

**A MULTILEVEL EXAMINATION OF THE MODERATING ROLE OF DIVERSITY
AND TUTORIAL LANGUAGE ON INTERGROUP CONTACT IN THE FIRST-YEAR
PSYCHOLOGY TUTORIAL PROGRAMME AT STELLENBOSCH UNIVERSITY.**

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**Thesis presented in fulfilment of the requirements for the degree of Master of
Arts (Psychology) at Stellenbosch University**



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DECLARATION

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ABSTRACT

Given South Africa's long history of ethnic segregation and violence, improving ethnic relations remains an important goal for this country. Evidence suggests that intergroup contact is one of the most effective methods for reducing prejudice and improving intergroup attitudes (Pettigrew & Tropp, 2006). Furthermore, research has shown that an increase in diversity is positively related to intergroup contact, and subsequently improved intergroup relations. The present study investigated the extent to which diversity (opportunity for contact) within a first-year psychology tutorial class influenced the direct intergroup contact taking place within the tutorial classes. Furthermore, the present study aimed to examine the moderating role of language of tuition on the relationship between diversity and direct contact. A cross-sectional multi-level design was implemented to test the effects of diversity and language of tuition. Data were collected from students registered for the first-year Psychology 144 module at Stellenbosch University (N = 1,154). The findings from the present study show that diversity within the tutorial classroom significantly predicts an increase in direct contact, for both the majority and minority groups. Moreover, students in Afrikaans tutorials experience significantly less direct intergroup contact, compared to those in English tutorials. Tutorial language was also found to significantly moderate the relationship between diversity and direct contact for the white majority group only. For the white majority group the relationship between diversity and direct contact was significantly stronger in the English tutorials compared to the Afrikaans tutorials. The present study contributes to the existing literature of intergroup contact in South Africa, examining the effects of diversity within a smaller everyday setting. Learning how to take advantage of the increasing diversity will enable us to harness the prejudice-reducing effects of intergroup contact.

OPSOMMING

Gegewe Suid-Afrika se lang geskiedenis van etniese segregasie en geweld, is die verbetering van etniese verhoudings steeds 'n belangrike doelwit vir hierdie land. Bewyse dui daarop dat intergroepkontak een van die doeltreffendste metodes is om vooroordeel te verminder en intergroep houdings te verbeter (Pettigrew & Tropp, 2006). Daarbenewens, navorsing het getoon dat 'n toename in diversiteit positief verband hou met intergroepkontak, en gevolglik intergroepverhoudinge verbeter. Die huidige studie het ondersoek ingestel na die mate waarin diversiteit (geleentheid vir kontak) in 'n eerstejaar sielkunde tutoriaalklas die direkte intergroepkontak wat in die tutoriaalklasse plaasgevind het, beïnvloed het. Verder het die huidige studie daarin gepoog om die modereringsrol van onderrigtaal op die verhouding tussen diversiteit en direkte kontak te ondersoek. 'n Dwarssnit veelvuldige-vlakontwerp was geïmplementeer om die effekte van diversiteit en onderrigtaal te toets. Data was ingesamel van studente wat geregistreer is vir die eerstejaar Sielkunde 144-module aan die Universiteit van Stellenbosch ($N = 1,154$). Die bevindings uit die huidige studie toon dat diversiteit in die tutoriaalklaskamer 'n toename in direkte kontak voorspel vir beide meerderheid- en minderheidsgroepe. Daarbenewens ervaar studente in Afrikaanse tutoriale aansienlik minder direkte intergroepkontak, in vergelyking met die Engelse tutoriale. Tutoriaaltaal was bevind om 'n beduidende invloed op die verhouding tussen diversiteit en direkte kontak vir die blanke meerderheidsgroep uit te oefen. Vir die Blanke meerderheidsgroep was die verhouding tussen diversiteit en direkte kontak aansienlik sterker in die Engelse tutoriale, in vergelyking met die Afrikaanse tutoriale. Die huidige studie dra by tot die bestaande literatuur van intergroepkontak in Suid-Afrika, en ondersoek die effekte van diversiteit binne 'n kleiner alledaagse omgewing. Die verbetering van kennis om voordeel te trek uit die toename in diversiteit sal ons in staat stel om die vooroordeelverminderende effek van intergroepkontak te benut.

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¹ Rowling, J. K. (2000). *Harry Potter and the goblet of fire*. London, UK: Bloomsbury Publishing.

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ABBREVIATIONS

ANC	African National Congress
HLM	Hierarchical Linear Modelling
ICC	Intraclass Correlation
IJR	Institute for Justice and Reconciliation
NP	National Party
RWA	Right-Wing Authoritarian Personality
SDO	Social Dominance Orientation
SSA	Statistics South Africa
SU	Stellenbosch University
U.S.	United States of America
VOC	Vereenigde Oost-Indische Compagnie (Dutch East India Company)

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CHAPTER ONE

THE STATE OF INTERGROUP RELATIONS IN SOUTH AFRICA

South Africa has a long history of hostile intergroup relations and racial oppression, dating back to the late 1600's (Saul, 2014), and is described by Bornman (2011) as "one of the most profound examples of adverse intergroup relations in recent history" (p. 729). Included in this history is a 40-year period of legalised segregation (Apartheid), which created a country entrenched with ethnic antagonism, with little to no positive contact (face-to-face interactions) taking place between ethnic groups (Gibson, 2015). The fall of Apartheid in the years leading up to the 1994 democratic elections resulted in the removal of those segregationist laws, enabling, for the first time, the interaction and integration of the various ethnic groups.

Despite this movement towards a united South Africa, intergroup segregation and conflict between ethnic groups persists. Neighbourhoods and schools remain segregated along ethnic lines and friendship groups continue to be homogenous in terms of ethnicity (Alexander & Tredoux, 2010; Christopher, 2001). Moreover, individuals seek out, and avoid, every day spaces on the basis of their ethnic group, which only serves to enhance ethnic segregation (Alexander & Tredoux, 2010). Furthermore, negative attitudes between ethnic groups persist (Bornman, 2011; Dixon et al., 2010b; Durrheim, Tredoux, Foster, & Dixon, 2011; Gibson & Claasen, 2010; Mynhardt, 2013; Tredoux & Finchilescu, 2010).

The world in general, and the workplace in particular, are becoming increasingly more ethnically diverse, and individuals are faced with the challenge of negotiating conflicting ideas, backgrounds, cultures, and beliefs. They are expected to work cooperatively and engage with one another in close proximity. For these reasons the future success of South Africa depends on its ability to encourage harmonious and cooperative intergroup relations (Gibson & Claasen, 2010). With this in mind, it is concerning that results from various studies indicate that South Africans of all ethnicities often report negative interaction experiences with members of different ethnic groups, and individuals show a reluctance to engage in personal contact with members of the outgroup (Bornman, 2016; Durrheim, Trotter, Piper, &

Manicom, 2004; Institute for Justice and Reconciliation, 2013). It is impossible to understand the present state of intergroup relations and attitudes in South Africa, and attempt to improve these relations, without first examining the history that has shaped a segregated society. This history is briefly discussed below.

South Africa's History of Intergroup Relations

Intergroup Relations Before Apartheid (1600-1948)

The history of South Africa begins with its earliest inhabitants, the Khoikhoi (Hottentots) and the San (Bushmen; Bornman, 2011). These two groups, collectively known as the Khoisan, lived harmoniously (Saul, 2014). The Khoikhoi maintained livestock in large chiefdoms, while the San hunter-gathered in small groups (Saul, 2014). During the 4th and 5th centuries groups of individuals from various parts of Africa began to migrate and settle in South Africa. These individuals gradually branched out into a number of groups, each with their own distinct language and culture (Omer-Cooper, 1987). These groups became known as the Nguni and the Sotho-Tswana (Omer-Cooper, 1987). These two groups are considered to be the ancestors of the Zulu, Swazi, Xhosa, Sotho and Tswana populations in South Africa today (Saul, 2014). The Nguni and Sotho-Tswana organized themselves into chiefdoms and established trading relationships with the Khoisan. In some instances, the Khoisan groups were absorbed into a chiefdom. Intermarriage between members of the chiefdoms and the Khoisan was also not uncommon (Omer-Cooper, 1987).

The 1600's saw the rise of the European imperial conquest, which brought the Dutch East India Company (Vereenigde Oost-Indische Compagnie, VOC) to South Africa. This resulted in an influx of white Europeans from Germany, France and the Netherlands, establishing permanent settlements within the Khoisan territories (Hulme, 1984). Over the course of the 17th and 18th century this settler population developed into a distinct "Afrikaner" group, with an individual language, dialect and identity (Bornman, 2011). These early colonisers brought with them a large number of slaves from Asia, Madagascar and various other countries in East and West Africa (Le May, 1971; Saul, 2014).

Along with the arrival of these early settlers came antagonistic relations with the native Khoisan and the African chiefdoms. With the expansion of colonist settlements, the San were pushed deeper inland. The Khoikhoi, on the other hand, established a trading relationship with the Dutch settlers (Saul, 2014). However, due to disease and competition for land, the Khoikhoi were eventually forced into the role of labourers within the settler society (Bornman, 2011; Saul, 2014). From as early as the 16th century various attempts were made to keep the settlers segregated from their non-European counterparts. The European settlers held the belief that non-European slaves, as well as the indigenous South Africans, were inherently inferior to Europeans (Omer-Cooper, 1987). In 1663 separate schools were created for the non-European populations. In 1678 black Africans were forbidden from living amongst the white settlers (Louw, 1984). In 1685 Commander Hendrik van Rheeде prohibited the marriage of Europeans to individuals without European blood. Moreover, non-Europeans were increasingly denied the legal rights that the white colonists enjoyed (Louw, 1984; Omer-Cooper, 1987). Despite these examples of segregation, interethnic mixing and marriage did take place between white settlers, slaves, black (Africans) and the Khoisan, during the early years of colonisation (Bornman, 2011). This diversity of mixing resulted in a group that later became known as the so-called Coloureds.

Between 1815 and 1860 a second wave of settlers arrived in South Africa from Britain, establishing a white English-speaking population. From the 1860s onwards, these British settlers brought a large number of Indians to work on the sugar plantations (Lemon, 1976). This resulted in the establishment of an Indian population in South Africa. Despite extensive social and economic contact, the arrival of the British created tensions between the Afrikaans-speaking settler population and the English-speaking British colonists (Bornman, 2011). Britain began to explore new ideas regarding equal rights and the treatment of slaves; which led to abolishment of slavery in 1834 (Omer-Cooper, 1987). These new ideas spread to the British settlers in South Africa. The British settlers wanted to emancipate the slaves and offer them the same rights previously reserved for the white population. The importation of slaves came to an end, and with it came a shortage of labour, followed by financial losses (Omer-Cooper, 1987). The Afrikaner settlers were unhappy with these

changes, as they wanted to maintain the system that guaranteed them their privileged position before the arrival of the British (Beck, 2000).

The conflict between these two settler groups resulted in a mass migration inland of the Afrikaner population, known as the Great Trek. This mass migration saw the establishment of a separate “Boer” (farmer) population in Natal, Transorangia and the Transvaal. Slavery was maintained in these Boer settlements. Non-whites² were denied any political rights; they were segregated from the white community and were often mistreated (Beck, 2000). The British settlers attempted to contest these Boer settlements, but in 1852 they signed the Sand River Convention granting the Boer republics their independence (Beck, 2000). From that point South Africa was made up of a British settler colony, two Afrikaner republics, and a collection of large African chiefdoms (Clark & Worger, 2011). The discovery of diamonds and gold created further conflict between the British and the Afrikaner republics. This conflict eventually culminated in two Anglo-Boer Wars (Clark & Worger, 2011; De Reuck, 1999). Although these wars were between the two white settler groups, coloured, Indian and black (African) South Africans fought on both sides of the war (Hulme, 1984).

In order to take advantage of the profits of diamond and gold mining, the British settlers conquered the remaining African chiefdoms and confiscated their lands (Clark & Worger, 2011). A number of discriminatory laws were put into place restricting the movements, employment and rights of the non-white populations, to ensure cheap labour and increased profits (Clark & Worger, 2011). At the end of the second Anglo-Boer war in 1902, the Treaty of Vereeniging was signed, which combined the Afrikaner and British republics under the rule of the British Empire, with their own local self-government (Clark & Worger, 2011). This treaty was signed on the understanding that this union would ensure “the just predominance of the white race” (Clark & Worger, 2011, p. 17). In 1910, the Union of South Africa was

² The researcher acknowledges that the use of the term “non-white” is politically framed within a history that placed “whiteness” at the center of superiority. A more politically correct term would be “previously disadvantaged groups”, however for the sake of brevity the use of the term “non-white” will be used to encompass black (African), coloured, and indian population groups respectively.

established and the power to rule was given to the Afrikaans-speaking white population. Afrikaans was to serve as the language of power and politics, trade, religion, social interaction, education, and exclusion (Alexander, 1989). Under this new rule, the political and economic interests of the white population were protected, while the rights and freedoms of the non-white populations were further reduced. This was done through the implementation of a system of segregationist policies.

The 1911 Mines and Works Act reserved skilled jobs for the white population, barring the black African population from holding any skilled positions. In the same year the Native's Labour regulations act established fixed laws controlling the employment of black Africans, restricting their movements in the cities through the use of pass books (Clark & Worger, 2011). In 1913 the South African government passed the Native's Land Act; which limited black Africans' ownership of property to small-designated areas of land, which were often of poor quality (Clark & Worger, 2011). The 1923 Native's Urban Areas Act further constrained their movements within white populated cities and black Africans were forced to live in segregated townships (Clark & Worger, 2011). The establishment of these early laws and policies laid the foundations for South Africa's Apartheid era.

Intergroup Relations during Apartheid (1948-1994)

In 1948, the election of a new government, under the rule of Dr D. F. Malan, cemented a new era of systemised and brutally enforced racial discrimination and segregation in South Africa (Finchilescu & Tredoux, 2010; Omer-Cooper, 1987). In order to carry out this new system, the new National Party (NP) government emphasised white supremacy and argued that separation was necessary in order to reduce conflict. To achieve this, the NP began passing legislation that further limited contact between groups.

One of the first of these segregationist laws was the Population Registration Act (1950), which formally categorised every South African citizen into one of four ethnic groups (namely white, coloured, black or Indian/Asian South African). In addition to other factors, language was used as a means to divide individuals into the various ethnic categories, with white Afrikaans-speaking individuals holding the most privileged positions within the Apartheid system (Alexander, 1989). Individuals were

required to carry around identity cards stating their ethnic category. This Act served as the basis for countless subsequent Apartheid legislations (Clark & Worger, 2011). Segregation in residential areas was ensured by the implementation of the Group Areas Act (No. 41 of 1950). This Act also divided the urban areas of South Africa into ethnic categories, restricting the ownership of land in that area to a specific ethnic group (Worden, 1994). This Act was established based on the notion that non-whites who spoke different languages should be separated and live within their own designated territories (Alexander, 1989). Residential intergroup contact was limited further with the Prevention of Illegal Squatting Act (1951) and the Native Resettlement Act (1954), which allowed for the forced removal of thousands of black South Africans from “white” areas and placed them in separate townships (Saul, 2014; Worden, 1994). Two of the largest mass removals of the time were the forced relocation of black residents of Soffiatown in Johannesburg, and of the coloured population of District Six in Cape Town (Beck, 2000). Intimate personal relationships, involving sexual relations and/or intergroup marriage, between whites and non-whites were prohibited with the establishment of the Immorality Act (No. 21 of 1950) and The Prohibition of Mixed Marriages Act (No. 55 of 1949; Clark & Worger, 2011).

Intergroup contact was also restricted within everyday public spaces by the Reservation of Separate Amenities Act (1953). This law allowed for the creation of segregated, and often unequal, public facilities (Beck, 2000). Public amenities such as toilets, parks, beaches, hotels, theatres and restaurants were also segregated along ethnic lines (Welsh & Spence, 2011). This segregation of public spaces expanded into the sphere of education as well, with some of the most damaging long-term effects (Clark & Worger, 2011). The Bantu Education Act (No. 47 of 1953) led to the creation of separate educational facilities for whites and non-whites. Schooling for non-whites was largely underfunded and the curriculum emphasised basic skills (Beck, 2000). Moreover, the Afrikaans language was used as the medium of instruction, which, in addition to the lack of funding and resources, served to maintain and reinforce the privileged position of the white Afrikaans-speaking majority (Alexander, 1989; Webb, 2002). In this way ethnic prejudice was maintained, and reinforced by the language barrier created by the Apartheid government (Alexander, 1989). By 1975 Afrikaans was imposed as the medium of instruction for the majority of Bantu schools in South Africa (Van der Waal, 2012). It

was the established of Afrikaans as the medium of instruction that eventually led to the Soweto Youth Uprising of 1976 (Van der Waal, 2012).

With the passing of the Extension of University Education Act (No. 45 of 1959) non-whites were prohibited from attending white universities, creating ethnic segregation within the higher education system. Few universities were available to the non-white population, and until the late 1980s more than 80.00% of South African university students were white (Beck, 2000; Karris & Gerhart, 1997). The segregation of educational facilities not only limited intergroup contact across South Africa, but also ensured the inferior educational and socio-economic status of the non-white population. Bantu education confined non-whites to unskilled, low-status professions. The inferior position of non-whites in the job market was further preserved by the Native Building Workers Act (1951) and the Native Labour Act (1953), each of which legally reserved higher-status and skilled positions for white employees. Although intergroup contact did take place in the work environment, this contact was hierarchical, oppressive and unequal in nature (Foster & Finchilescu, 1986).

Together, these and other laws were established with the primary aim of limiting (and strictly controlling) intergroup contact and reducing intergroup conflict in the Union of South Africa. Ironically, the creation of a 'non-contact' society bred intergroup hostility and conflict. Apartheid legislation prompted protest from non-white citizens that took the form of mass boycotts, strikes, civil disobedience and violent demonstrations (Clark & Worger, 2011). These uprisings were met with swift and brutal retaliation from the government. The Sharpeville massacre, which resulted in the death of 69 protestors and the wounding of 186 others, is one such example of the NP government's fierce response to these uprisings (Clark & Worger, 2011).

The legalised segregation during Apartheid was accompanied by high levels of prejudice across the ethnic groups. Findings from a number of studies undertaken between the 1930s and the late 1980s show a consistent pattern of results (e.g., Durrheim et al., 2011; MacCrone, 1949; Nieuwoudt, Plug, & Mynhardt, 1977). MacCrone (1949) examined the intergroup attitudes of white university students toward non-white South Africans every two years from 1934 to 1944. He found that

both English- and Afrikaans-speaking white South Africans were extremely prejudiced towards black, coloured and Indian South Africans, with white Afrikaans-speaking students showing more prejudice. In their review of intergroup attitudes during Apartheid Durrheim et al. (2011) found similar results. Furthermore, they noted that black (African) and coloured South Africans also expressed high levels of prejudice. These two groups expressed more favourable attitudes towards white English-speaking South Africans, and demonstrated more prejudiced attitudes towards white Afrikaans-speaking South Africans (see also Kinloch, 1985). From these studies it becomes evident that the segregation of groups did nothing to decrease intergroup conflict, instead it merely increased prejudice and tensions between ethnic groups.

The uprisings and violence against the Apartheid system increased during the 1970s until a combination of internal and external pressures forced the ruling party to dismantle the Apartheid government in 1990 (Beck, 2000). Negotiations between the National Party and the African National Congress (ANC) culminated in the end of legalised segregation and South Africa's first democratic elections in 1994 (Clark & Worger, 2011). This marked the beginning of the 'new' and 'unified' South Africa.

The Current State of South African Intergroup Relations

After the fall of the Apartheid government South Africans of all ethnic groups were legally allowed to interact freely with one another for the first time. The various ethnic groups could now occupy and live within the same public spaces and attend the same institutions. South Africa aimed to celebrate its diversity and create a new constitution that laid the foundation for a society of equality and reconciliation (Bornman, 2016; Muyeba & Seekings, 2011). This new constitution would embrace the country's multicultural character. Today, South Africa has 11 official languages, consisting of nearly 55 million individuals from numerous different ethnic, cultural and religious groups (Statistics South Africa, 2015). Its population consists of approximately 79.20% black (African)-, 8.90% white-, 8.90% coloured- and 3.00% Indian/Asian South Africans (Statistics South Africa [SSA], 2015). It was hoped that increased equality and interaction between groups would foster improved intergroup

relations and reduce intergroup prejudice (Finchilescu & Tredoux, 2010; Pettigrew, 2010).

