (i.e. the endogenous variable) obtained an R-square value of .47 which indicates that the total model accounts for 47% of the variance observed in the WE of special needs teachers. Even though a higher r-square value would imply that the model is more significant, the obtained R-square value for the present study indicates that the model can be relied upon to develop interventions aimed at enhancing the work engagement of special needs teachers in Windhoek, Namibia.

Table 4.8

R-Square of the Structural Model

	R-square	R-square adjusted
Work engagement	.47	.4

4.5.2. Multicollinearity

Multicollinearity can be defined as a statistical phenomenon in which two or more predictor variables in a multiple regression model are highly correlated (Jamal, 2017, p.4). Multicollinearity statistics are necessary to ensure that the predictor variables are not correlated (Jamal, 2017). It is imperative that the explanatory variables used in the study predict and correlate with the dependent variable to produce reliable results. The work factors in the present study must have the ability to have their distinct impact on the work engagement of special needs teachers. The variance inflation factor (VIF) is used to assess how much variance is inflated due to high correlation among the explanatory variables. An inflated variance can contribute to a path coefficient that is not accurate (Jamal, 2017). According to Jamal (2017), if VIF value is =1, the variables are not correlated and it can thus be concluded that there is no multicollinearity problem. However, if VIF value is >5, the variables are highly correlated and it can be concluded that there is a problem of multicollinearity in the data set. As indicated in table 4.9, all the variables in the present study obtained VIF value of <5, and it can be concluded that there is no multicollinearity problem in the data set of the present study. Table 4.9 indicates the multicollinearity values for the exogenous latent variables.

Table 4.9

Multicollinearity Statistics

	Variance Inflation Factors (VIF)
	Work engagement
Autonomy*Job crafting	3.734
Autonomy	2.054
Co-worker relations*Job crafting	4.044
Co-worker relations	1.741
Rewards and recognition	1.299
Supervisor relations	1.725
Work ambiguity* Job crafting	1.965
Work ambiguity	1.419
RR1 ¹	
RR2 ²	
Work engagement	

4.5.3. Evaluating and interpreting the main effects

Ullman and Bentler (2013) argue that variables that are analysed with SEM can be factors or variables depicted in a path diagram. The path diagram is necessary because it allows the researcher to show the hypothesised relationships of the study. The path coefficient is used to indicate the extent to which a path is significant or not significant and is interpreted within the 95% lower and 95% upper confidence intervals. For a path coefficient to be significant, $p < .05$ is considered statistically significant at the 95% confidence interval. If $p > .05$, the path coefficient is not considered statistically significant at the 95% confidence interval (Herholdt, 2015). The results of the various paths depicted in the structural model are shown in table 4.10 and interpreted according to the relationships hypothesised in this study.

¹ RR1 as a new independent factor was not included in the original model as an exogenous variable, hence its missing value for multicollinearity.

²RR2 as a new independent factor was not included in the original model as an exogenous variable, hence its missing value for multicollinearity.

Table 4.10

Path Coefficients

Path	Path Coefficient	95% lower	95% upper	Significant t from CI	p-value from t-test
Supervisor support to Work engagement	-.13	-.38	.26	No	.41
Co-worker support to Work engagement	.35	.06	.55	Yes	.01
Autonomy to Work engagement	.15	-.11	.36	No	.18
Rewards and Recognition to Work engagement	-.1	-.31	.12	No	.43
RR1 to Rewards and Recognition	.88	.81	.92	Yes	0
RR2 to Rewards and Recognition	.85	.79	.91	Yes	0
Job crafting to Work engagement	.35	-.37	.73	No	.21
Work ambiguity to Work engagement	.06	-.17	.39	No	.65

Hypothesis 1: *Supervisor support has a significant, positive impact on work engagement*

The hypothesised relationship between supervisor support and work engagement was found to be statistically **insignificant** ($p = .41$), with zero falling within the 95% confidence interval. Due to an insignificant p-value obtained in this sample, hypothesis 1 is **rejected**. The correlation coefficient reported in Table 4.2 ($r = .00$, $p < 0.05$), also indicate that there is no statistically significant relationship between supervisor support and work engagement. The findings from the present study contradict findings from previous studies which proposed that when supervisors are more supportive of employees in their work role, employees tend to be more engaged in their work. Supervisors play a crucial role in coaching and mentorship, emotional support and

support to do with work related tasks. It is beyond comprehension to imagine an employee that will be productive and engaged at work without the basic elements of supervisor support. Involving samples from various sectors, supervisor support was found to positively affect employee engagement (Jin & McDonald, 2017; Naruse et al., 2013; Vera et al., 2016; Ahmed et al., 2018).

Despite the fact that for the present study, supervisor support was not found to impact the work engagement of special needs teachers in Windhoek, Namibia, it is important to understand that the sample size could account for the inconsistencies in the results, compared to previous research findings. In addition, it could be that at the time of collecting data from the various special schools, employee's perception of supervisor support was not as favourable. The researcher observed that at the time of collecting data, the special needs teachers were all pressed with deadlines to submit continuous assessment marks as per the rules and structures of government schools. The HODs and the principal who act as supervisors in the school context had to constantly remind and push for submission upon said cut-off dates. It could therefore be argued that some special needs teachers might have evaluated their supervisors not as favourable due to the above mentioned reason.

Hypothesis 2: *Co-worker support has a significant, positive impact on work engagement*

The hypothesised relationship between co-worker support and work engagement was found to be **significant** ($p = .01$) with zero not falling within the 95% confidence interval. As such, hypothesis 2 is **not rejected**. In fact, the correlation analysis performed for this study corroborates that there is a positive statistically significant relationship between co-worker support and work engagement ($r = .29, p < 0.05$). This echoes findings from previous studies that proposed that support from co-workers is instrumental to work engagement. Research findings by (Dehaloo & Schultz, 2013; Vera et al., 2016) reveal that co-worker support significantly and positively impacts work engagement. It is within the co-worker relations space that employees share work related issues and assist one another with emotional and task related activities. The co-worker space offers employees the ability to connect with each other and form meaningful relationships that have the ability to fulfil employees need for a sense of belonging, inform an employee's identity and spur an employee on in their work role.

It is therefore concluded, based on the findings of the present study that co-worker support, does impact work engagement of special needs teachers in Windhoek, Namibia.

