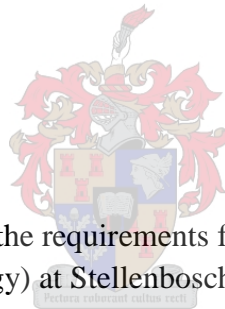


**Attitude and Intergroup Anxiety Generalisation as Mediators of the
Secondary Transfer Effect of the Contact-Prejudice Relationship among
White South African Stellenbosch University Students**

Cara Daiber



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

Supervisor: Dr. Hermann Swart

March 2017

DECLARATION

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

Signature: Cara Daiber

March 2017

Date

ABSTRACT

Intergroup contact has been found to be one of the most effective ways of reducing prejudice (Allport, 1954; Pettigrew & Tropp, 2006) and its effects generalise beyond the outgroup involved in the interaction (Pettigrew, 2009). As such, the present study aimed to explore the impact that White South African students' intergroup contact with Coloured South Africans has on the attitudes and intergroup anxiety towards Coloured South Africans, and whether these attitudes and intergroup anxiety generalise to impact social distance and expectancies towards Black (African) South Africans, while controlling for prior contact with the secondary outgroup. In other words, the present study explored the secondary transfer effect, as well as the mechanisms mediating this effect. The present study is a quantitative, cross-sectional study. Data was collected via an online survey questionnaire completed by 866 White South African Stellenbosch University students and was subsequently analysed via structural equation modelling. I found that cross-group friendships with Coloured South Africans were significantly associated with intergroup anxiety towards Coloured South Africans and positive attitudes towards Coloured South Africans. Furthermore, intergroup anxiety towards Coloured South Africans was significantly related to negative outcome expectancies towards Black (African) South Africans and positive attitudes towards Coloured South Africans had a significant relationship with social distance towards Black (African) South Africans. The findings support the secondary transfer effect and provide valuable evidence of the mediating role of attitude- and intergroup anxiety generalisation. These findings fill an important theoretical gap in the contact literature, as South African studies exploring the secondary transfer effect and its mediators are extremely scarce. Furthermore, the findings from the present study provide important insights that can be applied in the organisation of interventions aiming to reduce prejudice.

OPSOMMING

Daar is bevind dat tussengroepkontak een van die mees effektiewe maniere is om vooroordeel te verminder (Allport, 1954; Pettigrew & Tropp, 2006) en dat die uitwerking daarvan wyer as die groep betrokke by die interaksie veralgemeen (Pettigrew, 2009). Dit is dus die doel van die onderhawige studie om die impak wat tussengroepkontak tussen Wit Suid-Afrikaners en Kleurling Suid-Afrikaners op die gesindhede en tussengroepangs van Kleurling Suid-Afrikaners het, te bestudeer en te bepaal of hierdie gesindhede en tussengroepangs sal veralgemeen om die sosiale afstand en verwagtinge teenoor Swart Suid-Afrikaners ook te raak, terwyl vorige kontak met die sekondêre buitegroep beheer is. Met ander woorde, die onderhawige studie ondersoek die sekondêre oordrageffek, sowel as die meganismes wat die effek bemiddel. Die onderhawige studie is 'n kwantitatiewe deursnee-ontwerp-studie. Data is ingesamel via 'n aanlynopnamevraelys wat deur 866 Wit Suid-Afrikaanse Universiteit Stellenbosch-studente ingevul is en wat daarna deur strukturele vergelykingsmodellering ontleed is. Ek het bevind dat kruis-groep-vriendskappe met Kleurling Suid-Afrikaners 'n beduidende assosiasie met tussengroepangs en positiewe houdings teenoor Kleurling Suid-Afrikaners het. Verder was tussengroepangs teenoor Kleurling Suid-Afrikaners beduidend verwant aan negatiewe verwagtinge oor Swart Suid-Afrikaners en positiewe houdings was beduidend verwant aan sosiale afstand teenoor Swart Suid-Afrikaners. Die bevindings ondersteun die sekondêre oordrageffek en bied waardevolle bewyse ten opsigte van die bemiddelende rolle van gesindheids- en tussengroepangs-veralgemening. Hierdie bevindings vul 'n belangrike teoretiese gaping in die kontakliteratuur, aangesien Suid-Afrikaanse studies wat die sekondêre oordrageffek en sy bemiddelende meganismes bestudeer, uiters skaars is. Verder bied die bevindings van die onderhawige studie belangrike insig wat toegepas kan word in die organisasie van intervensies wat mik om vooroordeel te verminder.

ACKNOWLEDGEMENTS

I would like to express my sincerest gratitude to everybody who assisted me and supported me during this research process and subsequently aided me in successfully completing this Masters thesis.

First and foremost, I would like to thank my Lord and Saviour. Thank you for giving me the strength and ability to tackle this thesis. I would like to thank my supervisor, Dr Hermann Swart, for sharing his expert wisdom with me by way of exceptional feedback. I truly appreciate his guidance during this process. Additionally, I would like to thank Anri Nell for her support and advice, which she always offers with a smile.

I am lucky to have amazing friends and family who are always willing to listen to, encourage and advise me. In particular, I wish to thank Anri Venter, Nicola Vorster, Jo-Anne Stroebel and my brother, Arno Daiber. Most importantly, I would like to thank my parents: my mother (Colet Daiber) and my father (Michael Daiber) for their unwavering love and support. Thank you for giving me the opportunity to study. This thesis is dedicated to you.

TABLE OF CONTENTS

DECLARATION	i
ABSTRACT.....	ii
OPSOMMING	iii
ACKNOWLEDGEMENTS	iv
TABLE OF CONTENTS.....	v
LIST OF TABLES	viii
LIST OF FIGURES	ix
APPENDICES	x
CHAPTER ONE: INTRODUCTION	1
South African History of Intergroup Contact.....	2
South African Intergroup Relations during Apartheid	2
South African Intergroup Relations Post-Apartheid	6
The South African University Context.....	9
The Present Study.....	11
Chapter Overview	13
CHAPTER TWO: THE CONTACT HYPOTHESIS	14
The Inverse Relationship between Contact and Prejudice	15
Formulating the Contact Hypothesis	15
Initial Conflicting Findings of the Contact Hypothesis.....	16
Support for the Contact Hypothesis.....	17
South African support for the contact hypothesis.....	20
Moderators of the Contact-Prejudice Relationship	22
Group status.	22
Category salience.....	25
Dimensions of Contact	26
Quantity of contact versus quality of contact.	26
Cross-group friendships.....	27
Mediators of the Contact-Prejudice Relationship	30
Intergroup Anxiety	31
Expectancies Relating to Intergroup Contact	35
Summary	39

CHAPTER THREE: THE SECONDARY TRANSFER EFFECT OF INTERGROUP CONTACT.....	40
Characteristics of the Secondary Transfer Effect	40
Support for the Secondary Transfer Effect	42
Longitudinal and experimental support for the secondary transfer effect.	44
South African support for the secondary transfer effect.	45
Alternative Explanations for the Secondary Transfer Effect.....	48
Mediators of the Secondary Transfer Effect	50
Attitude Generalisation.....	50
Intergroup Anxiety	53
Summary	56
CHAPTER FOUR: INTERGROUP ANXIETY AND ATTITUDE GENERALISATION AS MEDIATORS OF THE SECONDARY TRANSFER EFFECT	57
The Present Study.....	57
Hypotheses.....	59
Method	60
Questionnaire.....	60
Predictors.	60
Mediators.	61
Outcomes.	62
Procedure	63
Respondents.....	64
Results	65
Preliminary Data Analysis.....	65
Main Data Analysis	67
Structural equation modelling with latent constructs.....	67
Mediation effects.	70
Alternative models.	71
Summary of Findings	76
CHAPTER FIVE:	77
DISCUSSION	77
Primary Contact Effects.....	78
The Secondary Transfer Effect of Intergroup Contact	80
Attitude generalisation.	80

Intergroup anxiety generalisation.	82
Alternative models.	84
Alternative Explanations	86
Practical Application of the Present Findings	88
Limitations of the Present Study	91
Directions for Future Research.....	95
Conclusion.....	98
REFERENCES	99
APPENDICES	118

LIST OF TABLES

Table 1.	Pearson Product-Moment Correlations between Composite Variables, and Construct Reliability, Mean, and Standard Deviation (SD)	66
----------	--	----

LIST OF FIGURES

- Figure 1. Structural model illustrating the mediating effect of attitude and intergroup anxiety generalisation within the secondary transfer effect 51
- Figure 2. Structural equation model of the secondary transfer effect, via attitude and intergroup anxiety generalisation amongst White South African Stellenbosch University students (N = 866). 69
- Figure 3. Alternative structural equation model of the secondary transfer effect, via attitude and intergroup anxiety generalisation amongst White South African Stellenbosch University students (N = 866). 73

APPENDICES

Appendix A	Electronic Survey Invitation	118
Appendix B	Informed Consent Form	119
Appendix C	Biographic Questionnaire	123
Appendix D	Main Survey Questionnaire	125

CHAPTER ONE:

INTRODUCTION

The Oxford Dictionary (Waite, 2012) defines prejudice as dislike, hostility or unjust behaviour derived from preconceived opinions that are not based on reason or experience. In all of history, there has been no group of people unsusceptible to prejudice. It is a world-wide disease that has been the basis of many human tragedies. Slavery, for example, was based and sustained on the principles of prejudice. The Holocaust, the killing of millions of Jews during World War II, is another illustration of prejudice in its most potent form. In South Africa, during the Apartheid era, prejudice amongst White South Africans towards “non-Whites” manifested in legislations segregating ethnic groups. Across the world people of all ethnic groups, sexual orientations, religious affiliations and other social categories are both victimisers and victims of prejudice.

In the modern age people are exposed to numerous social groups different from their own. International travel allows more people to migrate and societies are therefore quickly becoming more diverse. However, scarce resources and intense competition for these resources exacerbates intergroup tensions. Unless a method to reduce prejudice is employed, these intergroup tensions could quickly escalate into intergroup conflict. Intergroup contact is considered to be one of the most effective ways to reduce prejudice (Allport, 1954; Pettigrew & Tropp, 2006) and is therefore of great interest to social psychology researchers across the globe.

Given South Africa’s unique history of intergroup tension and the importance of intergroup contact, Chapter One will explore South Africa’s history of intergroup contact, both during and after Apartheid. As the present study’s respondents are university students, the context of South African universities will be discussed in detail, followed by a discussion of the present study. Finally, an overview of the layout of the present study will be presented.

South African History of Intergroup Contact

Given the diversity of its people, South Africa is known as the rainbow nation. Today, 22 years after the abolishment of Apartheid, a multitude of different ethnic groups can freely engage in intergroup contact. Legislation separating ethnic groups no longer exist, but South Africa has a painful 46-year history of legislations that fostered group-based distrust, anxiety and resentment. In order to understand South Africa's current social dynamics, Apartheid and its legacy on today's intergroup relations will be examined below.

South African Intergroup Relations during Apartheid

Apartheid literally means “apart-ness”, suggesting a programme of separation. Specifically, Apartheid was a radical extension of a system of segregation, originating from the colonisation of South Africa, which then evolved into complex institutions, supported by legislation underpinning White dominance in a mixed ethnic society (Eades, 1999). Apartheid began in 1948 and ended in 1994. The Minister of the Interior, T.E. Dönges, stated that: “If you reduce the number of points of contact to the minimum, you reduce the possibility of friction...” (Welsh, 2009, p. 55). This statement proved to be ironic, as contact researchers at that time postulated that positive contact between an ingroup and an outgroup member will lead to reduced prejudiced (Allport, 1954) and, consequently, reduce “friction”. Nevertheless, in order to curb contact between the ethnic groups and consequently avoid conflict, certain official regulations, that formed the cornerstones of Apartheid, were put into place.

The Population Registration Act of 1950 proved vital to Apartheid and the segregation of South Africa's people. It stipulated the classification of people into ethnic categories, which determined their status in society (Welsh, 2009; Welsh & Spence, 2011). The categories were White (people of European descent), Black (people of African descent), Coloured (people of mixed ethnic heritage) and Indian (people of Asian descent). The Group

Areas Act of 1950 further served to keep people apart by segregating residential areas and businesses into zones according to these race categories. Pass laws regulated and limited the influx of oppressed ethnic groups into the so-called “White areas”. Segregation also extended to multiple other spheres of life. “Whites only” signs were put up and restaurants, transport, beaches, public facilities, sport teams and other social spaces were segregated (Welsh, 2009; Welsh & Spence, 2011). The Immorality Act prohibited sexual relations between Black (African) and White individuals (1927) and between Coloured and White individuals (1950). Furthermore, mixed marriages were also prohibited by law as of 1949 (Welsh & Spence, 2011).

Apartheid laws did not only physically separate ethnic groups, but also separated them by giving them distinct frames of reference. The leaders of Apartheid feared the creation of “black Englishmen” who could overthrow their rule (Welsh & Spence, 2011, p. 19). Thus, it was decided that oppressed groups would only be educated in a manner that “befitted” their minority status. Hence:

The Bantu must be guided to serve his own community in all respects. There is no place for him in the European community... For that reason it is of no avail for him to receive a training which has its aim absorption in the European community while he cannot and will not be absorbed there. (Welsh & Spence, 2011, p. 19)

In this way, the Bantu Education Act of 1953 ensured that contact between White and oppressed individuals could never take place on equal educational footing.

Kinloch (1985) found that, as expected, there was a clear rift between White Afrikaans South Africans and other groups, particularly Black (African) South Africans during Apartheid. After careful study of the literature of the time, Kinloch (1985) concluded that any potential for positive progress via intergroup relations rested with English White South Africans and the oppressed groups of the time. Durrheim, Tredoux, Foster, and

Dixon (2011) explored data from 13 studies, from 1937 to 2011, to compare social distance and semantic differential scores across different South African historical periods. Social distance gives an indication of a respondent's behavioural intention to have intergroup contact, while the semantic differential score is a measure of the respondent's attitude towards the outgroup. Both English and Afrikaans speaking White respondents exhibited high levels of social distance towards Indian, Coloured and Black (African) outgroups during the Apartheid era. Initially, White respondents' social distance scores were highest for Indian outgroups, but after the 1978 political struggles, they were least inclined to have contact with Black (African) outgroups. Black individuals represented "die swart gevaar" (or the black peril) and, as such, were perceived as a security threat to White South Africans. Specifically, the black peril represented White South Africans' fears of being overwhelmed during encounters with Black (African) South Africans, especially when White South Africans were at a numerical disadvantage (Durrheim & Dixon, 2013). This perceived threat had been propagated through the years and had been grounded in collective memories of perceived Black-on-White violence.

On the other hand, disadvantaged outgroups' levels of social distance towards White South Africans during Apartheid were found to be lower than White respondents' social distance scores towards them (Durrheim et al., 2011). Therefore, White South Africans were even less inclined to interact with other outgroups than other outgroups were willing to interact with White South Africans. As the perpetrators of Apartheid, White South Africans were clearly very prejudiced and this is reflected in their social distance (a measure of prejudice) score. Moreover, White South Africans feared "die swart gevaar" (the black peril; Durrheim & Dixon, 2013) and this intergroup anxiety (as discussed in Chapter Two and Three) would have increased prejudice and triggered avoidance of contact.

The semantic differential scores for White respondents between 1975 and 1999 indicated increased prejudice towards other outgroups. Semantic differential scores were more favourable than social distance scores for all studied groups, excluding Black (African) respondents, for whom it remained uniform. This suggests that, even during the Apartheid era, a slight willingness for intergroup contact existed amongst the respondents, despite their self-reported attitudinal prejudice (Durrheim et al., 2011).

If Apartheid's objective was to avoid friction by limiting contact between ethnic groups, it failed miserably. Oppressed ethnic groups started fighting back against the ruling party. On 21 March 1960 a protest in Sharpeville culminated in the killing of 69 Africans by police (Welsh, 2009). This allowed Nationalists to seriously question the state of the country. On 16 June 1976, 6,000 protesters fought against the official requirement that certain subjects in African schools in "White" areas be taught in Afrikaans. Police opened fire on the protestors after failing to disperse them with teargas. By the end of the day, 15 fatalities were recorded (Welsh, 2009; Welsh & Spence, 2011). The Soweto uprising was the first nail in the coffin of Apartheid. It occurred during a time when South Africa was affected by economic sanctions as it was internationally isolated. It also ignited rage and determination in the oppressed (Welsh, 2009). The official commission of inquiry noted 575 fatalities between 16 June 1976 and 28 February 1977, but many speculate that the number who died was actually nearly double that (Welsh & Spence, 2011). The leaders of the Apartheid government would soon realise that suppressing "non-Whites" would no longer be a viable long-term option.

Both internal and external pressure took its toll on Apartheid and contributed to its fall. Political uncertainty was exacerbated by economic deterioration, partly due to the withdrawal of foreign investment. International isolation (e.g. economic sanctions, sporting and cultural boycotts) also aggravated the situation (Eades, 1999).

In 1994 South Africa had its first democratic election. A total of 19.7 million people voted in the national election and 62.65% of those votes went to the African National Congress (ANC). A revised constitution was proposed and was signed into law by President Nelson Mandela as *The Constitution of the Republic of South Africa*, Act 108 of 1996 (Welsh & Spence, 2011).

South African Intergroup Relations Post-Apartheid

Approximately 22 years after the abolition of Apartheid, South Africa has made great strides in building a diverse multi-cultural country. A total of 11 official languages is spoken in South Africa. Of its population of 54,956,900 people, 80.50% are Black (African), 8.80% Coloured, 2.50% Indian or Asian and 8.30% White (Statistics South Africa, 2015). Additionally, Apartheid laws that segregated the people of South Africa have been abolished and all of these ethnic groups are now allowed to intermingle peacefully. Public facilities are no longer segregated and all groups are now free to interact with one another without fearing legal repercussions. Therefore, the expectation would be that intergroup contact between the ethnic groups would have consequently increased.

Despite increased opportunities for contact, research shows that it has not necessarily led to the expected increase in post-Apartheid intergroup interaction (see Tredoux & Dixon, 2009). Dixon and Durrheim (2003) observed the informal segregation of people on an “open” beach in post-Apartheid South Africa. It was observed that White and Black (African) beach-goers would occupy different sectors of the beach. Even more astounding was the observation that on public holidays an influx of Black (African) beach-goers would be accompanied by a corresponding withdrawal of White beach-goers. (for another example of self-segregation in post-Apartheid South Africa, see Tredoux & Dixon, 2009). According to a survey taken by the Institute for Justice and Reconciliation (IJR, 2013), amongst a national sample representative of the South African adult population aged 15 and above, 53.90% of respondents indicated that

they “*never*” or “*rarely*” partake in interethnic socialising. Troublingly, only 23.50% of respondents indicated that they “*often*” or “*always*” take part in interethnic socialising.

Finchilescu, Tredoux, Mynhardt, Pillay, and Muianga (2007) used 2,559 students from the University of Cape Town, the University of Witwatersrand, the University of South Africa and the University of Johannesburg to explore eight reasons for the avoidance of contact. The reasons for avoidance included language, interests, dissociation, behaviour, ethnicity issues, culture, rejection and social economic status. Two core types of reasons emerged from the results: statements which blame the outgroup for the lack of intergroup interaction and statements about differences between the ingroup and the outgroup. It was found that the blame factor was significantly negatively related to amount of contact (White: $r = -.22, p < .05$; Black: $r = -.25, p < .05$), and significantly positively associated with negative affective prejudice (White: $r = .48, p < .05$; Black: $r = .41, p < .05$) and social distance (White: $r = .43, p < .05$; Black: $r = .29, p < .05$). Furthermore, the difference factor was significantly negatively related to amount of contact (White: $r = -.26, p < .05$; Black: $r = -.14, p < .05$), and significantly positively associated with negative affective prejudice (White: $r = .39, p < .05$; Black: $r = .12, p < .05$) and social distance (White: $r = .37, p < .05$; Black: $r = .15, p < .05$). Indications of limited contact due to self-segregation post-Apartheid is concerning, as it threatens the progress of South African intergroup relations, prejudice reduction and reconciliation. This lack of reconciliation was made increasingly obvious when a string of recent incidents fuelled racial tensions expressed via social media.

These incidents include Penny Sparrow’s racial slur, in which she referred to Black (African) individuals as monkeys on Facebook; Gareth Cliff questioning the meaning of freedom of speech; economist Chris Hart’s tweet; Velaphi Khumalo’s Facebook post on the cleansing of the country of White people, and the like (eNCA, 2016; Mail & Guardian, 2016; Shange, 2016; Wicks, 2016). These incidents have created a backlash of anger between the

ethnic groups in South Africa. Furthermore, 2015 marked a year of protests. Whether it be against institutional racism, Afrikaans in universities or for free education, these protests, whether intentional or not, stirred up a lot of anger between individuals from different ethnic groups. Hashtags, for example, #rhodesmustfall, #feesmustfall, #zumamustfall and #pennysparrowmustfall started trending on social media sites, sparking racial debate.

It is clear that there is still post-Apartheid intergroup prejudice (see Durrheim et al., 2011), but have there been any historical changes in the levels of prejudice since Apartheid? Durrheim et al. (2011) found that White respondents' mean social distance scores (ranging from 0 to 1) towards Black (African) individuals decreased slightly in recent years (1934 = .80, 2006 = .59). Black (African) and Coloured social distance scores also show a slight reduction. Therefore, even though there is still limited contact in South Africa, people are becoming more accepting of the idea of intergroup contact. Although White individuals have historically shown very high prejudice levels, there has been a reversal since 2007, where prejudice towards White individuals amongst Black (African) individuals has become higher than prejudice towards Black (African) individuals amongst White individuals (Durrheim et al., 2011).

These results have been supported by Gibson and Claassen's (2010) findings, where Black (African) individuals were found to be less reconciled with White individuals, as compared to the three ethnic minorities' levels of reconciliation with Black (African) individuals. This could be because of Black (African) South Africans' economic minority status within the South African society. Despite the fact that intergroup contact is still limited post-Apartheid, it stands to reason that post-Apartheid intergroup contact would allow for more equal status than Apartheid intergroup contact and would therefore probably be experienced as more positive. However, contact effects have been found to be less effective when applied to minority status group members (Tropp & Pettigrew, 2005). Black (African) South Africans

might be more conscious of their group identity and their group's devalued status economically.

Gibson (2004) measured reconciliation via four sub-categories, i.e. inter-ethnic reconciliation, support for a human-rights culture, political tolerance and institutional legitimacy. An average group score of 4.00–5.00 on each of the sub-dimensions was considered indicative of high reconciliation. A score of 3.00–3.90 was considered as somewhat reconciled. According to Gibson (2004), 33% of Black (African), 56% of White, 59% of Coloured and 48% of Asian South Africans are at least somewhat reconciled. Therefore, about 44% of the South African population is at least somewhat reconciled with outgroups. This paints a fairly optimistic future for South Africa, provided that contemporary intergroup contact becomes more prevalent, as positive intergroup contact has been shown to be one of the most effective ways to decrease prejudice towards an outgroup (see Allport, 1954; Pettigrew & Tropp, 2006). South African universities offer ideal contexts in which to foster positive intergroup relations and, as such, should be discussed in more detail.

The South African University Context

During the Apartheid era education, like every facet of society, was segregated by legislation. After the democratic election in 1994 the segregationist laws of the Apartheid regime were rescinded and people were free to choose which schools or universities to attend. All ethnicities were permitted to freely intermingle, live in the same residential areas and attend the same educational institutions. Unfortunately, as indicated in the above section, Apartheid's influence is still wide-spread in contemporary South Africa.