This optimism for South Africa's future is reflected in research findings from bi-annual socio-political trends surveys as well as the World Values studies (Harris, 2007), which showed that after the 1994 democratic elections 76.00% of South Africans felt that South Africa was on the way to a better future. Moreover, these results revealed that 59.00% of South Africans felt that ethnic relations were improving and that a great proportion of South Africans (84.00%) felt that South Africa holds a good future for all ethnic groups (Harris, 2007). In a recent study conducted by the Institute for Justice and Reconciliation (IJR; 2013) it was found that the majority of the South African population (61.40%) think that there has been development towards reconciliation since 1994 and 76.40% agree that Apartheid was a crime against humanity. Furthermore, 64.00% of South Africans said they want to move forward from Apartheid and 61.90% reported that they wish to forgive members of the outgroup (IJR, 2013). However, despite this optimism there appears to be an enduring level of prejudice between ethnic groups.

The transition to a more integrated society presented a unique opportunity for social psychologists to study changing intergroup relations. Numerous post-Apartheid studies examined the possible improvement of intergroup attitudes in the new South Africa (Bornman, 2011; Duckitt & Mphuthing, 1998; Mynhardt, 2013; Tredoux & Finchilescu, 2010). Durrheim et al. (2011) examined a collection of studies conducted in both pre- and post-Apartheid and found that there has been a steady decline in prejudiced attitudes towards black (African) South Africans amongst white South Africans since 1994. The outgroup attitudes of black (African) South Africans towards white South Africans appear to have remained stable over this time, however (see also Bornman, 2011; Dixon, et al., 2011; Mynhardt, 2013; Tredoux & Finchilescu, 2010). Gibson and Claasen (2010) found similar results to those mentioned above, that white South Africans' negative attitudes towards black (Africans) had decreased within the same time period, although they also found that black (African)'s positive attitudes towards whites had increased between the period of 2001 and 2004. Results also suggest that coloured South Africans hold comparably negative attitudes towards white South Africans when compared to their black (African) South African counterparts (Durrheim et al., 2011). Although there

has been a decrease in negative attitudes for the white South African population, there is evidence that this attitude change has not resulted in behavioural change, and they continue to demonstrate a resistance towards real world integration and policy change (Dixon, Durrheim, & Tredoux, 2007; Dixon & Durrheim, 2010; Dixon et al., 2010a).

In summary, post-1994 South Africa saw slight improvements in negative intergroup attitudes across the ethnic groups; however there seems to be a persistence of negative intergroup attitudes despite the recent integration. Furthermore, even in the face of these increased opportunities for integration, segregation between groups continues. In their nationally representative sample, the Institute for Justice and Reconciliation (IJR, 2013) found that 50.50% of participants did not want to increase their interactions with outgroup members, while only 19.40% said they wanted to interact more with outgroup members. Additionally, 21.00% of participants said they would like to have *less* interaction with outgroup members. White South Africans (69.40%) expressed the greatest desire to keep the amount of interaction with other groups the same and they displayed the smallest desire to increase their interactions with other South African groups (11.70%; IJR, 2013). Further studies have also found evidence of this reluctance to interact (e.g., Dixon & Durrheim, 2003; Dixon, Tredoux, Durrheim, Finchilescu, & Clack, 2008; Durrheim & Dixon, 2010; Finchilescu, Tredoux, Mynhardt, Pillay, & Muainga, 2007; Tredoux & Dixon, 2009). This is particularly problematic given the vast number of studies that have shown that positive contact between different groups reliably reduces prejudice, thereby improving intergroup relations (Allport, 1954; Pettigrew & Tropp, 2006). Moreover, given the persistent levels of segregation in South Africa it becomes increasingly important to identify contexts that can encourage intergroup interaction. The South African university context is one such context that holds the potential for creating valuable opportunities for positive intergroup contact between young South African adults.

The University Context

As discussed above, the education system was one of the many areas exploited in order to segregate and limit contact between ethnic groups during

Apartheid. Although segregationist policies were abolished in 1990, segregation between groups continues today. Residential areas remain largely ethnically homogenous (Christopher, 2001, 2005; McClinton & Zuberi, 2006). Comparable ethnic separation is also observed in schools, as learners usually attend schools within their residential area (Chisholm & Nkomo, 2005; Soudien, 2004).

Universities were one of the institutions that were segregated along ethnic lines during Apartheid. Since the fall of Apartheid, access to universities is no longer restricted. As such, university campuses have become increasingly more diverse since 1994 (HESA, 2014). Stellenbosch University is one such example. Stellenbosch University is one of five previously white Afrikaans-speaking tertiary institutions that had numerous connections with the Apartheid government (Brink, 2006). Although the town of Stellenbosch remains ethnically segregated, the university itself has become progressively more diverse. In 1990 black, coloured and Indian students collectively accounted for only 726 students of Stellenbosch University's student population. Today the student population includes 18,764 white-, 5,355 black (African)-, 5,238 coloured-, and 793 Indian/Asian students (Stellenbosch University, 2013a, 2015).

University campuses offer a more diverse environment and may therefore offer opportunities for increased intergroup contact, especially in post-conflict societies that remained characterised by residential (self-) segregation. Therefore, the university context might play an important role in creating a positive environment for intergroup contact to take place. For many South African students attending university may provide them with their first opportunity to take part in regular, consistent, direct face-to-face contact with South Africans from different ethnic groups. Moreover, students at university have a relatively equal status and participate in a wide range of shared activities (Finchilescu & Tredoux, 2010). This interaction offers the potential for the development of cross-group friendships.

The Present Study

This history of intergroup segregation and conflict and the post-Apartheid years of increased diversity and possibilities for integration serve as the basis for this present study. Intergroup conflict remains one of the most vexing social problems

and improving intergroup relations in South Africa is vitally important for the future of the country (Bornman, 2011; Gibson & Claasen, 2010). Research has demonstrated that positive intergroup contact is one of the most powerful and effective ways in which we can improve intergroup attitudes and reduce prejudice (Allport, 1954; Hewstone & Swart, 2011; Hodson, Hewstone, & Swart, 2013; Pettigrew & Tropp, 2006).

Given the increasing diversity at universities across South Africa, and the important role these universities may play in facilitating positive intergroup contact and the development of positive intergroup relations, the present study aims to explore the nature of intergroup contact at Stellenbosch University and the moderating role that diversity may have on students' contact opportunities within a small-group academic setting. The present study, therefore, investigated diversity levels within the first-year psychology tutorials at Stellenbosch University across two language groups (namely English and Afrikaans). Additionally, the direct intergroup contact that was taking place between white and non-white students within those tutorials was also investigated. The principle focus of the present study was to explore whether diversity and tutorial language were moderators of intergroup contact within the first-year tutorial program.

Thesis Overview

As highlighted above, intergroup contact, in one way or another, has been a central feature in understanding South Africa's history of intergroup relations. During Apartheid, intergroup contact between South Africans of different ethnicities was limited in the hope of eliminating intergroup conflict. However, decades of segregation and limited intergroup contact resulted in distrust, suspicion, and negative intergroup attitudes. One of the key social challenges faced in the contemporary South African society is one of bridging the divide between the diverse ethnic, linguistic and cultural groups in South Africa and fostering more cooperative, positive intergroup relations. To this end, intergroup contact may serve as an essential mechanism for reducing intergroup prejudice in the South African context and fostering positive intergroup relations. This is an idea expressed in Allport's

(1954) contact hypothesis, one of the most influential ideas to emerge from social psychology in the 20th century.

Chapter two provides a discussion of the contact hypothesis and its early support, with particular examination of evidence in the South African context (Allport, 1954; Pettigrew & Tropp, 2006). This is followed by an examination of the dimensions of intergroup contact, including the factors that influence the strength of contact's effects; namely the individuals prior level of prejudice, group status and the quality of contact. The important role of cross-group friendships in the contact-prejudice relationship is discussed. Finally, an outline of the possible consequences associated with an increase in diversity is presented. This involves an examination of two opposing theories, namely Constrict Theory (Putnam, 2007) and the Opportunity Hypothesis (Hallinan & Smith, 1985).

Chapter three provides an account of the research setting in the present study, as well as an outline of the research rationale of the study, based on the presentation of the various literature covered in chapter two. Additionally, chapter three provides an overview of the aims and objectives of the present study, as well as the methodology that was used. This includes a description of the data collection process and the materials used in this data collection. Following this, chapter four reports on the results of the present study.

The final chapter of this thesis, chapter five, offers an in-depth discussion of the results of the present study. Both the practical and theoretical contributions of the present study are considered in this discussion. Chapter five concludes with an examination of the limitations of the present study, together with possible directions for future research.

CHAPTER TWO

INTERGROUP CONTACT AND THE IMPORTANCE OF DIVERSITY

South Africa's extended history of ethnically-based antagonism and legally enforced segregation has resulted in a country that remains marked by ethnic conflict (Bornman, 2016). The scars left by Apartheid continue to impact on every South African, despite the post-Apartheid government's principles of non-discrimination and equal human rights for all. As discussed in chapter one, segregation between groups persists in post-Apartheid South Africa and prejudiced attitudes between ethnic groups in South Africa remain high, interfering with the country's hopes for prosperous intergroup relations. In the face of this strife the ideal of improving intergroup relations remains an key objective for the future of the country.

Research within the field of social psychology suggests that positive intergroup contact may be an important component in the development of harmonious intergroup relations and social reconciliation in post-conflict societies (Al Ramiah & Hewstone, 2013; Hewstone Cairns, Voci, Hamberger, & Niens, 2006; Tausch, Tam, Hewstone, Kenworthy, & Cairns, 2007). Although intergroup contact may not be the only way to improve intergroup relations, it has been established as one of the most compelling strategies for reducing prejudice and improving outgroup attitudes (see the meta-analysis undertaken by Pettigrew & Tropp, 2006).

The country's substantial ethnic diversity, and the increased opportunity for positive intergroup interactions between ethnic groups, may have the potential to help increase intergroup contact and thereby decrease conflict and improve intergroup relations. This chapter provides a discussion of the contact hypothesis as an effective tool for improving intergroup relations. Specifically, this chapter expounds on the history of the contact hypothesis, with particular attention paid to the evidence supporting the contact hypothesis within the South African context. This is followed by an examination of the possible consequences that desegregation and increased diversity may present for South Africa, given the aim of improving intergroup relations.

The Contact Hypothesis

Below I provide a brief history of the early intergroup contact research and the formulation of the contact hypothesis. This is followed by a discussion of the support for the contact hypothesis, with particular attention paid to support within the South African context.

Early Intergroup Contact Research

Research regarding the nature of intergroup contact and intergroup relations has been cited in the literature since the mid-1930s, along with the emergence of the field of social psychology as an academic discipline (Dovidio, Gaertner, & Kawakami, 2003). During this time, researchers, particularly in the United States, became interested in the ways in which groups came into contact and conflict (primarily interracial conflict) with one another. They wanted to understand why, in some instances, individuals behave in prosocial ways (e.g. aiding and/or showing an affinity towards members of the outgroup), while other individuals respond with enmity and prejudice. The riots throughout the Black Civil Rights movement in America (U.S.; 1920-1930) and the 1943 race riots in Detroit, which are considered to be the worst race riots in U.S. history, drew researchers' interest in the effects of intergroup contact. During this time black and white Americans clashed violently, while those black and white citizens who knew each other and/or were close friends/neighbours aided and protected one another, refraining from the racial violence (Lee & Humphrey, 1968).

Early studies failed to demonstrate that positive contact was associated with reduced prejudice (e.g. Sims & Patrick, 1936). However, later studies began to explore the positive effects of contact in more favourable conditions; these studies provided evidence for the positive effects of contact. Studies drawing on the experiences of soldiers after World War II showed that white soldiers who were integrated into units with African-American soldiers had more positive outgroup attitudes towards African-Americans compared to those white soldiers whose combat troops remained segregated (Singer, 1948; Stouffer, 1949). Similar results were found following the desegregation of the Merchant Marine in 1948. Brophy (1946) describes how the interracial attitudes of white seamen improved as a result

of the increased voyages they embarked on with African-American seamen. In a program that created positive interracial experiences between white Columbia University students and black African-American leaders in Harlem over a series of weekends, Smith (1943) found that students who took part in this program demonstrated significant improvements in their attitudes towards African Americans. Furthermore, no attitude change occurred in the control group, who experienced no interracial contact. In his research on ethnic relations in American public schools, Bramfield (1946) noted that “where people of various cultures and races freely and genuinely associate, their tensions and difficulties, prejudices and confusions, dissolve; where they do not associate, where they are isolated from one another, their prejudice and conflict grow like disease” (p.245; cf. Allport & Kramer, 1946; Kephart, 1957).

Given the increasing interest in intergroup relations the Social Science Research Council approached Robin Williams (1947), a renowned sociologist, and asked him to review the intergroup relations literature of the time. In his review, which included 102 papers, Williams (1947) proposed that a number of variables may be needed for prejudice reduction to be maximally effective. For example, he suggested that contact would have optimal prejudice-reducing effects if the intergroup interaction was intimate in nature; the participants had equal status and share the same interests or tasks; and if the contact disconfirmed stereotypes. His report laid the initial foundations of contact theory and led to more rigorous testing of the prejudice-reducing effects of contact (Pettigrew, Tropp, Wagner, & Christ, 2011).

Some of the strongest evidence of the time came from studies in the 1950's that examined racially segregated and desegregated housing projects in New York (e.g., Campbell & Stanley, 1963; Deutsch & Collins, 1950, 1951; Wilner, Walkley, & Cook, 1955; Works, 1961). These studies found that white residents who were living in desegregated housing projects had more positive and continuous contact with their African-American neighbours. As a result, they had more positive attitudes towards African-Americans and demonstrated less outgroup stereotyping (Deutsch & Collins, 1951).

The Formulation of the Contact Hypothesis

It is against this background that the contact hypothesis, as it is known today, was formalised by Gordon Allport (1954) in his seminal volume, *The Nature of Prejudice*. Allport (1954) hypothesised that the absence of contact between members of different groups leads to prejudice, negative attitudes, and group stereotyping towards the outgroup. He predicted that increased contact between these different groups would result in reductions in prejudice, negative attitudes and group stereotyping. This would then bring about more favourable intergroup relations. Additionally, Allport (1954) proposed that prejudice reduction was highly likely to occur if certain optimal conditions were met, as these conditions create a more positive environment in which interaction can occur (cf. Hewstone, 2003; Pettigrew, 1998). He defined these optimal conditions as follows:

Prejudice... may be reduced by equal status contact between minority and majority groups in the pursuit of common goals. The effect is greatly enhanced if this contact is sanctioned by institutional support (i.e., by law, custom or local atmosphere), and if it is of a sort that leads to the perception of common interests and common humanity between members of the two groups (Allport, 1954, p. 281).

Early research testing the influence of these optimal conditions began to emerge. These studies provided evidence for the prejudice-reducing effects of intergroup contact in the presence of these optimal conditions; namely when members of a contact situation feel as though there is equal group status between members (e.g. Brewer & Kramer, 1985; Cohen & Lothan, 1995; Dovidio, Gaertner, & Validzic, 1998; Moody, 2001), when these groups share common goals and there is intergroup cooperation (e.g. Aronson & Patnoe, 1997; Bettencourt, Brewer, Croak, & Miller, 1992; Brown & Abrams, 1986; Koschate & van Dick, 2011; Kuchenbrandt, Eyssel, & Seidel, 2013; Sherif, 1966; Sherif, Harvey, White, Hood, & Sherif, 2010; Worchel, Andreoli, & Folger, 1977), and when the contact is institutionally and socially sanctioned (e.g. Aronson & Patnoe, 1997; Landis, Hope, & Day, 1984; Walker & Crogan, 1998; cf. Dovidio et al., 2003; Koschate & van Dick, 2011).

In the decades following Allport's (1954) formulation, the contact hypothesis has undergone considerable empirical examination (Pettigrew et al., 2011). Initial

reviews of the contact hypothesis produced mixed results. Numerous reviews found that intergroup contact typically reduces outgroup prejudice, providing support for the contact hypothesis (e.g., Harrington & Miller, 1992; Patchen, 1999; Pettigrew, 1971, 1986, 1998). Conversely, alternative studies offered conflicting conclusions (e.g. Amir, 1969, 1976; Forbes, 1997, 2004; Stephan, 1987), highlighting the complexity of intergroup relations and emphasising the multiple barriers to prejudice reduction. These barriers may include the contact setting itself, and even the groups or individuals under study (Stephan, 1987; cf. Pettigrew, 1998). Some reviews were especially critical of the role of intergroup contact in prejudice reduction, leading some critics to discard the theory completely (e.g., Ford, 1986; McClendon, 1974; cf. Hopkins, Reicher, & Levine, 1997).

According to Pettigrew and Tropp (2006; see also Pettigrew et al., 2011) these critical early reviews had three primary shortcomings, which can account for their conflicting results. Firstly, Pettigrew and Tropp (2006) note that these initial reviews made little attempt to incorporate the complete intergroup contact research base, and the samples they included were often incomplete (typically including fewer than 60 articles). Secondly, the early reviews did not make use of strict inclusion criteria. Therefore, the various studies in early reviews had inconsistent definitions of intergroup contact (e.g. some studies measured intergroup proximity rather than the established measure of direct face-to-face contact). Lastly, a number of these reviews used non-quantitative assessments when examining the contact effects, drawing subjective conclusions from analyses of a limited subsection of the contact literature.

The Contact Hypothesis as a Fully Fledged Theory

In their large-scale meta-analysis Pettigrew and Tropp (2006) set out to overcome the limitations of these earlier reviews. The aim of their meta-analysis was to find a conclusive answer as to the prejudice-reducing effects of intergroup contact. Their review included an exhaustive search of all intergroup contact studies, published and unpublished, conducted in the 20th century. Additionally, Pettigrew and Tropp (2006) made use of stringent inclusion criteria for their investigation. Studies were only incorporated into their meta-analytic review if they met the

following criteria: (1) intergroup contact was defined and measured as direct face-to-face contact between groups (studies measuring contact opportunity were excluded); (2) direct intergroup contact served as the independent variable, and prejudice served as the dependent variable; (3) the direct intergroup contact occurred between distinct and well-defined groups; (4) data were collected at the individual level, and individuals served as the unit of analysis. Their search located 515 contact studies from 38 different nations, amounting to nearly 250,000 participants across 714 independent samples.

Pettigrew and Tropp's (2006) meta-analysis revealed that 94.00% of the 515 studies reported an exceptionally significant negative association between intergroup contact and a number of prejudice measures (mean $r = -.21$, $p < .001$). This finding demonstrates that increased intergroup contact is typically related to lower levels of prejudice. These significant effects held across age groups (mean r ranged from $-.20$ to $-.24$), and gender (males: mean $r = -.19$ and females: mean $r = -.21$). Pettigrew and Tropp (2006) also noted the positive effects of intergroup contact were observed across countries. They found no significant differences in the contact effects between U.S. and non-U.S. samples (mean $r = -.22$, $p < .001$ for both samples). The wide range of target groups and research settings, as well as the large sample size of this meta-analysis, provides compelling evidence for the universality of the contact hypothesis.

In addition to testing the contact-prejudice relationship, Pettigrew and Tropp (2006) examined the effect of the optimal conditions for contact suggested by Allport's (1954) hypothesis. Their results showed that intergroup contact had a greater prejudice-reducing effect in those samples where most of Allport's (1954) optimal conditions were met within the contact setting (mean $r = -.29$, $p < .001$). A particularly important finding of this meta-analysis is that intergroup contact was correlated with a decrease in prejudice even when Allport's (1954) optimal conditions were *absent* (mean $r = -.20$, $p < .001$). This finding suggests that these optimal conditions may not be fundamental for intergroup contact to have positive effects on prejudice, but may serve as facilitating conditions for contact. Pettigrew and Tropp's (2006) extensive meta-analysis provided definitive evidence for the contact hypothesis, confirming conclusively that intergroup contact is reliably associated with prejudice reduction. In subsequent years further research resulted in

the refinement of the contact hypothesis, leading to the formulation of an integrated contact theory (Hewstone & Swart, 2011). However, it can be said that Pettigrew and Tropp's (2006) influential meta-analysis cemented the contact hypothesis as a fully-fledged theory.