Hypothesis 3: *Work autonomy has a significant, positive impact on work engagement*

The hypothesised relationship between work autonomy and work engagement was found to be **insignificant** ($p = .18$), with zero falling within the 95% confidence interval. As a result, the hypothesis had to be **rejected**. Interesting to note, for the present study, is the discrepancy that exist between the path coefficient and the correlation coefficient. The correlation coefficient obtained ($r = .32$, $p < 0.05$), indicate that the two variables are positively and statistically significant.

In addition, a number of studies corroborate the relationship between autonomy and work engagement and propose that when employees are given considerable freedom in terms of how to arrange and do their work, they tend to be more engaged (Sarinah, Akbar & Prasadja, 2018; Freeney & Fellenz, 2013; Skaalvik & Skaalvik, 2014; Kumar & Sia, 2012; Mostert & Rathbone, 2001; Vera et al., 2016). A teacher's level of autonomy could be said to be linked to empowerment and flourishing of the employee, which in essence are necessary for engagement at work (Parker, 2015).

However, this relationship was not supported in this sample possibly due to the small sample size. It could further be due to the fact that special needs teachers perceive that autonomy is primarily given to them by school management or that at the time of collecting data, their perception of autonomy in their work role was not as favourable. They might have possibly wanted to exercise freedom and independence in their work roles, but at the time of collecting data, they had to adhere to strict set deadlines as far as submission of continuous assessment marks is concerned.

Hypothesis 4: *Rewards and recognition has a significant, positive impact on work engagement*

The relationship between rewards and recognition and work engagement in this sample was found to be **insignificant** ($p = .43$), with zero falling within the 95% confidence interval. As a result, hypothesis 4 is **rejected**. Similarly, it was uncovered during the correlation analysis that there is a negative relationship between rewards and recognition and work engagement ($r = -.02$, $p < 0.05$). The findings of the present

study are in contrast with findings from previous studies that found that rewards and recognition significantly and positively affects work engagement (Dehaloo & Schulze; D' Emiljo & du Preez, 2017; Wagas & Saleem, 2014). Specific to this hypothesis, the rewards and recognition subscale was flagged as problematic and as such could have affected the results because the rewards and recognition scale reflected two factors and not one e.g. monetary and non- monetary rewards. It was indicated, after the EFA results, that the scale is not reliable with its current structure. In fact, two distinct factors (i.e. monetary and non-monetary rewards) loaded on the scale. As such, the inconsistency in the structure of the rewards and recognition scale could have potentially contributed to the inconsistency in the results. It could be that the wording of the items in the reward and recognition scale did not reflect entirely the various rewards and recognition opportunities offered at each school and as a result, special needs teachers could not assess themselves accordingly. It is however concluded, based on the findings of the present study that rewards and recognition do not impact, positively, the work engagement of special needs teachers in Windhoek, Namibia.

Hypothesis 5: *Job crafting has a significant, positive impact on work engagement*

The relationship between job crafting and work engagement as proposed by this study was found to be **insignificant** ($p = 0.21$), with zero falling within the 95% confidence interval. As a result, hypothesis 6 is **rejected**.

The correlation coefficient obtained for the present study ($r = .05$, $p < .05$) as indicated in Table 4.2 also echo that there is no statistically significant relationship between job crafting and work engagement. Researchers who explored job crafting in relation to work engagement found that job crafting is a significant predictor of engagement (Tims, Bakker, Derks & Van Rhenen, 2013; De beer, Tims, & Bakker; 2016; Siddiqi, 2015). This is because employees who are able to be creative and devise their work in such a way that it creates meaning for themselves and the end receivers, are motivated and engaged.

The proposed relationship between job crafting and work engagement in this study did not yield any positive results, possibly due to a number of reasons. As previously mentioned, at the time of collecting data for the present study, teachers were busy with finalising their continuous assessment marks and attention was thus devoted to that specific assignment instead of engaging actively in job crafting techniques.

Additionally, it could be argued that knowledge of what job crafting is and the different ways in which it could be carried out, could potentially affect the extent to which the special needs teacher engage in job crafting. Crafting is also a behaviour that individuals must be willing to engage in, and it could be that the special needs teachers who participated in the study were not familiar with how they could go about crafting their roles. This could have potentially negatively affected teachers' evaluations of their job crafting behaviours.

Hypothesis 6: *Work ambiguity has a significant, negative relationship with work engagement*

The hypothesised relationship between work ambiguity and work engagement was found to be **insignificant** ($p = .65$), with zero falling within the 95% confidence interval. As a result, hypothesis 5 is **rejected**. This finding contradicts findings from previous studies which propose that the higher the employee role ambiguity, the lower their engagement levels because the work is not clearly defined. (Curran & Prottas, 2017; D' Emiljo & du Preez, 2017; Lee, Shin & Baek, 2017).

This finding also contradicts the correlation coefficient ($r = .31$, $p < 0.05$) obtained for this study which indicates that there is a statistically significant relationship between work ambiguity and work engagement. Specific to the work environment of special needs teachers, there is constant need to re-assess teaching methods to ensure that all learners with disabilities are accommodated and that learning is indeed taking place. It could further be reasoned that the nature of the work of special needs teachers when it comes to figuring out various disabilities and its accommodations are of such a vague nature, that they (the teachers) have become accustomed to the lack of clarity that it brings, and as a result tend to engage even more to try and understand and meet the needs of their learners. This could probably be the reason why the correlation coefficient obtained, indicates a statistically significant relationship between work ambiguity and work engagement.

The insignificant PLS path coefficient obtained could be that at the time of collecting data for the present study, teachers work structure was clear (i.e. submission of assessment marks to HODs). As such, teachers might not have experienced work ambiguity to evaluate themselves accordingly.

4.5.4 Remarks on the main effects of the study

Six main effects were tested using PLS in this study. Only one main effect obtained a significant p-value and was not rejected. The remaining five main effects tested via PLS obtained p-values $>.05$ and had to be rejected. Interesting to note is that the correlation analysis performed for this study did point out that some of the relationships between certain work factors and work engagement that were found to be insignificant in the PLS analysis, were found to be significant in the correlation analysis. Of interest for the present study is the relationship between work ambiguity and work engagement as well as the relationship between work autonomy and work engagement. The correlation coefficients captured in Table 4.2 indicate that there is a statistically significant relationship between work ambiguity and work autonomy with work engagement.