Children and adolescents often grow up in largely homogenous neighbourhoods (Chisholm & Nkomo, 2005) and, as such, attend largely homogenous schools. This provides them with limited opportunities for intergroup interaction. Universities in South Africa, and Stellenbosch University in particular, offer unique opportunities for intergroup contact that are

perhaps not as readily available in the students' home environments. Unfortunately, a pattern of self-segregation has been observed in contemporary South African universities (Finchilescu et al., 2007). Schrieff, Tredoux, Dixon, and Finchilescu (2005) observed the seating patterns of students in university residence dining halls for a month. An informal type of segregation was clearly evident among the Black (African) and White students. Furthermore, segregation occurred in the seating at various individual tables, as well as in the overall organisation of the seating in the dining halls. Moreover, Schrieff, Tredoux, Finchilescu, and Dixon (2010), in a similar longitudinal study, found that the patterns of segregation take place rapidly when groups encounter each other and that segregation patterns remain consistent over time. Not only do students self-segregate when confronted with the choice of which groups to choose to sit with, but it was also found that students have a marked preference for same-ethnic friendships (81.27%; Schrieff et al., 2010). There is some hope that students would be willing to take part in cross-group friendships, as 18.73% of all new friendships reported by the students were cross-ethnic. While far fewer than the same-ethnic friendships, cross-ethnic friendships were, therefore, far from absent amongst the respondents.

Even though not as diverse as the general population, Stellenbosch University has an ethnically varied student body, far exceeding the diversity experienced at the average student's home environments. Stellenbosch University strives to create a multicultural environment where different cultures get the opportunity to meet and learn from each other. As such, the Vice-Rector for Community Interaction and Personnel was requested to submit a comprehensive and integrated Transformation Plan in 2013 (Stellenbosch, 2013a). The promotion of diversity is an important aspect of this transformation.

Stellenbosch University's student demographic has changed quite drastically over the years. In 1990, at the time of Nelson Mandela's release from prison, 762 students of colour (5.40% of the entire student body) were enrolled at Stellenbosch University (Stellenbosch,

2013b). That number has increased to 11,386 (37.76%) in the year 2015 (Stellenbosch University, 2015). Not only does Stellenbosch University aim to diversify its student body, but also their staff. In 2009 Stellenbosch University had a percentage of 38.4% staff members who were people of colour. Stellenbosch University's aim was to increase this number to 53% by 2015 (Stellenbosch, 2013c). The opportunities for interaction with different outgroups created by this diversity could pave the way for increased positive intergroup relations.

The Present Study

While the present study does not advocate ethnic classifications as naturally dividing categories, apartheid's ethnic categories remain a salient concern within present-day South Africa (Pillay & Collings, 2004) and are therefore a rich and vital area of study. Apartheid is still fresh in the minds of the South African people, especially those still struggling under the oppressive burdens created by Apartheid. Racial tensions are still rife and even though opportunities for intergroup contact are now more readily available, contact is still limited, as a result of homogenous environments and self-segregation. It is in this social environment that the present study takes place. Even though contact is lacking, it is necessary for reconciliation in South Africa. As such, this study focuses on the effects of intergroup contact on prejudice.

Due to South Africa's diverse populace and the slim possibilities of contact with all South Africa's outgroups, it would be beneficial to not only study the effect contact has on prejudice towards the outgroup with whom the individuals have direct contact (primary outgroup), but to also explore the influence contact interventions could have on prejudice towards other outgroups (secondary) not involved in the contact situation. This is referred to as the secondary transfer effect (Pettigrew, 2009) and could be driven by a process called attitude generalisation or intergroup anxiety generalisation (see Lolliot et al., 2013).

Therefore, the aim of the present study was to discover whether self-reported cross-group friendships amongst White South African Stellenbosch University students with Coloured South Africans (primary outgroup) is negatively associated with prejudice towards Coloured South Africans in general, and whether this is in turn positively associated with prejudice towards Black (African) South Africans in general (secondary outgroup), while controlling for prior contact with the secondary outgroup. Furthermore, the study aimed to discover whether cross-group friendships with Coloured South African Stellenbosch University students is negatively associated with intergroup anxiety towards Coloured South Africans in general and whether this is, in turn, positively associated with intergroup anxiety towards Black (African) South Africans in general.

In spite of the important nature of this research in South Africa, few South African studies have focused on the secondary transfer effect (however, see De Beer, 2015; Lolliot, 2013; Openshaw, 2015; Swart, 2008). South Africa has a long history of group-based distrust as a result of the Apartheid era. Despite the subsequent important mediational role of intergroup anxiety, there is a decided lack of South African literature on this mediator within the secondary transfer effect, and specifically on its generalisation potential in the secondary transfer effect. Therefore, this study addresses this gap in the contact literature and does so within an environment, namely a university campus, which offers more opportunities for intergroup contact than is available in the broader community.

Findings from the present study not only hold theoretical value (by addressing a gap in the contact literature), but also practical value. Interventions can be developed based on these findings, preparing White South Africans for the multicultural context that they would be confronted with when entering university.

Chapter Overview

Chapter One makes it clear that South Africa still battles with the effects of Apartheid on intergroup attitudes. According to Allport's (1954) contact hypothesis, intergroup contact is the most effective way of reducing prejudice. Chapter Two will focus on the contact-prejudice relationship. The contact hypothesis will be broadly discussed, touching on the research that has led to its formulation, as well as recent support of the contact hypothesis in literature. This is followed by a detailed discussion of the dimensions of contact and, in particular, the most powerful form of face-to-face intergroup contact, cross-group friendships. Furthermore, the mediators (in particular intergroup anxiety and expectancies) of the contact-prejudice relationship will be examined.

Chapter Three will discuss the secondary transfer effect in detail. Characteristics of the secondary transfer effect and support for the secondary transfer effect will be examined. Importantly, alternative explanations for the secondary transfer effect will also be explored. Finally, the mediators of the secondary transfer effect, specifically attitude generalisation and intergroup anxiety generalisation, will be discussed.

Chapter Four will outline the current study in detail. The rationale for the choices made in this thesis will be considered, followed by the aims and objectives. The materials and method used will be elaborated on, as well as the data analysis procedure and, lastly, the results found will be presented in detail.

The fifth and final chapter includes an interpretation of the results in the form of a discussion that will lend from the contact literature. Practical application of the present study's findings, in the form of intervention, will be discussed. Limitations of the study will be considered and suggestions for future research made.

CHAPTER TWO:

THE CONTACT HYPOTHESIS

As illustrated in Chapter One, South Africans, despite increased opportunities for post-Apartheid contact, experience limited positive, face-to-face contact with members of other ethnic groups (see Dixon & Durrheim, 2003; Tredoux & Dixon, 2009). This is concerning as intergroup contact has been found to be one of the most effective ways of reducing prejudice (Allport, 1954; Pettigrew & Tropp, 2006). Intergroup contact can be defined as face-to-face interaction between members of discrete, clearly defined groups, i.e. the ingroup and the outgroup (Pettigrew & Tropp, 2006). An ingroup is a group to which an individual belongs and/or identifies with, while an outgroup is a group to which an individual does not belong and/or does not identify with (Brown & Hewstone, 2005).

Intergroup contact is an especially promising solution for a country like South Africa, which is still healing from the racial conflict of its past. Studies exploring the contact hypothesis in other post-conflict societies support this hypothesis, for example Northern Ireland (Hewstone, Cairns, Voci, Hamberger, & Niens, 2006; Paolini, Hewstone, Cairns, & Voci, 2004; Tam et al., 2007; Tausch, Hewstone, Kenworthy, Cairns, & Christ, 2007). Northern Ireland has a history of more than 300 years of intergroup conflict between Catholics and Protestants. Despite recent ceasefires, Northern Ireland still remains largely segregated, similar to South Africa's reported self-segregation. As such, the contact hypothesis will be thoroughly explored in this chapter.

Below, I will begin with a broad overview of the history of the formulation of Allport's (1954) contact hypothesis, as well as the critique and support it has received over the years. Thereafter, variables that increase the potency of the contact effect, specifically group status and category salience, will be studied. This is followed by an in-depth look at the dimensions of contact, and in particular, cross-group friendships. Finally, I will turn my

attention from *if* contact reduces prejudice to *how* it reduces prejudice. I will specifically be looking at the role of intergroup anxiety and expectancies as mediators of the contact-prejudice association.

The Inverse Relationship between Contact and Prejudice

Formulating the Contact Hypothesis

Social researchers speculated for decades about the probability of intergroup contact possibly being able to reduce prejudice. Some felt that contact between groups would merely breed more suspicion and hostility, leading to intergroup conflict (Baker, 1934). Views like these led to institutional structures like Apartheid. Other researchers believed that contact would help outgroups understand each other (Lett, 1945). Williams' (1947) book, *The Reduction of Intergroup Tensions*, was one of the most influential contributions to the contact literature. With the upsurge of research on intergroup contact, the Social Science Research Council asked Williams to review all the papers on intergroup contact. Williams' (1947) book offered 102 testable hypotheses on intergroup contact. One of the propositions offered by Williams (1947) shaped an initial unrefined formulation of the contact hypothesis. Armed with Williams' proposition, researchers began to study the suggested theory more thoroughly (e.g. Wilner, Walkley, & Cook, 1952; Works, 1961) and found favourable results.

Based on this evidence and Williams' (1947) initial formulation of the contact hypothesis, Allport (1954) refined and introduced his prominent contact hypothesis, which forms the basis of all subsequent contact literature. In his book *The Nature of Prejudice*, Allport (1954) suggested that prejudice, unless deeply ingrained in the character structure of an individual, could be reduced by contact. Four optimal conditions for the intergroup interaction were emphasised by Allport (1954). The relevant groups engaged in the contact situation must be equivalent in status, have mutual interests, and work cooperatively, and the authorities must be supportive of this contact.

While the contact hypothesis was originally developed to describe the contact-prejudice relationship between different groups of ethnicities, Pettigrew and Tropp's (2006) meta-analysis of more than 500 independent studies illustrates that this effect works equally well for other types of groups and settings as well. In fact, the contact hypothesis has been applied in the educational sector (e.g. Van Laar, Levin, Sinclair, & Sidanius, 2005), amongst different religious groups (e.g. Paolini et al., 2004), refugees (e.g. Turner & Brown, 2008), the disabled (e.g. Cameron & Rutland, 2006), homosexual individuals (e.g. Hodson, Harry, & Mitchell, 2009), the elderly (e.g. Schwartz & Simmons, 2001), and the homeless (e.g. Lee, Farrell, & Link, 2004).

Initial Conflicting Findings of the Contact Hypothesis

Despite the promise of Allport's (1954) contact hypothesis reviews were initially conflicted. In addition to reviews that supported the contact hypothesis (e.g. Harrington & Miller, 1992; Jackson, 1993; Patchen, 1999; Pettigrew, 1971, 1986, 1998), some papers also reached mixed conclusions (such as Amir, 1969, 1976; Forbes, 1997; Stephan, 1987). Amir (1969), for example, reviewed numerous studies and reached the conclusion that, while contact under optimal conditions does in fact reduce prejudice, these results do not generalise to the entire outgroup. Other reviews were critical of the contact hypothesis (such as Ford, 1986; McClendon, 1974). Ford (1986) inspected 53 studies on contact and, based on this, he described the contact hypothesis as premature and insufficient to describe all the numerous circumstances in daily life.

However, according to Pettigrew and Tropp (2006), three major failings account for these conflicting reviews. Firstly, the papers used incomplete samples with less than 60 articles each. Typically, they only explored articles relating to a specific group, for example ethnic groups. Therefore, their views, and as a result their conclusions, would have been severely limited. Secondly, they did not employ strict inclusion criteria when selecting

articles. This was as a result of differing definitions of intergroup contact across the articles. Lastly, prior reviews merely made subjective judgements based on reading experience, rather than making use of quantitative assessments to establish a pattern. This would have led to the observed mixed results, as selection biases and differing interpretations would have been a major hindrance. As such, the contact hypothesis should be reviewed using a far larger number of relevant studies, including a wide range of samples. Strict inclusion rules should be utilised and quantitative means should be employed. Therefore, a meta-analytic approach would be the best method to accurately portray the legitimacy of Allport's (1954) contact hypothesis.

Support for the Contact Hypothesis

In 2006, Pettigrew and Tropp conducted a meta-analysis with 713 independent samples from 515 studies, representing 38 nations. It was found that intergroup contact does typically reduce prejudice (mean $r = -.22$, $p < .001$). Rigorous experimental studies yielded an even stronger mean effect between intergroup contact and prejudice ($r = -.34$, $p < .001$). In fact, in 94% of the samples contact had a negative relationship with prejudice (Pettigrew & Tropp, 2006), suggesting that intergroup contact is related to reduced prejudice.

Pettigrew and Tropp (2006) also considered the optimal conditions for contact, as specified by Allport (1954). The studies that developed contact situations which meet Allport's optimal conditions, attained far greater mean effect sizes ($r = -.29$, $p < .001$) than those that did not ($r = -.20$, $p < .001$). This supports Allport's (1954) hypothesis that status equivalence, mutual interests, cooperativeness and supportive institutions can enhance the effect contact has on prejudice. However, these optimal conditions are merely facilitating (Pettigrew & Tropp, 2006) and not necessary (Pettigrew, 1998). Samples that achieved none of the specified optimal conditions still displayed significant contact-prejudice relationships.

Moreover, optimal conditions for contact worked best when presented together, rather than separately (Pettigrew & Tropp, 2006).

Pettigrew and Tropp's (2006) meta-analysis is not only important given the strong meta-analytic support it provides for the contact hypothesis, but also because it ruled out a number of alternative explanations for the contact-prejudice relationship. Firstly, rather than contact reducing prejudice, the reverse could be true, namely that people who are free of prejudice are more likely to embrace intergroup contact (Pettigrew & Tropp, 2006). Therefore, research that supports Allport's (1954) contact hypothesis could arguably suffer from participant-selection bias. To avoid participant-selection bias, Pettigrew and Tropp (2006) only included studies in their meta-analysis that included intergroup circumstances limiting participant choice to engage in intergroup contact. Their findings suggest that the contact-prejudice relationship is not a product of participant selection, as studies that allowed no choice yielded slightly larger effects than studies in which participants could choose whether to take part in contact or not (Pettigrew & Tropp, 2006).

A second alternative explanation for the observed contact-prejudice effect could be the so-called file-drawer problem or publication bias (Pettigrew & Tropp, 2006). Typically, studies with higher statistical significance are published, whereas researchers often do not submit studies with modest results and when they do, journals might reject them. Pettigrew and Tropp (2006) took steps to avoid overestimating effect sizes due to publication bias. Of the six tests, five indicated that publication bias was not a serious threat to the validity of their findings. The one remaining exception still revealed a significant contact-to-prejudice effect when rigorous research methods were used. Lastly, the rigour of research studies should be examined to determine the credibility of the study. Pettigrew and Tropp (2006) found that less rigorous studies yield smaller effects.

One of the limitations of their meta-analysis, recognised by Pettigrew and Tropp (2006) is that the majority of studies they included was cross-sectional in design. Cross-sectional studies are limited in their ability to adequately test the causal relationship between intergroup contact and prejudice. To this end, there has been an emergence of longitudinal research in the contact literature in recent years. For example, Binder et al. (2009) conducted a two-wave longitudinal study with 1,655 school students in Germany, Belgium and England. The final sample consisted of 512 ethnic minority-status group members and 1,143 ethnic majority-status group members. It was found that contact also had a beneficial influence on prejudice over time. Contact quality ($r = -.47, p < .001$), as well as contact quantity ($r = -.35, p < .001$), were significantly negatively correlated with social distance at Time 1. At Time 2 contact quality ($r = -.48, p < .001$) and contact quantity ($r = -.39, p < .001$) were also significantly negatively associated with social distance. Gómez, Eller, and Vázquez (2013) conducted a two-wave longitudinal study. Respondents at Time 1 were 142 Spanish high school students. At Time 2, 12 weeks later, 116 respondents participated in the study. It was found that quality of contact with immigrants at Time 1 had a significant relationship with general evaluation of immigrants at Time 2 ($b = .16; p < .05$). Kauff, Schmid, Lolliot, Al Ramiah, and Hewstone (2016; Study 2) conducted a two-wave longitudinal study amongst 753 German respondents. It was found that cross-group friendships with foreigners at Time 1 was significantly associated with positive outgroup attitudes towards foreigners at Time 2 ($r = .27; p < .01$), while controlling for attitudes towards foreigners at Time 1.

The strongest support for the casual relationship between contact and prejudice comes from the wealth of experimental studies (which control for the influence of third variables) that have been undertaken. These studies show strong support for the ability of intergroup contact to reduce prejudice (e.g. Brannon & Walton, 2013; Brown, Brown, Jackson, & Sellers, 2003; Enos, 2014; Henry & Hardin, 2006; Openshaw, 2015; Thomae, Zeitlyn,

Griffiths, & Van Vugt, 2013; Turner & West, 2012; Turner, West, & Christie, 2013; Vezzali, Capozza, Giovannini, & Stathi, 2011; Welker, Slatcher, Baker, & Aron, 2014). Welker et al. (2014), for example, conducted an experiment amongst Caucasian and African American individuals ($n = 74$; 52.70% Caucasian and 47.30% African American) and couples ($n = 124$; 51.60% Caucasian and 48.40% African American). Firstly, participants completed a pre-experimental measure of outgroup attitudes, after which participants were randomly assigned to either a same-group or cross-group couple or individual. Together, they completed a high self-disclosure closeness-induction task. Finally, participants had to complete a post-experimental measure of outgroup attitudes. It was found that positive high self-disclosure intergroup contact led to more positive outgroup attitudes.

South African support for the contact hypothesis.

Support for the contact hypothesis can also be found in a small, but growing number of South African studies. Holtman, Louw, Tredoux, and Carney (2005) aimed to discover the relationship between intergroup contact and prejudice amongst 19 previously segregated schools in Cape Town. The sample consisted of 1,079 Black (African), Coloured and White learners. Amongst each of these population groups, self-reported contact was significantly associated with reduced social distance and increased positive attitudes towards the involved outgroups. Moholola and Finchilescu (2006) conducted a study amongst 106 Black (African) learners from a multi-ethnic, as well as a single-ethnic school in Johannesburg, South Africa. When comparing the results of learners from the multi-ethnic school and the segregated school, it was found that learners from the multi-ethnic school reported lower levels of social distance towards White individuals than the segregated school, where contact was limited.

Dixon et al. (2010) conducted cellular phone surveys with 596 adult Black (African) South Africans. Contact was found to be inversely related to racial attitudes, as well as perceived personal discrimination. Therefore, the more positive contact Black (African)

South Africans have with White South Africans, the lower their negative attitudes towards White South Africans were. Furthermore, the more positive contact Black (African) South Africans have with White South Africans, the less they perceived themselves as being discriminated against by White South Africans. Another example of a South African study supporting the contact hypothesis is the cross-sectional study conducted by Tredoux and Finchilescu (2010). This study was conducted amongst respondents recruited from four different South African universities with various different histories and ethnic demographics. The sample consisted of 2,559 students, of whom 41% were Black (African) South Africans and 59% were White South Africans. Amongst the Black (African) sample, cross-group friendships were significantly associated with affective prejudice ($r = -.24; p < .01$). Cross-group friendships amongst the White sample were significantly related to affective prejudice ($r = -.30; p < .01$) and social distance ($r = -.26; p < .01$).

Swart, Hewstone, Christ, and Voci (2010) undertook two cross-sectional studies amongst White and Coloured South African high school students in order to test the contact-prejudice relationship. White ($N = 186$) and Coloured ($N = 196$) respondents formed the sample of Study 1 and Black (African) South Africans the target group. Amongst the White respondents, contact was significantly related to positive outgroup attitudes ($b = .30; p < .05$) and amongst the Coloured respondents contact was also significantly related to positive outgroup attitudes ($b = .25; p < .01$). Study 2 explored the contact-prejudice relationship between White respondents ($N = 171$) and a Coloured target outgroup, as well as between Coloured respondents ($N = 191$) and a White target group. Amongst White South Africans, contact with Coloured South Africans was significantly related to positive outgroup attitudes towards Coloured South Africans ($b = .23; p < .05$). Similarly, amongst Coloured South Africans, contact with White South Africans was significantly associated with positive outgroup attitudes towards White South Africans ($b = .11; p < .05$).

The South African literature also offers longitudinal support for the impact of intergroup contact on prejudice over time. Swart, Hewstone, Christ, and Voci's (2011) three-wave longitudinal study presented strong support for the underlying tenet of the contact hypothesis, while under conditions of very strict statistical constraints. This study was conducted over 12 months amongst Coloured South African high school students (N = 465) and provided crucial insight into the causal direction between contact and prejudice. Swart et al. (2011) concluded that the converse pathway from prejudice to contact does not pose a threat to contact theory, as the fully mediated relationship between Time 1 variable and Time 3 variable via Time 2 mediator, was only witnessed in the forward direction (contact to prejudice), as predicted by the contact hypothesis. Therefore, there appears to be evidence that positive contact between distinct groups in South Africa could ease intergroup prejudice.

As illustrated, the contact hypothesis has received strong empirical support and could arguably be considered as an integrated theory (Hewstone, 2009; Hewstone & Swart, 2011). It has been well established that positive face-to-face intergroup contact reduces prejudice, but this process is more complex than suggested by this statement. As such, research has also focused on the variables that affect the strength of the contact effect.

Moderators of the Contact-Prejudice Relationship

Group status.

The contact literature clearly indicates that positive intergroup contact is reliably associated with reduced prejudice (for reviews see Brown & Hewstone, 2005; Hewstone & Swart, 2011; Pettigrew, 2016; Pettigrew & Tropp, 2006). Importantly, however, it seems that the effect of intergroup contact for minority-status group members is smaller than for majority-status group members. Tropp and Pettigrew (2005) conducted a meta-analysis comparing the contact-prejudice relationship amongst majority- and minority-status members. Intergroup contact had a significant negative relationship with prejudice amongst

both status groups. However, the relationship was significantly weaker for minority-status groups ($r = -.18$; $p < .001$) than for majority-status groups ($r = -.24$; $p < .001$; Tropp & Pettigrew, 2005).

It has been shown that minority-status group members perceive intergroup interactions differently from majority-status group members. Using seven different samples, Plant and Devine (1998) explored internal and external motivations for responding without prejudice during a contact interaction. Internal motivations are related to an individual's personal standards. Discrepancies between actual responses during intergroup contact and an individual's personal standards could lead to guilt and self-criticism. On the other hand, external motivations are associated with the standards of society and discrepancies could lead to threatened affect. Based on Plant and Devine's (1998) significant insights on internal and external motivations it could be argued that White individuals (i.e. the majority-status group) might be more internally motivated to respond without prejudice, as appearing to be free of prejudice is an essential part of their self-concept. Due to the legislative changes in South Africa that made overt prejudice illegal, as well as the socially unacceptable nature of prejudice, White respondents could also be externally motivated to interact without prejudice, considering that they fear the possible punishment associated with prejudice. Therefore, during intergroup contact majority-status group members are apprehensive about being seen to be prejudiced.

Minority-status group members, on the other hand, might be a bit more sceptical of an intergroup interaction, as they are accustomed to having prejudice directed towards them. Therefore, intergroup contact might be less beneficial for them, as they are constantly aware of their status outside the immediate interaction (Tropp, 2006) and of the fact that this interaction will leave their lower group status unchanged outside of the interaction. This clearly illustrates the difference in expectations amongst majority- and minority-status group

members when entering an intergroup contact situation, which is why it is important to consider the contact-prejudice relationship separately for majority- and minority-status groups.