What makes the contact hypothesis even more convincing is the fact that contact has been shown to not only reduce prejudice towards ethnic/cultural groups, but it also decreases prejudice towards a large variety of stigmatised groups. For example, contact has been found to reduce prejudice towards homosexuals (e.g. Herek, 1996, 2009; Herek & Capitanio, 1996; Hodson, Harry, & Mitchell, 2009; Schiappa, Gregg, & Hewes, 2008; Turner, West, & Christie, 2013; Vonofakou, Hewstone, & Voci, 2007), immigrants (e.g. Dhont, Roets, & van Hiel, 2011; Schmid, Hewstone, Küpper, Zick, & Tausch, 2014), refugees (e.g. Turner & Brown, 2008), the elderly (e.g. Caspi, 1984; Harwood, Hewstone, Paolini, & Voci, 2005; Schwartz & Simmons, 2001), individuals with mental and physical disabilities (e.g. Desforjes et al., 1991; Makas, 1993; Cameron, Rutland, Brown, & Douch, 2006; Corrigan & Shapiro, 2010), as well as people who have contracted HIV/AIDS (e.g. Earnshaw, Bogart, Dovidio, & Williams, 2013; Herek, & Capitanio, 1997; Werth & Lord, 1992; Yiu, Mak, Ho, & Chui, 2010). Moreover, the effects of contact have been tested with both cross-sectional and longitudinal research designs (e.g., Al Ramiah & Hewstone, 2012; Binder et al., 2009; Brown, Eller, Leeds, & Stace, 2007; Daiber, 2017; Eller & Abrams, 2004; Levin, van Laar, & Sidanius, 2003; Nel, 2017; Swart, Hewstone, Christ, & Voci, 2011), and within the experimental laboratory setting (e.g., Blascovich, Mendes, Hunter, Lickel, & Kowai-Bell, 2001; Husnu & Crisp, 2010; Joyce & Harwood, 2012; Lemmer & Wagner, 2015; Mazziotta, Mummendey, & Wright, 2011; Openshaw, 2015; Turner, Crisp, & Lambert, 2007). The experimental and longitudinal contact research has provided strong support for the contact-prejudice relationship, confirming a causal pathway from positive intergroup contact to reduced prejudice.

Of particular relevance to the present study, intergroup contact has been shown to work in contexts that are marked by a history of intergroup conflict (Hewstone et al., 2014). For example, Hewstone and his colleagues have regularly found that contact between Catholic and Protestants in Northern Ireland, a society marked by conflict between these two religious groups, was associated with a decrease in

outgroup prejudice (e.g., Hewstone et al., 2006; Paolini, Hewstone, Cairns, & Voci, 2004; Tausch et al., 2007; see also Al Ramiah & Hewstone, 2013). Similar results have been found within the Serbian context, a country with a history of war and violent conflict (Leonard, Damjanovic, Simic, & Marshall, 2016; Nikolić-Ristanović, 2015; Penic, Elcheroth, & Morselli, 2017). Meernik and colleagues (2016) examined the effects of intergroup contact on reconciliation tendencies amongst a sample of adolescents from the former Yugoslavia. They found that adolescents in mixed ethnic schools were more likely to believe in the likelihood of reconciliation than those in ethnically homogenous schools. Intergroup contact's ability to reduce prejudice in post-conflict settings suggests that it may be particularly relevant within South African society, a country that continues to be marked with prejudice between ethnic groups.

Support for the Contact Hypothesis in South Africa

Intergroup contact research pre-1994.

Research into the effects of intergroup contact during South Africa's Apartheid years provide mixed results. For example, some research into intergroup contact during this time demonstrated a negative intergroup contact effect (i.e., that intergroup contact was associated with *greater* intergroup prejudice, contrary to the predictions of the contact hypothesis). For example, Mynhardt (1982, cited in Mynhardt & du Toit, 1991) examined the attitudes of White English-speaking adolescent girls attending ten private, mixed ethnicity, high schools. Mynhardt (1982) found that those students who had contact with their black (African) classmates reported significantly more negative attitudes towards the outgroup than those who had no intergroup contact. Mixed results were also reported in Nieuwoudt's (1973, cited in Mynhardt & du Toit, 1991) study of the effects of intergroup contact on the attitudes of white English- and Afrikaans-speaking military recruits. Nieuwoudt (1973) found that only 25.90% of the recruits demonstrated an improvement in their outgroup attitudes, while the same percentage of recruits demonstrated a deterioration of their outgroup attitudes (cf. Melamed, 1969). These negative contact effects could have been the result of a number of influencing factors. The contact settings could have been particularly anxiety provoking, oppressive or hierarchical in

nature (Stephan & Stephan, 1985), the contact itself may have been particularly violent or negative (Finchilescu & Tredoux, 2008). Moreover, during this time the Apartheid ideology was deeply entrenched within the white South African population, and positive contact between ethnic groups was actively discouraged (Finchilescu & Tredoux, 2008).

Despite these negative findings, a number of South African studies undertaken during Apartheid demonstrated the prejudice-reducing effects of intergroup contact. Much research on intergroup contact in the Apartheid era, when segregation between ethnic groups was at its height, found that intergroup contact was associated with decreased prejudice (e.g., Finchilescu, 1988; Luiz & Krige, 1981, 1985). Although these studies only found prejudice-reducing effects when using some measures (and not others), and only for certain groups, these results were promising given the societal norms and laws against interethnic contact at the time (Finchilescu & Tredoux, 2010). In her study of mixed Durban neighbourhoods during Apartheid, Russell (1961) found a correlation between the degree of prejudice expressed by participants and the degree of residential proximity of the outgroup. Russell's (1961) findings suggested that individuals who lived in closer residential proximity to members of their outgroup, expressed less prejudice towards the outgroup. One potential confound that may offer an explanation for these results, however, may be that of self-selection: that individuals with lower prejudice chose to live in closer residential proximity to members of other ethnic groups.

Several contact studies in the Apartheid era examined intergroup contact in the workplace, where intergroup contact was more prevalent than in the general society. Spangenberg and Nel (1983) compared the outgroup attitudes of white lecturers employed at a so-called coloured university (who had contact with coloured co-workers and students), with those of white lecturers employed in an all-white university (who had limited/no contact with coloured individuals). The lecturers working at the coloured university showed more positive attitudes towards coloured South Africans than those lecturers working at the all-white university. Furthermore, this study found a positive relationship between the quality of cross-group friendships and outgroup attitudes. In her study of the effects of intergroup contact among nurses training at four private hospitals, Finchilescu (1988) found that those white nurses who experienced intergroup contact had significantly more positive intergroup

attitudes than those nurses who experienced little or no intergroup contact (cf. Bornman & Mynhardt, 1991; Van Dyk, 1990).

Intergroup contact research post-1994.

The post-Apartheid intergroup contact literature in South Africa provides further support for the contact hypothesis. For example, Harber (1998) examined the outgroup attitudes of learners from a newly desegregated school in South Africa. This school allowed for intergroup contact to take place between its learners, and the school actively attempted to foster the so-called 'optimal conditions' for positive contact prescribed by Allport (1954). Harber (1998) found that these learners demonstrated significantly more positive attitudes towards their outgroup. Gibson (2004a) conducted a series of surveys in 2000 and 2001, and found a significant positive relationship between the quantity of reported intergroup contact and a measure of positive race reconciliation amongst a nationally representative South African sample. Various studies examined the contact-prejudice relationship within school and university settings. For example, Holtman, Louw, Tredoux and Carney (2005) conducted research involving 1,119 high school students at 18 South African schools. They found that intergroup contact was a significant predictor of more positive outgroup attitudes for white-, black (African)-, and coloured- South African learners. In their study of 2,559 black (African) and white university students, Finchilescu, Tredoux, Muianga, Mynhardt, and Pillay (2006) reported a significant association between the quantity of intergroup contact and prejudice for both ethnic groups. They noted that cross-group friendship was a significant predictor of positive intergroup relations.

More recently, in their large-scale study on white and coloured South African high school students, Swart, Hewstone, Christ, and Voci (2010) reported that intergroup contact (in the form of cross-group friendships) was significantly negatively associated with a number of prejudice measures. Specifically, they found that contact was negatively correlated with negative action tendencies, and positively correlated with positive outgroup attitudes and increased outgroup variability for both the white- and coloured- samples respectively. Tredoux and Finchilescu (2010) examined the contact-prejudice relationship using a diverse non-probability sample

of white and black (African) university students from four South African universities. They found that greater intergroup contact was significantly correlated with two measures of prejudice, namely affective prejudice (intergroup anxiety; which refers to the anxious or fearful response when in the presence of, or interacting with outgroup members, Stephan & Stephan, 1985) and social distance, for both ethnic groups. Furthermore, Tredoux and Finchilescu (2010) noted that the greater the quality of intergroup contact the more strongly it was correlated with reduced prejudice. In her cross-sectional study of a sample of white South African Stellenbosch University students, Nel (2017) found that intergroup contact (in the form of cross-group friendships) with black (African) students significantly predicted improved attitudes (empathy generalisation) towards, not only, black (African) South Africans, but also towards coloured South Africans.

The patterns of findings described above were replicated by Swart et al. (2011), in a three-wave longitudinal study amongst coloured high school students in South Africa. They found that cross-group friendships with white South Africans were significantly associated with a decrease in negative action tendencies, and an increase in positive outgroup attitudes and perceived outgroup variability relating to white South Africans in general over time. Experimental evidence of the effects of intergroup contact has also been found in the South African context. Openshaw (2015) conducted a three-wave longitudinal experimental study amongst a sample of white South African students (N = 58) registered at Stellenbosch University. Openshaw (2015) tested whether direct contact with a black (African) confederate could reduce prejudice and found that contact significantly reduced negative outgroup attitudes and improved outgroup trust towards black (African) South Africans.

Since the fall of Apartheid, a small number of programmes have been developed with the aim of improving intergroup relations in South Africa. A central feature of these programmes is that they bring members of different ethnic groups together. During these contact sessions individuals work together on shared tasks. The majority of these programmes have reported a decline in prejudice as a result of intergroup contact taking place (e.g., Druker, 1996; Kim, 2015; Louw-Potgieter, Kamfer, & Boy, 1991; Naidoo, 1990; Nott, 2000; Wilhelm, 1994). The results of these contact programmes and the findings of the contact studies discussed above present

an optimistic view of the possibilities that intergroup contact may present for the improvement of ethnic relations within the South African context.

Since the establishment of the contact hypothesis as a fully-fledged theory, subsequent research has expounded on the various dimensions of intergroup contact that might operate to reduce prejudice. In addition to showing the prejudice-reducing effects of contact, researchers have started to examine the many factors at play within an intergroup contact situation, finding converging evidence. For example, studies have examined the importance of Allport's (1954) optimal conditions (e.g. Koschate & van Dick, 2011), providing suggestions for additional facilitating conditions. Further studies have investigated the various mediators and moderators of the contact-prejudice relationship, examining effects such as anxiety reduction, increased intergroup trust and empathy (e.g. Pettigrew & Tropp, 2008; Vezzali, Giovannini, & Capozza, 2010). The following section will provide an overview of the various factors that may influence the effects of contact, including group status, prior levels of prejudice and the quality of the contact (e.g. Dhont, van Hiel, & Hewstone, 2014, Tropp, 2007, Tropp & Pettigrew, 2005b).

Factors Influencing the Effects of Intergroup Contact

Research on intergroup contact has demonstrated, beyond doubt, that contact between members of different groups results in a reduction in various forms of prejudice. Furthermore, the positive effects of contact occur across a variety of different groups and contexts. Additional studies have examined the various factors that may impact on the potency of these positive effects. For example, Pettigrew and Tropp (2006) found that the prejudice-reducing effects of contact were greater when the contact setting encompassed Allport's (1954) optimal conditions. A number of additional factors have been identified, and the following section will discuss three of them in turn; namely the individuals' prior level of prejudice, the individuals' group status, and the quality of the intergroup contact.

Individuals' Prior Level of Prejudice

In his early formulation of the contact hypothesis Allport (1954) noted that an individual's prior level of prejudice (i.e. prior to engaging in intergroup contact) may serve as a possible obstacle to prejudice reduction. Allport (1954) stated that the positive effects of contact were unlikely to occur if prejudice was "deeply rooted in the character of the individual" (p. 281). Some studies have found support for Allport's (1954) claim, demonstrating that when highly-prejudiced individuals engage in intergroup contact with the outgroup they exhibit an impairment in their executive functioning. These studies also suggest that there is an increase in negative attitudes when pressure is placed on individuals to suppress their prejudice (e.g. Richeson & Shelton, 2003; Vorauer & Kumhyr, 2001). However, in spite of Allport's (1954) early reservations, recent evidence has emerged to suggest that intergroup contact may be *particularly* beneficial in reducing prejudice amongst those individuals who may need it the most (i.e., those individuals who may be characterised as having 'prejudiced personalities'). This evidence is described in more detail below.

Two personality types have been found to exhibit highly-prejudicial tendencies; namely the Right-wing Authoritarian Personality Type (RWA; Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950; Baars & Scheepers, 1993) and those with a high Social Dominance Orientation (SDO; Hewstone, Rubin, & Willis, 2002; Sidanius, & Pratto, 1999). Individuals who have a predisposition towards RWA express a desire for sameness and conformity, and show a particular aversion towards diversity (Stenner, 2005). Research has found a positive correlation between RWA and various measures of prejudice (e.g. Altemeyer, 1998; Asbrock & Kauff, 2015; Funke, 2005; Manganelli Rattazzi, Bobbio, & Canova, 2007). Manganelli Rattazzi et al. (2007), in their study of prejudice against Islamic immigrants in Italy, found a significant relationship between RWA and measures of both subtle and blatant prejudice. In their study of German undergraduate university students, Asbrock and Kauff (2015) reported a negative relationship between RWA and positive diversity beliefs.

Individuals whose personalities exhibit a high SDO, on the other hand, demonstrate an inclination towards maintaining intergroup hierarchies, and promote

the domination of their ingroup over the outgroup (Hewstone et al., 2002). Research has also found a positive relationship between SDO and outgroup prejudice (e.g., Bilewicz, Soral, Marchlewska, & Winiewski, 2015; Henry, Sidanius, Levin, & Pratto, 2005; Passini & Morselli, 2016). In their national study of Polish adolescents and adults, Bilewicz et al. (2015) found that SDO was positively related to the acceptance of hate speech, as well as general outgroup prejudice towards minorities. Comparatively, when examining the SDOs of a sample of U.S. citizens, Henry and colleagues (2005) found that those individuals higher in SDO showed greater support for increased violence against the Middle East.

Despite this, research has shown that intergroup contact is especially effective amongst those individuals who are highly prejudiced. For example, Dhont and Van Hiel (2009) investigated the effect of intergroup contact on the prejudice levels of those individuals high on RWA and SDO amongst two samples of Flemish participants. Their findings revealed that those individuals high on RWA and SDO exhibited a significantly greater decrease in blatant prejudice towards foreigners when they engaged in more positive intergroup contact with them, than those individuals low on RWA and SDO (cf. Asbrock, Christ, Duckitt, & Sibley, 2012; Dhont et al., 2014; Hodson, 2011; Shook, Hopkins, & Koech, 2016). Moreover, intergroup contact is effective amongst highly prejudiced individuals even when they are given no choice regarding the contact. Hodson (2008) explored the relationship between contact, SDO, and prejudice, across two studies amongst a sample of black and white inmates serving their sentence at a British prison. The prison system is rife with conflict and domination and offers little choice regarding intergroup interactions. Hodson's (2008) results showed how white inmates with a high SDO demonstrated significantly more positive outgroup attitudes towards their black inmates, and had lower levels of ingroup bias, when they engaged in more positive intergroup contact, as compared to those white inmates lower in SDO.

Perhaps more surprising are the findings reported by Asbrock, Gutenbrunner and Wagner (2013), who discovered that those participants high in RWA demonstrated a decrease in prejudice after merely imagining a positive intergroup contact encounter. Specifically, those participants scoring high in RWA showed less negative emotions towards the outgroup, and displayed an increase in willingness to participate in future contact with the outgroup. Additionally, Pettigrew and Tropp's

(2006) large-scale meta-analysis demonstrated the greatest positive contact effects for those individuals who were more prejudiced, less motivated, and who had no choice regarding their intergroup contact (mean $r = .28$), compared to those individuals who had a choice regarding their engagement in the contact situation (mean $r = .22$). These findings are promising as they demonstrate that even the most prejudiced individuals in society will benefit from the positive effects of intergroup contact.

Prior levels of prejudice may be of particular importance within the South African context. As mentioned earlier, the Apartheid system, with its emphasis and enforcement of ethnic separation and segregation, bred a culture of ethnic prejudice that had become entrenched within South African society (Bornman, 2011). A number of studies have shown that this ethnic prejudice persists in post-Apartheid South Africa (Durrheim & Motse, 2006; Gibson, 2004b; IJR, 2013). In his study on ethnic relations, Schlemmer (2001, as cited in Bornman, 2011) found that White- (73.00%), Black (African)- (65.00%), and Coloured- (66.00%) South Africans felt that they trusted members of their outgroup less since the fall of Apartheid. Similarly, Gibson (2010) found that from the years 2001 to 2004, Black (African) South Africans showed significantly more negative attitudes (i.e. shifted away from reconciliation) towards white South Africans. Studies have also shown that little to no social contact between these groups is taking place (see Chapter One). As discussed above, positive intergroup contact is particularly beneficial for highly prejudiced individuals. For this reason creating opportunities for positive intergroup contact may be a significant step for the improvement of intergroup relations in South Africa.

Group Status

The social status of the individuals' group within the contact setting may serve as an obstacle for the positive effects of contact. Although Allport (1954) suggested that equal status between members of a contact situation serves as an optimal condition, enhancing the prejudice-reducing effects of contact, establishing equal status between groups is not always possible in reality. More often than not, the individuals involved in the contact setting are likely to have diverging group statuses.

As such, individuals are likely to have different contact experiences, which may impact the strength of positive intergroup contact outcomes.

Research has documented the contrasting intergroup contact experiences of minority- and majority-status groups. Some research has reported non-significant contact effects for minority-status group members (e.g. Binder et al., 2009). However, the majority of research has reported a smaller (yet still significant) contact effect for minority-group members. Tropp and Pettigrew (2005a) found considerable meta-analytic support for these differing effects. They reported that the prejudice-reducing effects of intergroup contact were significantly weaker for the minority-status groups (mean $r = .18$, $p < .01$), when compared to the majority-status groups (mean $r = .23$, $p < .01$). It is important to point out here, however, that they nevertheless found a significant contact-prejudice relationship for members of both status groups. Tropp (2007) conducted a national survey using participants in the U.S. and reported similar findings. Tropp (2007) observed significant positive effects of intergroup contact for both white Americans and black African Americans, but noted that these effects were significantly weaker (though still significant) among the black minority sample (cf. Hopkins & Kahani-Hopkins, 2006).

Several explanations have been put forth to explain these differing intergroup contact effects that may result from a difference in group status. Research has revealed that minority-status group members may interpret intergroup encounters with the majority-status group differently, when compared to how the majority-status group interprets their intergroup interactions (Tropp, 2006). Additionally, the minority/disadvantaged group may have more experiences with being confronted with prejudice, and may therefore have a greater anticipation of a negative contact experience when encountering intergroup interactions (Binder et al., 2009; Tropp & Pettigrew, 2005b). Minority-group members may also be more aware of their unequal status during intergroup interactions, and recognise that they may be evaluated in terms of their group status. As such, they may anticipate a prejudicial response from the majority-group member (Tropp, 2006; Tropp & Pettigrew, 2005a).

However, despite these findings, intergroup contact has consistently been shown to reduce prejudice for both minority- and majority-group members (see the meta-analysis by Tropp & Pettigrew, 2005a). Two studies undertaken within the

South African context provide evidence that contact is capable of decreasing prejudice amongst both minority- and majority-status groups. In their study of white (majority-status) and coloured (minority-status) high school learners, Swart et al. (2010) discovered a significant negative relationship between intergroup contact and a number of prejudice measures for both the minority and majority samples. More notably, in an additional study, Swart et al. (2011) found significant longitudinal effects of the contact-prejudice relationship amongst a sample of coloured minority group members, demonstrating contact's positive effects on the minority-status group over time.

In the South African context, it becomes increasingly difficult to assign a group with a 'minority' or 'majority' status, as a group's status may change depending on the context. Nevertheless, the country's long history of legally and institutionally enforced ethnic inequality still impact on the experience of everyday interactions. For example, the black (African) population hold the political power in the country (with an ANC run government), yet the white population continue to hold the socio-economic advantage (Swart et al., 2011). Economic inequality in South Africa corresponds largely with the previously imposed ethnic divisions, with sizable percentages of black (African) South Africans remaining unemployed and in poverty 20-years post-Apartheid. Statistics have shown that 40.00% of black (African) South Africans remain unemployed, compared to only 8.00% of white South Africans (SSA, 2014), while 54.00% of black (African) South Africans live in absolute poverty, compared to 0.80% of white South Africans (SSA, 2011). In some sense, then, racial Apartheid has been replaced with a socio-economic Apartheid, which continues to affect those groups repressed during the Apartheid era (Gibson, 2015; Terre Blanche, 2006).