It was uncovered in literature as indicated under each hypothesis in section 4.5.3 that the relationship between supervisor support, co-worker support, work autonomy, rewards and recognition, work ambiguity, job crafting and work engagement was tested in a number of studies using samples from banks, retails, schools, private and public organisations and was consistently found to statistically and significantly relate (be it a positive or negative) to one another. As outlined in section 4.5.3, the main contribution to the inconsistent findings obtained for this study could possibly be the small sample size utilised and the timing regarding the collection of data as teachers might have been under pressure to finalise and submit continuous assessment marks to the school management. This could therefore imply that the teachers might have not evaluated themselves in a just manner as far as the present study is concerned.

4.5.5 Evaluating and interpreting the moderating effects

Job crafting was conceptualised as a moderator variable in the present study. Two approaches were utilised to test for moderation. Firstly, the moderation effects were tested by including the interaction (i.e. independent, moderator and dependent variables) in the full PLS-SEM model. Secondly, the moderation effects were tested separately by testing each moderator path at a time (i.e. independent, moderator and dependent). With either way of testing moderation effects, the interest lies in the degree to which a change in R-square value is observed in the model (M. Kidd, personal communication, August 18, 2019). The structural model obtained an R-square value of 46.6, which infer that the interactions included in the full PLS-SEM

model, account for 47% of variance in work engagement of special needs teachers. When the interaction effects are removed from the full PLS-SEM model and tested independently based on the premise of univariate moderation, the structural model obtained an R-square of 41%. The results of the first moderation analyses are reported in Table 4.11, followed by the results of the second moderation analysis in Table 4.12.

Table 4.11

Moderation Results from PLS-SEM Model

Path	Path	95%	95%	Significa	p-value
	coeffic	lower	Upper	nt from	from t-
	ient	CI	CI	CI	test
Co-worker support* Job crafting to Work engagement	.06	-.03	.36	no	.27
Autonomy*Job crafting to Work engagement	-.12	-.4	.3	no	.5
Work ambiguity* Job crafting to Work engagement	-.16	-.34	.16	no	.19

Hypothesis 7: *Job crafting has a significant, positive moderator effect on the relationship between co-worker support and work engagement*

This study proposed that job crafting will have a significant, positive moderator effect on the relationship between co-worker support and work engagement. This was however found to be statistically **insignificant** ($p = .27$), with zero falling within the 95% confidence interval. As a result, hypothesis 7 is **rejected**.

Hypothesis 8: *Job crafting has a significant, positive moderator effect on the relationship between work autonomy and work engagement*

The hypothesised significant, positive moderator effect of job crafting on the relationship between autonomy and work engagement was found to be statistically **insignificant** ($p = .5$), with zero falling within the 95% confidence interval. As a result, hypothesis 8 is **rejected**.

Hypothesis 9: *Job crafting has a significant, negative moderator effect on the relationship between work ambiguity and work engagement*

The hypothesised significant, negative moderator effect of job crafting on the relationship between work ambiguity and work engagement was found to be statistically **insignificant** ($p = .19$), with zero falling within the 95% confidence interval. As a result, hypothesis 9 is **rejected**.

4.5.6 Univariate moderation

The three variables (i.e. independent, moderator and dependant variables) were tested independently to see if moderation effects will be significant. Univariate moderation is performed to see if interaction effects will be significant if tested independently in PLS. According to the statistical analyst (M. Kidd, personal communication, February 13, 2019), univariate moderation has become one alternative to test moderation effects in PLS with the main purpose of testing to see if R-square value increases significantly when interaction effects are tested independently. Becker, Sarstedt and Ringle (2018) also mention that different interaction terms can be generated in PLS to estimate moderation effects.

The results of the univariate moderation analysis are captured in Table 4.12.

Table 4.12

Results from Univariate Moderation

Independent	Moderator	Dependent	Interaction coefficient	p-value	Significant
Autonomy	Job crafting	Work engagement	-.27	.01	Yes
Co-worker Support	Job crafting	Work engagement	-.23	.02	Yes
Work ambiguity	Job crafting	Work engagement	-.16	.13	No

Hypothesis 7: *Job crafting has a significant, positive moderator effect on the relationship between work autonomy and work engagement*

The results of the analysis indicate that job crafting has a **positive moderating effect** ($p = .01$), on the relationship between autonomy and work engagement. The p-value is $<.05$ and as a result, hypothesis 7 is **not rejected**. The findings of the present study suggest that the relationship between work autonomy and work engagement is strengthened when job crafting is low. This implies that when job crafting behaviours are high, the relationship between work autonomy and work engagement is weakened. Figure 4.1 proposes that the activities that characterise employee work autonomy are in essence adequate to positively influence work engagement without a greater use of job crafting. It could be argued that when a special needs teacher is vested with work autonomy, there is freedom and discretion in scheduling and performing tasks at work (Cummings & Worley, 2008). Additionally, the special needs teacher has control over the various class activities in his/her class. As a result, the special needs teacher with work autonomy has the freedom and control over what needs to be done and will possibly still become engaged in his/her work role when the opportunity to engage in job crafting is not available.

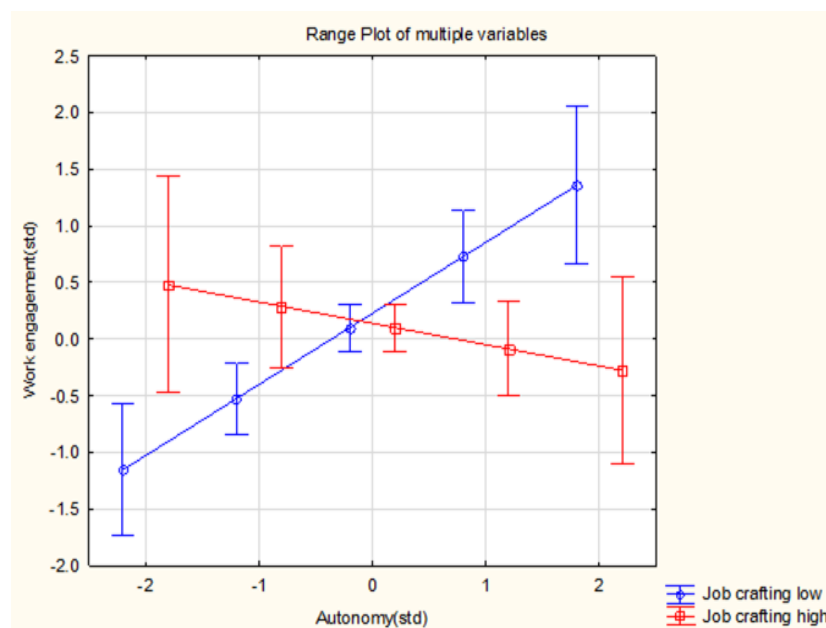


Figure 4.1. Moderating effect of job crafting on the relationship between work autonomy and work engagement