Binder et al. (2009) conducted a two-wave longitudinal study amongst 1,655 school students from Germany, Belgium and England. Ethnic minority-status group members ($n = 512$) answered questions regarding ethnic majority-status members. Similarly, ethnic majority-status group members ($n = 1,143$) answered questions regarding ethnic minority-status members. Contact effects were consistently weaker for minority-status group members than for majority-status group members. The quality of contact-to-prejudice relationship was weaker for minority group members ($B = -.08; p > .05$) than for majority group members ($B = -.10; p < .001$). Furthermore, the quantity of contact-to-prejudice relationship was also weaker for minority group members ($B = -.06; p > .05$) than for majority group members ($B = -.05; p < .05$).

Group status as a moderator in the complex social dynamics of South Africa is problematic. The assignment of group status is fluid in South Africa and fluctuates according to the context (e.g. political, economic, and demographic) in which the group status is considered. Despite the fact that after the Apartheid era the political power shifted from White South Africans to Black (African) South Africans, White South Africans still hold the socio-economic power in the country. Coloured South Africans, on the other hand, hold an arguably lower group status in the country, but could also be considered as a numerical majority in Stellenbosch. Swart and colleagues (2010) explored the contact-prejudice relationship amongst White and Coloured samples and they found that contact effects were consistently stronger for White respondents than for Coloured respondents. White and Coloured respondents formed the sample of Study 1 and Black (African) South Africans the target group. Study 2 was conducted amongst White respondents (Coloured target outgroup)

and Coloured respondents (White target group). The difference between contact effects for White and Coloured samples was less pronounced in Study 1, where both samples reacted to Black (Africans). This could be because, in comparison to Black (African) South Africans, Coloured South Africans hold a socio-economic majority position in Stellenbosch (although not to the extent of the majority status of White South Africans; Swart et al., 2010).

Therefore, the dynamics of Study 1, when using the White sample and the Coloured sample, were similar. In both cases, a majority-status group answers questions on a minority-status group. In contrast with Study 2, Coloured South Africans would be considered a minority-status group when compared with White South Africans (Swart et al., 2010). Therefore, it would make sense for the difference in contact effects between White and Coloured samples to be more pronounced in Study 2.

Category salience.

In order for positive attitudes towards an outgroup member to generalise to the outgroup as a whole, the ingroup member must regard the outgroup member as a sufficiently typical representative of the outgroup (i.e. when group salience is high) and not just as a likable individual (Brown & Hewstone, 2005; Hewstone & Brown, 1986; Wilder, 1984). A typical outgroup member would be someone who embodies all of the stereotypes representing the outgroup. If the individual is an atypical outgroup member, he or she might be considered as the less threatening exception to the rule and, as such, the positive interaction will not generalise towards the outgroup as a whole. Importantly, Wilder (1984) showed that contact with a typical outgroup member is not constructive when that typicality is based on negative stereotypes about the outgroup, as it could lead to anxiety (see also Hewstone, 1996; Stephan & Stephan, 1985; Wright, Aron, McLaughlin-Volpe & Ropp, 1997).

Voci and Hewstone (2003) conducted two studies involving immigrants in Italy. In Study 1 a sample of 310 Italian students from two universities in Northern Italy completed questionnaires on their intergroup relations with African immigrants. Italian hospital workers' intergroup relations with immigrants (Brazil, Colombia, Egypt, India, Peru, the Philippines, Romania and Senegal) were explored in Study 2. During both Study 1 and Study 2, strong consistent evidence was found indicating the successful moderation of intergroup contact and prejudice by high salience. Not only did high levels of group salience improve the process of attitude generalisation towards the outgroup as a whole, but it also led to increased reduction of intergroup anxiety. Vonofakou, Hewstone, and Voci (2007; Study 2) conducted a study amongst 160 heterosexual students at a British university. It was found that intergroup anxiety mediated the relationship between cross-group friendships with gay men and attitudes towards gay men, but that the relationship between cross-group friendships and intergroup anxiety was only significant when the outgroup was highly typical of the outgroup as a whole ($\beta = -.43$; $p < .001$) and not when outgroup members had a low typicality with the outgroup as a whole ($\beta = -.03$; $p > .05$). While conducting a two-wave longitudinal study amongst European school students, Binder et al. (2009) discovered that quality of contact had a stronger effect on prejudice when high typicality ($B = -.18$; $p < .001$), rather than low typicality ($B = -.06$; $p = .06$) was present (see also Brown, Eller, Leeds, & Stace, 2007; Ortiz & Harwood, 2007).

Dimensions of Contact

Quantity of contact versus quality of contact.

Conventionally, the majority of studies has focused on the frequency (quantity) of direct intergroup contact. However, there exists extensive evidence favouring the quality of contact over the quantity of contact. For example Islam and Hewstone (1993) explored the intergroup contact between 65 Hindu and 66 Muslim university students in Bangladesh, and

found that, although both quantity and quality of contact had a significant association with prejudice, contact quality had a far stronger and more reliable inverse relationship with attitudes than quantity of contact. Similarly, McGuigan and Scholl (2007) found that intimate contact (i.e. contact quality) with Old Order Amish people had a significant effect on the attitudes of 89 non-Amish individuals, while superficial contact (i.e. contact quantity) had no significant affect.

Longitudinal evidence also supports quality of contact over quantity of contact. In the longitudinal study by Binder et al. (2009), which was discussed in an earlier section, both quality of contact and quantity of contact significantly predicted prejudice. However, quality of contact ($B = -.08; p < .001$) had a stronger and more significant relationship with prejudice than quantity of contact ($B = -.05; p < .01$). Ideally, a contact experience will include a combination of both quantity and quality of contact. As such, cross-group friendships, which offer regular high quality interaction, have become a popular measure of contact in the interrelations literature (see Lolliot et al., 2014).

Cross-group friendships.

Pettigrew (1997) described cross-group friendships as meaningful long-term relationships that include similar interests, interactions that take place over time and contact across different situations. Behaviours that foster positivity, support, openness and interaction are crucial to preserving a friendship (Oswald, Clark, & Kelly, 2004). Furthermore, these relationships exist under optimal conditions (e.g. voluntary contact, equal status, common goals) that facilitate reduced prejudice (Pettigrew, 1998). Many researchers believe that an intimate relationship creates the perfect conditions for intergroup contact to reduce prejudice (see Brown & Hewstone, 2005; Hewstone & Swart, 2011; Paolini et al., 2004; Pettigrew, 1997) and, as such, Pettigrew (1998) suggested that cross-group friendships should be added as an additional optimal condition to Allport's (1954) original list of conditions. Cross-group

friendships have received robust support over the past 15 years or so from studies with a variety of different contexts, participants and target groups (e.g. Davies, Tropp, Aron, Pettigrew, & Wright, 2011; Pettigrew, 1997; Pettigrew & Tropp, 2006; Swart et al., 2011; Turner, Hewstone, & Voci, 2007).

Pettigrew (1997) investigated the effects of self-reported cross-group friendships with minorities on the prejudice levels of 3,806 respondents from four Western European nations (France, Netherlands, Britain, and West Germany). His results confirmed the predicted cross-group friendships-prejudice association. The reported link between cross-group friendships and prejudice ($r = -.22, p < .001$) was much larger than the association between co-workers and prejudice ($r = -.03, p < .001$), and neighbours and prejudice ($r = -.01, p < .001$). In reference to the reduction of prejudice, this clearly illustrates the value of cross-group friendships over more casual intergroup encounters.

Pettigrew and Tropp's (2006) and Davies et al.'s (2011) meta-analyses give a clear overview of the support for cross-group friendships found in the contact literature. Pettigrew and Tropp (2006) studied papers reporting on 154 individual tests, involving 61 samples, which assessed cross-group friendships as a measure of intergroup contact. The 154 tests that used cross-group friendships as a measure of contact reported significantly more robust effect sizes ($r = -.25, p < .05$) than the remaining 1,211 tests that explored all measures of contact ($r = -.21; p < .05$). As cross-group friendships were not the main focus of Pettigrew and Tropp's (2006) meta-analysis, no further analyses were conducted to explore the different operationalisations of cross-group friendships and their association with prejudice.

Therefore, Davies et al. (2011) undertook a meta-analysis that built on the meta-analysis undertaken by Pettigrew and Tropp (2006). Their meta-analysis included 208 samples and 501 tests. Davies and colleagues (2011) explored a diverse range of operationalisations of cross-group friendships, including time spent or activities performed

with outgroup friends, closeness with outgroup friend, inclusion of outgroup friend in sense of self, self-disclosure to outgroup friend, amount of cross-group friends and percentage of friends group that belong to an outgroup. This allowed them to investigate which aspects of friendship play the largest role in reducing prejudice. As expected, it was discovered that all measures of cross-group friendships are significantly associated with decreased prejudice. However, time spent with outgroup friends ($r = .27; p < .001$), as well as self-disclosure to outgroup friends ($r = .26; p < .001$), yielded the largest effects.

It has been determined that cross-group friendships can also reduce prejudice over time. Levin, Van Laar, and Sidanius (2003) undertook a longitudinal study, spanning five years, that explored cross-group friendships' durable effect. The sample consisted of 2,000 White, Black (African), Asian and Latin American college students. Self-reported results indicate that those students with more outgroup friends at Year 2 and 3 of college, also experienced less bias and anxiety during their fourth year of college than students with less outgroup friends. This is a testament to the essential nature of cross-group friendships, especially in a post-conflict society like South Africa, which would ideally become less prejudiced and more integrated over time.

In fact, cross-group friendships have been shown to reduce prejudice, even in post-conflict societies. In a two-part study conducted in Northern Ireland, cross-group friendships had a positive relationship with forgiveness for both Catholics and Protestants and was significantly positively associated with attitudes for Study 2 ($r = .23, p < .001$; Hewstone et al., 2006). Cross-group friendships in South Africa, on the other hand, appear to be the exception rather than the norm (Gibson, 2004). Nevertheless, studies have illustrated that cross-group friendships are important for the reduction of prejudice within the South African context. In the two studies undertaken by Swart et al. (2010), which were reported earlier, cross-group friendships with Black (African) South Africans in Study 1 had a significant

positive relationship with positive outgroup attitudes amongst both Coloured and White South African respondents, while cross-group friendships with White South Africans (for Coloured South African respondents) and Coloured South Africans (for White South African respondents) were associated with more positive attitudes towards the respective outgroup. Importantly, friendships have been found to have a stress-buffering effect (Cohen, Sherrod, & Clark, 1986) and, as such, are associated with reduced negative affective reactions, for example anxiety.

Mediators of the Contact-Prejudice Relationship

Strong support for the reduction of prejudice by intergroup contact has been found in the contact literature. Therefore, recent research has shifted focus to the pertinent question of *how* or *why* intergroup contact reduces prejudice. This is accomplished by studying the potential mediators involved in this relationship. Mediators refer to mechanisms of action, which act as a vehicle between a predicted cause and predicted effect (Cole & Maxwell, 2003).

The three most studied mediators in the contact literature are knowledge of the outgroup (e.g. Robbins, Cooper, & Bender, 1992), empathy (e.g. Batson et al., 1997; Tam, Hewstone, Harwood, Voci, & Kenworthy, 2006) and intergroup anxiety (e.g. Islam & Hewstone, 1993; Paolini et al., 2004). Intergroup knowledge is a cognitive mediator, while empathy and intergroup anxiety are affective mediators (positive and negative, respectively). Pettigrew and Tropp (2008) conducted a meta-analysis reviewing more than 54 studies with 91 independent samples (dating from the 1940's until more than 60 years later), in order to examine the mediational effects of these three mediators. Knowledge, empathy and intergroup anxiety were each significant mediators of the contact-prejudice relationship. In other words, intergroup contact is significantly related to all three of these constructs and they are, in turn, significantly related to prejudice. Knowledge, empathy and intergroup anxiety,

therefore, all act as vehicles between the predicted cause (intergroup contact) and the predicted effect (prejudice). However, the affective mediators of intergroup anxiety and empathy, as compared to the more cognitively orientated mediator of outgroup knowledge, were clearly found to be more effective at facilitating the relationship between contact and prejudice. More specifically, intergroup anxiety ($Z = -26.55, p < .0001$) was the strongest reported mediator, followed by empathy ($Z = -12.43, p < .0001$) and, lastly, knowledge ($Z = -3.87, p < .001$; Pettigrew & Tropp, 2008).

Intergroup Anxiety

Intergroup anxiety is the anxiety one experiences when interacting, or even when anticipating a future interaction, with members of an outgroup (Stephan & Stephan, 1985). Intergroup anxiety originates from a fear of negative psychological and behavioural consequences, as well as fear of negative evaluations by members of the outgroup and the ingroup. This makes it particularly relevant for the present study, which uses a sample of White South Africans (economic majority-status group). The majority group member's intergroup interaction is characterised by apprehension and fear of being perceived as prejudiced (Plant & Devine, 1998).

Three sets of factors are responsible for the degree of intergroup anxiety experienced (Stephan & Stephan, 1985). The first factor, relating to the amount and circumstances of previously experienced intergroup contact, is especially relevant in South Africa, as the groups' political and economic interests conflict, affecting the quality of their intergroup experiences. As such, more intergroup anxiety can be expected. In fact, South African studies have reported mean intergroup anxiety scores of between 2.25 and 3.38 (scaled from 1 to 5; Swart et al., 2010, 2011), suggesting that South Africans experience some discomfort when interacting with others. Intergroup cognitions, such as knowledge of the outgroup, expectations, stereotypes and perceptions of dissimilarity, could also affect the amount of

intergroup anxiety experienced. For example, prior Apartheid stereotypes of Black (African) South Africans being the fearsome “swart gevaar” could potentially increase the level of intergroup anxiety experienced when interacting with Black (African) South Africans. Lastly, relevant dynamics of the situation in which intergroup anxiety is experienced, could also be quite influential on the intergroup anxiety experienced (Stephan & Stephan, 1985).

Cooperative, structured intergroup activities where the ratio of ingroup to outgroup members is high, and in which everybody is of equal status, will likely result in less intergroup anxiety than a competitive, unstructured group with a low ingroup to outgroup ratio and with an unequal balance of status. Intergroup anxiety affects an individual along behavioural, cognitive, as well as affective dimensions.

Riek, Mania, and Gaertner (2006) conducted a meta-analysis of research spanning 95 samples, exploring intergroup threat and its influence on outgroup attitudes. Five categories of intergroup threat were specified: realistic threat, symbolic threat, negative stereotypes, group-esteem threat, distinctiveness threat and intergroup anxiety. Their results showed that intergroup anxiety was the most effective form of threat, as it had the strongest correlation with negative outgroup attitudes, which is a measure of prejudice ($r = .46, p < .05$). Moreover, intergroup anxiety also had the strongest unique relationship with negative outgroup attitudes ($\beta = .26, p < .01$)

Stephan and Stephan's (1985) paper inspired an influx of American and European studies that support the hypothesis that intergroup contact typically reduces intergroup anxiety, which in turn reduces prejudice. Harwood, Hewstone, Paolini, and Voci (2005, Study 2) examined the effect of mediators on the relationship between contact with grandparents and attitudes towards the elderly. The sample consisted of 100 students at a British university. The findings suggest that contact quality with grandparents is negatively associated with prejudice towards the elderly, an effect mediated by intergroup anxiety.

Contact quality was significantly negatively related to intergroup anxiety ($r = -.58, p < .001$), which was, in turn, significantly negatively associated with positive attitudes towards the elderly ($r = -.46, p < .001$). Intergroup anxiety can mediate the contact-prejudice relationship amongst a variety of different samples (e.g. the elderly). However, the most relevant type of sample for this present study is ethnic groups. Voci and Hewstone (2003) undertook two studies exploring the role of intergroup anxiety as a mediator of the contact-prejudice relationship. In Study 1, 310 Italian students self-reported their intergroup contact with immigrants from Africa. Intergroup anxiety significantly mediated the relationship between contact and prejudice. Specifically, contact was significantly negatively associated with intergroup anxiety ($\beta = -.27, p < .001$), which was in turn significantly negatively associated with positive attitudes towards the outgroup ($\beta = -.39, p < .001$) and significantly positively associated with subtle prejudice ($\beta = .35, p < .001$). Study 2 considered intergroup contact between 94 Italian hospital workers and their co-workers from outside the European Union. It was found that contact at work was significantly negatively associated with intergroup anxiety at work ($\beta = -.32, p < .01$), which was in turn significantly negatively associated with positive attitudes towards their co-workers ($\beta = -.46, p < .001$).

Intergroup anxiety is especially relevant in post-conflict societies, in which tension and fear are still extensive. Fortunately, intergroup anxiety has been shown to reduce prejudice in post-conflict societies similar to post-Apartheid South Africa. Paolini et al. (2004) conducted a two-part study in Northern Ireland amongst a student sample ($N = 341$), as well as a representative sample of the general population ($N = 735$). Purportedly, 69% of the student sample and 51% of the general population sample have reported experiencing “The Troubles” directly or indirectly. Despite this unusual environment, cross-group friendships, in both studies, were negatively associated with prejudice, an effect mediated by intergroup anxiety.

Taking South Africa's long history of group-based distrust and tension into account, intergroup anxiety plays an integral role in the South African context. Importantly, given the large-scale residential segregation that still persists in South Africa (Chisholm & Nkomo, 2005), and the limited opportunities for contact between different ethnic groups that exist, the novel experience of intergroup relations experienced at university might be overwhelming to students and lead to the development of intergroup anxiety in contact situations.

Nevertheless, despite a robust body of American and European contact literature (see, for example, Aberson & Haag, 2007; Brown & Hewstone, 2005; Harwood et al., 2005; Islam & Hewstone, 1993; Page-Gould, Mendoza-Denton, & Tropp, 2008; Paolini et al., 2004; Paolini, Hewstone, Voci, Harwood, & Cairns, 2006; Pettigrew, 1998; Pettigrew & Tropp, 2008; Turner et al., 2007; Voci & Hewstone, 2003; Vonafakou, Hewstone, & Voci, 2007) illustrating the prominence of intergroup anxiety as one of the strongest if not the strongest (see the meta-analysis undertaken by Pettigrew & Tropp, 2008) mediator of the contact-prejudice relationship, very little South African research has focused on intergroup anxiety.

Tredoux and Finchilescu (2010) undertook a study amongst Black (African) and White students from four South African universities with different histories and ethnic demographics. Their diverse non-probability sample was quite large and consisted of 2,599 students. Intergroup anxiety was the strongest mediator tested in this group. Contact amongst both groups of respondents had a significantly negative relationship with intergroup anxiety, which in turn had a significantly positive relationship with affective prejudice and social distance. This was especially found to be true for the White respondents. Additionally, a three-wave longitudinal study was conducted by Swart et al. (2011) amongst 465 minority-status Coloured South African high school students. Under strict statistical constraints, it was found that cross-group friendships with White South Africans at Time 1 had a significant negative relationship with intergroup anxiety towards White South Africans in general at

Time 2 ($r = -.10, p < .01$), which consequently had a significant negative relationship with perceived outgroup variability at Time 3 ($r = -.14, p < .01$). These results illustrate that the reduction of intergroup anxiety over time will mediate the impact cross-group friendships has on prejudice (see also Van Laar et al., 2005).

As seen from the previously reported longitudinal study by Swart and colleagues (2011), intergroup anxiety has not only been tested cross-sectionally, but also longitudinally and experimentally. Blascovich, Mendes, Hunter, Lickel, and Kowai-Bell (2001) used three experiments in order to investigate to what extent stigmatised outgroup members trigger participants' threat responses. The experiments consisted of a procedure that mimics an actual meeting between strangers. An interaction phase is followed by two tasks, during which participants' physiological responses were recorded. During Experiment 1 ($N = 43$) and Experiment 2 ($N = 53$), participants interacted with an individual with a port-wine stain birthmark. Findings for Experiment 1 and 2 confirm the presence of threat (i.e. intergroup anxiety) during contact with a stigmatised individual (i.e. an outgroup member that one is prejudiced towards). In Experiment 3 ($N = 70$), participants interacted with individuals of a different ethnicity (Black individual) or socio-economic status. This time a self-report measure of contact was added before the experimental interaction. The results suggest that contact with a stigmatised individual weakens the anxiety reaction (Blascovich et al., 2001).

Expectancies Relating to Intergroup Contact

Expectancies are negative presumptions about intergroup contact, often based on concerns about being rejected or having difficulty navigating interactions with outgroup members (e.g. Plant & Devine, 2003). It can be argued that expectancies are closely linked to intergroup anxiety. According to Stephan and Stephan's (1985) outline of intergroup anxiety, intergroup anxiety originates as a result of the expectation that contact with an outgroup member will lead to negative consequences. As discussed earlier in this chapter, majority-

and minority-status group members clearly enter an intergroup contact situation with different expectations. Majority-status group members expect to be judged as prejudiced and are often, as a result, internally and externally motivated (Plant & Devine, 1998) to appear non-prejudiced. Entering an intergroup interaction while extremely anxious could lead to these negative expectations becoming more pronounced and a fear of failing to appear to be non-prejudiced could, in turn, also lead to further anxiety. Minority-status group members enter an intergroup interaction with expectations of being treated, as they are accustomed, with prejudice (Tropp, 2006). Intergroup anxiety could cause this expectation to become more pronounced and, similarly, the expectation of being treated with prejudice could cause intergroup anxiety.

Research on the relationship between outcome expectancies and intergroup anxiety is scarce (for exceptions, see Gómez, Tropp, & Fernández, 2011; Hutchison, Fox, Laas, Matharu, & Urzi, 2010; Plant, 2004; Plant, Butz, & Tartakovsky, 2008; Plant & Devine, 2003), but presents convincing evidence of a significant connection. Hutchison and colleagues (2010), for example, conducted a cross-sectional study amongst 61 students and found that negative expectancies regarding intergenerational contact with the elderly were associated with intergroup anxiety towards the elderly ($\beta = .59, p < .001$). Plant et al. (2008, Study 1) explored expectancies amongst 49 White and 53 Hispanic introductory psychology students. They distinguished between expectancies regarding an individual's own proficiency in intergroup interactions (i.e. self-efficacy expectancies) and expectancies regarding outgroup members not being open to intergroup interactions (i.e. negative response expectancies). Butz and Plant (2006) suggested that anxious and avoidant reactions stem from self-efficacy expectancies and angry and hostile reactions stem from negative response expectancies. Plant et al. (2008, Study 1) found a significantly positive association between expectancies and intergroup anxiety. For the White sample, self-efficacy expectancies

($\beta = .78, p < .05$) and negative response expectancies ($\beta = .68, p < .05$) were significantly associated with intergroup anxiety. Similarly, efficacy expectancies ($\beta = .65, p < .05$) and response expectancies ($\beta = .53, p < .05$) were significantly associated with intergroup anxiety for the Hispanic sample.

Furthermore, Plant and Devine (2003) explored the antecedents and implications of intergroup anxiety across two studies. Study 1 examined 106 White introductory psychology students' self-reported responses to interacting with Black people. It was found that positive outcome expectancies significantly mediated the relationship between positive previous contact and intergroup anxiety ($z = 5.03, p < .001$). Specifically, outcome expectancies were significantly related to intergroup anxiety ($\beta = .62, p < .005$). Research also suggests that, reciprocally, reduced intergroup anxiety could also lead to reduced negative expectancies. Important for the purposes of this study, Plant and Devine (2003) also tested an alternative model and found that intergroup anxiety significantly mediates the relationship between contact and outcome expectancies ($z = 5.55, p < .001$). Gómez et al. (2011) found that intergroup anxiety significantly mediated the relationship between intergroup contact and expectancies amongst 322 majority Spanish and minority immigrant high school students. This suggests that intergroup anxiety could, in fact, lead to expectancies regarding a contact situation.