Similarly, although black (African) South Africans make up the numerical majority of the population (79.20%), in some contexts, for example Stellenbosch University, they may form the numerical minority (SSA, 2015). Additionally, South African minority- and majority-status groups share vastly different experiences and histories within South African society (see Chapter One). Given this, minority- and majority-status groups could have contrasting experiences, and subsequent outcomes, within the same contact situation. As such, the influence of group status may be particularly important within the current South African context. For the above

reasons, it may be especially important to examine the effects of contact and diversity separately for the minority- and majority-status groups in the present study. Having examined the potential influence of group status on the relationship between intergroup contact and prejudice reduction, I turn now to a discussion of quality of contact as a factor influencing contacts' positive effects, with specific reference to the importance of cross-group friendships.

Quality of Intergroup Contact

Previous research on intergroup contact traditionally examined the influence of quantity of contact on prejudice reduction. In order to accomplish this, researchers measured the amount or frequency of direct, face-to-face contact that occurred between groups and correlated this with self-reported levels of prejudice. In the original formulation of the contact hypothesis, Allport (1954) highlighted that increases in the amount, or quantity, of contact between groups would be associated with a decrease in prejudice. Studies have found support for this effect (e.g. see the meta-analysis by Pettigrew & Tropp, 2006). Nonetheless, Allport (1954) did acknowledge the importance of the quality of contact when he put forth his optimal conditions. A growing body of evidence suggests that quantity of contact alone is insufficient for establishing enduring contact effects, and that the quality of contact may be an increasingly more important predictor of prejudice reduction than the quantity of contact (e.g., Islam & Hewstone, 1993; Mähönen, Jasinskaja-Lahti, & Liebkind, 2011; Pettigrew, 1997, 1998; Pettigrew & Tropp, 2006).

In an examination of the quantity and quality of intergroup contact experienced by Hindu ($N = 65$) and Muslim ($N = 66$) businessmen in Northern India, Islam and Hewstone (1993) found that both quantity and quality of contact between these two groups were significantly negatively associated with prejudice. Yet, the prejudice-reducing effects were significantly stronger for quality of contact ($\beta = -.48$; $p < .001$), than quantity of contact ($\beta = -.12$; $p < .05$). Comparable findings were reported by Tropp and Pettigrew (2005b) in their national U.S. study. Tropp and Pettigrew (2005b) surveyed the quantity and quality of intergroup contacts amongst a sample of white Americans, and reported that the quality of their contact with African Americans was a greater predictor of positive attitudes towards African Americans in

general than quantity of their contact (for more recent studies see Mähönen et al., 2011; McGuigan & Scholl, 2007; Tausch et al., 2007).

These studies emphasise the fact that the type of intergroup contact occurring may have differential effects on prejudice reduction, and that contact that is high in quality may be particularly effective at reducing prejudice. If at all possible, intergroup interactions should be high in both quantity and quality of contact (Pettigrew, 1998). Intergroup contact situations embodying a greater quantity and quality of contact may be an especially powerful tool for improving intergroup relations. Studies have found this combination of quantity and quality of contact (i.e., quantity X quality index) to be a strong predictor of decreased prejudice (e.g., Cehajic, Brown, & Castano, 2008; Tam et al., 2007).

The importance of cross-group friendships.

Cross-group friendships typically involve intergroup contact that is high in both quantity and quality. Additionally, cross-group friendships are said to embody many of Allport's (1954) optimal conditions for contact. For example, cross-group friendships characteristically involve cooperation and the sharing of common goals or interests, and the individuals within the friendship usually share an equal status (Pettigrew et al., 2011). Moreover, cross-group friendships demonstrate a greater quality of contact, which is more intimate in nature, and encourages self-disclosure, trust and forgiveness (Hewstone et al., 2006; Pettigrew, 1997). Cross-group friendships offer contact that is more stable, consistent, and long lasting (Pettigrew, 1997, 1998). Cross-group friendships have also been found to be related to attitudes that remain stable over time and are more easily accessible (Pettigrew et al., 2011; Turner, Hewstone, Voci, Paolini, & Christ, 2007). Moreover, the positive influence of cross-group friendships extend to individuals and outgroups who are not involved in, encouraging a broader generalisation of positive attitudes (Pettigrew et al., 2011).

Therefore, cross-group friendships may enhance the effects of intergroup contact. An increasing number of research studies have demonstrated the importance of cross-group friendships within the contact-prejudice relationship (e.g., Barlow, Louis, & Hewstone, 2009; Davies, Tropp, Aron, Pettigrew, & Wright, 2011;

De Tezanos-Pinto, Bratt, & Brown, 2010; Dixon et al., 2010b; Gibson & Claassen, 2010; Hewstone et al., 2014; Hodson et al., 2009; Page-Gould, Mendoza-Denton, & Tropp, 2008; Pettigrew, 1998). Some researchers have even gone as far as to suggest that cross-group friendships should make up a fifth optimal condition for prejudice reduction (Pettigrew, 1998). In his study of 3,806 respondents from Germany, France, U.K., and the Netherlands, Pettigrew (1997) found a significant negative relationship between contact and prejudice and a positive relationship with contact and positive affect (i.e., understanding and respect for the outgroup). More importantly, Pettigrew (1997) reported a significantly stronger positive relationship between contact and affective prejudice when the contact involved cross-group friendships (mean $r = -.22$, $p < .001$), rather than contact between co-workers (mean $r = -.03$, $p < .001$), or neighbours (mean $r = -.01$, $p < .001$). What Pettigrew's (1997) study demonstrates is that casual intergroup contact is a weaker predictor of prejudice reduction when compared to cross-group friendships. This highlights the potential of cross-group friendships for improved ethnic relations.

Furthermore, the important role of cross-group friendships for reducing prejudice has found support in longitudinal studies. For example, Levin et al. (2003) tested the effects of cross-group friendships on outgroup attitudes in their longitudinal study using a sample of white ($N = 311$), African-American ($N = 67$), Asian ($N = 389$) and Latino ($N = 252$) university students from the University of California. They collected data at five separate occasions and found that participants with more self-reported cross-group friendships in their second and third years of university exhibited less outgroup prejudice in their final year at university. Moreover, Binder and colleagues (2009) examined the longitudinal effects of cross-group friendships amongst a sample of German ($N = 1,509$), Belgian ($N = 1,034$), and English ($N = 1,124$) school learners. They noted that both the quantity and quality of contact had a positive effect on two types of prejudice (decreased social distance and less negative intergroup emotions). Most importantly, Binder et al. (2009) noted that the quality of contact, in the form of cross-group friendships, had much larger effect sizes (social distance: mean $r = -.10$, $p < .001$; negative emotions: mean $r = -.14$, $p < .001$), and played a more prominent role, than the quantity of contact (social distance: mean $r = -.05$, $p < .05$; negative emotions: mean $r = -.10$, $p < .001$). Longitudinal research thus validates the prejudice-reducing influence of cross-group

friendships over time, demonstrating the potential of cross-group friendships for the improvement of prejudiced attitudes.

Additionally, experimental research has provided further evidence of the fundamental role of cross-group friendships in intergroup contact settings. Experimental studies have demonstrated that establishing new cross-group friendships can result in a less intergroup anxiety as well as a reduction in prejudice. For example, Page-Gould and colleagues (2008) induced friendships between Latino and white American participants over three friendship meetings. They found that respondents who had made a cross-group friend displayed lower levels of intergroup anxiety, providing experimental evidence for the positive effects of cross-group friendships (cf. Wright, Aron, & Tropp, 2002; Wright, Brody, & Aron, 2005). Studies have also shown that cross-group friendships are particularly likely to lead to prejudice reduction amongst individuals high in RWA and SDO (e.g., Asbrock et al., 2013; Dhont & van Hiel, 2009; Dhont et al., 2014; Hodson, 2008, 2011; Hodson et al., 2009).

The most profound support for the significant role of cross-group friendships within the intergroup contact literature can be found in two influential meta-analyses undertaken by Pettigrew and Tropp (2006) and Davies et al. (2011). Firstly, in their comprehensive meta-analysis Pettigrew and Tropp (2006) noted that those studies that measured cross-group friendships as a form of intergroup contact reported a significantly larger negative correlation with prejudice (mean $r = -.25$, $p < .05$) than those studies that used alternative measures of direct intergroup contact (mean $r = -.21$, $p < .05$). This indicates that, when compared to other forms of contact, cross-group friendships have a significantly greater prejudice-reducing effects.

A more recent meta-analysis conducted by Davies et al. (2011) set out to examine whether different operationalisations and measures of cross-group friendship (e.g. cross-group friendships measured in terms of the quantity of outgroup friends, closeness or self-disclosure to outgroup friends, time spent with outgroup friends, perceived embodiment of outgroup friends within the self, and the proportion of outgroup members within their friendship network) produced different contact effects. Davies et al. (2011) examined 154 studies, which included a large proportion of longitudinal contact research, and found that cross-group friendships

significantly predicted more positive outgroup attitudes. Moreover, these effects were enhanced when cross-group friendships were measured in terms of the proportion of outgroup members within the friendship network (mean $r = .24$, $p < .001$), the quantity of outgroup friends (mean $r = .22$, $p < .001$), the perceived embodiment of the outgroup within the self (mean $r = .20$, $p < .001$), and lastly the closeness to the outgroup friends (mean $r = .18$, $p < .001$). This meta-analysis provides valuable insight regarding the ideal measures for cross-group friendships within contact studies and informed the measure of direct contact for the present study.

Cross-group friendships and the South African context. The studies above demonstrate the particularly important role of cross-group friendships in the formation of positive intergroup relations. Having discussed the vast evidence for the positive outcomes associated with cross-group friendships it becomes apparent that this type of contact may be of special significance within the South African context and the goal of building harmonious ethnic relations. Yet, given South Africa's racialized history, opportunities for intergroup contact, and the subsequent development of cross-group friendships, are fleeting. Indeed, studies within post-Apartheid South Africa have demonstrated the lack of cross-group friendships across ethnic groups. In a nationally representative sample, Gibson (2004b) described how, across all South African ethnic groups, a large majority of participants reported having no cross-group friends. Furthermore, a large percentage of the sample acknowledged that they found it difficult to imagine ever having a cross-group friendship. Similarly, Durrheim and Dixon (2010) emphasise that ethnic isolation between groups persists, with 60.00% of black (African), and 30.00% of white-South Africans having no intimate contact (i.e. cross-group friendships) with members of other ethnic groups (cf. Tredoux & Finchilescu, 2010).

Despite these findings, there are South African studies that have found that where cross-group friendships do occur they predict a reduction in prejudice. The findings of these South African studies replicate the results of those international studies discussed above. Two cross-sectional studies carried out by Swart and colleagues (2010) found support for the importance of cross-group friendships in prejudice reduction amongst two samples of high school students in South Africa. In

their first study, Swart et al. (2010) investigated the cross-group friendships of coloured ($N = 196$) and white ($N = 186$) high school students with black (African) South Africans. It was found that cross-group friendships with black (African) South Africans were significantly correlated with less negative outgroup attitudes towards black (African) South Africans in general for both the white and coloured samples respectively. In their second study, Swart et al. (2010) examined the cross-group friendships between white ($N = 171$) and coloured ($N = 191$) South Africans. They reported that cross-group friendships were significantly positively correlated with positive outgroup attitudes for both samples, as well as a reduction in intergroup anxiety (Swart et al., 2010).

Similar results were reported by Swart et al. (2011) in a three-wave longitudinal study amongst a sample of coloured high school students ($N = 465$). Swart et al. (2011) found that cross-group friendships with white South Africans resulted in significantly more positive outgroup attitudes, and a decrease in negative action tendencies towards white South Africans in general. Additionally, these cross-group friendships resulted in an increase in affective empathy and a decrease in intergroup anxiety.

Given the above, it is apparent that cross-group friendships are of specific importance within the context of fostering positive intergroup relations within South Africa, because they demonstrate a greater quality of contact (Davies et al., 2011). However, it is only through contact that individuals can develop cross-group friendships (Pettigrew, 1998). For this reason, the opportunities presented to individuals to engage in contact with members of different groups may be vitally important. The diversity within a given context may be one factor that influences whether intergroup contact has the opportunity to take place. The following section explores the possible influences of diversity on intergroup contact.

The Diversity Paradox

South Africa has been a democracy for over 20 years and since the fall of Apartheid various desegregation efforts have been made to increase the diversity within everyday spaces (Christopher, 2005; see Chapter One). Internationally, researchers have become progressively more interested in the possible

consequences of increased ethnic diversity (e.g., Bécares, Stafford, Laurence, & Nazroo, 2011; Gundelach, 2014; Pettigrew, Wagner, & Christ, 2010; Putnam, 2007; Rae, Newheiser, & Olson, 2015; Sturgis, Brunton-Smith, Read, & Allum, 2010). Increasing diversity may present a number of challenges for social cohesion, intergroup relations, and prejudice, although it may also offer important opportunities for promoting intergroup understanding. An important goal for social psychologists is to uncover the ways in which to take advantage of the increasing diversity of an ever-more globalised world in order to achieve improved intergroup relations. There are alternative explanations regarding the possible consequences of diversity on intergroup relations, offering conflicting views and presenting us with what has come to be known as the diversity paradox (Pettigrew et al., 2010). Two of these diverging theories, conflict theory and the opportunity hypothesis, are particularly relevant to the present study and are discussed in more detail below.

Conflict Theory

Debates emphasising the negative consequences of diversity draw on the notion of group threat and rely on conflict theory to substantiate their arguments. Conflict theory, or constrict theory, maintains that increased ethnic diversity evokes intergroup conflict (Bobo, 1999). The theory is driven by the idea that the subjective experience of threat towards the ingroup enhances prejudice towards the outgroup (Stephan & Stephan, 2000). These perceived threats can take a variety of forms. For example, individuals may anticipate rejection from the outgroup member; they may come to identify distinct differences in the values or belief systems between the ingroup and the outgroup; they may be confronted with perceived or actual conflicting group interests; or there may be competition over scarce resources (Tropp & Page-Gould, 2015). These perceptions of threat, as well as the presence of on-going violence and hostility, can provoke intergroup conflict and prejudice, and may undermine the effectiveness of intergroup contact. As such, conflict theory takes up a negative evaluation of the consequences of diversity.

This side of the diversity debate was brought to the fore by Putnam (2007). Using a large general population sample from neighbourhoods in the United States, Putnam (2007) found that diversity had negative outcomes on a number of attitudes

and behaviours related to social capital. Specifically, participants living within more ethnically diverse neighbourhoods recorded lower levels of trust towards their neighbours and the outgroup. This theory, therefore, suggests that an increase in diversity may have a negative impact on a number of individual-level outcomes (Bobo, 1999). An increase in diversity may result in amplified levels of prejudice, intergroup anxiety, and social isolation, and result in decreased intergroup trust (Cernat, 2010; Pettigrew et al., 2010; Putnam, 2007). Conflict theory argues that as diversity increases, the ethnic majority will become more hostile towards the minority (Blalock, 1967). Therefore, it assumes that increasing diversity may evoke perceptions of threat and anxiety, which will decrease intergroup contact, social isolation and outgroup trust, and increase discriminative outgroup attitudes and intergroup hostility.

Putnam's (2007) conclusions regarding the negative consequences of diversity resulted in a series of studies examining the possible effects of diversity. Rae et al. (2015) found that states in America with larger proportions of African-American inhabitants had greater levels of implicit and explicit in-group bias amongst both black and white respondents. In another study of nearly 4,000 participants across 148 neighbourhoods in Brisbane, Australia, Wickes, Zahnow, White and Mazerolle (2013) found that social cohesion and the frequency of interactions with neighbours are diminished in suburbs that are more ethnically diverse. Similarly, Guest, Kubrin, and Cover (2008) found that white residents living in ethnically diverse neighbourhoods in Seattle exhibited less trust and displayed fewer helping tendencies. These studies provided support for Putnam's (2007) pessimistic claims (cf. Alesina & La Ferrara, 2002; Dinesen & Sønderskov, 2012; Laurence, 2011; Letki, 2008).

However, Van der Meer and Tolsma's (2014) recent meta-analytic review of the literature examining the effects of diversity provided mixed evidence. Their review included the results of 90 of the most recent studies, drawing from both published and unpublished studies, including working and conference papers, reports and book chapters (Van der Meer & Tolsma, 2014). The meta-analysis included studies from the United States, the United Kingdom, Europe, and Canada. The review notes that most of the evidence supporting conflict theory comes from studies in the U.S. These mixed findings may be present for a number of reasons. Firstly, the countries

involved in these studies have distinct and varied histories. Secondly, the studies cover geographical areas that vary in size (i.e. some studies investigate diversity at the neighbourhood level, while other studies examine diversity at the country level). Thirdly, these studies utilize different control variables. Lastly, and perhaps most importantly, what a number of the above studies fail to account for is the possibilities that an increase in diversity may offer in terms of intergroup contact (Hewstone, 2015). The opportunity hypothesis takes a more optimistic view regarding the consequences of diversity by focusing on the importance of diversity for creating opportunities for positive intergroup contact.

The Opportunity Hypothesis

According to the opportunity hypothesis (Hallinan & Smith, 1985), diverse contexts offer individuals more opportunities for intergroup contact (Blau, 1977; Christ et al., 2014; Pettigrew et al., 2010). In other words, diversity allows individuals to come into direct face-to-face contact with members of the outgroup. The opportunity hypothesis suggests that, as the number of minority members in a contact situation increases, so does the likelihood that a majority member will select a minority member as a friend (Echols & Graham, 2013; Hallinan & Smith, 1985). The opposite holds true as well, as the number of minority members in a contact situation decreases; the likelihood that a majority member will select a minority member as a friend also decreases. In this way, the structural diversity (i.e., the availability of different ethnic partners within a context) may influence the opportunities for intergroup contact, which may in turn influence the likelihood of the prejudice-reducing effects of intergroup contact (Clarke & Antonio, 2012; Schneider, 2008). As discussed previously, numerous studies have shown that intergroup contact reliably reduces prejudice (Pettigrew & Tropp, 2006).

A number of studies have shown that people who live in more diverse settings do engage in more intergroup contact (e.g., Gundelach, 2014; Lee & Bean, 2010; Schmid, Al Ramiah, & Hewstone, 2014; Schlueter & Scheepers, 2010; Wagner, Christ, Pettigrew, Stellmacher, & Wolf, 2006). In their study of 2,545 native Dutch residents in 35 municipalities Sluiter, Tolsma and Scheepers (2015) found that diversity was positively related to contact with outgroup members. The higher the

proportion of outgroup members in their neighbourhood, the more contact native Dutch residents had with their ethnic outgroup. Similarly, Huijts, Kraaykamp and Scheepers (2014) found that ethnic diversity in Dutch neighbourhoods resulted in increased contact with ethnic outgroups (namely contact between native Dutch and Turkish, Moroccan, Surinamese and Antillean neighbours). This increased diversity offered more opportunities for interaction. Bécares and colleagues (2011) examined the effects of diversity amongst a nationally representative sample of adults in England and Wales. Their findings suggest that residential areas that are ethnically heterogeneous display greater levels of social cohesion, compared to ethnically homogenous residential areas. In their study of contact opportunity in neighbourhoods the Netherlands, Havekes, Uunk and Gijsberts (2011) found that structural diversity had a positive effect on outgroup attitudes (cf. Barth et al., 2013).

Further studies have provided evidence that increased diversity is associated with increased intergroup contact; which is in turn associated with decreased prejudice. Gundelach (2014) examined the influence of diversity on intergroup contact and trust amongst a sample of 70,000 participants nested within 47 countries. In this cross-national analysis, she found a significant positive relationship between diversity and intergroup contact and positive intercultural exchange, which in turn was related to an increase in outgroup trust (cf. Perry, 2013; Quillian & Campbell, 2003; Wagner et al., 2006). Similarly, in their national survey of British participants, Schmid and colleagues (2014) found that increased diversity was consistently associated with an increase in intergroup contact, which in turn was associated with increased outgroup trust. Therefore, opportunities to interact with members of the outgroup may have important consequences for intergroup attitudes and prejudice reduction. These results have been replicated in a number of other contexts. In Germany it has been noted that a greater proportion of immigrants in a setting is associated with an increase in intergroup contact and, in turn, a decrease in the negative evaluations of the outgroup (Wagner et al., 2006; cf. Lancee & Dronkers, 2011; Stolle et al., 2013). Christ et al. (2014) conducted a large-scale study of the effects of diversity on intergroup contact and prejudice in neighbourhoods across a number of countries, including South Africa. The South African sample included black (African) and Coloured respondents living in neighbourhoods in Cape Town, Western Cape. They found that living within a

diverse neighbourhood results in significantly more intergroup contact. Furthermore, across all their samples Christ et al. (2014) found that those individuals living in more diverse contexts had consistently more positive outgroup attitudes.