Hypothesis 8: *Job crafting has a significant, positive moderating effect on the relationship between co-worker support and work engagement*

The results of the analysis indicates that job crafting has a **significant** positive moderating effect ($p = .02$) on the relationship between co-worker support and work engagement. The p-value obtained is $<.05$ and as a result, hypothesis 8 is **not rejected**. According to the moderation analysis in Figure 4.2, there is a positive relationship between co-worker support and work engagement when job crafting is low. In other words, co-worker support (i.e. emotional and task related support, encouragements, appreciation gestures etc.), are sufficient for impacting work engagement.

This implies that when special needs teachers' actions of increasing social job resources and increasing structural job resources are high, co-worker support can significantly and positively influence work engagement. The co-worker relations space offers employees an opportunity to guide one another, to collaborate on work related activities and to form meaningful connections with each other (Rothmann & Rothmann, 2010; May et al., 2004). In fact, Rothmann and Rothmann (2010) argue that no employee will be able to be productive without the human resources found in any workplace. In essence, special needs teachers could rely on the co-worker space with its resources and still experience work engagement when they are not able to engage in job crafting.

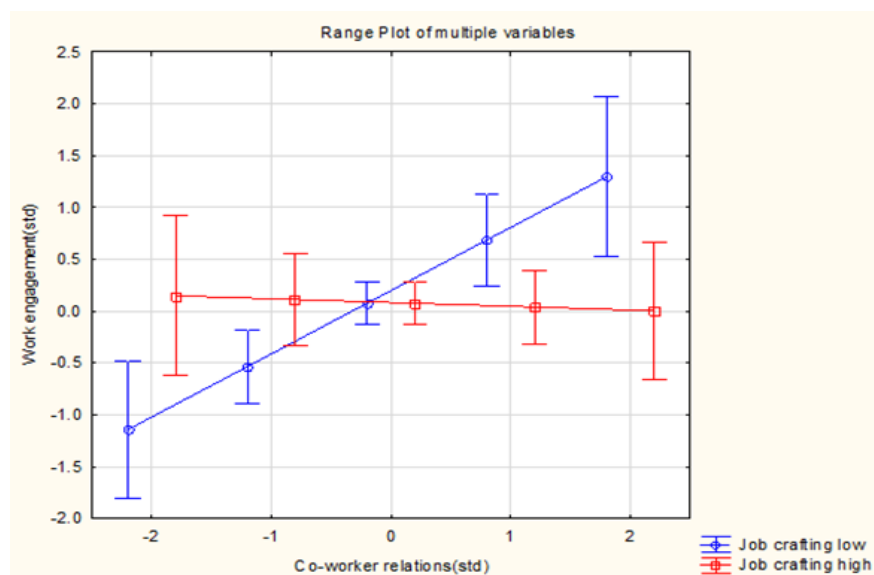


Figure 4.2. Moderating effect of job crafting on the relationship between co-worker support and work engagement

Hypothesis 9: Job crafting has a significant, positive moderator effect on the relationship between work ambiguity and work engagement

The results of the analysis indicate that job crafting does not have a **significant** negative moderating effect ($p = -.16$) on the relationship between work ambiguity and work engagement. The p-value obtained is $>.05$ and as a result, hypothesis 9 is **rejected**. The hypothesis was based on the premise that when special needs teachers are faced with constant demands for reasonable accommodation as per the disability of each learner, job crafting would enable teachers to better accommodate learners based on their individual needs, which may not always be clearly spelt out. Through job crafting, the special needs teacher might devise strategies to deal with the negative impact of unclear work structures. This is then envisioned to reduce the negative impact of work ambiguity on work engagement. This assertion was however not supported for the present study.

4.5.7 Remarks on moderation results

The first moderation analysis included the interaction effects in the full PLS-SEM model. Results from the full PLS-SEM showed that all the moderation paths were statistically insignificant. The univariate moderation analysis did not include the moderation paths in the PLS-SEM model but tested the moderation paths separately. Hypothesis seven and eight were found to be statistically significant and as such are not rejected.

Although the moderation results from PLS-SEM and univariate moderation are contradictory, the results of the univariate moderation analysis can by all means not be discounted and therefore necessitate for further research on the interaction paths of the present study. Specific to the two job crafting subscales utilised in the present study, the subscale used to measure “increasing structural job resources” looked at the extent to which special needs teachers try to engage in activities that will develop their capabilities, their professional skills, and whether they learn new things at work (Tims et al., 2012). The subscale used to measure ‘increasing social job resources’ looked at the extent to which special needs teachers ask their supervisors for coaching and whether the supervisor is satisfied with the teachers’ work, as well as asking colleagues for advice on the work tasks and overall performance (Tims et al., 2012). Explicit to the univariate moderation results (Figures 4.1 and 4.2), the question that

needs to be investigated, taking into account what the two subscales from the job crafting scale assesses, is; what low job crafting means in the context of special needs schools?, and how it could possibly be operationalised to ensure that the special needs teacher still benefits from job crafting. The findings from the univariate moderation analysis could also suggest that perhaps viewing job crafting as characterised merely as a resource (i.e. increasing social resources and increasing structural resources) is not adequate enough to thoroughly measure job crafting. However, job crafting could possibly be viewed as a day to day behaviour which is deliberately initiated and which extends into every sphere of an employee's work life.

4.6 CHAPTER SUMMARY

The research findings were reported and discussed in the present chapter. The measurement and structural model fit was tested with PLS analysis. In evaluating the measurement model fit, it was uncovered that the rewards and recognition scale was not reliable. This justified for the use of EFA, after which reliability on all measuring instruments was confirmed.