Now that I have established the relationship between negative outgroup expectancies and intergroup anxiety, I turn to negative outgroup expectancies' relationship with intergroup contact. Hutchison and colleagues (2010) found that frequent previous contact with aging individuals were associated with negative expectancies ($\beta = -.45, p < .001$). Plant et al. (2008, Study 1), on the other hand, found that a significant negative relationship existed between contact and expectancies for both the White and Hispanic samples. Specifically, previous positive intergroup contact was significantly negatively related to self-efficacy expectancies

($\beta = -.58, p < .05$) and negative response expectancies ($\beta = -.50, p < .05$) for the White sample, as well as self-efficacy expectancies ($\beta = -.66, p < .05$) and negative response expectancies ($\beta = -.66, p < .05$) for the Hispanic sample. Plant and Devine (2003) found that quality of contact amongst White students with Black individuals was negatively and significantly associated with outcome expectancies towards Black individuals ($\beta = -.63, p < .005$).

Lastly, for the purposes of the present study, it is also important to explore expectancies' association with prejudice. Plant and colleagues (2008, Study 1) found that expectancies were significantly and positively associated with negative outgroup attitudes. A significant relationship was found between negative attitudes and self-efficacy expectancies ($\beta = .72, p < .05$), as well as negative response expectancies ($\beta = .71, p < .05$) amongst the White sample. Finally, the association between negative attitudes and self-efficacy expectancies ($\beta = .68, p < .05$) and negative response expectancies ($\beta = .61, p < .05$) was also significant amongst the Hispanic sample. Plant and Devine (2003) found that quality of contact was significantly associated with expectancies, which was, in turn, significantly related to intergroup anxiety, which was, consequently, positively and significantly associated with contact avoidance and hostility ($\beta = .54, p < .005$).

In order to explore the anxiety generalisation pathway, while avoiding biased findings as a result of shared method variance, expectancies will be measured along with intergroup anxiety in the present study. The reported findings support two possible pathways: (1) intergroup contact to intergroup anxiety to negative outcome expectancies to prejudice; and (2) intergroup contact to negative outcome expectancies to intergroup anxiety to prejudice. The present study explored the first pathway.

Summary

In this chapter I investigated Allport's (1954) contact hypothesis in detail. Convincing evidence was presented that indicates that positive direct intergroup contact with an outgroup member reduces prejudice towards the outgroup member (for a review, see Pettigrew & Tropp, 2006). The direction of the contact-prejudice relationship as described by the contact hypothesis (contact to prejudice) was confirmed (see Swart et al., 2011) and it was discovered that the optimal conditions suggested by Allport (1954) are facilitating, rather than necessary (Pettigrew & Tropp, 2006). Of particular importance, the contact hypothesis was found to be relevant in post-conflict societies (e.g. Hewstone et al., 2006). Furthermore, I discovered that contact effects are weaker for minority-status groups (Plant & Devine, 1998) and that in order for reduced prejudice to generalise towards the whole outgroup, the outgroup member involved in the intergroup interaction must be regarded as a typical outgroup member (Hewstone & Brown, 1986).

Research indicates that contact quality is more effective than contact quantity at reducing prejudice (Islam & Hewstone, 1993). In particular, cross-group friendship is an especially effective form of contact (for a review, see Davies et al., 2011), which can influence negative affective mediators (e.g. intergroup anxiety). According to Pettigrew and Tropp's (2008) meta-analysis, intergroup anxiety is the strongest mediator of the contact prejudice relationship. A link between intergroup anxiety and expectancies has been found (Gómez et al., 2011) and, as such, expectancies will be used in the present study's anxiety generalisation pathway, in order to avoid shared method variance. Chapter Three will discuss a very important, but fairly under-researched process involved in the contact effect – the generalisation of positive attitudes from the outgroup involved in the contact situation to other uninvolved outgroups (i.e. the secondary transfer effect of intergroup contact).

CHAPTER THREE:

THE SECONDARY TRANSFER EFFECT OF INTERGROUP CONTACT

The contact literature has provided robust evidence of the effect contact with an outgroup member has on prejudice towards the outgroup involved in the interaction. Pettigrew and Tropp (2006) identified three forms of generalisation of contact effects that were not fully addressed by Allport (1954), but which are critical for the successful practical application of the contact hypothesis (see also Brown & Hewstone, 2005). Pettigrew and Tropp (2006) explored the mean effect size of each of these forms of generalisation – generalising beyond the immediate situation ($r = -.24, p < .001$), generalising towards the entire outgroup ($r = -.21, p < .001$) and generalising to outgroups not involved in the interaction ($r = -.19, p < .001$). Recently, interest has shifted towards the effect intergroup contact with an outgroup member has on the outgroup involved in the interaction (primary outgroup) and, importantly, its consequent effect on other outgroups *not* involved in the interaction (secondary outgroup), i.e. the secondary transfer effect (STE; Lolliot et al., 2013; Pettigrew, 2009). Importantly, the primary outgroup can be defined as the outgroup involved in the contact, while the secondary outgroup represents the uninvolved outgroup (Pettigrew, 2009). Therefore, during the STE, contact with the primary outgroup improves attitudes towards the secondary outgroup.

In this chapter, I will discuss the characteristics of the STE. This will be followed by a thorough review of the STE literature. I will also touch on the STE in the South African context. Alternative explanations for the STE are also considered. Next, I describe putative mediators of the STE, including attitude generalisation and intergroup anxiety generalisation.

Characteristics of the Secondary Transfer Effect

In his book, Allport (1954) discusses a study conducted by E. L. Hartley in 1946. College students had to report their attitudes towards 35 nations and ethnicities. Three

fictitious ethnicities were hidden among the rest. Despite this, attitudes between all groups, including the fictitious ones, were highly correlated. Given that an individual prejudiced towards one outgroup is likely to be prejudiced towards other outgroups as well (Allport, 1954), it is reasonable to conclude that improved attitudes towards one outgroup would lead to improved attitudes towards other outgroups (by attitude generalisation, as discussed later in this chapter), not involved in the contact interaction (known as secondary outgroups).

Pettigrew (2009) noted that attitudes generalise more readily between certain outgroups. He suggested a similarity gradient. The STE is strongest when outgroups (primary and secondary) are equally stigmatised. Furthermore, the STE is most effective when applied to similar groups, but does also apply to unrelated groups. One can distinguish between three different types of group categories: social or tribal stigma, abominations of the body and perceived blemishes of individual character (Goffman, 1963). Tribal stigma refers to ethnic groups, religious groups, and other groups, that are stigmatised to some extent. Abominations of the body refer to physically handicapped groups or groups with a physical blemish (e.g. a port-wine stain birthmark). Lastly, blemishes of individual character are groups with perceived “weaknesses” of character that have stigma attached to them (e.g. homosexuals, drug addicts and the homeless).

South Africa is known as the rainbow nation as a result of its rich diversity in cultures, ethnicities, languages and religions. As established in Chapter One, intergroup contact in present-day South Africa is limited (Dixon & Durrheim, 2003). Therefore, it is improbable that a South African will ever interact with all the possible outgroups in South Africa. As such, research on the STE in South Africa is particularly vital. Despite this, few studies, particularly in the South African context, have focused on the STE. Of the 700 samples explored by Pettigrew and Tropp’s (2006) meta-analysis, only 18 reported on the STE, from which a significant mean effect size was found ($r = -.19, p < .001$). Despite the lack of

research focusing on this critical form of attitude generalisation, recent evidence has facilitated confidence in the legitimacy of the STE as a phenomenon of wide-spread prejudice reduction.

Support for the Secondary Transfer Effect

Initial indications consistent with the STE, but not necessarily definite, can be found as early as the mid-seventies. Weigert (1976) explored questionnaire data from 454 Black soldiers stationed in West Germany and found that contact between Black and White soldiers not only fostered positive attitudes towards the White soldiers (primary outgroup), but was also associated with positive attitudes towards Germans (secondary outgroup), even when controlling for previous contact with the secondary outgroup. Caditz (1976) studied 204 respondents from a politically liberal American organisation and found that respondents who moved in more religiously diverse groups were also more supportive of ethnic integration policies than those respondents involved in more homogenous groups. Similarly, Wilson (1996) conducted a study amongst White non-Jewish Americans and found that contact with African Americans (primary outgroup) is not only associated with improved attitudes towards African Americans, but also improved attitudes towards Asian Americans, Jews and Latinos (secondary outgroups). Building on this initial evidence, Pettigrew (1997) investigated this form of contact generalisation amongst 3,806 respondents from the 1988 national probability samples from France, Britain, Netherland, and West Germany. Across the samples, friendship was found to be associated with increased positive attitudes towards minorities, even in countries in which the minorities are few or not present at all. This suggests that a process of generalisation took place.

More recently, Pettigrew (2009) labelled this phenomenon of generalisation the contact's secondary transfer effect. German national probability samples from 2002 and 2004 were used to demonstrate the STE across a variety of outgroups (foreigners, Muslims, Jews,

the homeless, homosexual men and homosexual women and non-traditional women). The results illustrated across the two observed years were amazingly stable. In the 2002 sample, contact with resident foreigners not only reduced prejudice towards foreigners (primary outgroup), but also generalised to the following secondary outgroups: the homeless ($r = -.21$, $p < .01$), homosexual men and women ($r = -.20$, $p < .01$), and Jews ($r = -.11$, $p < .01$). Similarly, the results from the 2004 sample illustrated that intergroup contact with foreigners reduced prejudice towards foreigners, which consequently reduced prejudice towards Muslims ($r = -.34$, $p < .01$), the homeless ($r = -.20$, $p < .01$), homosexual men and women ($r = -.20$, $p < .01$), non-traditional women ($r = -.13$, $p < .01$), and Jews ($r = -.06$, $p < .05$). Pettigrew's (2009) results clearly illustrate the STE and confirm previous literature's premise that the STE is stronger for closely related and equally stigmatised groups.

Schmid, Hewstone, Küpper, Zick, and Wagner (2012) conducted a cross-sectional study with nationally representative samples from eight European countries (France, Germany, Hungary, Italy, Netherlands, Poland, Portugal, and the United Kingdom) and a total respondent count of 7,042 individuals. A significant relationship between contact and attitudes towards minorities (primary outgroup) was found and positive attitudes towards minorities, in turn, was significantly positively associated with positive attitudes towards Jews and homosexual individuals (secondary outgroups). The STE was evidenced in seven out of the eight samples, the exception being Portugal. In Poland and Netherlands, the STE was confirmed for one of the two secondary outgroups (Jews). Results from the Poland sample did show a direct relationship between contact with immigrants and attitudes towards homosexual individuals. A possible explanation for the lack of evidence of the STE in the Netherlands sample could be as a result of citizens from Netherlands being more accepting of homosexual individuals from the start (Keuzenkamp, 2010). As such, they would not be considered to be on the same stigma level as immigrants and results would consequently not

generalise across the two groups. Furthermore, while both immigrants and Jews represent tribal stigma groups, homosexuals represent the “blemishes of character” grouping (Goffman, 1963). As such, the STE may fail within the very specific context of Netherlands, due to the dissimilarity of the involved groups.

Longitudinal and experimental support for the secondary transfer effect.

Most of the evidence of the STE consists of cross-sectional studies, which cannot confirm causal relationships. Fortunately, the STE has also been tested longitudinally, as well as experimentally. Eller and Abrams (2004, Study 1) used a two-wave longitudinal design to investigate the STE across six months. British students' (N = 90 at Time 1 and N = 76 at Time 2) contact with French exchange students at Time 1 predicted attitudes towards Algerians at Time 2. Study 2 used a two-wave longitudinal design, exploring the STE across two years. Contact between Mexican and American employees led to the generalisation of contact effects towards Canadians (Eller & Abrams, 2004, Study 2). The sample consisted of 207 Mexicans at Time 1 and 87 Mexicans at Time 2. Unfortunately, Eller and Abrams (2004) used a very small sample. As such, we now turn to a study that holds stronger evidential value.

Van Laar et al. (2005) conducted a longitudinal study spanning five years (five waves), exploring the reduction of prejudice as a consequence of contact amongst White, Asian American, Latino and African American students (N = 2,000) at the University of California. Students were assigned to outgroup roommates. Thereafter, intergroup contact between randomly assigned and voluntary roommates was studied. It was found that contact with the outgroup roommate reduced prejudice towards that outgroup as a whole and these attitudes also generalised to other outgroups. This generalisation effect was particularly strong between Black and Latino roommates. Contact with Asian American roommates was the exception, as this contact led to more negative attitudes towards other groups. There could

be two possible reasons for this exception. Firstly, Asian Americans can be considered a “model minority” with an intermediate ethnic group status in America. Exposure to Asian Americans could lead to negative comparisons to lower status ethnic groups. Secondly, Van Laar et al. (2005) found that Asian Americans have higher levels of racial prejudice than the other ethnic groups examined. With exposure to an Asian American roommate, it is possible that the roommate’s prejudiced attitude could be adopted.

Harwood, Paolini, Joyce, Rubin, and Arroyo (2011) were the first to experimentally explore the STE. A total of 158 American students were randomly assigned to one of three imagination tasks. One group ($N = 42$) was asked to imagine a positive interaction with an illegal immigrant. The second group ($N = 38$), on the other hand, had to imagine a negative encounter with an illegal immigrant and the last group ($N = 48$) imagined an outdoors scene (control group). Respondents were then asked to rate their feelings about 21 outgroups, including illegal immigrants. For the positive-negative contrast predictor variable it was found that attitudes towards illegal immigrants significantly generalised to attitudes towards Mexican-Americans, legal immigrants, Asian-Americans, the homeless, political refugees, Black individuals, Democrats and professors. On the other hand, when the positive-control contrast was the predictor variable, attitudes towards illegal immigrants significantly generalised to attitudes towards Mexican-Americans, legal immigrants, the homeless, political refugees, men, humanities majors, social science majors and Republicans. No significant generalisation effects existed for the negative-control contrast. From the results it is clear that the STE does exist, but that this effect is not homogenous. Similarity between the target and secondary group accounts for the variation observed in the strength of the STE.

South African support for the secondary transfer effect.

Despite its unique applicability in the South African context, literature exploring the STE in South Africa is extremely scarce. One of the earliest examples of attitudes

generalising across outgroups came from a South African study conducted by Lever (1965). He conducted an experiment amongst 210 White South African first year sociology students. Participants were divided into three experimental groups and one control group. In the various conditions participants (1) attended a lecture dismissing the myth that Black individuals are inherently inferior scholastically to White individuals (due to biological differences), (2) read a transcript and discussed it afterwards, (3) read a transcript and (4) attended a normal sociology lecture discussing the sociology of art (control group). The aim was to discover if any of these conditions would affect White South African social distance towards Black (African) South Africans or social distance towards Coloured South Africans. In order to measure the influence on social distance, social distance was measured before manipulations, as well as 12 weeks afterwards. It was found that participants' attitudes towards Black (African) South Africans were significantly improved after attending the lecture presented in the first experimental group. Moreover, social distance scores towards Coloured South Africans significantly decreased for participants who belonged to the group who read the transcript and discussed it afterwards.

Swart (2008, Study 3) examined the STE amongst White South African (N = 159) and Coloured South African high school children (N = 180). Results showed that cross-group friendships with Black (African) South Africans amongst the White South African sample was significantly positively associated with positive attitudes towards Black (African) South Africans ($\beta = .53$; $p < .001$), which was in turn significantly positively associated with positive attitudes towards Coloured South Africans ($\beta = .42$; $p < .001$), after controlling for cross-group friendships with Coloured South Africans. Furthermore, White respondents' cross-group friendships with Coloured South Africans had a significant positive relationship with positive attitudes towards Coloured South Africans ($\beta = .54$; $p < .001$), which was, in turn, significantly positively associated with positive attitudes towards Black (African) South

Africans ($\beta = .44$; $p < .001$), after controlling for cross-group friendships with Coloured South Africans. In contrast, no generalisation effect was exhibited amongst the Coloured respondents. Cross-group friendships amongst Coloured South Africans with Black (African) South Africans were significantly associated with positive attitudes towards Black (African) South Africans ($\beta = .38$; $p < .001$), which was, in turn, not significantly associated with attitudes toward Coloured South Africans ($\beta = .06$; $p > .05$). Similarly, amongst the Coloured sample, cross-group friendships with White South Africans were significantly related to attitudes towards White South Africans ($\beta = .32$; $p < .01$). However, this effect did not generalise to attitudes towards Black (African) South Africans ($\beta = .06$; $p > .05$). This could be as a result of the vastly different group statuses of the relevant primary and secondary group under consideration by the Coloured respondents; White South Africans being the past-oppressors and Black (African) South Africans being the past-oppressed.

Lolliot (2013, Study 5) conducted a three-wave longitudinal study across a period of one year. White South African secondary school students' self-reported contact with and attitudes towards Black (African) and Coloured South Africans, as well as towards two lesser contacted outgroups (African immigrants and Indian South Africans) were explored. The final sample at Time 1 consisted of 494 White male respondents. A total of 516 respondents participated at Time 2, and a total of 494 respondents participated at Time 3. Firstly, it was found that cross-group friendships with Black (African) South Africans at Time 1 were significantly positively related to positive attitudes towards Black (African) South Africans at Time 2 ($r = .36$, $p < .001$). Cross-group friendships with Coloured South Africans at Time 1 were significantly positively associated with positive attitudes towards Coloured South Africans at Time 2 ($r = .35$, $p < .001$). Secondly, attitudes towards Black (African) South Africans were found to have a significant positive relationship with positive attitudes towards both African immigrants ($r = .43$, $p < .001$) and Indian South Africans ($r = .41$, $p < .001$).

Attitudes towards Coloured South Africans were significantly positively related to positive attitudes towards both African immigrants ($r = .20, p < .01$) and Indian South Africans ($r = .15, p < .05$).

De Beer (2015) conducted a cross-sectional study amongst 551 White South African Stellenbosch University students. It was found that cross-group friendships with Coloured South Africans had a significantly positive relationship with positive attitudes towards Coloured South Africans ($b = .26; p < .001$), which were in turn significantly and negatively associated with social distance towards Black (African) South Africans ($b = -.35; p < .001$). Openshaw (2015) conducted a three-wave longitudinal experimental study amongst 58 White South African university students. The aim was to discover if contact with a Black (African) individual would improve attitudes towards Black (African) South Africans in general and whether these effects would generalise to improve attitudes towards Indian South Africans. Participants in the direct contact experimental condition (the condition most relevant to the current discussion) were introduced to a same-gender Black (African) confederate. The participant and confederate then completed a Closeness Induction Task, a set of questions of increasing intimacy. It was found that the experimentally manipulated direct contact significantly improved attitudes towards Black (African) South Africans at Time 2 (after the experiment), as compared to Time 1 (a baseline measure taken one week earlier), which in turn lead to improved attitudes towards Indian South Africans at Time 2, while controlling for previous contact with (and prior attitudes towards; both measured at Time 1) Indian South Africans.

Alternative Explanations for the Secondary Transfer Effect

As seen by the above reported studies, the STE has consistently been illustrated in the contact literature, but in order to establish true conviction in the STE, all alternative explanations need to be examined and ruled out. Tausch et al. (2010) tested three commonly

suggested alternative explanations for the STE. Firstly, the secondary contact problem postulates that the positive association between intergroup contact with a primary outgroup and attitudes towards a secondary outgroup is as a result of the tendency of respondents, who interact more with one outgroup, to also interact more with other outgroups. Many studies that provided evidence for the STE did not control for contact with the secondary outgroup (for exceptions, see Swart, 2008; Van Laar et al., 2005; Weigert, 1976). In order to rule out this alternative explanation for the STE, Tausch et al. (2010, Studies 2-4) included a control measure of contact with the secondary outgroup. In all three studies the STE was present, even when controlling for contact with the secondary outgroup (see also Openshaw, 2015). This suggests that this phenomenon is not as a result of secondary contact.

Secondly, people might report more contact and more positive outgroup attitudes in order to appear more socially acceptable (the social desirability problem). In their third study Tausch et al. (2010) included a measure of social desirable responding (Paulhus, 1984). In this way it could be examined whether the STE was still present when socially desirable answers were partialled out. This study demonstrated that intergroup contact was directly and indirectly related to attitudes towards the secondary outgroup, while social desirability was controlled for. Social desirability did not moderate any of the relationships. As such, the validity of the STE was confirmed.

Lastly, the causal sequence problem states that it could be that contact does not generalise to secondary outgroups, but rather that more tolerant people might be more likely to engage in contact. In order to rule out this alternative hypothesis, the direction of causation needs to be determined. Unfortunately, the vast majority of STE studies are cross-sectional and therefore unable to conclusively determine causation. As longitudinal studies allow stronger causal inferences, it was beneficial for Tausch et al. (2010, Study 4) to also test the STE longitudinally. For other examples of longitudinal and experimental studies exploring

the STE, see previous studies discussed in this chapter. No evidence of a reverse causal order, in which attitudes precedes contact, was found and, as such, all three alternative explanations were ruled out and the STE can still be regarded as the best explanation for the accumulated results in contact literature.

Mediators of the Secondary Transfer Effect

An important gap in the STE literature is the scarcity of studies addressing its mediators. After a thorough appraisal of the contact literature, Lolliot et al. (2013) identified four putative mediating processes: attitude generalisation, deprovincialisation, empathy generalisation and anxiety generalisation. Given the focus of the present study, only the mediating processes of attitude generalisation and anxiety generalisation will be discussed.

Attitude Generalisation

Attitude generalisation involves a process whereby attitudes towards a particular primary outgroup generalises to attitudes towards other secondary outgroups, even after controlling for prior contact with the secondary outgroup (see Figure 1 below). Therefore, intergroup contact indirectly affects attitudes towards the secondary outgroup via the mediation of attitudes towards the primary outgroup. More specifically, contact with the primary outgroup predicts more positive attitudes towards the primary outgroup (path a) which, in turn, predicts more positive attitudes towards the secondary outgroup (path b; Lolliot et al., 2013). Primary and secondary outgroups do not need to be of the same category for attitude generalisation to take place (Pettigrew, 2009), but attitude generalisation is stronger when groups are more similar (e.g. White and Black, which both represent ethnicities) than dissimilar (e.g. Coloured and homosexual; Pettigrew, 2009).

Within the limited literature available on the secondary transfer effect, the attitude generalisation pathway has received robust support (e.g. Al Ramiah, 2009; Harwood et al., 2011; Lolliot, 2013; Openshaw, 2015; Pettigrew, 2009; Schmid et al., 2012; Swart, 2008).