Diversity and the University Context

The opportunity hypothesis becomes even more imperative when one takes into consideration the positive effects that intergroup contact has on a number of outcomes. Not only does contact reliably and consistently reduce prejudice towards the outgroup within a contact situation, but it also results in generalized prejudice reduction towards other outgroups not involved in the contact situation (e.g., Daiber, 2017; Lolliot et al., 2015; Nel, 2017; Pettigrew, 2009; Pettigrew & Tropp, 2006, 2011; Schmid, Hewstone, Kupper, Zick, & Wagner, 2012). Furthermore, contact has been shown to have numerous positive effects. For example, intergroup contact has been related to reduced intergroup anxiety and negative action tendencies, as well as increased intergroup trust and perspective taking (Hewstone et al., 2006; Kokkonen, Esaiasson, & Gilljam, 2014; Pettigrew & Tropp, 2008; Schmid et al., 2014; Swart et al. 2010).

A number of studies have examined the numerous effects diversity may have on a number of student outcomes within the university context (Chang, 2011). In his meta-analysis of 23 studies, Bowman (2010) found that intergroup interactions and diversity-related experiences at higher learning institutions were associated with an increase in cognitive skills (i.e., problem solving and critical thinking), cognitive tendencies, and other cognitive outcomes (cf. Chang, 2011; Chang, Astin, & Kim, 2004; Gurin, Dey, Hurtado, & Gurin, 2002). Similarly, in their study on a predominantly white university campus in the USA, Shook and Clay (2012) found that intergroup contact was related to an improved academic achievement (measured using the students grade point average [GPA]), especially for minority group students. Furthermore, they found that intergroup contact was positively related to an improved sense of belonging at university. In their 4-year longitudinal study of 2,932 university undergraduates at 28 universities, Bowman and Park (2015) found that diversity was consistently related to an improved sense of belonging, increased university satisfaction, and gains in self-confidence (cf. Shook

& Clay, 2012). Moreover, numerous studies have shown that cross-ethnic interaction is associated with an increased openness to diversity (e.g. Chang, 2011; Chang, Denson, Saenz, & Misa, 2006; Gurin et al., 2002). Gurin and colleagues (2002) explored the relationship between diversity and a number of educational outcomes among a sample of university students at Michigan University. They found that diversity was significantly positively related to openness to diversity. Additionally, they found that diversity was significantly associated with increased perspective-taking, cultural and intellectual engagement, active thinking, and academic skills.

As can be seen from the above discussion the findings regarding the consequences of diversity are mixed (see Van der Meer & Tolsma, 2014 for a meta-analytic review). These opposing theories challenge social psychologists to interrogate the most suitable approach to the challenges of diversity and take advantage of the possible opportunities that increasing diversity may present for the improvement of intergroup relations (Hewstone, 2015). The present study focused on the positive consequences that diversity has in terms of the opportunities it presents for intergroup contact to occur at a South African university, given the number of positive student outcomes associated with increased intergroup interaction.

Chapter Summary

South Africa has a long history of legally enforced ethnic segregation, which created a country in which ethnic prejudice and a lack of intergroup contact persists. Since the fall of Apartheid South Africans had hoped that intergroup prejudices would decrease and that individuals of all ethnic groups could live harmoniously. However, 23 years into the 'new' South Africa prejudiced attitudes and segregation between ethnic groups remains entrenched throughout society. An overwhelming amount of evidence suggests that one of the best ways to improve intergroup relations is to bring people of different ethnicities into contact with one another, within positive contact settings (Allport, 1954). Research has shown that intergroup contact is effective on a number of outcomes, in a range of settings, and on a variety of different people (Pettigrew & Tropp, 2006). Furthermore, intergroup contact has been shown to be effective within the South African context. It has also been

established that cross-group friendships may play a particularly important role in the creation of harmonious intergroup relations.

Therefore, if intergroup contact is an effective tool for improving ethnic relations it is important to find ways to increase positive intergroup contact within the South African context. One way in which this may be accomplished is through an increase in ethnic diversity within contact settings (i.e. universities, schools, work places). The opportunity hypothesis (Hallinan & Smith, 1985) suggests that diversity affords greater opportunities for intergroup interaction, and consequently may improve intergroup relations. Increased diversity presents opportunities for intergroup contact to occur and, as suggested by the contact hypothesis (Allport, 1954), contact between groups leads to a reduction in outgroup prejudice and improved intergroup relations.

Using the theoretical insights discussed above as its foundation, Chapter Three provides a detailed review of the research setting of the present study, demonstrating the importance of the university context for intergroup relations. This is followed by an outline of the research rationale for the present study, as well as an overview of the aims and objectives, including the hypotheses of the present research. Chapter Three concludes with a detailed discussion of the methodology, procedure, and participants.

CHAPTER THREE

DIVERSITY AND INTERGROUP CONTACT AT UNIVERSITY

One of the post-Apartheid government's main goals continues to be the improvement of ethnic relations and intergroup conflict within South Africa. However, intergroup prejudice and conflict remain one of the country's most vexing problems (see Chapter One). Despite the 22 years since the abolishment of Apartheid and its discriminatory laws, segregation between ethnic groups persists, even in the face of South Africa's increasing diversity (Christopher, 2005). This is cause for concern, since it has been established that intergroup contact, especially in the form of cross-group friendships, is the most promising way to reduce intergroup prejudice and improve ethnic relations (Pettigrew & Tropp, 2006, see Chapter Two). Moreover, intergroup contact has been shown to work in societies marked by a history conflict, such as in South Africa (e.g., Al Ramiah & Hewstone, 2013; Hewstone et al., 2014).

Although the increasing diversity in South Africa may have a number of conflicting consequences, it has been noted that diversity levels within a specific context can increase opportunities for intergroup contact, which may in turn lead to a reduction in prejudice (as described by the opportunity hypothesis presented in Chapter Two). Although numerous studies have examined the effects of diversity at the country- or neighbourhood-level (e.g., Christ et al., 2014; Rae et al., 2015), few studies have examined the consequences of diversity at a smaller, everyday level. Furthermore, while various studies have examined the influence of diversity within smaller spaces, such as schools, far fewer studies have looked at the university context. The present study, therefore, adds to the existing literature by examining a smaller group context, namely Stellenbosch University's first-year psychology students' weekly tutorial classes. This may be more meaningful than examining the university as a whole, given that it is within these smaller everyday spaces that individuals negotiate their intergroup relations (Hewstone, 2015).

Previous research in the field of intergroup contact has focused almost exclusively on the impact of intergroup contact on prejudice at the individual- or micro-level. These studies often fail to take into account the nested nature of settings. Although individuals may be residing in the same area, or attending the

same university, their everyday experiences of diversity and intergroup contact may be different given the fact that they may inhabit spaces with different ethnic compositions (Pettigrew, 2006). Contact and context are closely entwined, and for this reason it is important to examine the contextual-level effects of diversity on the contact-prejudice relationship (Stein, Post, & Rinden, 2000).

Allport (1954) himself acknowledged, through the description of his optimal conditions, how various features of the contact environment could encourage or inhibit the potential positive effects of contact. Indeed, Allport's (1954) final optimal condition for positive intergroup contact, namely that the contact is endorsed both socially and institutionally, acknowledges the fact that intergroup interactions are socially and contextually situated (Koen & Durrheim, 2010). Therefore, in context situations where there is no support for cross-group interaction, positive intergroup contact is unlikely to occur, thereby reducing the strength of contact's effects. Examining these contextual level influences becomes increasingly important because, not only may they regulate opportunities for cross-group interaction, but these contextual factors may facilitate the formation of cross-group ties, communication and intergroup cohesion (Dixon, Tredoux, & Clack, 2005). Furthermore, these contextual factors may play a role in shaping intergroup perceptions. The following section will highlight one of the key contextual-level factors that may influence opportunities for intergroup contact, namely the size and ethnic composition of the contact setting.

Size and Ethnic Composition

As discussed in Chapter Two, the ethnic composition of the contact situation (i.e. ethnic diversity) may facilitate or hinder opportunities for intergroup interaction and the subsequent formation of cross-group friendships (e.g., Joyner & Kao, 2000; Koen & Durrheim, 2010; Sigelman, Bledsoe, Welch, & Combs, 1996). As the number of outgroup members in a contact setting increases, so do the opportunities for intergroup contact (as per the opportunity hypothesis). Therefore, the more diverse a contact setting is, the more likely it will be for intergroup interactions to occur, which will in turn increase the possible formation of cross-group friendships. Majority group members cannot engage in intergroup contact if there are no minority group

members in the contact context, the same applies to minority group members (Stein et al., 2000). Without the presence of potential contact partners, individuals are left to form attitudes and opinions in the absence of any meaningful, direct (face-to-face) contact. This often leads to the maintenance of negative stereotypes and attitudes.

Similarly, the group size (i.e. the number of individuals in the contact setting) may impact on the likelihood of intergroup contact taking place. This may seem paradoxical given that increasing the size of the contact setting would result in greater opportunities for intergroup contact. However, studies have shown that when a contact setting is overly crowded, in terms of the number of individuals present, it decreases an individual's willingness to interact and associate with members of the outgroup (Clack, Dixon, & Tredoux, 2005; Davis, Seibrit, & Breed, 1966). Clack et al. (2005) noted that if the number of individuals in a contact setting becomes too dense, the probability of individuals interacting is decreased. Therefore, as the number of individuals in a contact setting increases, segregation is likely to increase. If an individual perceives a contact setting as overly crowded, they may feel threatened and respond with increased anxiety; which may decrease the likelihood of them interacting with outgroup members (Koen & Durrheim, 2010). It may also be argued that in contact settings with fewer individuals in general, there may be greater opportunities for contact that is more intimate (i.e. more personal) in nature, and that these individuals do not feel threatened by the presence of outgroup members (Koen & Durrheim, 2010).

In their observational study of 67 first-year university lectures at the University of KwaZulu-Natal in South Africa, Koen and Durrheim (2010) found that the greater the class size, venue size and density within a lecture hall, the more segregated the contact setting was. Furthermore, they noted that larger lecture venues, which accommodate larger class sizes, were associated with an increase in racial anxiety and a decrease in intimacy (i.e. contact that is more personal in nature; Koen & Durrheim, 2010). This, in turn, increased segregation between ethnic groups and decreased opportunities for intergroup contact. Their study shows how contextual factors within a contact setting may influence the opportunities for intergroup contact, and thereby impact on contacts' prejudice-reducing effects.

The Importance of the University Context

As discussed previously, an important precursor to prejudice reduction is the opportunity to engage in regular, direct intergroup contact. Despite South Africa's various desegregation efforts these opportunities for interaction remain limited (see Chapter One). The university context is one example of an everyday space that may serve as a promising site to foster intergroup contact (Finchilescu & Tredoux, 2010). University campuses in South Africa serve as one of the few places where naturally occurring intergroup contact is likely to take place. Furthermore, tertiary education institutions in South Africa should assume a certain amount of responsibility for preparing individuals for working in the context of an increasingly diverse environment (Erasmus & Ferreira, 2006; Leibowitz, Rohleder, Bozalek, Carolissen, & Swartz, 2007).

As pointed out by Vincent (2008), one would expect South African universities to play a particularly important role in the improvement of race relations, given that people of all ethnic groups come together in a shared space, socialising and working collaboratively, despite their diverging cultures and histories. University contexts are considered one of the few contexts that encompass individuals from diverse backgrounds in one shared space (Halualani, Chitgopekar, Morrison, & Dodge, 2004), and where students can experiment with new relationships, roles and ideas (Gurin et al., 2002).

For many students in South Africa, attending university is one of their first real encounters with diverse groups of people, individuals who have vastly different ethnicities, cultures and historical backgrounds (Bray, Gooskens, Kahn, Moses, & Seekings, 2010; McKinney, 2004). These new encounters could foster opportunities for learning and stereotype disconfirmation, and thereby create positive contact experiences. For this reason, the university context may be especially important for the formation of cross-group relationships and the development of more positive intergroup attitudes, as it appears to be one environment that is especially conducive to dismantle the ethnic barriers created by Apartheid (Finchilescu et al., 2007). A few South African studies have shown the significant role universities play in the development of improved attitudes and ethnic relations.

Finchilescu et al. (2006) examined the prejudice-reducing effects of contact at four South African universities, across a sample of 2,559. and reported a strong relationship between intergroup contact and prejudice reduction for both black (African) and white South African students. Moreover, they noted that cross-group friendships significantly predicted enhanced intergroup relations. In their study of white South African students ($N = 244$), Cakal, Hewstone, Schwär and Heath (2011) found that intergroup contact significantly predicted greater support for policies favouring the outgroup. These results point to the improved attitudes of the white majority group towards the black (African) minority group. Similarly, Lewis (2014) examined the cross-group friendships of a sample of coloured students ($N = 302$) studying at Stellenbosch University and found that quantity, as well as the quality, of contact were significantly positively associated with increased outgroup trust. Furthermore, quality of contact was significantly positively associated with better outgroup attitudes (see also Goosen, 2011; Tredoux & Finchilescu, 2010).

However, despite these promising findings, research has found that segregation between ethnic groups remains a problem on our university campuses. A number of studies have demonstrated that even in the face of increasing diversity a lack of integration between these different ethnic groups persists. These studies suggest that an increase in diversity does not necessarily imply meaningful intergroup interaction; the intergroup contact that is occurring may be of a superficial nature (Finchilescu et al., 2007). In their naturalistic study of segregation patterns of South African university students, Tredoux, Dixon, Underwood, Nunez, and Finchilescu (2005) observed the seating patterns of students within informal public spaces at the University of Cape Town. They noted that students showed a tendency to self-segregate, however this segregation decreased as the space filled up. Similar results have been found in university dining rooms and lecture halls.

Schrieff, Tredoux, Dixon and Finchilescu (2005) recorded the seating patterns of university students in their residence dining halls over a one-month period. Schrieff et al. (2005) found high levels of self-segregation between black (African) and white students. Students tended to sit in ethnically homogenous groups, with little contact occurring across ethnic lines. These findings have been replicated longitudinally as well. Schrieff, Tredoux, Finchilescu and Dixon (2010) examined the seating patterns of university students in two residence dining halls over the course

of an academic year. Their results indicated high levels of ethnic segregation, and that this segregation remained relatively consistent across the research period (see also Alexander, 2007). Similarly, in their longitudinal study of segregation within lecture venues at the University of KwaZulu-Natal, Koen and Durrheim (2009) found high levels of segregation across lectures and that this segregation increased over time (cf. Alexander & Tredoux, 2010). These findings are similar to those reported in a number of international studies (see Al Ramiah, Schmid, & Hewstone, 2014; Clack et al., 2005; McKeown, Stringer, & Cairns, 2016).

Notwithstanding the above findings, research has found that where contact and cross-group friendships do occur, they result in improved intergroup relations (Pettigrew & Tropp, 2006). Small-group tutorial settings at university may serve a particularly important role in encouraging cross-group interaction and facilitating opportunities for intergroup contact that goes beyond superficial interactions. The present study, therefore, focused on small-group tutorial setting of the Psychology Department at Stellenbosch University, exploring those contextual factors related to such settings that may promote, or inhibit, intergroup contact.

The Research Setting

Stellenbosch University is a dual-language university in the town of Stellenbosch, in the Western Cape Province of South Africa. Stellenbosch University uses English and Afrikaans as their main mediums of education and communication. The University was previously an Afrikaans, whites-only university during the Apartheid era and served as one of the intellectual seats of the Apartheid government. Since the fall of Apartheid in 1994, Stellenbosch University has become increasingly more diverse. Between 2011 and 2015, the number of minority group members attending Stellenbosch University increased from 9,278 individuals to 11,386 individuals (Stellenbosch University, 2015).

Today, the university is committed to the promotion of a more diverse campus environment, one that accepts all individuals “irrespective of origin, ethnicity, language, gender, religious and political conviction, social class, disability or sexual orientation” (Stellenbosch University, 2013b, p.1). Their goal is to create a multicultural university campus that enables individuals from different backgrounds

and cultures to interact with, and learn from one another (SU, 2013b). To this end, the university has developed a comprehensive language policy as a tool for facilitating the inclusivity it seeks to foster on campus.

The Language Policy at Stellenbosch University

The language policy of Stellenbosch University is committed to the advancement of multilingualism in South Africa, and for this reason the university makes use of parallel-medium teaching whenever feasible and affordable (SU, 2014). The Psychology Department at Stellenbosch University is one Department that makes use of parallel-medium teaching (SU, 2014). Psychology tutorials are presented in either English or Afrikaans, and students can decide which language stream they wish to be taught in. Owing to the fact that students have a choice regarding their language of tuition, it may be important to examine the contextual effect of tutorial language on the facilitation (or inhibition) of opportunities for intergroup contact.

Approximately 42.30% of students at Stellenbosch University indicate Afrikaans as their home language, while 44.20% indicate English as their home language (SU, 2015). According to Statistics South Africa's (2011) most recent census, only 2.60% of black (African) South Africans have Afrikaans as their first language, compared to 59.10% of white South Africans and 74.6% of coloured South Africans. These statistics suggest that any tutorials presented in Afrikaans are most likely to consist of mainly white and coloured students. This could possibly result in the English and Afrikaans stream having vastly different ethnic compositions; with the English stream being more ethnically diverse. Therefore, the language policy at Stellenbosch University may inadvertently influence the racial composition of the tutorial groups, thereby impacting students' opportunities to engage in meaningful interactions across ethnic lines.

The ethnic composition of the tutorial classrooms may have a greater impact on the development of cross-group friendships than does the overall diversity of the university campus (Echols & Graham, 2013). As mentioned above, various studies have noted that the structural diversity of a setting may impact on the degree of cross-group interaction and the subsequent development of cross-group friendships

(see Clarke & Antonio, 2012; Echols & Graham, 2013; Schmid et al., 2014). This in turn may have an influence on contact's ability to reduce prejudice.

Contextual-level variables, such as tutorial language or level of diversity, may act as moderators of intergroup contact. Some students may experience more opportunities for intergroup contact than others by virtue of their tutorial language and the subsequent ethnic composition of their tutorial class. Both individual- and contextual-level variables may be critically important when examining the relationship between contact and prejudice reduction (Pettigrew et al., 2010). However, it is also important to examine the interaction between individual-level factors and contextual-level factors (Peugh, 2010).

The Psychology Department's Tutorial Program at Stellenbosch University

As discussed above, contact opportunities for students at the university may be affected by the size and structure of the students' immediate social environment (Stauder, 2014). Furthermore, environments such as small-group tutorials may provide opportunities to transform contact into positive and meaningful interactions, enhancing the prospects of friendship formation (Stauder, 2014). It is for this reason that various policies and features within the university context may impact on the extent to which students are engaging in meaningful contact and being granted opportunities for cross-group friendship formation (Stearns, Buchmann, & Bonneau, 2009). Examining the effects of such policies may help to improve intergroup relations in South Africa and decrease intergroup prejudice.

Students enrolled in the Psychology 144 module at Stellenbosch University participate in ten small-group tutorials once a week over the course of a semester. Currently, in accordance with the overarching broader language policy of the university (Stellenbosch University, 2014), all Psychology tutorials are presented in either English or Afrikaans. These tutorial groups range in size from 16 to 30 individuals per tutorial group, and are designed to encourage interaction and engagement. Moreover, students are assigned to their tutorials based on their course timetable and language preference. This means that students who share the same university course will be assigned to the same tutorial timetable slot. Furthermore, students remain in the tutorial group to which they are assigned for the

course of the 10-week psychology tutorial program, allowing them to engage in weekly contact on a regular basis with the same tutorial group members.

Given South Africa's considerable history of racial exclusion and segregation, and its increasing ethnic and cultural diversity, initiating positive contact between these diverse groups may be especially difficult. However, it is important to take advantage of this diversity as it occurs at university, and create positive opportunities for contact. Contact within the context of such small-group tutorials may offer one such opportunity and could lead to the development of cross-group friendships (Alexander & Tredoux, 2010; Stearns et al., 2009). It has been suggested that cross-group friendships at university are more likely to occur when students are enrolled in the same course and come into regular contact with one another (Davies et al., 2011). Davies et al. (2011) further note that contact situations allow for the development of friendships when this contact is recurrent and meaningful.

Unlike the compulsory, larger Psychology lectures at Stellenbosch University, where attendance may range from 150 to 300 students per lecture, student attendance is more easily monitored and enforced within the small-group tutorials. As such, students are likely to engage in regular and consistent contact within the small-group tutorials (Stearns et al., 2009). Moreover, while students are not necessarily provided with opportunities to interact with one another during larger, traditional lectures, the tutorial classes are designed to emphasize and encourage interaction and group discussions, thereby offering students greater opportunities to take up meaningful interactions with one another. Additionally, in classes with fewer individuals, there may be greater opportunities for contact that is more intimate in nature (Koen & Durrheim, 2010). Given the above, it becomes evident that the tutorial program may play a particularly vital role in the creation of opportunities for intergroup interaction and the further development of cross-group friendships.