In the present chapter, six main effects hypotheses were tested using PLS-SEM. The path coefficients indicated that hypothesis two was accepted as significant. However, hypotheses one, three, four, five and six were tested as insignificant and therefore had to be rejected. In addition, correlation analysis was used to test the relationship between the work factors and work engagement. The correlation coefficients obtained indicate that co-worker support, work autonomy and work ambiguity are statistically and significantly related to work engagement. Based on the correlation coefficients obtained, hypothesis two, three and six were found to be statistically significant.

Hypotheses seven to nine are moderation paths. In the PLS-SEM model, the moderation hypotheses were all found to be insignificant. When tested independently, hypothesis seven and eight were found to be statistically significant and hypothesis nine was found to be insignificant. The inconsistencies in the moderation results warrant for further research investigations to be undertaken.

Chapter 5 will provide a detailed outline on the implications of the research findings, limitations of the present study and recommendations for further research.

CHAPTER 5

IMPLICATIONS, LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

5.1 INTRODUCTION

The study investigated the work engagement of teachers at special schools, with specific emphasis on identifying the work factors that are most salient in significantly accounting for variance in work engagement among special needs teachers in Windhoek, Namibia. The specific work factors investigated in the study are; supervisor support, co-worker support, rewards and recognition, ambiguity at work, work autonomy and job crafting. This chapter captures the managerial implications and recommendations from the findings of the study, which could be used for interventions and development tailored towards enhancing the work engagement of special needs teachers. In addition, the limitations of the present study and the recommendations for future research are also discussed.

5.2 MANAGERIAL IMPLICATIONS AND INTERVENTIONS

The results from the PLS model suggest that the model explains 47% of variance in work engagement. The model can be relied upon for intervention development tailored towards enhancing the work engagement of special needs teachers. In Industrial/Organisational psychology literature, such interventions are carried out at individual and organisational level (Cummings & Worley, 2008).

5.2.1 Co-worker support

Co-worker support was found to be statistically significant in positively impacting work engagement. As such, co-worker support can be used to enhance the work engagement of special needs teachers. Co-worker support may come in a form of emotional support, instrumental help, informational support and appraisal from others (Jo, 2014; Kopp, 2013). Individuals can be encouraged to care for each other while at work, or assist each other in the various work tasks to get work done and share information on various issues pertaining to professional development or teaching methods to enhance their work task. Co-workers can also be encouraged to show appreciation and to praise each other for outstanding work. According to the social exchange theory, individuals form meaningful relationships in the workplace in order

to exchange resources and services. The extent to which individual employees choose to maintain the various relationships that they form with other co-workers depends on whether rewards are perceived to be higher than costs (Swartz et al., 2016). Rewards encompasses trust and appreciation. If employees perceive trust, loyalty and appreciation in their work relationships, they tend to want to continue with the relationship.

At organisational level, co-worker support can be achieved through the use of team building activities. Team building interventions have been documented to assist with co-worker relations in numerous ways. According to Cummings and Worley (2008, p. 263) team building “refers to a broad range of planned activities that help groups improve the way they accomplish tasks, help members enhance their interpersonal and problem solving skills, and increase team performance”. It provides employees with platforms to ensure that they are aware of each other’s strengths, weaknesses and ways on how to embrace such for the greater functioning of the organisation.

Team building can also be used to strategise on better communication techniques, innovation and initiative among team members, and the emergence of a family of individuals who are all committed to the vision and mission of an organisation. Certain negative behavioural tendencies by employees such as a lack of member interest in work related activities; loss of productivity in a work role; increasing complaints within the group; confusion about assignments; low participation in meetings; lack of motivation to be creative, punctuality and conflicts among members could be overcome with the use of team building avenues where individuals are taught collectively on ways to overcome potential team problems (Cummings & Worley, 2008). Individual teachers form part of the work team of special needs teachers at a special school. It is important that individual teachers are made aware of the role they play as co-workers in ensuring that individual and organisation level interventions are successfully implemented.

5.2.2 Job crafting

Although the hypothesised relationship between job crafting and work engagement was found to be insignificant ($p = .18$) in the PLS-SEM model, it is still worth mentioning how job crafting could possibly be enhanced in the context of special needs teachers. It was argued in section 4.5.3 of the previous chapter that the proposed relationship

between job crafting and work engagement for the present study did not yield any positive results due to a number of reasons. It was noted that at the time of collecting data for the present study, teachers were busy with finalising their continuous assessment mark and their attention was devoted to that specific assignment instead of engaging actively in the specific job crafting techniques. This might have affected the special needs teacher's evaluations of their job crafting behaviours. Additionally, job crafting was found to yield positive moderating results on the relationship between work autonomy and co-worker support with work engagement. It is based on the aforementioned reasons that managerial implications for job crafting is included in this section.

Special needs teachers need to first understand that job crafting is a self-initiated and proactive work behaviour (Tims & Bakker, 2010; Solberg & Wong, 2016). As such, training on what job crafting is and the different ways it could be achieved is necessary.

The present study only assessed the ways in which employees engage in the job crafting dimensions of increasing structural job resources and increasing social job resources. Employees can increase their structural job resources by requesting for more resources (Tims & Bakker, 2010), depending on the different tasks the special needs teacher have planned for their class. Early planning of the different needs of each lesson planned, is key for early identification and requesting of resources needed.

In the same manner, special needs teachers can increase social job resources by seeking for guidance, feedback, advice as well as encouragements from their supervisors and co-workers (Tims & Bakker, 2010). Guidance, feedback, advice and encouragements will depend on the extent to which there is active behaviour from the special needs teacher to seek for such. It is therefore encouraged that co-workers make use of the co-worker relationship space to share and discuss on key issues that need guidance and encouragements.

Job crafting can be carried out either individually or in collaboration, depending on the creativeness of the teachers. This implies that the special needs teacher can form working groups with one or more colleagues where they jointly strategise and plan on best possible ways to do their work tasks. This provides an avenue for motivation for

the teachers as well as an opportunity for the teachers to learn from each other. The two forms of job crafting strategies could be utilised simultaneously.

5.2.3 Concluding remarks on the proposed interventions

It is evident that the implementation of the various ways in which co-worker support, work autonomy and job crafting can be enhanced, depends not only on the employees but largely on supervisor support.