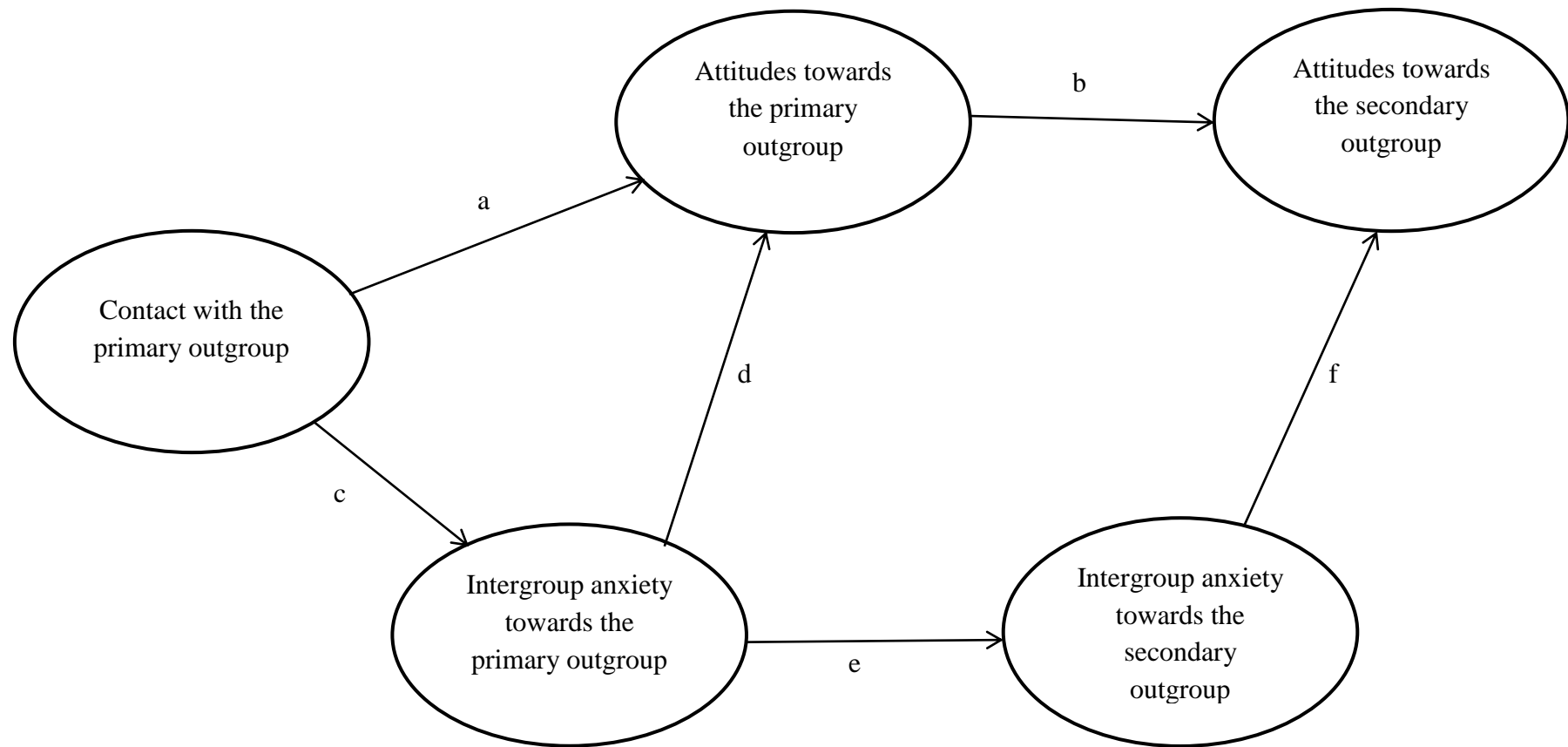


Figure 1. Structural model illustrating the mediating effect of attitude and intergroup anxiety generalisation within the secondary transfer effect

For example, Tausch et al. (2010) contributed substantial support to the attitude generalisation hypothesis. Tausch and colleagues' (2010) first study was undertaken amongst 1,653 respondents (800 Greek Cypriots and 853 Turkish Cypriots). Contact with the Turkish (Greek) Cypriot outgroup significantly predicted positive attitudes towards the Turkish (Greek) outgroup (primary outgroup) which, in turn, was significantly associated with more positive attitudes towards mainland Greeks (Turks; secondary outgroup), confirming that attitude generalisation took place. The sample in their second study comprised of 1,973 respondents (983 Catholics and 990 Protestants) from Northern Ireland. Contact with the ethno-religious outgroup was significantly associated with improved attitudes towards ethnic minorities (secondary outgroup), via outgroup attitudes towards the primary outgroup. Study 2 expanded on Study 1 by controlling for contact with ethnic minorities (the secondary outgroup). Importantly, both Study 1 and Study 2 were conducted in the context of a post-conflict society, similar to South Africa, and illustrate the potential effectiveness of the STE and attitude generalisation in South Africa (see, for example, Lolliot, 2013; Openshaw, 2015; Swart, 2008).

The third study conducted by Tausch and colleagues (2010) was undertaken in North Texas amongst White (N = 199) and Black (N = 76) college students. The primary outgroup was Hispanics and the secondary outgroup either Vietnamese or East Asian (as decided by random allocation). They found that cross-group friendships with Hispanics significantly predicted positive attitudes towards Hispanics and, consequently, improved attitudes towards the secondary outgroup, even after controlling for prior contact with the secondary outgroup. However, Tausch et al. (2010), along with many other STE studies, have been criticised for using the same scales to measure the primary and secondary outgroup attitudes, which could lead to shared method variance (Lolliot et al., 2013; Podsakoff, MacKenzie, Lee, & Podsakoff, 2003).

Schmid et al. (2012), in contrast, aimed to eliminate the problem of shared method variance by using different measures of outgroup attitudes towards the primary and secondary outgroups in their cross-sectional study. The sample was drawn from the general population of eight European countries (France, Germany, Hungary, Italy, Netherlands, Poland, Portugal, and the United Kingdom; $N = 7,042$). Positive intergroup contact with immigrants (primary outgroup) was associated with more positive attitudes towards Jews and homosexuals (secondary outgroups), via the mediation effect of more positive attitudes towards immigrants (i.e. attitude generalisation). Attitude generalisation has not only been explored in cross-sectional studies. Longitudinal (e.g. Tausch et al., 2010, Study 4), as well as experimental (e.g. Harwood et al., 2011) studies have considered attitude generalisation as a mediator of the STE. The fourth study undertaken by Tausch et al. (2010) used a longitudinal (two-wave) design. Protestants ($N = 226$) and Catholics ($N = 185$) from Northern Ireland constituted the sample. The primary outgroup for Protestant respondents was Catholics and the primary outgroup for Catholics was Protestants. Ethnic minorities formed the secondary outgroup. The results showed that contact with the ethno-religious outgroup at Time 1 predicted more positive attitudes towards the secondary outgroup at Time 2, mediated by attitudes towards the ethno-religious primary outgroup, even after controlling for prior secondary outgroup contact. These results provide robust support for the attitude generalisation hypothesis. As previously reported, Harwood et al. (2011) conducted an experimental study amongst 158 American students. It was found that participants who imagined a positive interaction with an illegal immigrant experienced improved attitudes towards a number of uninvolved outgroups via improved attitudes towards illegal immigrants.

Intergroup Anxiety

Pettigrew (2009) stressed that the STE may largely depend on affective factors. Given Pettigrew and Tropp's (2008) findings that suggest that intergroup anxiety is the strongest

mediator of the contact-prejudice relationship, I decided to explore the mediational role of intergroup anxiety in the STE via two pathways (as suggested by Lolliot et al., 2013). Therefore, as depicted in Figure 1, the first pathway is an expansion of the attitude generalisation pathway. Primary outgroup contact leads to reduced intergroup anxiety towards the primary outgroup (path c), which in turn improves primary outgroup attitudes (path d). This then generalises to secondary outgroup attitudes (path b). The second pathway, which is of particular interest to this study, depicts the intergroup anxiety generalisation pathway. Contact with the primary outgroup initiates reduced intergroup anxiety towards the primary outgroup (path c), which in turn generalises to reduce intergroup anxiety towards the secondary outgroup (path e). Finally, this then leads to improved attitudes towards the secondary outgroup (path f).

Vezzali and Giovannini (2011) offer the first evidence of intergroup anxiety's role in the STE. They found that Italian school students' ($N = 175$) contact with immigrants was significantly negatively associated with intergroup anxiety towards immigrants ($\beta = -.20$, $p < .05$) which, in turn, was significantly positively associated with intergroup anxiety towards homosexuals ($\beta = .35$, $p < .001$), which was consequently positively associated with social distance towards homosexuals ($\beta = .24$, $p < .001$). These results illustrate the mediational role of intergroup anxiety generalisation during the STE (where homosexuals constitute the secondary outgroup). As illustrated in Figure 1, however, intergroup anxiety towards the primary outgroup can also indirectly mediate the STE (path d and path b). This indirect mediation received support in the study undertaken by Vezzali and Giovannini (2011). They found that contact with immigrants was significantly negatively associated with intergroup anxiety towards immigrants, which was in turn significantly positively associated with social distance towards immigrants ($\beta = .19$, $p < .01$), which was in turn positively associated with social distance towards homosexuals ($\beta = .21$, $p < .001$).

However, when the two pathways depicting intergroup anxiety's mediational role in the STE were explored in a second model with the disabled as the secondary outgroup, intergroup anxiety's indirect effects on the relation between contact with the primary outgroup and social distance towards the secondary outgroup was found to be unreliable. Therefore, contact with immigrants was significantly associated with intergroup anxiety towards immigrants ($\beta = -.22$; $p < .01$), which was in turn significantly associated with intergroup anxiety towards the disabled ($\beta = .40$; $p < .001$), which was consequently non-significantly associated with social distance towards the disabled ($\beta = .05$; $p > .05$). Furthermore, contact with immigrants was significantly related to intergroup anxiety towards immigrants. This was in turn not significantly associated with social distance towards immigrants ($\beta = .09$; $p > .05$), which was significantly associated with social distance towards the disabled ($\beta = .41$; $p < .001$). Vezzali and Giovannini (2011) suggested that, in the context of the study, non-conflictual intergroup relations between Italian school students and the disabled allowed respondents to base their attitudes more on understanding the disabled rather than discomfort towards the disabled (i.e. intergroup anxiety). Unfortunately, Vezzali and Giovannini (2011) used one measure to test for intergroup anxiety across different groups and could, therefore, not rule out shared method variance; this shortcoming will be addressed in the present study.

To my knowledge, there has been a lack of research exploring the generalisation of intergroup anxiety as a mediator of the STE. In fact, Lolliot and colleagues (2013) suggest that future research should investigate the heretofore understudied mediating role of intergroup anxiety in the STE. The present research aimed to address this shortcoming in the literature.

Summary

Currently, contact researchers are very interested in the generalisation of contact effects to outgroups not involved in the contact interaction (STE), but despite the potential benefits the STE offers to South Africa's unique social environment, South African studies on the STE are scarce (however, see De Beer, 2015; Lolliot, 2013; Openshaw, 2015; Swart, 2008). Robust support can be found for the STE, including cross-sectional, longitudinal and experimental studies conducted in America, Europe and an emerging body of research in South Africa. This support helps to rule out common alternative explanations for the STE, namely the secondary contact problem, the social desirability problem and the causal sequence problem. The present study focused on understanding the mediating mechanisms underlying the STE, focusing on attitude and anxiety generalisation as putative mediators of the STE. In the following chapter, I will discuss the present research in detail by describing the aims and objectives, method and materials, as well as a summary of the results that were obtained during data analysis.

CHAPTER FOUR:

INTERGROUP ANXIETY AND ATTITUDE GENERALISATION AS MEDIATORS OF THE SECONDARY TRANSFER EFFECT

It has been extensively shown that positive intergroup contact, and most especially cross-group friendship (see Davies et al., 2011), reduces prejudice towards the outgroup involved in the interaction (see Pettigrew & Tropp, 2006). Additionally, the contact literature has confirmed the existence of the Secondary Transfer Effect (or STE, i.e. the effect whereby reduced prejudice towards an outgroup generalises towards other uninvolved outgroups (see Pettigrew & Tropp, 2006). Moreover, limited evidence of the generalisation of attitudes (e.g. Al Ramiah, 2009; Harwood et al., 2011; Lolliot et al., 2013; Pettigrew, 2009; Schmid et al., 2012) as a method of generalising contact effects from an outgroup involved in the contact interaction to other outgroups not involved in the interaction, have been found. Vezzali and Giovannini (2011) explored a model testing the generalisation of intergroup anxiety during the STE and Lolliot et al. (2013) suggested that future research explore the mediating role of intergroup anxiety during the STE. Therefore, building on approximately 62 years of contact research, the present study attempts to add to this impressive body of research.

The Present Study

Despite the potentially promising implications of the practical application of the STE in South Africa, research on the STE and its mediators in South Africa is limited (but see De Beer, 2015; Lolliot, 2013; Openshaw, 2015; Swart, 2008). As such, the present study sets out to fill this gap in the literature by investigating the STE of the contact-prejudice relationship amongst White South African Stellenbosch University students. Moreover, the present study explored the mediating role of outgroup attitudes and intergroup anxiety within the STE, as suggested by Lolliot et al. (2013). As a result of Apartheid, South Africa has a long history of intergroup distrust. It could be argued that it is possible that some White South Africans

(ingroup of the present study) might still experience anxiety, due to the faulty historical ideology of “die swart gevaar” (the black peril), at the thought of interaction with “non-Whites” post-Apartheid. As discussed in Chapter One, due to years of negative propagation, “die swart gevaar” represents White South Africans’ fear of encounters with Black (African) South Africans, during which they might be in danger of being overwhelmed (Durrheim & Dixon, 2013). This anxiety associated with a majority ethnic group in South Africa could potentially hinder numerous promising intergroup interaction opportunities. As such, it is of great value to explore the role of intergroup anxiety when investigating the STE in the South African context.

Given that the majority of students enrolled at Stellenbosch University in 2015 are White South Africans (62.24% of the total enrolled students; Stellenbosch University, 2015), White South African Stellenbosch University students were chosen as respondents for the present study. While a slightly higher total (undergraduate and postgraduate) percentage of Black (African) students than Coloured students are enrolled at Stellenbosch University, 98.96% of the respondents of the present study are undergraduate students and, therefore, are more likely to interact with other undergraduate students. According to Stellenbosch University (2014), 10.60% Black (African) students and 18.73% Coloured students formed part of the undergraduate student body in 2014. Therefore, respondents of the present study are more likely to have experienced previous positive intergroup contact with Coloured students and less likely to have experienced previous contact with Black (African) South Africans.

Moreover, a majority of 63.31% of the student body is originally from the Western Cape which, according to the latest 2011 census, is populated by 48.80% Coloured, 32.90% Black (African), 15.70% White and 1.00% Indian and Asian citizens (Statistics South Africa, 2011). The secondary outgroup was chosen as a result of their lower proportions in the

general and student populations. This allows the present study to rule out the secondary contact problem by minimising the probability of prior contact with the secondary outgroup affecting the present study's findings. As such, the present study used Coloured South Africans as the primary outgroup and Black (African) South Africans as the secondary outgroup. Therefore, White South African Stellenbosch University students answered questions pertaining to Coloured South Africans (primary outgroup) and Black (African) South Africans (secondary outgroup), while the present study controlled for prior contact with Black (African) South Africans (secondary outgroup).

Hypotheses

The present study aimed to explore the impact that intergroup contact with Coloured South Africans has on the attitudes and intergroup anxiety towards Coloured South Africans (primary outgroup) amongst White South African students at Stellenbosch University, and whether these attitudes and intergroup anxiety generalise to impact social distance and negative outcome expectancies towards Black (African) South Africans (secondary outgroup), while controlling for prior general contact with the secondary outgroup. It is broadly hypothesised that cross-group friendships with Coloured South Africans will be significantly negatively associated with social distance towards Black (African) South Africans, via the processes of attitude and intergroup anxiety generalisation, even while controlling for previous contact with Black (African) South Africans. Specifically, it is hypothesised that:

1. Cross-group friendship with Coloured South Africans will be significantly negatively associated with intergroup anxiety towards Coloured South Africans in general, which will in turn be significantly negatively associated with positive attitudes towards Coloured South Africans in general (as proposed by the contact hypothesis);

2. General intergroup contact with Black (African) South Africans will be significantly negatively associated with negative expectancies towards Black (African) South Africans, which will in turn be significantly positively associated with social distance towards Black (African) South Africans (as proposed by the contact hypothesis);
3. Positive attitudes towards Coloured South Africans will be significantly negatively associated with social distance towards Black (African) South Africans, while controlling for prior general contact with Black (African) South Africans (i.e. attitude generalisation will be observed, as predicted by the secondary transfer effect).
4. Intergroup anxiety towards Coloured South Africans will be significantly positively associated with negative expectancies towards Black (African) South Africans, while controlling for prior general contact with Black (African) South Africans (i.e. that anxiety generalisation will be observed, as predicted by the secondary transfer effect (see Lolliot et al., 2013)).

Method

Questionnaire

In order to test these hypotheses, an online questionnaire was administered. In order to avoid shared method variance, two different measures were used for each construct. Contact was measured by cross-group friendships and general contact. An intergroup anxiety scale, as well as an expectancies scale was used to measure the generalisation of intergroup anxiety. Finally, this study measured prejudice by examining positive attitudes and social distance. In order to test alternative models, all measures were asked in relation to both Coloured and Black (African) South Africans.

Predictors.

Cross-group friendships with Coloured and Black (African) South African Stellenbosch University students were measured with a two-item scale (adapted from Swart

et al., 2010, 2011; see Lolliot et al., 2014) focusing on the number of outgroup friends (scaled as 0 = *none*, 1 = *1*, 2 = *2-3*, 3 = *4-5* and 4 = *more than 5 friends*) and the amount of time spent with primary outgroup friends (scaled from 0 = *never* to 4 = *all the time*). Satisfactory scale reliabilities (ranging from $\alpha = .72$ to $\alpha = .86$; Swart et al., 2010) were reported by previous South African research that used comparable measures. Items were scored such that higher values indicated greater cross-group friendships.

General contact with Coloured and Black (African) South African Stellenbosch University students was measured with a three-item scale (created for the survey), measuring how regularly respondents have direct face-to-face contact with the secondary outgroup when in a range of “*social settings*”, “*as part of the same sports team, social club or campus society*” or during “*lectures, practicals and/or tutorials*” (scaled from 0 = *never* to 4 = *all the time*). Items were scored in a manner such that higher values indicate more general contact with Black (African) South Africans.

Mediators.

A three-item measure was used to assess intergroup anxiety towards Coloured and Black (African) South Africans in general (adapted from Stephan & Stephan, 1985; Swart et al., 2011). Respondents were asked to imagine working on different activities with a Coloured/Black (African) South African they have never met and to indicate and rate to what extent they would experience the adjectives provided, i.e. “*tense*”, “*scared*” or “*awkward*” (scaled from 1 = *not at all* to 5 = *completely*). Prior South African studies that have administered similar measures have reported reliability coefficients ranging from $\alpha = .78$ to $\alpha = .93$ (Swart et al., 2010). Items were rescored such that higher values on a particular construct represent higher levels of intergroup anxiety.

A five-item scale (Plant & Devine, 2003) was applied to measure negative outcome expectancies towards Coloured and Black (African) South Africans in general by exploring to

what extent respondents agree with various statements, including: *“Even if we hadn’t met before, a Coloured/Black (African) South African would expect me to be prejudiced”*, *“When interacting with a Coloured/Black (African) South African, he or she would see me as prejudiced no matter what I did”*, *“When interacting with a Coloured/Black (African) South African, I would be unsure how to act in order to show him or her that I am NOT prejudiced”*, *“If I were interacting with a Coloured/Black (African) South African, regardless of my behaviour, he or she would interpret my behaviour as prejudiced”* and *“When interacting with a Coloured/Black (African) South African, I would imagine that he or she would be watching my behaviour closely for prejudice”* (scaled from 1 = *strongly disagree* to 5 = *strongly agree*). A reliability coefficient of $\alpha = .79$ has previously been reported for this scale amongst White American university students (Plant & Devine, 2003). Items were rescored such that higher values for a particular construct reflect greater negative expectancies.

Outcomes.

Two measures of prejudice were assessed for the purposes of this study, namely positive outgroup attitudes and social distance. Positive outgroup attitudes towards Coloured and Black (African) South Africans in general were assessed via a four-item scale (adapted from Swart et al., 2011; see also Wright et al., 1997) exploring the extent to which respondents feel *“positive feelings”*, *“respect”*, *“negative feelings”* and to what extent they *“admire”* the outgroup when thinking about Coloured/Black (African) South Africans (scaled from 1 = *completely disagree* to 5 = *completely agree*). Reliabilities ranging from $\alpha = .68$ to $\alpha = .85$ have been reported by South African studies that previously used related measures to assess positive outgroup attitudes (e.g. Swart et al., 2010, 2011). Items were rescored, where necessary, so that higher values represent more positive outgroup attitudes.

Social distance towards Coloured and Black (African) South Africans in general was assessed via a three-item scale (adapted from Bogardus, 1933) that explores respondents' feelings of happiness under conditions of increasing proximity to Coloured/Black (African) South Africans (starting from "*attending the same classes as you*", progressing to "*as your roommate/flatmate/housemate*" and ending with "*as an intimate partner*", scaled from 1 = *not at all* to 5 = *completely*). Previous South African research using similar scales to measure social distance have obtained reliabilities of $\alpha = .91$. (Swart, Kagee, Moeschberger, & Hewstone, in preparation). Items were scored in such a manner that higher scores indicate greater social distance.

Procedure

The present study is a quantitative, cross-sectional study, forming part of a larger four-wave longitudinal survey study. Data was collected via an online survey questionnaire during the first wave of data gathering, which took place during May/June of 2015. Prior to data gathering, ethical clearance (REC: HS1051/2014) was obtained from the Research Ethics Committee (Humanities) at Stellenbosch University. The present study also received Institutional clearance and permission to access the email addresses of Stellenbosch University students. An invitation to participate in the present study (Appendix A) was emailed to 14,185 prospective respondents. Each email contained a link to a unique Uniform Resource Locator (URL) that allowed the prospective respondent to access the online survey, consisting of an electronic informed consent form (Appendix B), a demographic questionnaire (Appendix C), and the main survey questionnaire (Appendix D, discussed above), each presented in both English and Afrikaans.

After following the URL in the email, respondents were presented with the online informed consent form. The informed consent form started with a broad overview of the purpose of the present study, followed by potential benefits of the study on the subjects and

society, the cash prize draw and the procedure involved with the completing of the questionnaire. Most importantly, the respondents' rights were clearly explained, including their right to anonymity, confidentiality and their right to withdraw from the study at any time by selecting the “quit” button available on each page. If the respondent chose the “agree to participate in this survey” option at the bottom of the informed consent form, he or she was directed to the biographic questionnaire. Respondents were asked to indicate their gender, age, home language, faculty and years of study at Stellenbosch University on the biographic questionnaire. Additionally, they were asked to choose which category best suits them: White South African, Black (African) South African, Coloured South African, Indian South African or Asian South African. The online questionnaire was completed by 1,564 respondents in total, but only the data of respondents who indicated that they were White South Africans ($N = 866$) were used for further analysis in the present study. Next, respondents were directed to the main survey. Students who completed the survey received the opportunity to enter a cash prize draw for R1,000.

Respondents

The final sample consisted of 866 ($n = 470$ males, $n = 396$ females) White South African Stellenbosch University students above the age of 18 years. The respondents' ages ranged between 18 and 42 years ($M_{age} = 20.16$ years, $SD = 1.58$ years). The sample consisted of English ($n = 377$) respondents, Afrikaans ($n = 488$) respondents and one respondent that chose the “Other” option and then went on to specify that he or she is bilingual (Afrikaans and English). Respondents had been studying for between one and eight years ($M = 2.37$ years, $SD = 1.24$) at Stellenbosch University.

Results

Preliminary Data Analysis

Once the data was gathered, it was exported to SPSS for further analysis. The first step of the preliminary data analysis was to, where necessary, rescore items such that higher item values represent higher values of each construct. Next, the frequency distribution was explored in order to determine whether the necessary parametric assumptions for normality were met. Skewness and kurtosis were analysed using the cut-off criteria as proposed by West, Finch, and Curran (1995). West et al. (1995) suggested that a skewness value between -2.00 and 2.00 and a kurtosis value between -7.00 and 7.00 indicate a sufficiently normal item distribution. The skewness (minimum = -0.87, maximum = 1.75, $M = .09$, $SD = 0.61$) and kurtosis (minimum = -1.20, maximum = 2.36, $M = -0.48$, $SD = 0.71$) of all the measured items fell well within the acceptable ranges as suggested by West et al. (1995).