The Present Study

Within the frameworks of the contact hypothesis (Allport, 1954) and the opportunity hypothesis (Hallinan & Smith, 1985), the present study aimed to examine the influence that contextual-level factors, such as tutorial language and diversity,

may have on opportunities for intergroup contact in a university setting. Therefore, this study investigated the moderating role of diversity and tutorial language on direct intergroup contact across 51 first-year psychology tutorials. This study adds to the literature base in South Africa by examining the effects of diversity on intergroup contact within the smaller, everyday group context of academic tutorials.

The present study was undertaken at Stellenbosch University, a previously white tertiary educational institution in South Africa that has become increasingly more diverse since the fall of Apartheid (SU, 2015). White students still comprise the majority at the university (18,764 or 62.20%), with black (African)- (5,355 or 17.80%), coloured- (5,238 or 17.40%) and Indian- (793 or 2.60%) South African students making up the minority group (SU, 2015). Although black (African) South Africans form the majority group in South Africa (79.00%; SSA, 2015), at Stellenbosch University white South African students represent the numerical majority of the student body (SU, 2015). For this reason, white South Africans form the majority group in the present study, and black (African), coloured and Indian South African students collectively form the minority group.

Hypotheses

The aim of the present study was to examine the influence that the contextual-level factors of tutorial language and diversity may have on opportunities for intergroup contact and its relationship with direct, face-to-face intergroup contact within the tutorials. There were a number of objectives associated with this study. Firstly, to determine whether the university's parallel-medium language policy is influencing the levels of diversity within the Psychology tutorials, thereby influencing students' opportunities for intergroup contact. Secondly, to determine whether these differing levels of diversity across the two language streams are moderating the opportunity for contact – direct contact relationship within the tutorials.

The following hypotheses were tested:

- (1) The English stream of the first-year Psychology tutorial program will be more heterogeneous with regards to ethnic composition than the Afrikaans stream;

- (2) Students within the English stream of the first-year Psychology tutorial program will experience more direct contact (i.e., have more outgroup members in their friendship network) compared to those students in the Afrikaans stream;
- (3) Opportunity for intergroup contact (i.e. diversity) within both the English and Afrikaans tutorials will be significantly positively associated with direct, face-to-face intergroup contact, specifically;
 - (3a) For the white majority, diversity (i.e., the proportion of white students in the tutorial) will be significantly negatively associated with direct face-to-face intergroup contact; and
 - (3b) For the non-white minority, diversity (i.e., the proportion of white students in the tutorial) will be significantly positively associated with direct face-to-face intergroup contact; and
- (4) The significant positive relationship between opportunity for contact and direct contact will be significantly moderated by tutorial language. Specifically, the positive relationship between opportunity for contact and direct contact will be significantly *stronger* in the English tutorials (those tutorials that are more diverse – i.e., offer more opportunities for intergroup contact) as compared to the Afrikaans tutorials (those tutorials that are less diverse, offering fewer opportunities for intergroup contact).

These hypotheses were tested within a multi-level framework, where individual students (Level 1) are nested in tutorial groups (Level 2). The multi-level nature of these hypotheses are illustrated in Figure 1 and Figure 2 below.

Method

The research design of the present study is a cross-sectional, two-level multilevel design that examined the influence of tutorial language of the Psychology tutorial programme at Stellenbosch University on the relationship between opportunities for intergroup contact (i.e., tutorial diversity) and direct intergroup contact amongst a sample of students registered for the Psychology 144 Module in

2014. This multilevel model takes into account the nested data structure of the tutorials (Peugh, 2010).

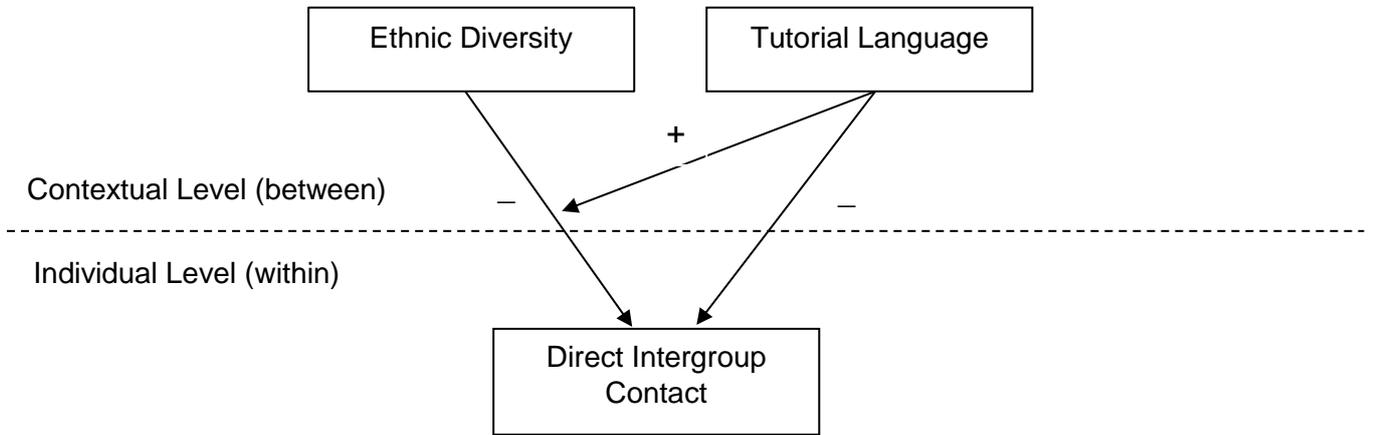


Figure 1. Theoretical model summarising the hypothesised relationships between diversity (i.e., the proportion of white students in the tutorial), tutorial language, and direct intergroup contact for the white majority group.

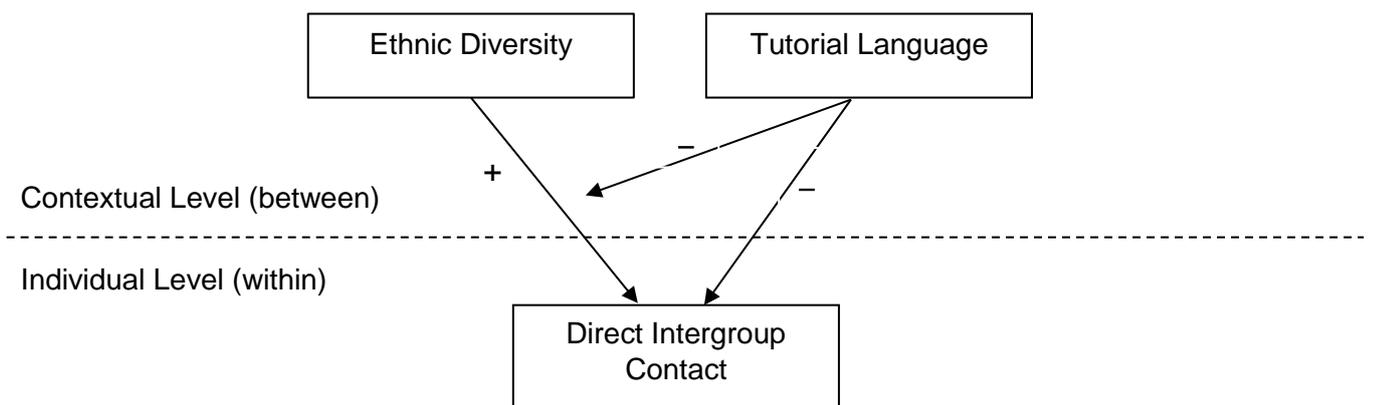


Figure 2. Theoretical model summarising the hypothesised relationships between diversity (i.e., the proportion of white students in the tutorial), tutorial language and direct intergroup contact for the non-white minority group.

Procedure

Subsequent to obtaining the necessary research ethics clearance from the Research Ethics Committee (Humanities) at Stellenbosch University (REC: HS1132/2014; see Appendix A), the data for the present study was collected in 2014 by the researcher and a team of 16 Psychology tutors. Prior to undertaking the data collection, a list with each student registered for the Psychology 144 Module in 2014 was obtained from the Department of Psychology. This list contained all the information submitted by the student when they apply for a place at the university. This included their name and surname, student number, age, gender, ethnicity, home language, and birth date. This list also provided information relating to the tutorial group that each student was assigned to, as well as the language of tuition of their tutorial group (tutorial language). The tutors received the necessary training as to how apply the materials associated with the data collection for this study (see Appendix B). Prior to making these materials available to the participants, they were provided with a statement that described the nature of the study. This statement covered the information contained in the informed consent letter at the start of the questionnaire. Tutors handed out the questionnaire used to collect the data for the present study at the start of the 10th Psychology 144 tutorial in 2014. Once the questionnaire had been completed, the participants sealed their responses in a blank envelope, which was then collected by the tutor. Directly after the tutorial these envelopes were taken to Dr Hermann Swart's (project supervisor) office for safe-keeping.

Questionnaire

This study made use of a social network questionnaire that was distributed to students in the Psychology 144 Module in 2014 (see Appendix C for an example). The questionnaire consisted of two sections, namely a biographical questionnaire followed by the social network nomination questionnaire. Before the questionnaire was completed, participants read through a short information sheet explaining the research project and informing them that by completing this questionnaire they were providing their informed consent to participate in the study (See Appendix C). The

biographical questionnaire included the participants' full name and surname, gender, and age. The second section of the questionnaire comprised the nomination questionnaire, which asked participants to nominate (name) up to five individuals who they had the most direct face-to-face contact (interactions) with over the course of the ten Psychology 144 tutorials they had attended. Students were informed that they may ask either their tutor or their fellow students if they are uncertain of the full name of the person(s) they were nominating. In this instance, the use of a limited nomination procedure was employed. It has been found that five names is the most effective number needed to compile a friendship network within defined social contexts (Merluzzi & Burt, 2013).

Individual level variables.

Demographic variables. Demographic information regarding each participant was obtained from the nomination questionnaire, as described above. Further demographic information was obtained from the student records made available to the Department of Psychology for each student registered at the Department. This information includes the participants' gender, age, ethnicity, and home language.

Direct intergroup contact. Direct contact was measured through the use of a subsection of the simple nomination questionnaire (as discussed above). Participants were asked to nominate up to five of their fellow students within their regular tutorial group, who they had the most regular face-to-face interactions with over the course of the ten tutorials. By limiting the number of nominations it is more likely that participants will nominate individuals with whom they have had more intimate contact, rather than those individuals with whom the contact was fleeting (Echols & Graham, 2013). Using these nominations, a direct contact score was created for each individual based on their preference to nominate a member of the outgroup as someone they had regularly interacted with over the course of their tutorials. For white participants this represented the preference to nominate a non-white interaction partner, and for non-white participants this represented the preference to nominate a white interaction partner. For each participant, these scores were summed together and then divided by the total number of individuals nominated, to create a value representing the proportion of outgroup members in

their ego network³ (ranging from 0 = *no outgroup members present in the nominated social network* to 1 = *all nominations include outgroup members*; Wölfer, Faber, & Hewstone, 2015).

Contextual level variables.

Tutorial language. All participants were placed into one of 51 tutorials. Of these tutorials, 32 were taught in English and 19 were taught in Afrikaans. English tutorials are coded as 1 and Afrikaans are coded as 2.

Tutorial Diversity (i.e., proportion of white students in the tutorial). A diversity score for each of the 51 tutorials was created in SPSS using the proportion of white to non-white students in each tutorial. These scores were aggregated so that each tutorial was assigned a single diversity score (ranging from 0 = *no white students in the tutorial* to 1 = *all white students in the tutorial*). Therefore, for the white students within a tutorial, a lower diversity score would indicate more non-white students, increasing their opportunities for intergroup contact. The reverse is true for non-white students within a tutorial; a higher diversity score would indicate more white students, increasing their opportunities for intergroup contact.

³ An ego network refers to an individual's connections to other members within a specific network parameter (Wölfer, Faber, & Hewstone, 2015). In this instance, the ego network refers to the five individuals a single student has had the most contact with, within their weekly Psychology tutorials over the course of 10 weeks.

CHAPTER FOUR

DIVERSITY AND TUTORIAL LANGUAGE AS MODERATORS OF INTERGROUP CONTACT WITHIN SMALL-GROUP TUTORIALS

Results

Participants

The present study included first-year students who were enrolled in the Psychology 144 Module at Stellenbosch University in 2014. There were 1,154 students in total ($N = 737$ white majority students, $N = 417$ black (African), coloured, and Indian minority students; $N = 903$ females, $N = 251$ males; $\text{Mean}_{\text{Age}} = 19.73$ years; $SD = 2.36$) enrolled in this Module, nested within 51 tutorials.

Table 1

Summary of the number of students by ethnicity in the English and Afrikaans tutorials

Tutorial	Number of Students
English Tutorials	
White	448
Black	76
Coloured	162
Other	26
Subtotal	712
Afrikaans Tutorials	
White	289
Black	3
Coloured	150
Other	0
Subtotal	442
Total	1,154

Of this sample, 712 students were assigned to English-language tutorials and 442 students were assigned to Afrikaans-language tutorials (see Table 1 above; See Appendix D for a more detailed breakdown of the number of white to non-white students per English and Afrikaans tutorials). The home language of the participants are as follows: English - $N = 554$; Afrikaans - $N = 517$; English and Afrikaans (bilingual) - $N = 5$; isiXhosa - $N = 34$; isiZulu - $N = 5$; Other African - $N = 23$; and Other Foreign - $N = 16$.

Preliminary Analyses

All data from the Social Network Questionnaire were recorded in Excel, with each row representing a single participant and their responses. This excel file was then imported into SPSS. The data (specifically the direct contact and diversity scores) were then tested to determine whether they met the parametric assumptions of normality (West, Finch, & Curran, 1995). To this end, the skewness and kurtosis values of each variable were examined. All items with a skewness value between -2.00 and +2.00, and a kurtosis value between -.7.00 and +7.00 were deemed to meet the parametric assumptions of normality (West et al., 1995). All the items fell within these recommended values ($M_{skew} = 0.66$, $SD_{skew} = 0.54$, $Min_{skew} = 0.44$, $Max_{skew} = 0.883$; $M_{kurt} = 0.27$, $SD_{kurt} = 0.40$, $Min_{kurt} = -0.13$, $Max_{kurt} = 0.66$).

The diversity score was calculated in SPSS by aggregating the ethnicity scores of each of the 51 tutorials in order to determine the proportion of white students in each tutorial ($M = 0.64$, $SD = 0.14$). The mean diversity score of the English ($M = 0.63$, $SD = 0.12$) and Afrikaans ($M = 0.66$, $SD = 0.16$) tutorials were then explored. Recall that diversity scores range from 0 (complete absence of white students in a tutorial) to 1 (only white students in a tutorial). So scores closer to 1 reflect a higher proportion of white students (and a lower proportion of non-white students) in the tutorials.

These statistics show that the English tutorials had a higher proportion of non-white students assigned to them on average (37% of students were non-white minority students) than the Afrikaans tutorials (34% of students were non-white minority students). To test the first hypothesis of the present study, namely that the

English tutorial stream would be more diverse in terms of ethnic composition than the Afrikaans tutorial stream, a one-way between-subjects ANOVA was conducted. The results revealed a non-significant difference in the mean diversity levels of the English and Afrikaans tutorial streams, $F(1, 49) = 7.28, p = .398$, rejecting the first hypothesis.

Following this, the mean direct contact score for each participant was examined in order to get an indication of the amount of intergroup contact taking place within the tutorials ($M_{\text{Total}} = 0.28, SD_{\text{Total}} = 0.30; M_{\text{English}} = 0.33, SD_{\text{English}} = 0.30; M_{\text{Afrikaans}} = 0.19, SD_{\text{Afrikaans}} = 0.27; \text{Min} = 0.00, \text{Max} = 1.00$). This mean score suggests that 28.00% of all interaction partners were outgroup members. Therefore, these statistics show that, on average, students reported approximately 1.4 outgroup members and 3.6 ingroup members in their network of five interaction partner nominations. Those students in the English tutorials reported, on average, 1.65 outgroup members, and 3.35 ingroup members, compared to those students in the Afrikaans tutorials who reported, on average, 0.95 outgroup members and 4.05 ingroup members in their ego networks. An independent samples t-test was run to test whether there was a difference in the direct contact scores across the English and Afrikaans tutorials respectively. The results of this t-test revealed a significant difference in the direct contact scores for the English and Afrikaans tutorials, $t(1047) = 7.30, p < .001$, showing that participants in the English tutorials reported significantly more intergroup contact than students in the Afrikaans tutorials.

Subsequent to these preliminary analyses, a level-1 (individual-level) data file was created containing the tutorial group, age, gender, ethnicity, home language and direct contact score of each participant. The age and direct contact score of each participant was then Z-standardized, in order to improve the interpretability of the results. This file was then divided into two separate files, one for non-white (minority) participants, and one for white (majority) participants. A level-2 (contextual-, or tutorial-level) data file was created containing the tutorial group information, including an aggregated tutorial language score (1 = English tutorial, 2 = Afrikaans tutorial), a Z-standardized diversity score (the proportion of white students in a tutorial) for each tutorial class, and a cross-product variable of the Z-standardized tutorial language and diversity score (to serve as a putative moderating variable). Once again, these scores were Z-standardized in order to improve the interpretability of the results.

Main Analyses

To investigate the hypothesised interrelationships between the contextual- (tutorial-) level variables of diversity and tutorial language and the individual-level variable of direct contact, a series of two-level, multilevel models were run. These models were run using the HLM2 option in the hierarchical linear modelling software (HLM version 7.0; Raudenbush, Bryk, & Congdon, 2011), with restricted maximum likelihood estimation. All predictor variables were entered uncentered. Direct intergroup contact (level 1) served as the outcome variable. All models were run separately for the majority and minority status groups respectively.

Firstly, the outcome variable, direct intergroup contact, was analysed by estimating a totally unconditional model (“null model”) with no predictors at either level 1 or level 2 for both the majority and minority samples. This model is used to calculate the intraclass correlation (ICC), which indicates whether there is sufficient variability across the tutorial groups for the use of multilevel modelling. The ICC estimates the proportion of variance between groups relative to the total variance (i.e. $ICC = \frac{u_0}{u_0+r}$; Singer, 1998). The formula for the totally unconditional model is as follows:

$$\text{Level 1: } DirectContact_{ij} = \gamma_{00} + u_{0j} + r_{ij}$$

$$\text{Level 2: } \beta_{0j} = \gamma_{00} + U_{0j}$$

Where: $DirectContact_{ij}$ is the value of the dependent variable for individual i in tutorial j ,

β_{0j} is the mean Direct Contact for classroom j ,

γ_{00} is the grand mean of Direct Contact,

r_{ij} is the within group variance of Direct Contact, and

U_{0j} is the between group variance in Direct Contact

Secondly, should the ICC statistics support the need for multilevel modelling, HLM can be used to examine whether there are any significant differences in the

intercepts and slopes of level 1 variables across the tutorial classrooms (Woltman, Feldstain, MacKay, & Rocchi, 2012). To this end, three models were estimated using a step-wise procedure (Hox, 2010). Firstly, a random intercepts model with predictors added at level-2 was run in order to examine whether tutorial language and diversity have a significant effect on direct contact for both the majority and minority groups respectively. The formula for the level-2 model is as follows:

$$DIRECTCONTACT_{ij} = \gamma_{00} + \gamma_{01} * TUTLANG_j + DIVERSITY_j + u_{0j} + r_{ij}$$

Where: $DIRECTCONTACT_{ij}$ is the value of the dependent variable for individual i in tutorial j ,

γ_{00} is the intercept (average outcome score),

$TUTLANG_j$ is the tutorial language of the individual in tutorial j ,

$DIVERSITY_j$ is the level of diversity in tutorial j ,

γ_{01} is the significance test of the mean slope,

u is the incremental effect of tutorial j to the observed outcome (level 2 error), and

r is the incremental effect of participant i in tutorial j (level 1 error)

A third model was tested in order to determine the moderation effect of tutorial language on the relationship between diversity and direct contact (i.e. the moderating role of tutorial language). The formula for this model is as follows:

$$\begin{aligned} DIRECTCONTACT_{ij} \\ = \gamma_{00} + \gamma_{01} * TUTLANG_j + \gamma_{02} * DIVERSITY_j + \gamma_{03} \\ * DIVERSITY * TUTLANG_j + u_{0j} + r_{ij} \end{aligned}$$

Where: $DIRECTCONTACT_{ij}$ is the value of the dependent variable for individual i in tutorial j ,

γ_{00} is the intercept (average outcome score),

$TUTLANG_j$ is the tutorial language of the individual in tutorial j ,

$DIVERSITY_j$ is the level of diversity in tutorial j ,

$DIVERSITY * TUTLANG$ is the interaction between diversity and tutorial language of the individual in tutorial j ,

γ_{01} is the significance test of the mean slope,

u is the incremental effect of tutorial j to the observed outcome (level 2 error), and

r is the incremental effect of participant i in tutorial j (level 1 error)

In the final model, age and gender were added into the models above as control variables. The formula for the final model is as follows:

$$\text{Level 1: } DIRECTCONTACT_{ij} = \beta_{0j} + \beta_{1j} * GENDER_{ij} + \beta_{2j} * AGE_{ij} + r_{ij}$$

$$\begin{aligned} \text{Level 2: } \beta_{0j} = & \gamma_{00} + \gamma_{01}(TUTLANG_j) + \gamma_{02}(DIVERSITY_j) \\ & + \gamma_{02}(DIVERSITY * TUTLANG_j) + U_{0j} \end{aligned}$$

Where: $DIRECTCONTACT_{ij}$ is the value of the dependent variable for individual i in tutorial j ,

$GENDER_{ij}$ is the gender of individual i in tutorial j ,

AGE_{ij} is the age of individual i in tutorial j ,

γ_{00} is the intercept (average outcome score),

$TUTLANG_j$ is the tutorial language of the individual in tutorial j ,

$DIVERSITY_j$ is the level of diversity in tutorial j ,

$DIVERSITY * TUTLANG$ is the interaction between diversity and tutorial language of the individual in tutorial j ,

γ_{01} is the significance test of the mean slope,

u is the incremental effect of tutorial j to the observed outcome (level 2 error), and

r is the incremental effect of participant i in tutorial j (level 1 error)

White majority group.