Principals and HODs who act as supervisors in a school, oversee performance, give feedback and guidance to special needs teachers. School management should advocate for resources to cater for team building activities as well as crafting activities. When management goes to all lengths to gather and advocate for necessary resources as needed by the special needs teacher, leads to feelings of appreciation and the special needs teachers are obliged to respond with engagement in their work. Another key aspect is the inclusion of teachers in decision making. The most effective way to have teachers take accountability for their workplace as a collective unit, is to include them in decision making concerning their key work aspects when it comes to co-workers support, autonomy and job crafting. Block (2011) argues that the best possible way to have interventions that produce positive outcomes is when the concerned employees are consulted and their input is taken into account. Suggestions from the special needs teachers can be requested in the staff room when everyone is present. Another appropriate alternative is to design an anonymous needs assessment survey (see Appendix C for a sample) where teachers will write their concerns and suggestions in their own private space to ensure confidentiality and anonymity. It is important to understand that not all suggestions will be implemented, however the needs assessment survey will give the school management ideas about what employees' perceptions and thoughts are concerning co-worker support, work autonomy and job crafting. When management have an idea about what the subordinates want, it is easier to strategise and be creative about what to action on and when to implement.

5.3 LIMITATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

The present study encountered several limitations that are worth mentioning. Firstly, the population of the study was made up of about 160 special needs teachers based in Windhoek, Namibia. Only 89 special needs teachers consented to participating in

the study as the study was entirely voluntarily. In as much as it could be argued that the 89 special needs teachers that participated in the study forms part of more than half of the study's population, the findings of the study could have been more reliable and credible if more than 89 special needs teachers partook in the study.

Secondly, the study focused only on special schools in Windhoek and mainstream schools with special classes in Windhoek, Khomas region. Generalising to other special schools outside Windhoek should therefore be done with caution. Due to the already small population of special needs teachers in the country, future studies that have the time and resources could include the entire country as the total population of special needs teachers are about 250, countrywide.

Thirdly, special needs teachers are expected to constantly be occupied at their work due to the nature of the disabilities that the learners under their care have. Learners with disabilities need individualised attention almost at all times. The nature of the work is demanding in itself and having to set aside time to complete a 30 minute questionnaire was a challenging task for some special needs teachers. In addition, the special needs teachers completed the questionnaire at a period where they were busy with submissions of continuous assessment marks to HODs. As such, future studies should be strategic about the periods of data collection to ensure that data collection is carried out during periods where the teachers are not pressured by many administrative duties.

Furthermore, the relationships between supervisor support, rewards and recognition, work ambiguity, work autonomy and job crafting that were, in previous studies documented to have significant relationships with work engagement were insignificant in the present study. The findings of the present study are therefore not conclusive and inconsistencies in the findings could be attributed to the small sample size. It is further recommended that the various scales utilised in the present study, be validated within the Namibian context.

The present study employed a cross sectional research approach and only captured participant's views on the variables of the study over a short period of time. It is recommended that future studies look at the variables of the study over a longer period of time to be able to draw patterns and consistencies that might have been missed in the present study. As such, a longitudinal research approach is recommended.

Based on the descriptive statistics of the sample, it was evident that only few principals partook of the research. Special needs teachers in the Namibian context includes principals as well as HODs as they all have the same qualification. There seemed to be a misunderstanding of what the term “special needs teacher” meant in the context of the study and future research should ensure that terms such as these are understood clearly by the principals and teachers alike.

The study looked only at supervisor support, co-worker support, work ambiguity, work autonomy, rewards and recognition and job crafting as work factors that could potentially impact the work engagement of special needs teachers in Windhoek, Namibia. However, it is important to note that these are not the only work factors that could potentially affect work engagement among special needs teachers in Windhoek, Namibia. As such, the findings of the study are not conclusive and should be viewed as one study amongst many to come. It is therefore recommended that other work factors are investigated as far as the work engagement of special needs teachers in Windhoek, Namibia is concerned.

5.4 CHAPTER SUMMARY

The objective of the present study was to identify the work factors that are most salient in significantly impacting work engagement of special needs teachers in Windhoek, Namibia. Co-worker support was found to be a key work factor in enhancing the work engagement of special needs teachers. Although work autonomy and job crafting were not found to be statistically significant in impacting work engagement by the PLS-SEM results, it was seen as appropriate, for the present study that ways in which they could be enhanced are also discussed.

Job crafting was additionally regarded as a personal resource and was found to have moderating effects on the relationship between co-worker support and work autonomy with work engagement.

The correlation analysis yielded significant results on the relationship between work autonomy and work engagement and this warranted for inclusion in the managerial implications section.

The findings paves way for interventions to be developed in efforts to enhance the work engagement of special needs teachers. The findings will be of much assistance and help, if indeed the stakeholders concerned, continue to advocate for the work

engagement of special needs teachers. As mentioned earlier in Chapter 1 of the study, by focusing on special needs teachers, the Ministry of Education directly, to a greater extent also enhances the learning of persons with disabilities, which is not at all possible without the special needs teacher. It is evident that the scope of the mandate of the special education directorate in Namibia continues to expand every year as more and more learners with disabilities continue to be admitted to special schools for the purposes of integrating them into the wider social and economic community.

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APPENDIX A

REC approval letter



APPROVED WITH STIPULATIONS
REC Humanities New Application Form

31 October 2018

Project number: IPSY-2018-7722

Project title: AN EXPLANATORY STUDY OF WORK ENGAGEMENT AMONG SPECIAL NEEDS TEACHERS

Dear Ms ANNELISA MUNINGUA

Your REC Humanities New Application Form submitted on **04 October 2018** was reviewed by the REC: Humanities on and approved with stipulations.

Ethics approval period:

Protocol approval date (Humanities)	Protocol expiration date (Humanities)
31 October 2018	30 October 2021

REC STIPULATIONS:

The researcher may proceed with the envisaged research provided that the following stipulations, relevant to the approval of the project are adhered to or addressed:

- 1) The researcher can still opt for a written informed consent form process that the participants can sign, the researcher should have two boxes, one for the questionnaires and another for signed consent forms. **[ACTION REQUIRED]**
- 2) The researcher is reminded that permission must be obtained from the directorate of education in the Khomas region as well as the school principals before recruitment and data collection may commence. Please upload proof of permission once available. **[ACTION REQUIRED]**

HOW TO RESPOND:

Some of these stipulations may require your response. Where a response is required, you must respond to the REC within **six (6) months** of the date of this letter. Your approval would expire automatically should your response not be received by the REC within 6 months of the date of this letter.