An exploratory factor analysis by way of a maximum likelihood method of extraction and direct oblimin rotation was conducted for each construct. A minimum factor loading of 0.40 was used, as suggested by Field (2009). All constructs were found to be unidimensional. This would suggest that each of the measures do indeed represent one factor, as was suggested by face validity. A reliability analysis was conducted using a Cronbach's alpha minimum of .70. For constructs represented by only two items, bivariate (Pearson's product-moment) correlations were run in order to assess the reliability of these constructs. It was found that the reliability for both the measures with two items and the measures with more than two items were reliable. Lastly, composite mean-level variables were created for each construct. Table 1 summarises the correlations, reliabilities, means and standard deviations computed for the composite variables. The data from SPSS was prepared for MPlus for the main data analysis.

Table 1. *Pearson Product-Moment Correlations between Composite Variables, and Construct Reliability, Mean, and Standard Deviation (SD)*

	1	2	3	4	5	6	7	8	9	10	11	12	Reliability (α)	Mean (SD)
1. Cross-group friendships with Coloured South Africans (2 items)	-												.46***†	2.64 (.82)
2. General contact with Coloured South Africans (3 items)	.65***	-											.84	2.49 (.92)
3. Intergroup anxiety towards Coloured South Africans (3 items)	-.22***	-.23***	-										.82	2.04 (.83)
4. Negative outcome expectancies towards Coloured South Africans (6 items)	-.06	-.04	.21***	-									.86	3.14 (.85)
5. Positive attitudes towards Coloured South Africans (4 items)	.27***	.29***	-.37***	-.19***	-								.83	3.69 (.77)
6. Social distance towards Coloured South Africans (3 items)	-.30***	-.30***	.34***	.24***	-.43***	-							.73	2.39 (.97)
7. Cross-group friendships with Black (African) South Africans (2 items)	.37***	.24***	-.14***	-.19***	.23***	-.29***	-						.47***†	2.53 (.76)
8. General contact with Black (African) South Africans (3 items)	.30***	.54***	-.17***	-.14***	.23***	-.30***	.58***	-					.74	2.37 (.84)
9. Intergroup anxiety towards Black (African) South Africans (3 items)	-.12**	-.15***	.71***	.35***	-.22***	.34***	-.25***	-.27***	-				.80	2.28 (.94)
10. Negative outcome expectancies towards Black (African) (5 items)	-.05	-.02	.20***	.98***	-.17***	.23***	-.17***	-.11**	.33***	-			.82	3.10 (.92)
11. Positive attitudes towards Black (African) South Africans (4 items)	.10**	.13***	-.21***	-.40***	.55***	-.44***	.31***	.28***	-.42***	-.38***	-		.87	3.23 (.96)
12. Social distance towards Black (African) South Africans (3 items)	-.19***	-.22***	.26***	.31***	-.32***	.86***	-.35***	-.37***	.41***	.30***	-.54***	-	.76	2.60 (1.02)

† Bivariate correlations (Pearson's r) for construct comprised of only 2 items.

Note. All scales calibrated such that higher mean values denote higher levels of a particular construct. Scales of measurement: Cross-group friendships and general contact were scaled from 0 to 4. Intergroup anxiety, negative outcome expectancies, positive attitudes and social distance were all scaled from 1 to 5.

* $p < .05$, ** $p < .01$, *** $p < .001$

Main Data Analysis

Structural equation modelling with latent constructs.

The main data analysis involved examining the structural relationships of latent variables in MPlus (v7.0; Muthén & Muthén, 1998-2013), which takes measurement error into account and therefore allows more accurate results (Weston & Gore, 2006). The present study satisfies the structural equation modelling (SEM) assumption of 10 to 20 respondents per parameter (Kline, 1998).

Cross-group friendships, general contact, intergroup anxiety, negative outcome expectancies, positive outgroup attitudes and social distance all represent latent (unobserved) constructs examined in the present study. Each of these latent constructs was measured by manifest (observed) variables (items). When latent constructs are measured by more than four manifest variables, parcelling is used in order to increase model parsimony and reduce the influence of error associated with each item (Little, Cunningham, Shahar, & Widaman, 2002). From the six items measuring the latent construct, negative expectations, in the alternative model, three parcels were created. From the five items measuring the latent construct, negative expectations, in the present study's main model, two parcels were created. One parcel was created from two items and the other from three items, arranged in accordance to the item-to-construct balance method (Little et al., 2002). If using this method, factor loadings act as a guide of how to arrange items in parcels. In the present study the item with the largest factor loading was paired with the item with the lowest factor loading. The item with second highest factor loading was paired with the item with the second lowest factor loading, as well as the remaining middle item.

A strictly confirmatory two-step approach (Anderson & Gerbing, 1988) to SEM was used in the present study. The first step involved analysing the measurement model by confirmatory factor analysis (CFA), whereas the second step explored the structural model.

The measurement model sets out to discover whether the manifest variables measure the latent constructs. Robust maximum likelihood (RML) estimates were used for the measurement model, which was found to have a good fit (see Hu & Bentler, 1999). The Chi-square fit index tests the null hypothesis, which suggests that the structure of the measurement model is not significantly different from the data. As the chi-square fit index is quite sensitive and therefore prone to error, the relative chi-square was also considered. The relative chi-square (χ^2/df) should be smaller than 3:1. The comparative fit index (CFI), on the other hand, compares the fit of the existing model with a null model, which assumes that latent constructs are not correlated. The CFI reflects a good fit when complying with the assumption that a CFI > .95 suggests a good fit. The root mean square error of approximation (RMSEA) should be < .05, in order to achieve a good fit. The standardised root mean square residual (SRMR) measures the difference between predicted and observed variances and should be less than .05 in order to have good fit. The model fit indexes for the measurement model of the present study ($N = 866$), $\chi^2 (104) = 265.04$, $p < .000$, $\chi^2/df = 2.55$, CFI = .97, RMSEA = .04, SRMR = .04 therefore suggested that the measurement model possessed a good model fit.

In the second step the present study's *a priori* theoretical model, based on the model suggested by contact literature (Pettigrew & Tropp, 2006) and Vezzali and Giovannini's (2011) model of the generalisation of intergroup anxiety, was compared to the data. Model fit indices illustrated that the present study's theoretical structural model fits the data well and therefore is a sufficiently accurate representation of the data, $\chi^2 (110) = 279.90$, $p < .000$, $\chi^2/df = 2.54$; CFI = .968; RMSEA = .042; SRMR = .040.

The structural model measures unstandardised beta (*b*) path coefficients. All direct effects found in the present study's structural model were significant. Specifically, the direct relationship between cross-group friendships with Coloured South Africans and positive

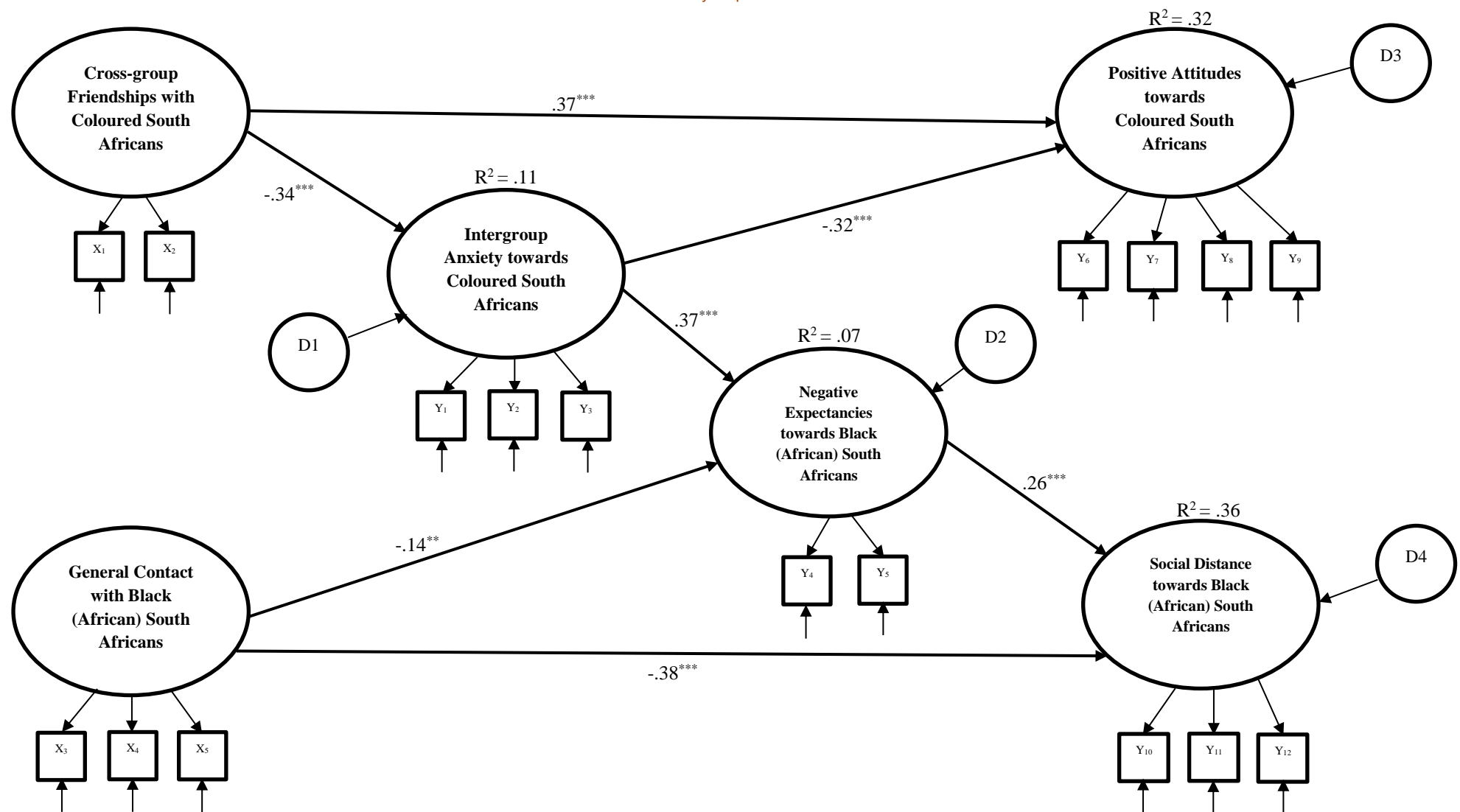


Figure 2. Structural equation model of the secondary transfer effect, via attitude and intergroup anxiety generalisation amongst White South African Stellenbosch University students ($N = 866$).

$\chi^2(110) = 279.90$, $p < .000$, $\chi^2/df = 2.54$; CFI = .97; RMSEA = .04; SRMR = .04.

* $p < .05$; ** $p < .01$, *** $p < .001$. Unstandardised b path coefficients

attitudes toward Coloured South Africans was found to be significantly positive ($b = .37$, $p < .001$). Moreover, cross-group friendship was directly and significantly negatively associated with intergroup anxiety ($b = -.34$, $p < .001$), which in turn was directly significantly inversely associated with positive attitudes ($b = -.32$, $p < .001$). Similarly, general contact with Black (African) South Africans had a significant direct negative association with social distance towards Black (African) South Africans ($b = -.38$; $p < .001$). Furthermore, the direct association between general contact and negative expectancies was significantly negative ($b = -.14$, $p < .01$), which in turn had a direct significant positive relationship with social distance ($b = .26$, $p < .001$). Not only did I observe direct primary contact effects, but contact effects also generalised towards the secondary outgroup. Specifically, positive attitudes towards Coloured South Africans were directly and significantly inversely associated with social distance towards Black (African) South Africans ($b = -.22$, $p < .001$). Moreover, the direct relationship between intergroup anxiety towards Coloured South Africans and negative expectancies towards Black (African) South Africans was significant and positive ($b = .20$, $p < .001$).

Mediation effects.

As expected from the contact hypothesis, intergroup anxiety towards Coloured South Africans significantly positively mediated the indirect relationship between cross-group friendships with Coloured South Africans and positive attitudes toward Coloured South Africans ($b = .11$, $p < .001$, 95% CI [.08, .14]). Moreover, expectancies towards Black (African) South Africans negatively mediated the indirect relationship between general contact with Black (African) South Africans and social distance towards Black (African) South Africans ($b = -.04$, $p < .01$, 95% CI [-.06, -.02]).

Evidence of the attitude generalisation pathway was found. Positive attitudes towards the primary outgroup significantly and negatively mediated the indirect association between

cross-group friendships with the primary outgroup and social distance towards the secondary outgroup ($b = -.08, p < .001, 95\% \text{ CI } [-.11, -.05]$). Finally, the path coefficients of the structural model also confirmed the mediating role of the generalisation of anxiety pathway during the STE. The findings of the present study illustrated partial intergroup anxiety generalisation via two mediation effects. Firstly, intergroup anxiety towards Coloured South Africans positively mediated the indirect relationship between cross-group friendships with Coloured South Africans and positive attitudes towards Coloured South Africans ($b = .11, p < .001, 95\% \text{ CI } [.08, .14]$). Secondly, positive attitudes towards Coloured South Africans positively mediated the indirect relationship between intergroup anxiety towards Coloured South Africans and social distance towards Black (African) South Africans ($b = .07, p < .001, 95\% \text{ CI } [.05, .10]$). Full intergroup anxiety generalisation was also found in the present study and reported via two mediation effects. Firstly, intergroup anxiety towards Coloured South Africans significantly negatively mediated the indirect association between cross-group friendships with Coloured South Africans and negative outcome expectancies towards Black (African) South Africans ($b = -.07, p < .001, 95\% \text{ CI } [-.10, -.04]$). Secondly, negative outcome expectancies towards Black (African) South Africans significantly and positively mediated the indirect relationship between intergroup anxiety towards Coloured South Africans and social distance towards Black (African) South Africans ($b = .05, p < .001, 95\% \text{ CI } [.03, .08]$). Both attitude and intergroup anxiety generalisation pathways were found, even while controlling for general contact with the secondary outgroup, Black (African) South Africans. Figure 2 summarises the findings from the main data analysis.

Alternative models.

In order to explore rival hypotheses, alternative models were investigated in the present study. The first alternative model employed the same configuration of primary and secondary outgroups (i.e. Coloured South African primary outgroup and Black (African)

South African secondary outgroup). It differed from the model described in Figure 2 in that it included outgroup expectancies and social distance towards Coloured South Africans and intergroup anxiety and positive outgroup attitudes towards Black (African) South Africans. This alternative model produced identical measurement and structural model fit, and a similar pattern of direct and indirect (mediation) effects to those found for the model described in Figure 2.

The main alternative model that was tested explored the so-called “reverse STE” (i.e. using Black (African) South Africans as the primary outgroup and Coloured South Africans as the secondary outgroup; see Schmid et al., 2012; Tausch et al., 2010). In this model, cross-group friendships towards Black (African) South Africans predicted intergroup anxiety and positive outgroup attitudes towards Black (African) South Africans; general contact with Coloured South Africans predicted negative outcome expectancies and social distance towards Coloured South Africans; intergroup anxiety towards Black (African) South Africans predicted negative outcome expectancies towards Coloured South Africans (i.e. testing anxiety generalisation); and positive attitudes towards Black (African) South Africans predicted social distance towards Coloured South Africans (i.e. testing attitude generalisation). The model fit indices for the measurement model ($N = 866$), $\chi^2(120) = 253.39, p < .000, \chi^2/df = 2.11, CFI = .98, RMSEA = .04, SRMR = .03$, suggested a good model fit. Furthermore, the model fit indices for the structural model also indicated a good fit ($N = 866$), $\chi^2(126) = 279.77, p < .000, \chi^2/df = 2.21, CFI = .98, RMSEA = .04, SRMR = .04$. Next, I explored the relationships between the latent constructs (see Figure 3).

The direct relationship between cross-group friendships with Black (African) South Africans and positive attitudes towards Black (African) South Africans was found to be significant and positive ($b = .38, p < .001$). Cross-group friendships with Black (African) South Africans were directly and significantly negatively related to intergroup anxiety

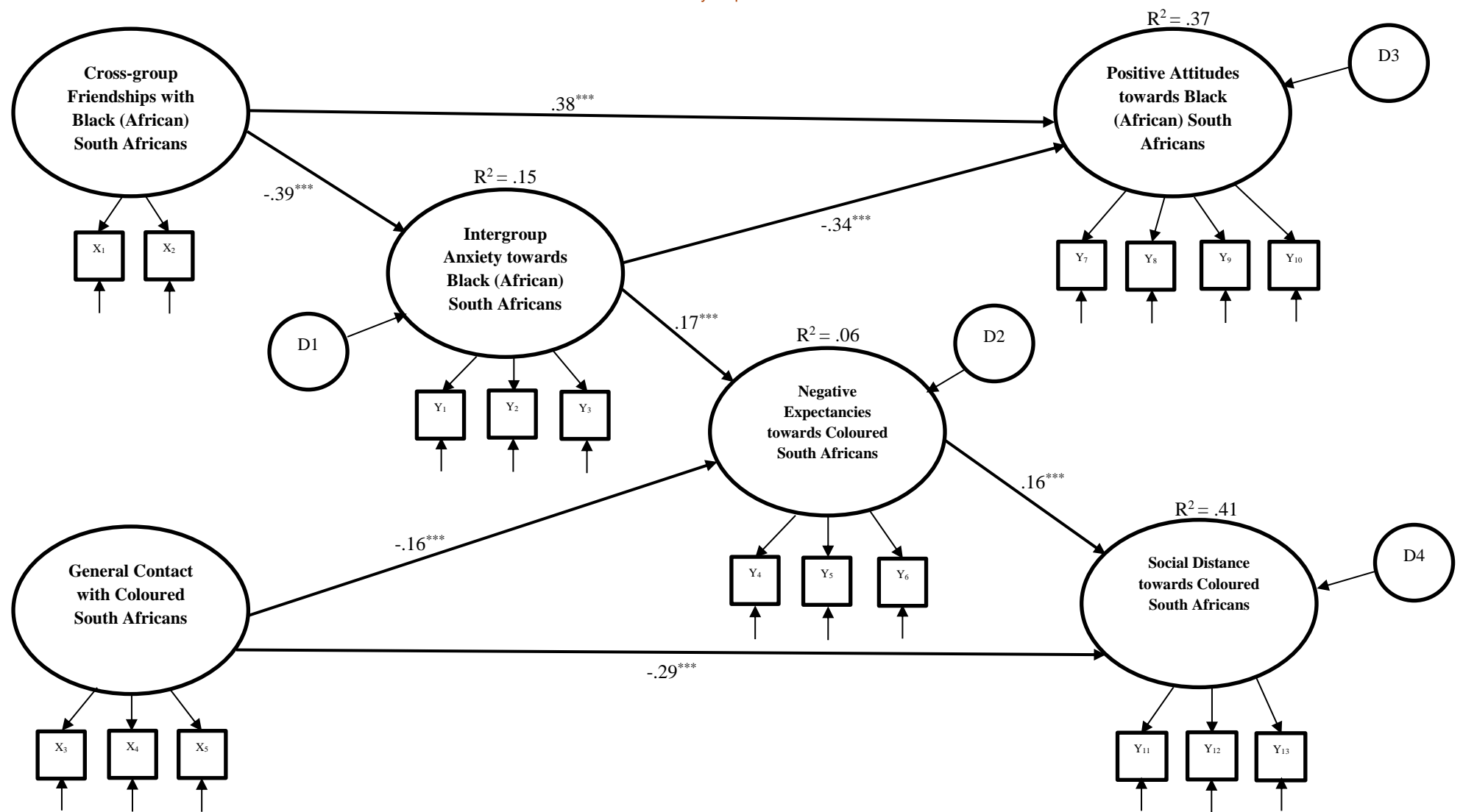


Figure 3. Alternative structural equation model of the secondary transfer effect, via attitude and intergroup anxiety generalisation amongst White South African Stellenbosch University students ($N = 866$).

$\chi^2 (126) = 279.77, p < .000, \chi^2/df = 2.21$; CFI = .98; RMSEA = .04; SRMR = .04.

* $p < .05$; ** $p < .01$, *** $p < .001$. Unstandardised b path coefficients

towards Black (African) South Africans ($b = -.39, p < .001$). Intergroup anxiety towards Black (African) South Africans was directly and significantly negatively associated with positive outgroup attitudes towards Black (African) South Africans ($b = -.34, p < .001$). Furthermore, the direct association between general contact with Coloured South Africans and social distance towards Coloured South Africans was also significantly negative ($b = -.29, p < .001$). General contact with Coloured South Africans had a significant direct negative relationship with negative outgroup expectancies towards Coloured South Africans ($b = -.16, p < .001$). Negative outgroup expectancies towards Coloured South Africans significantly directly positively related to social distance towards Coloured South Africans ($b = .16, p < .001$).

Direct generalisation effects between the primary outgroup and the secondary outgroup were also observed in the present findings. The direct negative association between positive outgroup attitudes towards Black (African) South Africans and social distance towards Coloured South Africans was significant ($b = -.45, p < .001$). Furthermore, intergroup anxiety towards Black (African) South Africans had a direct significant positive relationship with negative outgroup expectancies towards Coloured South Africans ($b = .17, p < .001$). Figure 3 summarises the findings from the main data analysis for the main alternative model.

Alternative Model 1 found evidence of mediation of the primary contact effect, as well as of the STE. Intergroup anxiety towards Black (African) South Africans significantly negatively mediated the indirect relationship between cross-group friendships towards Black (African) South Africans and positive attitudes towards Black (African) South Africans ($b = -.03, p < .01, 95\% \text{ CI } [.01, .17]$). Furthermore, negative outcome expectancies towards Coloured South Africans significantly positively mediated the indirect relationship between

general contact with Coloured South Africans and social distance towards Coloured South Africans ($b = .13, p < .001, 95\% \text{ CI } [-.04, -.01]$).

The mediation of the STE via the attitude generalisation pathway was observed in the main alternative model's findings. Specifically, positive attitudes towards Black (African) South Africans significantly inversely mediated the indirect relationship between cross-group friendships with Black (African) South Africans and social distance towards Coloured South Africans ($b = -.17, p < .001, 95\% \text{ CI } [-.21, -.13]$). Moreover, the partial intergroup anxiety generalisation pathway was also observed, via two mediation effects, in the findings of the main alternative model. Firstly, intergroup anxiety towards Black (African) South Africans significantly and positively mediated the indirect association between cross-group friendships with Black (African) South Africans and positive attitudes towards Black (African) South Africans ($b = .13, p < .001, 95\% \text{ CI } [.10, .17]$). Secondly, positive attitudes towards Black (African) South Africans significantly and positively mediated the indirect relationship between intergroup anxiety towards Black (African) South Africans and social distance towards Coloured South Africans ($b = .15, p < .001, 95\% \text{ CI } [.12, .19]$). Lastly, the full intergroup anxiety generalisation pathway was also observed in the present findings. Firstly, intergroup anxiety towards Black (African) South Africans significantly negatively mediated the indirect relationship between cross-group friendships with Black (African) South Africans and negative outgroup expectancies towards Coloured South Africans ($b = -.07, p < .01, 95\% \text{ CI } [-.10, -.04]$). Secondly, negative outgroup expectancies towards Coloured South Africans significantly positively mediated the indirect relationship between intergroup anxiety towards Black (African) South Africans and social distance towards Coloured South Africans ($b = .03, p < .01, 95\% \text{ CI } [.01, .04]$).