The null model for the majority status group was tested first. Direct contact was entered as the outcome variable. As per the intraclass correlations and subsequent chi-square test, the results of the totally unconditional model indicate a significant amount of group-level variation ($ICC = 0.27$) for direct contact amongst white majority participants, $\chi^2(50) = 264.70$, $p < .001$. These results show that 27.00% of the variance in direct contact exists at the group level, which indicates that a significant amount of this variation may be explained by group-level variables, such as language of tuition and diversity. See Table 2 for a summary of the results from the null model.

Table 2

Results of the two-level null model for the majority (white) sample with direct intergroup contact as the outcome variable

Random Effect	SD	Variance Component	d.f.	χ^2	p-value
Intercept, u_0	0.48942	0.23953	50	264.69355	0.001
Level-1, r	0.81337	0.66156			

The second model tested the direct effects of the level-2 predictors (diversity and tutorial language) on the level-1 outcome variable (direct contact). The results of model two indicate that there is a significant negative direct effect of tutorial language on direct contact ($b = -.32$, $p < .01$). This suggests that individuals nested within Afrikaans tutorials experience lower levels of direct contact with members of their outgroup, namely non-whites. There is also a significant negative direct effect of diversity on direct contact ($b = -.28$, $p < .001$), suggesting that as the proportion of

white individuals in a tutorial increases, direct contact with the non-white outgroup decreases. Alternatively, as the proportion of non-whites within a tutorial increases, direct contact with the non-white outgroup increases. The results from this model are summarised in Table 3 under “Model 2” below.

Table 3

Model summaries for the majority group with direct intergroup contact as the outcome variable

Variables	Direct Contact		
	Model 2	Model 3	Model 4
Direct Effects			
Intercept (random)	0.33 (0.17)	0.35 (0.17)	0.41 (0.17)
Individual level			
Age			0.18 (0.04)***
Gender			-0.07 (0.09)
Contextual level			
Tutorial language	-0.32 (0.11)**	-0.35 (0.10)***	-0.37 (0.10)***
Diversity	-0.28 (0.05)***	-0.31 (0.06)***	-0.30 (0.06)***
Interaction Effects			
Diversity*Tutorial Language		0.14 (0.05)**	0.16 (0.05)**

Note: Unstandardized coefficients are presented, with standard errors provided in parentheses. Level 1 variables: Direct Contact, Age, Gender. Level 2 variables: Tutorial Language, Diversity. Two-tailed test of significance; * $p < .05$, ** $p < .01$, *** $p < .001$

The third model tested the interaction between tutorial language and diversity on direct contact, examining the moderating role of tutorial language on the relationship between diversity and direct contact. The results of this model revealed a significantly positive cross-level interaction of tutorial language ($b = 0.14$, $p < .001$) on the relationship between diversity and direct contact. This suggests that tutorial language moderates the relationship between diversity and direct intergroup contact; such that the relationship between diversity and direct contact is significantly

stronger within English tutorials ($b = -0.86, p < .001$) than in Afrikaans tutorials ($b = -0.35, p < .001$). These results are summarised in Table 3 under “Model 3” above.

The fourth, and final model included age and gender as control variables. The results of this model show that despite controlling for age and gender the significant effects found within the previous models remain. Namely, tutorial language ($b = -0.37, p < .001$) and diversity ($b = -0.30, p < .001$) were significant predictors of direct intergroup contact. Furthermore, age was significantly positively related to direct intergroup contact ($b = 0.18, p < .001$). Gender had no effect on direct intergroup contact for the white majority group. Importantly the significant moderation effect of tutorial language on the relationship between diversity and direct contact remained after adding the controls ($b = 0.16, p < .01$). The results for this model are summarised in Table 3 under “Model 4” above.

Non-White minority group.

The same procedure was followed for the minority group sample. Firstly, a null model was tested in order to establish the need for multilevel modelling. Direct Contact was entered as the outcome variable for the minority group. The results indicate a significant amount of group-level variation ($ICC = 0.26$) for direct contact for the non-white minority group, $\chi^2(48) = 176.95, p < 0.001$. These results show that 26.37% of the variance exists at the group level, which indicates that a significant amount of this variation may be explained by our group-level variables, such as language of tuition and diversity. See Table 4 below for a summary of the results from the null model.

The second model tested the direct effects of the level-2 predictors on the level-1 outcome variable (direct contact). This was done by adding in predictors at level-2; namely tutorial language and diversity. The results of model three show a significant direct effect of tutorial language on direct contact ($b = -0.50, p < .001$). This suggests

Table 4

Results of the two-level null model for the minority (non-white) group with intergroup contact as the outcome variable

Random Effect	SD	Variance Component	d.f.	χ^2	p-value
Intercept, u_0	0.53870	0.29019	48	176.95393	0.001
Level-1, r	0.90017	0.81031			

that non-whites nested within Afrikaans tutorials experience lower levels of direct contact with members of their outgroup, namely white South Africans. There was also a significant direct effect of diversity on direct contact ($b = 0.40$, $p < .001$). This significant effect suggests that as the proportion of white individuals within the tutorial increases, direct contact with the outgroup, namely white South Africans, increases as well. The results from this model are summarised in Table 5 under “Model 2” below.

The third model tested the interaction between tutorial language and the relationship between diversity and direct contact, examining the moderating role of tutorial language for the non-white minority group. The results of this model revealed a non-significant cross-level interaction of tutorial language ($b = 0.01$, $p > .05$) on the relationship between diversity and direct contact. These results are summarised in Table 5 under “Model 3” below. This suggests that tutorial language has no influence on the relationship between diversity and direct contact for the non-white minority sample.

The fourth and final model included age and gender as control variables. The results of this model show that despite controlling for age and gender the significant effects found within the previous models remain. Namely, tutorial language ($b = - 0.50$, $p < .01$) and diversity ($b = 0.40$, $p < .001$) were significant predictors of direct contact within the tutorials. Furthermore, age ($b = - 0.06$, $p < .05$) was a significant predictor of direct contact for the non-white sample as well. The results indicated that younger non-white students had significantly more white friends in

their friendship network compared to older students. Gender ($b = 0.21, p < .05$) was also found to be a significant predictor of direct contact for the non-white sample. These results show that male minority group students have more white friends in their friendship network compared to female minority group students. The non-significant moderation result remained when adding the controls ($b = 0.01, p > .05$). The results for this model are summarised in Table 5 under “Model 4” below.

Table 5

Model summaries for the minority group with direct intergroup contact as the outcome variable

Variables	Direct Contact		
	Model 2	Model 3	Model 4
Direct Effects			
Intercept (random)	1.15 (0.22)	1.14 (0.26)	1.10 (0.25)
Individual level			
Age			-0.06 (0.03)*
Gender			0.21 (0.10)*
Contextual level			
Tutorial language	-0.50 (0.14)***	-0.50 (0.16)**	-0.50 (0.16)**
Diversity	0.40 (0.09)***	0.40 (0.10)***	0.40 (0.08)***
Interaction Effects			
Diversity* Tutorial language		0.01 (0.08)	0.01 (0.08)

Note: Unstandardized coefficients are presented, with standard errors provided in parentheses. Level 1 variables: Direct Contact, Age, Gender. Level 2 variables: Tutorial Language, Diversity. Two-tailed test of significance; * $p < .05$, ** $p < .01$, *** $p < .001$

Summary of Findings

The results of the present study indicated that there were no significant differences in diversity across the English and Afrikaans tutorials, resulting in the rejection of the first hypothesis of the present study. However, in support of the

second hypothesis, results did reveal that students in English tutorials experienced more direct intergroup contact, and had more outgroup friends in the friendship network, than those students in Afrikaans tutorials.

Furthermore, it was established that tutorial language and diversity were significant predictors of direct intergroup contact for both the white majority- and non-white minority status groups. This provided support for the third hypothesis of the present study. More specifically, for the white majority tutorial language was significantly negatively associated with direct contact. This indicated that white students in Afrikaans tutorials experienced less direct contact and had fewer cross-group friendships, compared to white students in English tutorials. Diversity was also significantly negatively associated with direct contact, indicating that white students in more diverse tutorials experienced more direct intergroup contact.

Similar results were found for the non-white minority sample. Tutorial language was significantly negatively associated with direct contact, suggesting that non-whites within Afrikaans tutorials experienced less direct contact compared to those non-white students in English tutorials. For the non-white sample diversity was significantly positively associated with direct contact, indicating that non-whites experience more direct intergroup contact when they are in more diverse tutorials. The significant direct effects of tutorial language and diversity were maintained even when controlling for age and gender.

Finally, partial support was found for the final hypothesis of the present study. Tutorial language significantly moderated the relationship between diversity and direct contact for the white majority group, but not for the non-white minority group. The following chapter will provide a discussion of the results described above with reference to the present contact literature.

CHAPTER SIX

DISCUSSION

It has been well established that encouraging positive intergroup contact enhances positive intergroup attitudes, decreases prejudice, and improves intergroup relations (Pettigrew & Tropp, 2006). However, South Africa faces one of the most extreme cases of ethnic segregation, prejudice and conflict, and for this reason it is of vital importance that we discover ways to increase positive intergroup contact. The opportunity hypothesis (Hallinan & Smith, 1985) provides one suggestion as to how this may be accomplished. This theory suggests that increasing diversity within a contact setting will result in an increase in intergroup contact. Research within larger contextual settings, such as neighbourhoods and countries, has shown that increasing diversity within a contact situation does result in an increase in the opportunities for intergroup contact, and subsequently an increase in actual direct contact (e.g., Gundelach, 2014; Lee & Bean, 2010; Schlueter & Scheepers, 2010; Wagner, Christ, Pettigrew, Stellmacher & Wolf, 2006). Furthermore, this increase in direct contact has been associated with prejudice reduction and improved intergroup attitudes (Christ et al., 2014; Hewstone, 2015; Perry, 2013; Quillian & Campbell, 2003; Wagner et al., 2006).

Given the literature on the positive effects of diversity and its influence on intergroup contact, the present study investigated the moderating role of diversity and language of tuition on direct intergroup contact within small-group tutorials, amongst a sample of majority- and minority-status group students studying at Stellenbosch University, using multilevel modelling. The central hypothesis that was tested in the present study was that diversity within a first-year tutorial classroom would be significantly positively associated with direct intergroup contact, for both the majority- and minority-status groups respectively. The results of the present study provide support for this central hypothesis. Furthermore, the moderating role of language of tuition on the relationship between diversity and direct contact was examined.

This chapter provides a discussion of the results from the present study, with specific reference to how these results compare to existing literature. Firstly, the

discussion will look at how the diversity levels compare within the English and Afrikaans tutorials. This will be followed by an examination of the differences regarding direct intergroup contact across the English and Afrikaans tutorial streams. A discussion of the effects of diversity and tutorial language on direct contact within the tutorials, for both the white majority- and non-white minority groups respectively, will then be presented. Lastly, the moderating role of tutorial language on the relationship between diversity and direct contact will be presented. Throughout the discussion I will focus on the theoretical and practical implications of the present study's findings. Following a detailed discussion of the findings, this chapter will include an analysis of the study's limitations, followed by the recommendations for future research.

Ethnic Diversity within Small-Group Tutorials

The first hypothesis of the present study was that English tutorials would be more diverse in terms of ethnic composition than Afrikaans tutorials. This hypothesis was generated on the fact that only 2.60% of black (African) South Africans selected Afrikaans as their first language in a recent census, compared to 59.10% of white South Africans and 74.60% of coloured South Africans (SSA, 2011). For this reason it was hypothesised that the Afrikaans stream of the psychology tutorials would consist of mainly white and coloured South African students, and would therefore be less ethnically diverse than the English tutorial stream, which would be made up of a greater variety of white, coloured, black (African) and Indian students. Results suggested that the English stream was made up of 37.00% non-white minority students, while the Afrikaans stream was made up of 34.00% non-white minority students. Nevertheless, the results of the one-way ANOVA suggested no significant difference in ethnic diversity for the English and Afrikaans tutorial streams respectively.

Although the differences in ethnic diversity between the English and Afrikaans tutorial streams were found to be non-significant, if one examines the breakdown by ethnicity for each of the 51 tutorials respectively (see Table 6 in Appendix D), it becomes evident that the Afrikaans tutorials consist of mainly white, and coloured students, with only three black (African) students across all 19 Afrikaans tutorial

groups. Furthermore, one Afrikaans tutorial (tutorial 29 in Appendix D) contains no non-white minority students. This means that although the students within the Afrikaans tutorial streams are coming into contact with their fellow white and coloured South African students, their contact with black (African) South Africans remains limited within the tutorials.

Given the small percentage of black (African) South Africans who select Afrikaans as their home language (2.60%), the number of black students within Afrikaans tutorials is unlikely to change. This could be potentially problematic, as segregation between groups leads to an increase in prejudice and negative outgroup attitudes (Allport, 1954; Gibson, 2015). This lack of contact between white Afrikaans South Africans and black (African) South Africans may help to explain why prejudices between these groups persist, as can be seen in research conducted by Durrheim and colleagues (2011) who found that black (African) South Africans held less favorable attitudes towards Afrikaans-speaking whites, compared to English-speaking whites (cf. Bornman, 2011; Mynhardt, 2013). It has also been found that Afrikaans-speaking whites have shown the least change in outgroup prejudices post-1994 (Durrheim et al., 2011; Mynhardt, 2013). For this reason it may be particularly important to create contact opportunities between white Afrikaans-speaking students and black (African) students at Stellenbosch University.

Direct Contact within Small-Group Tutorials

Having established that there was no significant difference in ethnic diversity across the English and Afrikaans tutorial streams, the present study examined the mean direct contact score of the sample. It was found that, on average, this sample had approximately 1.4 outgroup members and 3.6 ingroup members in their network of five interaction partner nominations. These low levels of cross-group interaction could be explained by the tendency for individuals to self-segregate along ethnic lines within contact situations, despite being presented with opportunities for interaction (Dixon et al., 2005). A number of studies within the university context in particular, and South Africa in general, have found evidence for this tendency to self-segregate (e.g., Alexander, 2007; Alexander & Tredoux, 2010; Finchilescu et al., 2007; IJR, 2013; Schrieff et al., 2005; Schrieff et al., 2010; Tredoux et al., 2005). This is

potentially problematic within the South African context given our already high levels of segregation within neighbourhoods and schools (Christopher, 2005). Future contact interventions should examine ways in which to reduce self-segregation tendencies and encourage more inter-ethnic contact on university campuses.

In addition to examining the mean direct contact score of the sample, the second hypothesis of the present study examined whether there was a significant difference in the amount of direct intergroup contact taking place within the English and Afrikaans tutorial streams respectively. The results revealed that students within the English tutorials reported significantly more outgroup interaction partners within their tutorials, compared to students within Afrikaans tutorials.

There are a number of possible explanations for this finding, given that ethnic diversity was found to be non-significant between the two language streams. One possible explanation for this difference in direct contact across the two language streams may be that students within the Afrikaans stream experience the intergroup contact within the tutorials as particularly anxiety-provoking (Stephan & Stephan, 1985). Stephan and Stephan (1985) proposed that in an intergroup contact setting, particularly when there has been little previous contact with the outgroup, individuals are likely to feel uncertain, anxious, threatened or apprehensive. This intergroup anxiety may arise from the anticipation of negative consequences for oneself within these contact situations. For example, the individual may fear that they will be misunderstood, rejected, embarrassed or discriminated against during an intergroup interaction (Brown & Hewstone, 2005). This anxiety may lead to the distancing from, or avoidance of the outgroup (Stephan & Stephan, 1985). For this reason anxiety may play a role in the difference in direct contact across the two language streams.

An alternative explanation may be that the previously held negative outgroup attitudes held by students within the Afrikaans tutorials may prevent students from engaging in intergroup contact. The Afrikaans tutorials are made up of mostly white Afrikaans and coloured students and as discussed previously, Afrikaans-speaking white South Africans have shown the least change in their attitudes towards black (African) and coloured South Africans, and have been found to have significantly more negative outgroup attitudes than any other ethnic group (Bornman, 2011; Durrheim et al., 2011; Mynhardt, 2013). Furthermore, white Afrikaans-speaking South Africans have also been found to hold more negative attitudes towards

coloured South Africans than any other ethnic group (Bornman, 2011). Coloured South Africans have also show more negative attitudes towards Afrikaans-speaking whites, although these attitudes are less negative than black (African) South Africans (Bornman, 2011; Mynhardt, 2013). These previously held negative attitudes could be associated with contact avoidance and increased intergroup anxiety, as well as perceptions of threat.

Another explanation for this significant difference in direct contact between the English and Afrikaans language streams may be ingroup identification or group salience (i.e., how you evaluate your ingroup compared to the outgroup; Gartner & Dovidio, 2000). High levels of ingroup identification and heightened group salience, especially early on in a contact situation, have been shown to lead to increased anxiety, threat perceptions, conflict and contact avoidance (Islam & Hewstone, 1993; Miller, 2002; Tropp & Page-Gould, 2015). Afrikaans-speaking white South Africans have been found to rate their ingroup significantly more positively than any other group (Bornman, 2011; Durrheim et al., 2011). Moreover, white Afrikaans-speaking South Africans rate coloured South Africans as the lowest out of all the ethnic groups evaluated (Bornman, 2011). Similarly, coloured South Africans have been found to have the most positive attitudes towards their ingroup than any other ethnic group (Bornman, 2011; Durrheim et al., 2011). These high levels of ingroup identification and prejudice between white Afrikaans-speaking South Africans and coloured South Africans may result in increased tension and subsequently the avoidance of intergroup contact; which may help to explain why more direct intergroup contact was taking place within the English tutorials.

However, the present study did not include such measures as anxiety, attitudes, and ingroup identification, so one can only speculate as to the possible reason for this significant difference in direct contact scores. Future research should examine the possible reasons for the small number of outgroup interaction partners in general, and in Afrikaans-speaking classes in particular. The reasons behind this lack of contact will help to inform how we approach interventions aimed at increasing positive intergroup contact experiences on university campuses.

The Effect of Diversity and Tutorial Language on Direct Contact

Diversity and Direct Contact

The present study also found support for the third hypothesis, demonstrating that ethnic diversity was consistently associated with more direct intergroup contact for both the majority- and minority-status groups respectively. More specifically, white majority group students in more diverse tutorials experienced more direct intergroup contact. The same results were found for the non-white minority group, namely that non-white minority group students in more diverse tutorials experienced more direct intergroup contact. Moreover, these significant effects remained when controlling for age and gender.

These findings are in line with previous research on diversity and the opportunity hypothesis (Hallinan & Smith, 1985), suggesting that increasing diversity within a contact situation will result in an increase in intergroup contact (e.g., Bécares et al., 2011; Christ et al., 2014; Gundelach, 2014; Huijts et al., 2014; Lee & Bean, 2010; Schlueter & Scheepers, Schmid et al., 2014; 2010; Stellemacher & Wolf, 2006; Sluiter et al., 2015). The findings of the present study do not align with the research on the negative effects of diversity, which suggest that increases in diversity would lead to individuals “hunkering down” and thereby avoiding intergroup contact (e.g., Putnam, 2007; Rae et al., 2015).