Your response (and all changes requested) must be done directly on the electronic application form on the Infonetica system: <https://applyethics.sun.ac.za/Project/Index/10009>

Where revision to supporting documents is required, please ensure that you replace all outdated documents on your application form with the revised versions. Please respond to the stipulations in a separate cover letter titled **"Response to REC stipulations"** and attach the cover letter in the section **Additional Information and Documents**.

Please take note of the General Investigator Responsibilities attached to this letter. You may commence with your research after complying fully with these guidelines.

If the researcher deviates in any way from the proposal approved by the REC: Humanities, the researcher must notify the REC of these changes.

Please use your SU project number (7722) on any documents or correspondence with the REC concerning your project.

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.

FOR CONTINUATION OF PROJECTS AFTER REC APPROVAL PERIOD

APPENDIX B

Turnitin similarity report

Document Viewer

Turnitin Originality Report

- Processed on: 27-Aug-2019 23:04 SAST
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[Journal of Managerial Psychology, Volume 21, Issue 7 \(2007-05-20\)](#)

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APPENDIX C

Research instrument

SECTION A: BIOGRAPHICAL INFORMATION

Age:	
Gender:	
Position in Organisation:	
Home language	
Other languages spoken:	
Highest Qualification: Grade 10,12,certificate,diploma,degree,masters,phd	
How long have you been working at this school? Please indicate the exact number of years in the next row AND tick next to the appropriate range below.	
0-1 years	
1-2 years	
2-3 years	
3-4 years	
4-5 years	
5-10 years	
10-15 years	
15-20 years	
More than 20 years	

Section B

Kindly tick (✓) the option that best describes you. Every part of the survey will be explained to you before you attempt to answer. Please feel free to ask questions where clarity is required.

Part A

The following items from the employee engagement scale are a reflection of how you feel in your work as a special needs teacher. Please select the option (i.e. 1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree).

Item No	Items	1	2	3	4	5
1	Performing my job is absorbing that I forget about everything else					
2	I often think about other things when performing my job					
3	I am rarely distracted when performing my job					
4	Time passes quickly when I perform my job					
5	I really put my heart into my job					

6	I get excited when I perform well on my job					
7	I often feel emotionally detached from my job					
8	My own feelings are affected by how well I perform my job					
9	I exert a lot of energy performing my job					
10	I stay until the job is done					
11	I avoid working overtime whenever possible					
12	I take work home to do					
13	I avoid working too hard					

Part B

The items below from the Job demands-Resources scale are a reflection of how clearly you understand your job characteristics. Please select the option (i.e. 1=strongly disagree, 2=disagree, 3=neither agree/disagree, 4=agrees and 5=strongly agrees) that best describes the work characteristics under which you work.

Item no	Items	1	2	3	4	5
14	Do you know exactly what other people expect of you in your work?					
15	Do you know exactly for what you are responsible?					

Part C

The items below are a reflection of the job crafting behaviours employees engage in while at work. Please select a response from the options (i.e. 1=strongly disagree, 2=agree, 3=neither agree/disagree, 4=agree and 5=strongly agree) that best describes how often you engage in crafting behaviours while at work.

Item no	Items	1	2	3	4	5
16	I try to develop my capabilities					
17	I try to develop myself professionally					
18	I try to learn new things at work					
19	I make sure that I use my capacities to the fullest					

20	I decide on my own how I do things					
21	I ask my supervisor to coach me					
22	I ask whether my supervisor is satisfied with my work					
23	I look to my supervisor for inspiration					
24	I ask others for feedback on my job performance					
25	I ask colleagues for advice					

Part D

The items below are a reflection of rewards and recognition perceived in the workplace. Please choose a response that best describes your perception. The response options are ranged from 1-5, with 1 representing “to a small extent and 5 representing “to a large extent”.

Item no	Items	1	2	3	4	5
26	A pay raise					
27	A promotion					
28	More freedom and opportunities					
29	Respect from the people you work with					
30	Praise from your supervisor					
31	Training and development opportunities					
32	More challenging work opportunities					
33	Some form of public recognition(e.g. employee of the month)					
34	A reward or token of appreciation(e.g. lunch)					
35	Job security					

Part E

The items below measures the subjective perception employees have of their co-workers and supervisors. Please rate a response from the options (i.e. 1=strongly agree, 2=agree, 3=neither agree/disagree, 4=disagree and 5=strongly disagree)

Item no	Items	1	2	3	4	5
36	My interactions with my co-workers are rewarding					
37	My co-workers value my input					
38	My co-workers listen to what I have to say					
39	My co-workers really know who I am					
40	I believe that my co-workers appreciate who I am					
41	I sense a real connection with my co-workers					
42	My co-workers and I have mutual respect for one another					
43	I feel a real kinship with my co-workers					
44	I feel worthwhile when I am around my co-workers					
45	I trust my co-workers					
46	My supervisor helps me to solve work-related problems					
47	My supervisor encourages me to develop new skills					
48	My supervisor keeps me informed about how employees think and feel about things					
49	My supervisor encourages employees to participate in important decisions					
50	My supervisor praises good work					
51	My supervisor encourages employees to speak up when they disagree with a decision					
52	Employees are treated fairly by my supervisor					
53	My supervisor is committed to protecting my interests					
54	My supervisor does what he/she says he/she will					
55	I trust my supervisor					
56	Do you get on well with your supervisor?					

Part F

The items below are a reflection of your perceived autonomy in the workplace. Please choose the option that best describe you. The response options ranges from 1 to 5, with 1=strongly disagree, 2=disagree, 3=neither disagree/agree, 4=agree and 5=strongly agree.

Item no	Items	1	2	3	4	5
57	The job allows me to make my own decisions about how to schedule my work					
58	The job allows me to decide on the order in which things are done on the job					
59	The job allows me to plan how to do my work					
60	The job gives me a chance to use my personal initiative or judgement in carrying in carrying out the work					
61	The job allows me to make a lot of decisions on my own					
62	The job provides me with significant autonomy in making decisions					
63	The job allows me to make decisions about what methods I use to completely my work					
64	The job gives me considerable opportunity for independence and freedom in how I do the work					
65	The job allows me to decide on my own how to go about doing my work					

Thank you for taking time to be part of this study. Your contribution to making it a success is immensely valued.