An alternative to this “reverse STE” model was also run, employing the same configuration of primary and secondary outgroups (i.e. Black (African) South African

primary outgroup and Coloured South African secondary outgroup). It differed from the model described in Figure 3 in that it included intergroup anxiety and social distance towards Black (African) South Africans and outcome expectancies and positive outgroup attitudes towards Coloured South Africans. This alternative model produced identical measurement and structural model fit to the main “reverse STE” model, and a similar pattern of direct and indirect (mediation) effects to those found for the model described in Figure 3. A final alternative model, which included intergroup anxiety and social distance towards Coloured South Africans and outcome expectancies and positive outgroup attitudes towards Black (African) South Africans. Like Alternative Model 2, Alternative Model 3 produced identical measurement and structural model fit to the main “reverse STE” model, as well as a similar pattern of direct and indirect (mediation) effects.

Summary of Findings

The main broad hypothesis of the present study was fully supported by the results. Cross-group friendships with Coloured South Africans were significantly negatively associated with social distance towards Black (African) South Africans, via both attitude and intergroup anxiety generalisation, even after controlling for previous contact with Black (African) South Africans. Moreover, all four of the more specific hypotheses received strong support. Both hypotheses regarding the primary contact effects were supported in the present study. The two hypotheses focusing on the STE (one more specifically touching on the attitude generalisation and the other intergroup anxiety generalisation) also received strong support in the present study. In the following chapter I discuss these results in detail and explore the present study’s findings in the context of the existing contact literature. Moreover, the limitations of the present study will be considered and recommendations for future research will be made.

CHAPTER FIVE:

DISCUSSION

It has already been well-established in the contact literature that intergroup contact reduces prejudice towards the outgroup involved in the interaction, especially if the contact is positive and/or facilitates cross-group friendships (Brown & Hewstone, 2005; Davies et al., 2011; Hewstone & Swart, 2011; Pettigrew, 1997; Pettigrew & Tropp, 2006). A detailed exploration of the latest contact literature revealed a few theoretical gaps, which also served as inspiration for further study in the current study. Interest has only recently shifted to the secondary transfer effect of intergroup contact (STE; e.g. Harwood et al., 2011; Pettigrew, 2009; Schmid et al., 2012; Shook, Hopkins, & Koech, 2016; Tausch et al., 2010; Vezzali & Giovannini, 2011) and more research is required on the mechanisms driving the STE (Lolliot et al., 2013). Specifically, more research should explore these mechanisms within the South African context.

As such, the present study aimed to investigate whether the self-reported cross-group friendships of White South African Stellenbosch University students with Coloured South Africans are significantly negatively associated with social distance towards Black (African) South Africans, via the mediational mechanisms of attitude and intergroup anxiety generalisation, even while controlling for previous contact with Black (African) South Africans. The present study was inspired by Lolliot et al.'s (2013) review of the STE and the mechanisms underlying this effect. The present study found strong support of the primary contact effect, as well as the STE. Moreover, evidence of the mediating roles of attitude generalisation and intergroup anxiety generalisation was found in the present study.

Chapter Five will discuss the key findings of the present study in relation to the existing contact literature and the context in which the study was undertaken. Specifically, the discussion will focus on primary contact effects and the STE (as well as its mediators).

Alternative models and alternative explanations will also be considered. Moreover, the practical applications of these findings within the South African context of higher education will be discussed. Lastly, the limitations of the present study will be considered and ideas for future research suggested.

Primary Contact Effects

The primary contact effect refers to the influence of intergroup contact on prejudice towards the outgroup involved in the contact situation (the primary outgroup), and is an important precursor for the generalisation effect described by the STE. The primary contact effect (and its underlying mediators) has received robust support in the contact literature (e.g. Cameron & Rutland, 2006; Hewstone et al., 2006; Hodson et al., 2009; Holtman et al., 2005; Lee et al., 2004; Paolini et al., 2004; Schwartz & Simmons, 2001; Swart et al., 2010; Tam et al., 2007; Tausch et al., 2007; Turner & Brown, 2008; Van Laar et al., 2005; Voci & Hewstone, 2003). In the present study, general contact with Black (African) South Africans had a direct significant negative association with social distance towards Black (African) South Africans, while cross-group friendships with Coloured South Africans had a direct significant positive relationship with positive attitudes towards Coloured South Africans. These findings are consistent with the established contact hypothesis (Allport, 1954) and supporting contact literature (see meta-analysis of Pettigrew and Tropp, 2006).

These findings are particularly important in South Africa, as the country is still healing from the negative impact of Apartheid and prejudice is still a wide-spread problem. These findings imply that intergroup relations in South Africa could improve via quality interactions between citizens of different ethnic groups. Unfortunately, it is not feasible for South Africans to interact with all outgroup members. It is therefore very promising to discover that the effect of positive contact, with one South African from another social group, generalises to the entire outgroup involved in the interaction. The findings suggest that

contact between ethnic groups could affect South Africans' willingness to live in close proximity to other ethnic groups. This is extremely promising, as this highlights a potential solution for self-segregation in South Africa. Reduced self-segregation will, in turn, increase contact, which would influence social distance, creating a cycle which could potentially improve South Africa's intergroup relations.

Ideally, the positive interaction between cross-ethnic South Africans would result in friendship. Cross-group friendships are a form of direct contact, which are high in quality, frequency and duration. Furthermore, cross-group friendships provide a perfect context for Allport's (1954) optimal conditions (e.g. voluntary contact, equal status, common goals; Pettigrew, 1998) to take part. This is therefore an ideal form of contact, given that the optimal conditions for contact are most effective when presented together, rather than separately (Pettigrew & Tropp, 2006). The present study's findings suggest that if South Africans from different ethnic groups could develop friendships, their attitudes towards the entire outgroup will be improved.

Each of these primary contact effects were found to be significantly mediated (indirect effect) by negative expectancies and intergroup anxiety respectively. General contact with Black (African) South Africans were significantly and negatively directly associated with negative expectancies towards Black (African) South Africans, which were, in turn, significantly and positively directly associated with social distance towards Black (African) South Africans. Cross-group friendships with Coloured South Africans were significantly and negatively directly related to intergroup anxiety towards Coloured South Africans, which, in turn, had a significant negative direct relationship with positive attitudes towards Coloured South Africans. This is in line with previous international studies (see Paolini et al., 2004; Pettigrew & Tropp, 2008; Stephen & Stephen, 1985; Voci & Hewstone, 2003) and South

African (e.g. Swart et al., 2011; Tredoux & Finchilescu, 2010) studies exploring intergroup anxiety.

The Secondary Transfer Effect of Intergroup Contact

The present study's findings confirm that positive intergroup contact with the primary outgroup indirectly leads to improved attitudes towards the secondary outgroup, replicating studies from the emerging literature on the STE (e.g. Harwood et al., 2011; Pettigrew, 2009; Schmid et al., 2012; Shook et al., 2016; Tausch et al., 2010; Vezzali & Giovannini, 2011). Specifically, cross-group friendships with Coloured South Africans were indirectly negatively associated with social distance towards Black (African) South Africans. This indirect relationship between primary outgroup contact and secondary outgroup prejudice was significantly mediated by both attitude generalisation and intergroup anxiety generalisation. Moreover, these significant indirect effects were observed while controlling for both secondary contact effects and potential shared method variance. Few studies included these controls and therefore the present study makes a considerable contribution to the established STE contact literature.

Attitude generalisation.

In order to avoid shared method variance, two different variables were used to measure outgroup prejudice, namely positive outgroup attitudes and social distance. Attitudes are related to a person's belief systems regarding a specific group, whereas social distance refers to a person's acceptance of close proximity to an outgroup. It could therefore be argued that people's attitudes are a lot more ingrained than their willingness for close contact (which could most likely be influenced by their attitudes regarding outgroups in general). It makes sense that by promoting positive attitudes towards one group, a person can stimulate greater acceptance of closer proximity to other groups. It is not as clear how promoting greater acceptance of closer proximity to one outgroup would directly stimulate greater positive

attitudes towards other outgroups. For this reason, the present study explores generalisation from positive attitudes to social distance.

It was found that cross-group friendships with Coloured South Africans were directly positively associated with positive attitudes towards Coloured South Africans, which were in turn directly negatively related to social distance towards Black (African) South Africans, while controlling for prior contact with Black (African) South Africans. Moreover, the attitude generalisation pathway was found over and above the effect of intergroup anxiety generalisation. These findings replicated the results of previous international (e.g. Al Ramiah, 2009; Eller & Abrams, 2004; Harwood et al., 2011; Pettigrew, 2009; Schmid et al., 2012; Tausch et al., 2010), as well as the few South African studies (Lolliot, 2013, Study 5; Openshaw, 2015; Swart, 2008, Study 3) exploring the STE via attitude generalisation.

South Africa is a country of great cultural diversity, but also a country rife with self-segregation among its citizens (see Dixon & Durrheim, 2003; Tredoux & Dixon, 2009). As such, it is promising to discover that interactions creating the opportunity for friendship could potentially not only improve attitudes towards the outgroup involved in said interaction, but could also potentially increase an individual's willingness to interact closely with other outgroups one might not have regular intergroup contact with. Given the racial group distribution of Stellenbosch University's student body, interaction between all race groups is unlikely. Therefore, these findings are also promising in the context of a South African university. Students of all race groups attend classes together and therefore the reduction of university students' social distance towards various outgroups is extremely important, in order to avoid discord between students. Moreover, students often need to work together on group projects and class activities. Respect, admiration and positive feelings (positive outgroup attitudes) between students are therefore important to ensure productivity and harmony between students.

An important characteristic that moderates the strength of the attitude generalisation pathway is perceived outgroup similarity (Pettigrew, 2009). Generalisation from the primary outgroup to the secondary outgroup is more likely to occur if the outgroups are sufficiently similar to one another. Specifically, attitude generalisation is strongest when outgroups are equally stigmatised. This is perfectly illustrated in Swart's (2008) study. Swart (2008) observed no significant generalisation effect between White and Black (African) South African outgroups. This could be because White South Africans represent the previous-oppressors and Black (African) South Africans represent the previously-oppressed. In contrast, a significant generalisation effect was observed between Coloured and Black (African) South African outgroups. Coloured and Black (African) South African outgroups are perceived as equally stigmatised, as both outgroups were oppressed pre-1994 during the Apartheid era. This may contribute to why the STE between these two outgroups is strong. Unfortunately, the present study did not include a measure of perceived outgroup similarity (see limitations below), but the present study's exploration of the generalisation effect between Coloured South Africans (primary outgroup) and Black (African) South Africans (secondary outgroup) found, similar to Swart (2008), significant evidence of this generalisation effect between the primary and secondary outgroup. Therefore, due to these outgroups' shared political history in South Africa, it seems plausible that attitude generalisation in the present study was moderated by perceived outgroup similarity.

Intergroup anxiety generalisation.

The present study also explored intergroup anxiety generalisation, while controlling for secondary contact and potential shared method variance. In order to control for shared method variance, the present study used two different, yet related measures (i.e. intergroup anxiety and negative expectancies) to measure expressions of anxiety or concern about interactions with the outgroup. Before exploring intergroup anxiety as a mediator of the STE,

it first needs to be discovered whether a relationship exists between intergroup anxiety and negative expectancies.

In the present study, intergroup anxiety was found to have a direct positive and significant association with negative expectancies. It makes sense that if an individual's experience of threat when interacting with one outgroup member is reduced, their negative expectations regarding interaction with other outgroups will also be reduced. After all, they have just experienced an anxiety-free conversation with a person from a different ethnic group. An experience like that will have strong potential to alter their perception of similar future interactions. It makes less sense that an individual's reduced negative expectancies regarding contact with one outgroup would, consequently, reduce their anxiety about interacting with other groups. Therefore, in the present study intergroup anxiety towards Coloured South Africans will generalise to negative expectancies towards Black (African) South Africans. Very little research is available on intergroup anxiety's effect on negative expectancies (for an exception, see Gómez et al., 2011). As such, the present study makes an important theoretical contribution. Unfortunately, as the present study is cross-sectional, causal order between intergroup anxiety and negative expectancies should be interpreted with caution.

Two pathways through which intergroup anxiety could potentially mediate the STE were explored. The first pathway was via positive outgroup attitudes (primary outgroup intergroup anxiety to primary outgroup positive attitudes to secondary outgroup social distance). This first pathway is an expansion of the attitude generalisation pathway and is only partially mediated by intergroup anxiety. The second pathway was via negative outgroup expectancies (primary outgroup intergroup anxiety to secondary outgroup negative expectancies to secondary outgroup social distance), and concerns the full generalisation of intergroup anxiety. The present study's findings fully support the proposed model for

intergroup anxiety generalisation. These findings support Pettigrew's (2009) suggestion of the importance of affective factors in the STE. The present study found support for intergroup anxiety generalisation, over and above the attitude generalisation pathway, and despite controlling for general contact with Black (African) South Africans (secondary contact).

Upon a thorough review of the existing contact literature, only one study could be found that explored intergroup anxiety generalisation as a mediating mechanism of the STE (see Vezzali & Giovannini, 2011). Therefore, the present study will make a significant contribution by filling a heretofore practically unexplored (to this researcher's knowledge) gap in the contact literature. Given South Africa's history of intergroup conflict and the self-segregation currently observed between ethnic groups in South Africa, it is encouraging to discover that reduced intergroup anxiety towards one ethnic outgroup would generalise towards other groups. Practically spoken, reduced intergroup anxiety would mean more pleasant interaction between cross-ethnic groups. This will improve intergroup relations in South Africa.

Furthermore, reduced negative expectancies amongst South Africans could reduce self-segregation amongst the ethnic groups and might even avoid misunderstandings due to defensiveness during interactions with individuals from a different ethnic group. Moreover, the reduction of intergroup anxiety amongst students would mean one less stressful factor in a time already laden with unique challenges. Interacting with other cross-group students becomes a less daunting prospect, as their expectancies regarding these interactions would improve. This could probably result in less contact avoidance and less prejudice on South African campuses.

Alternative models.

In order to weigh up rival hypotheses against each other regarding the interrelationships between the latent constructs against the main hypothesis of the present

study, three alternative models were analysed and considered. The model fit of all three alternative models was good and all pathways were significant. Additionally, strong support for the primary contact effect, as well as the STE via attitude generalisation and intergroup anxiety generalisation, was found in all three alternative models. Alternative Model 1 switched the primary and secondary outgroups to Black (African) South Africans (primary outgroup) and Coloured South Africans (secondary outgroup). However, most of the respondents used for the present study are undergraduates and a higher percentage of undergraduate students at Stellenbosch University are Coloured, as opposed to Black (Stellenbosch University, 2014). Moreover, the majority of the student body are from the Western Cape and, according to the latest census, more Coloured South Africans, than Black (African) South Africans, live in the Western Cape (Statistics South Africa, 2011). As such, it would be most appropriate to use Coloured South Africans as the primary outgroup and Black (African) South Africans as the secondary outgroup, as there is a higher probability that respondents would not have experienced contact with Black (African) South Africans before.

Alternative Model 2 postulated that negative expectancies towards the primary outgroup will generalise to intergroup anxiety towards the secondary outgroup, rather than intergroup anxiety generalising towards negative expectancies, as hypothesised by the present study. However, while there are more studies that investigated the relationship between intergroup contact and intergroup anxiety (as mediated by negative expectancies), a few studies have suggested that intergroup anxiety could also mediate the relationship between intergroup contact and negative expectancies (see Gómez et al., 2011; Plant & Devine, 2003). Furthermore, it makes sense that intergroup anxiety towards one outgroup would generalise towards negative outgroup expectancies regarding contact with other outgroups. It was of interest to further investigate this second proposed relationship in the present study.

Alternative Model 3 combines the first two alternative models by switching outgroups, as well as intergroup anxiety and negative expectancies.

Although the alternative models all provided strong rival hypotheses, the main a priori model used in the present study was the best fit for the geographic demographics of the area in which the study was conducted and allowed the present study to explore an area of interest scarcely investigated by prior studies. The present study's a priori model offered strong support of the STE and its mediators. Nevertheless, other underlying processes could be responsible for the pattern observed in the findings and would, therefore, first need to be ruled out before it can be stated with confidence that the STE was involved in the present study.

Alternative Explanations

The findings suggest that secondary contact (see Tausch et al., 2010) was not associated with the promising results. A measure of contact with the secondary outgroup was added to the present study in order to control for the effects of secondary contact. As seen from the results, the STE occurred despite controlling for general contact with Black (African) South Africans. More specifically, cross-group friendships with Coloured South Africans (the primary outgroup) was indirectly associated with social distance towards Black (African) South Africans (the secondary outgroup), over and above the effects of contact with Black (African) South Africans (the secondary outgroup). Therefore, secondary contact can be ruled out as an alternative explanation for the observed phenomenon. Few studies exploring the STE have added contact with the secondary outgroup as a control measure (for exceptions see Tausch et al., 2010, Studies 2-4; Van Laar et al, 2005; Weigert, 1976) and therefore the present study makes an important contribution to the contact literature by providing rigorous evidence of the STE, despite the presence of contact with the secondary outgroup.

The chosen methodology in the present study also ruled out the presence of shared method variance. Method variance refers to variance that is a product of the measurement model rather than the construct being explored. Specifically, in the case of shared method variance, identical measures are used in order to explore the same construct across two groups, which results in relationships between constructs being artificially inflated (Podsakoff et al., 2003). In order to avoid shared method variance, the predictors (cross-group friendships and general contact), mediators (intergroup anxiety and negative expectancies) and the outcomes (positive attitudes and social distance) of the present study were represented by two different measures in each instance. Most existing studies on the STE have relied on identical measures (e.g. Al Ramiah, 2009; Tausch et al., 2010; Vezzali & Giovannini, 2011; for an exception, see Pettigrew, 2009). Therefore, the present study presents rigorous evidence of the STE, which fills an important gap in the contact literature.

While the present study is not able to rule out social desirability, our findings create reasonable doubt that the pattern of generalisation of effects is influenced by social desirability. The social desirability problem refers to the tendency of respondents to present themselves in a socially favourable light when self-reporting on their personal experiences and attitudes (e.g. by reporting more contact and more positive outgroup attitudes than truly experienced). As a result, the true relationship between two or more variables could be masked or false correlations between variables could be produced (Ganster, Hennessey, & Luthans, 1983). After reviewing the mean predictor (general contact and cross-group friendships) and mean outcome (social distance and positive attitudes) scores, the social desirability problem was ruled out as an alternative explanation for the present study's findings. None of the mean scores were excessively high, suggesting that the respondents did not select answers according to social desirability. Therefore, it is unlikely that the observed STE could be discredited as a result of social desirability.

Unfortunately, causal sequence was not determined in the present study and, as such, it could not be ruled out as a potential alternative explanation for the observed results (see limitations below), but Swart et al. (2011) presented convincing longitudinal evidence of the forward (i.e. contact to prejudice) direction of the contact effect (see also Tausch et al., 2010, Study 4). Nevertheless, bearing in mind that (1) alternative explanations for the observed phenomenon have been ruled out, which (2) few studies exploring the STE have attempted, as well as the (3) overall scarcity of research on the STE, the present study presents rigorous evidence and could make a significant contribution to the contact literature surrounding the STE.

Practical Application of the Present Findings

The knowledge generated by this thesis can be applied to develop practical interventions that facilitate reduced prejudice towards diverse groups via high quality intergroup contact (specifically cross-group friendships). Most importantly, the present findings suggest that it is not necessary that the intervention include a wide variety of outgroups to reduce prejudice towards numerous outgroups. The present study's findings suggest that should the intervention create conditions that foster cross-group friendships with even one outgroup, those primary contact effects could generalise, through attitude generalisation, towards a variety of other outgroups not involved in the intervention. These far-reaching effects of contact interventions are particularly valuable in the South African context, as South Africa is home to a large variety of different groups who experience limited intergroup contact due to large-scale self-segregation (Dixon & Durrheim, 2003).

For that reason, interventions at Stellenbosch University should aim to facilitate intergroup interaction, which will improve participants' attitudes towards the outgroup members with whom they interact, as well as the outgroup as a whole. To achieve increased positive attitudes, the intervention should be structured in such a manner that quality

interaction could take place between participants, with the goal of creating acquaintances who might become friends. In order to facilitate this type of intergroup contact experience, Allport's (1954) four optimal conditions should be present in the intergroup interaction. Firstly, the relevant groups engaged in the contact situation must be equivalent in status. An intervention at Stellenbosch University should strive to target students exclusively. All students hold equal status, but if an intervention was to include lecturers, along with students, status inequalities would exist within the intervention context. It could be even more constructive if the students were all at the same stage of their studies, e.g. busy with their first year at university. Furthermore, the intervention should be controlled, in order to ensure that equal status is maintained.

Secondly, the groups involved should share mutual interests. As students, the participants will all share common experiences and goals. If participants were all first-year students, for example, they would all be confronted with novel experiences. They would all be struggling with new-found independence, meeting new people and adapting to university-level workload. Furthermore, the intervention should facilitate non-threatening self-disclosure between participants, in order for them to discover their mutual interests. Thirdly, participants need to work cooperatively. Therefore, it might be beneficial to add an enjoyable task that the participants can do together during the intervention. Equal status and self-disclosure should be maintained while participants work together on the task. Lastly, in order to optimally reduce prejudice, the relevant authorities must be supportive of this contact. For example, institutional support should be gained from Stellenbosch University and the intervention should take place on the premises, in order to highlight this support.

Furthermore, it appears that this generalisation effect is strongest between equally stigmatised outgroups. As there are various outgroups in South Africa that were oppressed by White South Africans during Apartheid, the probability of generalisation to other outgroups

increases when using a past-oppressed outgroup member as the primary outgroup member. Therefore, it would be beneficial if interventions at Stellenbosch University could target White South Africans and create opportunities for them to interact with a past-oppressed outgroup member in a positive manner that might stimulate the possibility of a future friendship. Adding an affective element to the interaction would allow interventions to optimally reduce prejudice. Studies have also shown that the reduction of negative affective factors, specifically intergroup anxiety, effectively mediates the contact-prejudice relationship.

As the reduction of anxiety experienced during an interaction appears to not only facilitate primary contact effects, but also allows these effects to generalise to groups not involved in the interaction, it would be wise to target intergroup anxiety in an intervention. As such, based on Stephan and Stephan's (1985) insights on the causes of intergroup anxiety, the present study suggests that interventions should focus on alleviating certain intergroup cognitions that might hinder the reduction of intergroup anxiety. Therefore, it could be beneficial if participants have sufficient knowledge regarding the outgroup, in order to avoid anxiety associated with fear of embarrassment due to ignorance of the outgroup member's culture. Participants should therefore be briefed on the outgroup before interaction. Moreover, participants should be encouraged to freely exchange group knowledge during the intervention. It would also be beneficial to focus on similarities between the ingroup and the outgroup during the brief and the interaction. Additionally, another priority of the intervention could be to discourage and refute stereotypes and to illustrate to participants that their negative expectations regarding contact with an outgroup member might be unjustified in many situations. It is important for interventions to be highly structured (i.e. completing a task in which each participant plays a particular role), to be highly cooperative, to have an equal ratio of members of each group involved in the intervention and to maintain equal

status between these groups. This will lower the ambiguity and threat experienced by participants and, as a result, reduce intergroup anxiety.