This finding becomes particularly important when one considers the numerous positive outcomes associated with intergroup contact, specifically within the university setting. Intergroup contact has been shown to reduce a number of different types of prejudice, including intergroup anxiety and negative action tendencies, and improve outgroup forgiveness and trust (e.g., Hewstone et al., 2006; Pettigrew & Tropp, 2006, 2008; Swart et al., 2010). Furthermore, intergroup contact has been positively associated with a number of student outcomes, such as cognitive skills, academic achievement, improved sense of belonging, increased self-esteem and growth, and intellectual engagement (Bowman, 2010; Bowman & Oark, 2015; Chang, 2011; Chang et al., 2004, 2006; Gurin et al., 2002; Shook & Clay, 2012).

Given the positive consequences of intergroup contact, and the opportunities diversity presents for increasing intergroup contact, universities should focus on ways in which they can increase ethnic diversity within the many contact settings on

a university campus. This could be achieved through greater ethnic diversity within tutorial classes, or through the assignment of interethnic dormitory rooms in university residences. However, as discussed previously, research has shown that merely increasing diversity does not necessarily result in meaningful interaction (Dixon et al., 2005; Finchilescu et al., 2007; Koen & Durrheim, 2010; Tredoux et al., 2005). For this reason, Stellenbosch University and universities across South Africa should find ways in which to not only increase ethnic diversity, but also encourage and facilitate meaningful interaction between different ethnic groups. Interventions should focus on creating opportunities for meaningful interaction and friendship formation, as cross-group friendships have been found to be the most potent form of intergroup contact (Davies et al., 2011).

Tutorial Language and Direct Contact

In addition to the effects found for diversity, tutorial language also had an influence on direct contact for both the white majority- and non-white minority-status groups respectively. For the white majority-status group, those students in Afrikaans tutorials experienced significantly lower levels of direct intergroup contact compared to those students in English tutorials. Comparable results were found for the non-white minority-status group, namely non-white students in Afrikaans tutorials experienced lower levels of direct intergroup contact compared to non-white students in English tutorials.

These results reflect the findings regarding the second hypothesis of this study (i.e., that students in the English tutorial stream would experience more direct contact than those students in the Afrikaans tutorial stream). The possible reasons for this language effect are the same as those presented for the second hypothesis (see discussion on Direct Contact within Small-Group tutorials). Intergroup anxiety, previously held prejudices, and ingroup identification may all exert an influence on the likelihood that students in Afrikaans tutorials may engage in intergroup contact. Again, given that the present study did not include measures regarding the possible reasons for this effect, one can only speculate as to the possible reasons.

The Moderating Role of Tutorial Language on the Diversity-Contact Relationship

The final hypothesis of the present study tested whether tutorial language would moderate the significant relationship between diversity and direct intergroup contact for both the white majority- and non-white minority-status groups respectively. This hypothesis suggested that the diversity-contact relationship would be significantly stronger in English tutorials. Partial support was found for this hypothesis. Tutorial language significantly moderated the relationship between diversity and direct contact for the white majority status group. The relationship between diversity and direct contact was significantly stronger within English tutorials than in Afrikaans tutorials for the white majority group.

In contrast, this significant moderation effect was not found for the non-white minority status group. For the non-white minority sample, tutorial language had no influence on the strength of the relationship between diversity and direct contact. A possible reason for this lack of effect may be due to the fact that non-white students attending psychology tutorials at Stellenbosch University have many white interaction partners to choose from regardless of whether they are in an English or Afrikaans tutorial. The results of the first hypothesis revealed that there was no significant difference in the proportion of white students across the English and Afrikaans tutorials. For this reason non-white students within either language stream have similar opportunities for contact with majority status students.

This may also be the case on the Stellenbosch University campus in general, given that 62.24% of the student body are white majority students (SU, 2015). Creating intergroup opportunities for non-white students may therefore not be of the most importance. Instead intergroup contact interventions for non-white students should focus on creating positive intergroup experiences (i.e. contact experiences that embody most of Allport's optimal conditions) and promoting the development of cross-group friendships, as cross-group friendships have been shown to be especially good at improving intergroup relations and outgroup attitudes (Davies et al., 2011; Pettigrew & Tropp, 2006). Conversely, intergroup contact interventions directed at the white majority group should focus on creating more positive intergroup contact experiences, given the lack of outgroup members the white

majority may have access to. Furthermore, these contact experiences should encourage prolonged and consistent contact with outgroup members, and focus specifically on the potential for friendship formation.

Limitations of the Present Study

Despite the contributions of the present study to the current literature, there are a number of limitations that need to be recognised. The present study employed a cross-sectional multi-level design in order to test causal pathways between diversity, tutorial language, and intergroup contact. In order to accurately examine the causal relationships between variables an experimental research design is best suited (Bless, Higson-Smith, & Sithole, 2013; Cohen, Manion, & Morrison, 2007). Experimental research designs have high levels of internal validity, due to the fact that in such designs one is able to control for any factors that may exert an influence on the causal relationship being measured (Bless et al., 2013; Christensen, Johnson, & Turner, 2014; Cohen et al., 2007). Cross-sectional research designs are unable to rule out these potential influences. However, although experimental research designs offer high internal validity, they often lack external validity (Christensen et al., 2014; Cohen et al., 2007). Experimental designs take place within a highly controlled laboratory environment, to ensure that any competing influences are controlled for. This laboratory setting differs measurably from 'real-world' settings in which intergroup contact takes place. An individual's behaviour may therefore be altered or distorted when placed within a laboratory type setting. For this reason a cross-sectional research design may offer greater and more accurate insight into behaviours that occur within every day, 'real-world' settings, and may therefore have greater external validity (Bless et al., 2013; Christensen et al., 2014).

Longitudinal research designs may also be better suited to examine causal pathways. Longitudinal designs provide better external validity, which experimental research designs often lack (Bless et al., 2013; Cohen et al., 2007; Fitzmaurice, Laird, & Ware, 2011). Furthermore, longitudinal designs encompass greater internal validity when compared to cross-sectional designs. This is because longitudinal designs are able to control for the effects of variables over time (Cole & Maxwell, 2003; Fitzmaurice et al., 2011; Swart et al., 2011). Despite the benefits of these

alternative research designs, both experimental and longitudinal designs are demanding in terms of time and resources (Cohen et al., 2007). Therefore, given practicality, the time constraints of my degree, and the large number of resources and data collectors required for one data collection point of the present study, a cross-sectional research design was deemed appropriate. Moreover, given the fact that the present study aimed to examine intergroup contact within a smaller everyday setting, a cross-sectional approach was more suitable than an experimental design in a laboratory setting, since the study investigated 'real-world' behaviours. Regardless of its cross-sectional nature, the findings of the present study still make a vital contribution to the current intergroup contact literature, as it examines the effects of diversity within a smaller everyday setting, rather than at a neighbourhood or country level. Moreover, it provides evidence for the importance of taking advantage of diversity within the university system in order to increase intergroup contact and thereby improve intergroup relations.

The present study employed self-report measures to examine intergroup contact within the tutorials, asking participants about their intergroup contact indirectly through a nomination questionnaire. Although this is a common method for collecting intergroup contact data, it is not without its limitations. Self-report measures only generate accurate information if the participant answers the questionnaire as honestly as possible, and they are able and willing to express these sentiments (Correll, Judd, Park, & Wittenbrink, 2010). When examining intergroup contact, this may be particularly problematic. Firstly, societal norms have evolved over time and the explicit expression of prejudiced attitudes is no longer acceptable. This could result in socially desirable responses (i.e., stating that you experience more intergroup contact than you actually do). Secondly, participants may not be fully aware of their own prejudiced attitudes, which may also lead to inaccurate responses (Correll et al., 2010). One way to counteract these misleading and socially desirable responses is to ensure that the confidentiality and anonymity of the participant will be protected at all costs. The present study employed this technique. Furthermore, the use of a limited nomination questionnaire, which provides no insight into the fact that the questionnaire is testing intergroup contact, ensures that participants are not giving socially desirable responses. Owing to the fact that the

participants are unable to ascertain what the questionnaire is testing, they are more likely to answer the question honestly.

In addition to the above, there are a number of limitations with regards to the present study's sample of participants. The participants of the present study are unbalanced in terms of its ethnic composition. There are more white ($N = 737$) and coloured ($N = 312$) participants than black (African) participants ($N = 79$), making the sample unrepresentative of the current South African population. Furthermore, the present study made use exclusively of university students from the Psychology Department of Stellenbosch University. Individuals from other universities, or even from different departments, may have vastly different experiences of diversity and intergroup contact. Moreover, the experiences of university students are different from members of the general South African population. For these reasons, generalising the results of the present study outside of the current sample is inadvisable.

Directions for Future Research

The results of the present study, as well as its limitations discussed above, provide us with several directions and recommendations for future research on the influence of contextual level variables, such as diversity and language, on intergroup contact. Potential research should focus on examining the influence of diversity on direct intergroup contact both longitudinally and through experimental research designs. Moreover, future studies should examine possible variables that may influence the positive effects that diversity may present in terms of intergroup contact. For example, prospective studies could examine the influence of classroom size or density on the relationship between diversity and intergroup contact.

Future research should also include an additional survey that contains attitudes and prejudice measures in order to examine the effects of diversity on the contact-prejudice relationship. For example, studies could include measures of intergroup anxiety, intergroup trust, and positive outgroup attitudes. Furthermore, research should also attempt to control various factors that may influence the diversity-contact relationship (Brown & Hewstone, 2005). For example, previous contact, segregation, and negative contact within the contact setting (Schmid et al., 2014).

Much of the research on the opportunity hypothesis has focused on larger areas of analysis, such as the neighbourhood or country. Forthcoming research should focus more closely on the smaller everyday spaces in which individuals actually engage in intergroup contact behaviours. For example, researchers could examine smaller everyday spaces such as offices or classrooms. Prospective studies should examine the ways in which institutions, such as universities, can take advantage of their increasing diversity in order to increase opportunities for positive intergroup contact experiences. This will help to improve the state of intergroup relations in South Africa. In addition to this, studies should be conducted within other departments, universities and settings in order to test whether these results are replicable. For example, future studies could investigate the influence of diversity within the workplace, by examining companies that differ in their levels of ethnic diversity.

More longitudinal research should also be conducted within this area. Studies should examine the effects of diversity on intergroup contact at numerous time points. For example researchers could measure friendship networks at a number of time points throughout the year. Experimental studies should also be explored. Experimental tutorial groups could be created, with some tutorials encouraging active intergroup contact, while other tutorials make no active efforts to encourage intergroup interaction. In order to ensure the reliability of the self-report measure within the tutorials, future studies could make use of observational techniques to record who has contact with one another within the 10 weeks of class. Although this will require extensive time and resources, it will vastly improve the reliability of the self-report measures.

Conclusion

The present study makes a significant contribution to the present literature on diversity by examining the effects of diversity within a smaller everyday space in which individuals experience everyday intergroup relations (Hewstone, 2015). The results have established support for the positive effects of diversity for intergroup contact, demonstrating that diversity is consistently associated with increases in direct intergroup contact for both majority- and minority- status groups respectively.

This has practical implications suggesting that diversity within contact settings is important if contact is to occur, allowing for the subsequent positive outcomes associated with increased intergroup contact. Moreover, the present study found a moderating effect of tutorial language on the relationship between diversity and contact for the white majority-status group. Future research should focus on other contextual-and individual-level factors that may have an influence on diversity and its opportunities for intergroup contact.

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APPENDIX A:
Stellenbosch University Research Ethics Committee (Humanities) Clearance
Letter



UNIVERSITEIT • STELLENBOSCH • UNIVERSITY
jou kennisvenoot • your knowledge partner

13 December 2016

Tel.: 021 - 808-9183
Enquiries: Ms Clarissa Graham
Email: cgraham@sun.ac.za

Reference No. HS1132/2014

Ms Kayla Human
Dept of Psychology

Dear Ms Kayla Human

LETTER OF ETHICS CLEARANCE

With regard to your application, I would like to inform you that your application for ethics clearance of the project: *A Multilevel Examination of the Moderating Role of Diversity and Tutorial Language on the Intergroup Contact in the First-Year Psychology Tutorial Programme at Stellenbosch University* has been approved on the following provisos:

1. The researcher will only use data from the original approved project HS1132/2014.
2. The researcher will remain within the procedures and protocols indicated in the proposal submitted on 14 November 2016, particularly in terms of any undertakings made in terms of the confidentiality of the information gathered.
3. The research will again be submitted for ethical clearance if there is any substantial departure from the existing proposal.
4. The researcher will remain within the parameters of any applicable national legislation, institutional guidelines and scientific standards relevant to the specific field of research.
5. The researcher will consider and implement the foregoing suggestions to lower the ethical risk associated with the research.
6. This ethics clearance is valid for twelve months from 13/12/2016 until 12/12/2017.

We wish you success with your research activities.

Best regards


.....
Ms C.J. Graham

REC Coordinator: Research Ethics Committee: Human Research (Humaniora)
Registered with the National Health Research Ethics Council (NHREC): REC-050411-032



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Appendix B:

Social Network Questionnaire Data Collection Training

The 16 Psychology 144 tutors attended a training session, held by the researcher and her supervisor, two days before their respective tutorials. The tutors were all provided with the materials that they would need to have in each of their respective tutorial classes. This included a copy of the questionnaire, a blank envelope, and an elastic band. The tutors were informed that they would need to count the number of students they had in each of their three tutorial classes and collect the relevant number of questionnaires, along with a few extra copies, from the tutorial office before their tutorials.

The tutors were then told that they were to start their tutorial time slot as usual, by beginning with the attendance register and recording any absentee students. Once this is completed the tutors were instructed to hand out a questionnaire and a blank envelope to each of the students in their tutorial class. Dr Hermann Swart and myself then went through the questionnaire with the tutors, providing details on how it should be completed.

The tutors were told to give their students the following instructions. They should explain to the students that Dr Hermann Swart is conducting research on how successful the first year tutorials are. Specifically, that he is interested in seeing whether the students are being given sufficient opportunities to interact with fellow members of their tutorial group. The tutors were then given instructions to relay to their tutorial groups on how to complete the social network questionnaire.

Namely, that each student should carefully read the relevant information before completing the questionnaire, highlighting that participation is completely voluntary. The tutors should then demonstrate that each student needs to write their name and surname on the questionnaire. At this point the tutor needs to explain and highlight the fact that once the data is captured their name will become a coded number and their participation will be completely anonymous. The students should be shown the picture on the first page of the questionnaire illustrating that they will be illustrated as a network point as in a diagram like the one provided. The students should then complete their age and gender.

Following these instructions the tutor should then explain how the students should complete the remainder of the questionnaire. Specifically that students need to think about the past 10 tutorials, including the one they are in now, and then nominate up to five individuals who they have had the most interactions with over this time period. The students do not have to nominate five individuals, they can nominate anywhere between zero and five individuals from their tutorial group. For each nomination they need to write down BOTH the name and surname of the individual they are nominating - the tutors were told to stress the importance of this. Each tutor was provided with a class list to provide to their students in order to ensure they write both the name and surname. Furthermore, the tutors were informed that the questionnaires may not be handed around the class and that students cannot nominate themselves, or their tutor as a friend.

Once the students have completed their questionnaires the tutors were told to ask the students to seal their questionnaire within the blank envelope they are provided with. The tutors must then collect these sealed envelopes from each student. The tutors were then told to write their name (tutor name), the day of the week and the tutorial time on the top envelope, as well as any ABSENTEES on the first envelope on your pile and put them together with the elastic provided. Directly after their tutorial slot the tutors were instructed to hand the envelopes, as well as any left over questionnaires, to Kayla Human (the researcher). These envelopes will then be kept in a locked office. Once they have been captured the documents will be destroyed.

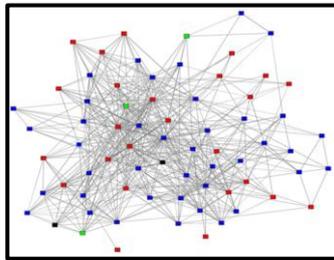
APPENDIX C:**Social Networks Questionnaire**

Psychology 2014
Tutorial feed back

Tutor's Name: _____ **Tutorial Group (Day & Timeslot):** _____

Dear Student,

On behalf of the Department of Psychology and the Faculty of Arts and Social Sciences, I, Dr Hermann Swart, am evaluating the extent to which the Psychology 144 Tutorials are providing you with an opportunity to interact with other students in this Tutorial group. To this end, I am interested in plotting the connections that have been established in your Psychology 114 Tutorial group, much like in the diagram below. Your feedback will be important for the continued development of the Psychology 144 Tutorial sessions as opportunities for students to engage with one another. The outcome of this evaluation will be communicated to the Head of the Psychology Department, and to the Dean of the Faculty of Arts and Social Sciences.



Please note the following important information:

- Completing this feedback form will take no longer than 5 minutes.
- There are no right or wrong answers.
- All data are treated completely anonymously and will be analyzed on an aggregated level only (i.e., averaging responses across many people).
- Besides myself, no one will have access to individual responses.
- Your participation in this assessment is voluntary, and you will not be prejudiced in any way by refusing.
- Below I ask you to write your name on this feedback form, so that I can match all the connections listed by the students in your Tutorial group (so that I can create a diagram like the one above to illustrate who has interacted with whom in this Tutorial group over the past five tutorials). **Your individual responses will NOT be shared with any single other person (inside or outside of the University). Your responses will be treated with strict confidentiality.**

I have read the information above and understand that any information I provide will be treated with strictest anonymity and confidentiality, and that my personal information will not appear in any documentation summarizing the results of this assessment. **By completing this feedback I am indicating my informed consent.**

RIGHTS OF RESEARCH PARTICIPANTS: If you have questions regarding your rights as a research subject, contact Ms Maléne Fouché [mfouche@sun.ac.za; 021 808 4622] at Stellenbosch University's Division for Research Development. You have right to receive a copy of this Information and Consent form.

INSTRUCTIONS: **Please answer each of the questions below as honestly as possible. Your feedback will remain confidential. Please complete this feedback on your own.**

1. Your Full Name and Surname: _____

Remember, your data will be treated anonymously; this information is needed only to match all nomination data.

2. Your Gender (please select): Male Female

3. Your Age today (in years): _____

4. Please take a moment and think back on your time in the **ten Psychology 144** Tutorials this Semester (since February 2015). Think about the students in your regular Tutorial group.

With these students in mind, please **nominate up to five students** (by writing down their name and surname) that you have had the **most regular face-to-face interactions** with (i.e., conversations) **during the ten Psychology 144 Tutorials this Semester** (i.e., as part of Tutorial activities or discussions).

IMPORTANT:

You may list the students in any order below. Select only those students that you had the **most regular face-to-face interactions with in your regular Tutorial group. It is essential that you include the name and surname for each student that you nominate.**

1. STUDENT

His / Her Name and Surname

2. STUDENT

His / Her Name and Surname

3. STUDENT

His / Her Name and Surname

4. STUDENT

His / Her Name and Surname

5. STUDENT

His / Her Name and Surname

APPENDIX D

Table 6

Number of students by ethnicity per English and Afrikaans tutorials respectively

	Tutorial Number	White (Majority)	Total Non-White (Minority)		
			Black (African) South Africans	Coloured South Africans	Indian South Africans
English Tutorials	1	16	3	8	0
	2	18	1	6	0
	3	13	3	0	1
	4	17	2	7	3
	5	14	0	9	0
	6	9	2	7	0
	10	13	8	5	0
	11	16	0	4	3
	12	12	4	3	0
	13	13	3	5	1
	14	16	1	6	2
	15	9	3	3	0
	16	15	3	3	3
	17	14	1	7	0
	18	11	1	10	1
	25	13	3	6	2
	26	23	0	1	0
	27	11	2	5	0
	34	14	1	6	2
	35	17	3	2	1
	36	9	2	8	0
	37	9	1	5	0
	38	23	1	4	0
	39	11	6	7	1
	40	14	5	6	1
	41	18	0	1	2
	42	15	4	1	0
	43	18	1	7	2
45	6	3	6	0	
46	13	4	5	1	
47	16	2	4	0	
48	12	3	5	0	

Table 6 (continued)

Number of students by ethnicity per English and Afrikaans tutorials respectively

	Tutorial Number	White (Majority)	Total Non-White (Minority)		
			Black (African) South Africans	Coloured South Africans	Indian South Africans
Afrikaans	7	16	0	9	0
Tutorials	8	17	1	4	0
	9	16	0	11	0
	19	14	0	10	0
	20	15	0	6	0
	21	10	1	13	0
	22	15	0	10	0
	23	15	0	8	0
	24	13	0	10	0
	28	14	0	5	0
	29	24	0	0	0
	30	13	0	14	0
	31	18	0	8	0
	32	17	0	6	0
	33	7	1	13	0
	44	17	0	5	0
	49	17	0	10	0
	50	16	0	1	0
	51	15	0	7	0