APPENDIX D**SAMPLE NEEDS ASSESSMENT SURVEY
FOR SPECIAL NEEDS EDUCATORS****AIM OF THE SURVEY**

Management wishes to hear your views on ways to enhance co-worker support,
work autonomy and job crafting

Co-worker support

Do you understand what co-worker support encompasses?

In what ways would you want to be supported by your co-workers?

.....
.....

Job crafting

Do you understand what job crafting is?

.....
.....

In what ways will you want to craft your work?

.....
.....

What resources will you need to craft your work?

.....
.....

Work autonomy

Do you understand what work autonomy is?

.....

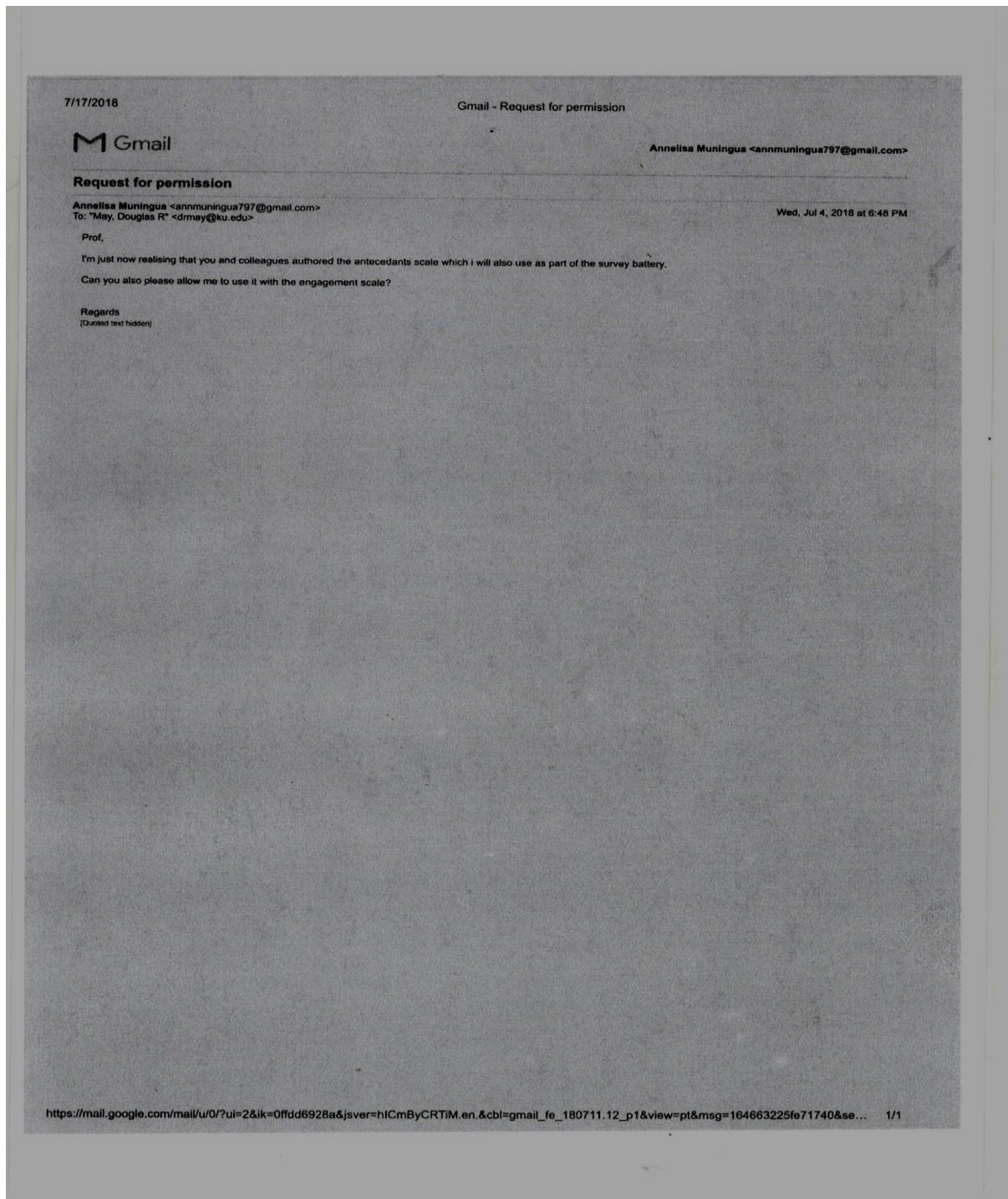
Which work areas do you need autonomy in?

.....
.....

The end

APPENDIX E

Permission letters for the use of research instruments



1/1

8/15/2018 Re:Request for permission - annmuningua797@gmail.com - Gmail

PERMISSION

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Thank you

Tims, M. <m.tims@vu.nl>
to me
Dear Annelisa,
The scale is available for scientific use. So if that's the purpose of your study, you have our permission. Good Luck with your study.
Kind regards,
Maria Tims

Op 4 jul. 2018 15:45 schreef Annelisa Muningua <annmuningua797@gmail.com>:

 **Annelisa Muningua** <annmuningua797@gmail.com>
to Tims, M.
Thank you very much
I appreciate
Regards

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Thank you

Frederick Morgeson <fred@morgeson.com>

to me

Hi Annelisa:

You have my permission to use the WDQ in the manner you describe. Best of luck with your research!

FPM

Frederick P. Morgeson, Ph.D.

Editor, *Annual Review of Organizational Psychology and Organizational Behavior*

Eli Broad Professor of Management

The Eli Broad College of Business

Michigan State University

fred@morgeson.com

<http://www.morgeson.com>

From: Annelisa Muningua <annmuningua797@gmail.com>

Sent: Monday, July 9, 2018 5:31 AM

To: Frederick Morgeson <fred@morgeson.com>

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I look forward to hearing from you soon

Regards

Alan Saks <saks@utsc.utoronto.ca>

to me

Yes, you can use it. Good luck.

Alan Saks, PhD

Professor, HRM

University of Toronto

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