To sum up, an ideal intervention conducted at a South African university, specifically Stellenbosch University, would use first year university students as participants. Due to the largely homogenous neighbourhoods in South Africa (Chisholm & Nkomo, 2005), interaction opportunities with different ethnic groups will be novel to a lot of first year students and they will be adapting to a more diverse environment. As such, this will be a perfect stage on which to target students, allowing them to experience positive intergroup contact and alleviating their anxiety about interacting with other outgroups. Using first year students as participants will also allow for equal status and mutual interests between the group members. Furthermore, it will be of value to use White South Africans and a previously-oppressed ethnic group (i.e. Coloured South Africans) as the relevant groups involved in the intervention. It is not necessary to include multiple ethnic groups. Interventions should include a short information session, followed by a cooperative task and positive quality interaction between members of two different ethnic groups.

Limitations of the Present Study

Although the present study makes a robust contribution to contact literature and offers valuable knowledge for the structuring of practical interventions, a number of limitations need to be addressed. Three core limitations of the present study are acknowledged and discussed. Firstly, the present study used a cross-sectional design, which is not ideally suited to exploring the complexity of the underlying processes involved in the contact-prejudice relationship. Findings from a cross-sectional design merely capture a single snapshot of the system of variables involved. Directional influences require time to operate (MacCallum & Austin, 2000). It is therefore problematic to make causal inferences (as suggested by the present study's path model) based on this particular design.

An experimental design is the only type of research design that could effectively test for causal direction. It has high internal validity and therefore has the ability to control for confounding variables and rule out contending explanations for the observed findings. However, an experimental design is low in external validity. In other words, controlled manipulations conducted in a laboratory setting might not adequately reflect the context of the real world. A survey design, even if only cross-sectional, as was used in the present study, has a high external validity. This is one of the strengths of the present study. Unfortunately, it also has a low internal validity and therefore cannot dismiss the possibility of an unknown variable driving the observed effect. In this sense a longitudinal design provides a good compromise. Like a cross-sectional design, a longitudinal design has high external validity. Moreover, a longitudinal design's internal validity (although not as high as the internal validity of an experimental design) is higher than that of a cross-sectional design. Another advantage of the longitudinal design is that it allows appropriate time for the effects of interest to occur, as it involves measurements obtained from the same individuals on repeated occasions over time (MacCallum & Austin, 2000).

Despite the advantages of using a longitudinal design for this type of research, it was best, within the scope of a master's study, for the present study to use a cross-sectional design. Both the time and the resources necessary to attempt a longitudinal study were lacking. However, the present study attempts to diminish the limitation posed by a cross-sectional study by using very strict a priori hypotheses, developed on a thorough investigation of the existing contact literature. Moreover, the present study made use of advanced statistical analysis techniques (i.e. SEM) to test the complex relationships described in the hypotheses. Nevertheless, a longitudinal or experimental design would have been more appropriate if wishing to make causal interpretations. Due to the present study's inability to conclusively determine causation, causal sequence (Tausch et al., 2010) could not be ruled out as an

alternative explanation for the findings. In other words, it could not be irrefutably proven that the findings were not as a result of reverse causal order, i.e. more tolerant people also being more likely to engage in contact. However, the contact literature provides convincing evidence supporting Allport's (1954) contact hypothesis, i.e. contact reduces prejudice (see Pettigrew & Tropp, 2006; Swart et al., 2011; Tausch et al., 2010, Study 4).

Secondly, a further limitation associated with the present study is that its findings might not generalise well beyond the sample that participated in this study. The sample consisted of White South African Stellenbosch University students. Due to the fact that only 866 of the total of 18,764 White students attending Stellenbosch University (Stellenbosch University, 2015) participated in the present study, I cannot state with confidence that my findings represent all White South African Stellenbosch University students' attitudes, nor that of students attending other universities in South Africa. Furthermore, 14,185 prospective respondents were emailed the link to the present study's survey, but only 1,564 respondents filled in the questionnaire. Of these 1,564 respondents a sample of 866 White South African Stellenbosch University students was used for the purposes of the present study. It is therefore clear that respondents and non-respondents are distinguished by a choice of their own making to fill in the survey or not to fill in the survey. As such, it is unclear whether the observed findings are reflective of the White South African Stellenbosch University student population or whether it is merely a result of self-selection. It is possible that people who decided to participate shared a common trait, which could act as a confounding variable. Therefore, the findings of the present study should be interpreted with caution, as they might not generalise beyond the current sample.

Moreover, it is unclear whether the findings are generalisable beyond university students. Most students are young, educated and have been exposed to a diverse student body. This is not true for the general South African population and it is therefore possible that

the present study's findings might not accurately reflect the views of citizens who are not currently studying. As discussed, South Africa is home to numerous different ethnic and cultural groups with vastly different historical experiences. These different backgrounds and statuses could affect the contact-prejudice process of each individual outgroup. As such, the generalisation of the findings beyond the ingroup-outgroups combination represented in the present study could be brought into question. Finally, the present study could also not guarantee that the findings will generalise beyond the snapshot in time captured by the cross-sectional study. A longitudinal design would have been needed to determine the findings' generalisability over time.

Thirdly, the contact-prejudice relationship and the STE, in particular, are complex processes that involve various underlying mechanisms, many of which could unfortunately not be considered in the present study. As such, the full picture of the pattern of results that were observed is not seen. An important consideration, for example, is the moderating role of perceived outgroup similarity (as described in Chapter Three). Another important consideration is the question of the extent to which the results are affected by the target group's perceived status by the respondents. It would therefore have been of interest to also use a minority status target group and to compare the results. Contact researchers of late have shifted their interest to the mediating mechanisms driving the STE. The present study explored the mediating role of attitude generalisation and intergroup anxiety generalisation, but did not include variables measuring deprovincialisation or empathy generalisation. The present study only focused on direct contact (specifically cross-group friendships). No measure for indirect contact was included. Lastly, the present study did not include a measure for social desirability and therefore it could not be definitively ruled out.

Directions for Future Research

While the present study clearly has a few limitations, which should be considered when interpreting the findings, these limitations present valuable opportunities for future research. Firstly, future research should attempt to replicate the present findings using a longitudinal or experimental design to present even more rigorous evidence of the mediating role of attitude and intergroup anxiety generalisation in the STE. The longitudinal design, for example, will be better able to capture the continual underlying processes driving the STE, as it allows the necessary time for these effects to occur. Moreover, both experimental and longitudinal designs have higher internal validity than that of a cross-sectional study. Furthermore, the present study ruled out secondary contact, socially desirable responding and shared method variance as alternative explanations. If future research makes use of a longitudinal or experimental design, it will be able to test causal pathways and determine the direction in which contact and prejudice affect one another. This will allow future studies to rule out an additional alternative explanation for the findings, i.e. direction of causation. To this author's knowledge, intergroup anxiety generalisation has not been explored longitudinally or experimentally. As such, future research would be filling a very important gap in the contact literature.

Secondly, future research could endeavour to increase generalisability of the findings by using a random probability sampling method. A computerised programme can be used to ensure that each member within the population has an equal chance of being selected. In this way future studies can state with more confidence that the sample is a good representation of the target group. Furthermore, future research could extend the narrow target group and setting used in the present study. The present research could be replicated at other universities in South Africa. Furthermore, it should also be replicated in other settings beyond universities. Student life is a unique and particular experience that is likely to affect the

findings of a study. Therefore, it could be valuable to explore attitude and intergroup anxiety generalisation amongst different groupings in different situations in South Africa. In fact, it would be beneficial to use different combinations of ingroups and outgroups, exploring other ethnic groups as a target group or even using more than one ingroup for the sake of comparison. This will be extremely useful in building on the current findings and accumulating valuable intergroup contact knowledge.

Finally, future studies should also consider measuring group status and category salience's moderating roles in the STE, as well as including alternative mediators of the STE, for example, deprovincialisation and empathy, along with the secondary transfer effect of indirect contact. Pettigrew (1997) coined the term deprovincialisation. This concept describes a broadening of one's perspective beyond the norms and values of the ingroup. The relationship between ingroup and outgroup attitudes is tenuous and varies across studies and, consequently, the deprovincialisation hypothesis, narrowly operationalised as ingroup attitudes and ingroup identification, received mixed support. Some studies supported deprovincialisation as a mediator of the STE (e.g. Pettigrew, 2009; Tausch et al., 2010, Study 1), while other studies did not (e.g. Tausch et al., 2010, Studies 2-4). Therefore, Lolliot et al. (2013) suggested using multiculturalism or social identity complexity as alternative forms of operationalisation for deprovincialisation. Future research should add a measure for deprovincialisation, using either one of these operationalisations. Research on both operationalisations is scarce and would therefore contribute to the body of contact literature.

Verkuyten (2005) described multiculturalism as a perspective that cultivates acceptance, and even appreciation, of different outgroups. This concept reflects Pettigrew's (1997) idea that intergroup contact results in a re-evaluation of ingroup norms and values. Social identity complexity, on the other hand, refers to an individual's cognitive representation of the interrelationships between each of his or her multiple ingroups (Brewer

& Pierce, 2005; Roccas & Brewer, 2002). More specifically, a person with high social identity complexity will be able to understand that another individual might be part of their outgroup in one category, but part of their ingroup in another category, i.e. he is Black and his friend is White, but they are both homosexual.

Empathy (perspective taking and affective empathy) is well established in the contact literature as a successful mediator of the contact-prejudice relationship (e.g. Aberson & Haag, 2007; Harwood et al., 2005; Pettigrew & Tropp, 2008; Swart et al., 2010, 2011). Moreover, Pettigrew (1997) speculated about the role of perspective taking in the STE, but did not specify how perspective taking would improve attitudes towards the secondary outgroup. Lolliot et al. (2013) suggested two pathways via which empathy could mediate the STE. The first pathway is an expansion of the attitude generalisation pathway. Primary outgroup contact leads to primary outgroup empathy (first path), which in turn initiates improved primary outgroup attitudes (second path) and, subsequently, improved secondary outgroup attitudes (third path). The second pathway represents the empathy generalisation pathway. Primary outgroup contact is associated with primary outgroup empathy (first path), which in turn generalises to secondary outgroup empathy (second path) and then leads to secondary outgroup attitudes (third path). Future studies would contribute greatly to the existing contact literature by adding to the sparse support of the generalisation of empathy (see also Galinsky & Moskowitz, 2000, Study 1; Vezzali & Giovannini, 2011).

Despite the abolishment of segregation laws, a lack of contact still exists between the different ethnic groups in South Africa (see Dixon & Durrheim, 2003; Tredoux & Dixon, 2009). Due to the pattern of self-segregation in South Africa, indirect contact would be an ideal method to increase tolerance. Future studies could explore extended or imagined contact (see also Harwood et al., 2011; Vezzali, Stathi, Giovannini, Capozza, & Trifiletti, 2015) and whether their effects are able to generalise to outgroups not involved in the interaction.

Nevertheless, the STE is not likely to be as strong when using indirect contact. For that reason, it would be constructive to focus attention on the alleviation of contact avoidance. Therefore, it would be beneficial if future studies could explore the factors involved in contact avoidance, as well as the factors stimulating interaction. The present study found promising evidence that positive quality interaction between individuals from different ethnic groups could improve attitudes towards many other outgroups.

Conclusion

The present study supports ideas brought forth by previous research and fills some important theoretical gaps, therefore making a significant contribution to the contact literature. The primary contact effect, as well as the STE, was fully supported by the present study. The present study also discovered convincing evidence of the mediating role of attitude and intergroup anxiety during the STE. Moreover, rigorous methods were used to collect and analyse these findings. The secondary contact problem and shared method variance were ruled out as potential alternative explanations for the findings. Furthermore, advanced statistical methods (SEM) were employed. Findings from the present study do not only hold theoretical value, but could be used to structure practical interventions in the future. While the study does have a few limitations that future research should focus on, it also provides valuable insights, which (together with established contact literature) could be applied to create a more tolerant and harmonious South Africa.

REFERENCES

- Aberson, C. L., & Haag, S. C. (2007). Contact, perspective taking, and anxiety as predictors of stereotype endorsement, explicit attitudes, and implicit attitudes. *Group Processes and Intergroup Relations*, 10, 179-201. doi:10.1177/1368430207074726
- Al Ramiah, A. (2009). *Intergroup relations in Malaysia: Identity, contact and threat* (Unpublished doctoral dissertation). Oxford University, Oxford.
- Allport, G. W. (1954). *The nature of prejudice*. Cambridge, MA: Perseus Books.
- Amir, Y. (1969). Contact hypothesis in ethnic relations. *Psychological Bulletin*, 71, 319-342. doi:10.1037/h0027352
- Amir, Y. (1976). The role of intergroup contact in change of prejudice and ethnic relations. *Towards the Elimination of Racism*, 245-308.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103, 411-423. Retrieved from http://www.ppsw.rug.nl/~boomsma/csadata/anderson_gerbing_1988.pdf
- Baker, P. E. (1934). *Negro-White adjustment*. New York, NY: Association Press.
- Batson, C. D., Polycarpou, M. P., Harmon-Jones, E., Imhoff, H. J., Mitchener, E. C., Bednar, L. L., ... & Highberger, L. (1997). Empathy and attitudes: Can feeling for a member of a stigmatized group improve feelings toward the group? *Journal of Personality and Social Psychology*, 72, 105-118. doi:10.1037/0022-3514.72.1.105
- Binder, J., Zagefka, H., Brown, R., Funke, F., Kessler, T., Mummendey, A., . . . & Leyens, J. P. (2009). Does contact reduce prejudice or does prejudice reduce contact? A longitudinal test of the contact hypothesis among majority and minority groups in three European countries. *Journal of Personality and Social Psychology*, 96, 843-856. doi:10.1037/a0013470

- Blascovich, J., Mendes, W., Hunter, S. B., Lickel, B., & Kowai-Bell, N. (2001). Perceiver threat in social interactions with stigmatized others. *Journal of Personality and Social Psychology*, 80, 253-267. doi:10.1037//0022-3514.80.2.253
- Bogardus, E. S. (1933). A social distance scale. *Sociology and Social Research*, 17, 265-271. Retrieved from <http://psycnet.apa.org/index.cfm?fa=search.displayRecord&UID=1933-03965-001>
- Brannon, T. N., & Walton, G. M. (2013). Enacting cultural interests: How intergroup contact reduces prejudice by sparking interest in an out-group's culture. *Psychological Science*, 24, 1947-1957. doi:10.1177/0956797613481607
- Brewer, M. B., & Pierce, K. P. (2005). Social identity complexity and outgroup tolerance. *Personality and Social Psychology Bulletin*, 31, 428-437. doi: 10.1177/0146167204271710
- Brown, K. T., Brown, T. N., Jackson, J. S., & Sellers, R. M. (2003). Teammates on and off the field? Contact with black teammates and the racial attitudes of white student athletes. *Journal of Applied Social Psychology*, 33, 1379-1403. doi: 10.1111/j.1559-1816.2003.tb01954.x
- Brown, R., Eller, A., Leeds, S., & Stace, K. (2007). Intergroup contact and intergroup attitudes: A longitudinal study. *European Journal of Social Psychology*, 37, 692-703. doi:10.1002/ejsp.384
- Brown, R., & Hewstone, M. (2005). An integrated theory of intergroup contact. In M. Zanna (Ed.), *Advances in experimental social psychology* (pp. 255-343). San Diego, CA: Academic Press.
- Butz, D. A., & Plant, E. A. (2006). Perceiving outgroup members as unresponsive: Implications for approach-related emotions, intentions, and behavior. *Journal of*

- Personality and Social Psychology*, 91, 1066-1079. doi: 10.1037/0022-3514.91.6.1066
- Caditz, J. (1976). Ethnic identification, interethnic contact, and belief in integration. *Social Forces*, 54, 632-645. doi: 10.2307/2576287
- Cameron, L., & Rutland, A. (2006). Extended contact through story reading in school: Reducing children's prejudice toward the disabled. *Journal of Social Issues*, 62, 469-488. doi:10.1111/j.1540-4560.2006.00469.x
- Chisholm, L., & Nkomo, M. (2005). Bringing the South African rainbow into schools. *HSRC Review*, 3, 15-16. Retrieved from <http://www.hsrc.ac.za/about/HSRCReview/Vol3No3/HSRCReview.pdf>
- Cohen, S., Sherrod, D. R., & Clark, M. S. (1986). Social skills and the stress protective role of social support. *Journal of Personality and Social Psychology*, 50, 963-973. doi:10.1037/0022-3514.50.5.963
- Cole, D. A., & Maxwell, S. E. (2003). Testing mediational models with longitudinal data: Questions and tips in the use of structural equation modeling. *Journal of Abnormal Psychology*, 112, 558-577. doi: 10.1037/0021-843X.112.4.558
- Davies, K., Tropp, L. R., Aron, A., Pettigrew, T. F., & Wright, S. C. (2011). Cross-group friendships and intergroup attitudes: A meta-analytic review. *Personality and Social Psychology Review*, 15, 332-351. doi: 10.1177/1088868311411103
- De Beer, H. (2015). *Attitude and empathy generalisation as mediators of the secondary transfer effect amongst white South African students at Stellenbosch University* (Doctoral dissertation). Stellenbosch, Stellenbosch University.
- Dixon, J., & Durrheim, K. (2003). Contact and the ecology of racial division: Some varieties of informal segregation. *British Journal of Social Psychology*, 42, 1-23. doi: 10.1348/014466603763276090

- Dixon, J., Durrheim, K., Tredoux, C., Tropp, L., Clack, B., & Eaton, L. (2010). A paradox of integration? Interracial contact, prejudice reduction, and perceptions of racial discrimination. *Journal of Social Issues*, 66, 401-416. doi:10.1111/j.1540-4560.2010.01652.x
- Durrheim, K., & Dixon, J. (2013). *Racial encounter: The social psychology of contact and desegregation*. New York, NY: Routledge.
- Durrheim, K., Tredoux, C., Foster, D., & Dixon, J. (2011). Historical trends in South African race attitudes. *South African Journal of Psychology*, 41, 263-278. doi: 10.1177/008124631104100302
- Eades, L. M. (1999). *The end of Apartheid in South Africa*. Westport, CT: Greenwood Press.
- Eller, A., & Abrams, D. (2004). Come together: Longitudinal comparisons of Pettigrew's reformulated intergroup contact model and the common ingroup identity model in Anglo-French and Mexican-American contexts. *European Journal of Social Psychology*, 34, 229-256. doi:10.1002/ejsp.194
- eNCA. (2016, January 5). *Calls to boycott Gareth Cliff after Penny Sparrow debate*. Retrieved from <https://www.enca.com/south-africa/calls-boycott-gareth-cliff-after-penny-sparrow-debate>
- Enos, R. D. (2014). Causal effect of intergroup contact on exclusionary attitudes. *Proceedings of The National Academy of Sciences*, 111, 3699-3704. doi:10.1073/pnas.1317670111
- Field, A. (2009). *Discovering statistics using SPSS*. London, UK: Sage Publications Limited.
- Finchilescu, G., Tredoux, C., Mynhardt, J., Pillay, J., & Muianga, L. (2007). Accounting for lack of interracial mixing amongst South African university students. *South African Journal of Psychology*, 37, 720-737. doi: 10.1177/008124630703700404

- Forbes, H. D. (1997). *Ethnic conflict: Commerce, culture, and the contact hypothesis*. New Haven, CT: Yale University Press.
- Ford, W. S. (1986). Favorable intergroup contact may not reduce prejudice: Inconclusive journal evidence, 1960-1984. *Sociology and Social Research*, 70, 256-258.
- Galinsky, A. D., & Moskowitz, G. B. (2000). Perspective-taking: Decreasing stereotype expression, stereotype accessibility, and in-group favoritism. *Journal of Personality and Social Psychology*, 78, 708-724. doi: 10.1037//0022-3514.78.4.708
- Ganster, D. C., Hennessey, H. W., & Luthans, F. (1983). Social desirability response effects: Three alternative models. *Academy of Management Journal*, 26, 321-331.
doi:10.2307/255979
- Gibson, J. L. (2004). *Overcoming Apartheid: Can truth reconcile a divided nation?* New York, NY: Russell Sage Foundation.
- Gibson, J. L., & Claassen, C. (2010). Racial reconciliation in South Africa: Interracial contact and changes over time. *Journal of Social Issues*, 66, 255-272. doi:10.1111/j.1540-4560.2010.01644.x
- Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. Englewood Cliffs, NJ: Prentice Hall.
- Gómez, A., Eller, A., & Vázquez, A. (2013). Verification of ingroup identity as a longitudinal mediator between intergroup contact and outgroup evaluation. *The Spanish Journal of Psychology*, 16, 1-11. doi:10.1017/sjp.2013.66
- Gómez, A., Tropp, L. R., & Fernández, S. (2011). When extended contact opens the door to future contact. Testing the effects of extended contact on attitudes and intergroup expectancies in majority and minority groups. *Group Processes and Intergroup Relations*, 14, 161-173. doi:10.1177/1368430210391119

- Harrington, H. J., & Miller, N. (1992). Research and theory in intergroup relations: Issues of consensus and controversy. In J. Lynch, C. Modgil, & S. Modgil (Eds.), *Cultural diversity and the schools* (pp. 159-178). London, England: Falmer.
- Harwood, J., Hewstone, M., Paolini, S., & Voci, A. (2005). Grandparent-grandchild contact and attitudes toward older adults: Moderator and mediator effects. *Personality and Social Psychology Bulletin*, 31, 393-406. doi: 10.1177/0146167204271577
- Harwood, J., Paolini, S., Joyce, N., Rubin, M., & Arroyo, A. (2011). Secondary transfer effects from imagined contact: Group similarity affects the generalization gradient. *British Journal of Social Psychology*, 50, 180-189. doi:10.1348/014466610X524263
- Henry, P. J., & Hardin, C. D. (2006). The contact hypothesis revisited: Status bias in the reduction of implicit prejudice in the United States and Lebanon. *Psychological Science*, 17, 862-868. doi:10.1111/j.1467-9280.2006.01795.x
- Hewstone, M. (1996). Contact and categorization: Social psychological interventions to change intergroup relations. In C. N. Macrae, C. Stangor & M. Hewstone (Eds.), *Stereotypes and Stereotyping*, (pp. 323-368). New York, NY: Guilford Press.
- Hewstone, M. (2009). Living apart, living together? The role of intergroup contact in social integration. *Proceedings of the British Academy*, 162, 243-300.
- Hewstone, M., & Brown, R. (1986). Contact is not enough: An intergroup perspective on the 'contact hypothesis'. In M. Hewstone & R. Brown (Eds.), *Contact and Conflict in Intergroup Encounters* (pp. 1-44). Oxford: Basil Blackwell.
- Hewstone, M., Cairns, E., Voci, A., Hamberger, J., & Niens, U. (2006). Intergroup contact, forgiveness, and experience of "The Troubles" in Northern Ireland. *Journal of Social Issues*, 62, 99-120. doi: 10.1111/j.1540-4560.2006.00441.x

- Hewstone, M., & Swart, H. (2011). Fifty-odd years of inter-group contact: From hypothesis to integrated theory. *British Journal of Social Psychology*, 50, 374-386. doi: 10.1111/j.2044-8309.2011.02047.x
- Hodson, G., Harry, H., & Mitchell, A. (2009). Independent benefits of contact and friendship on attitudes toward homosexuals among authoritarians and highly identified heterosexuals. *European Journal of Social Psychology*, 39, 509-525. doi: 10.1002/ejsp.558
- Holtman, Z., Louw, J., Tredoux, C., & Carney, T. (2005). Prejudice and social contact in South Africa: A study of integrated schools ten years after Apartheid. *South African Journal of Psychology*, 35, 473-493. doi: 10.1177/008124630503500306
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6, 1-55. doi: 10.1080/10705519909540118
- Hutchison, P., Fox, E., Laas, A. M., Matharu, J., & Urzi, S. (2010). Anxiety, outcome expectancies, and young people's willingness to engage in contact with the elderly. *Educational Gerontology*, 36, 1008-1021. doi:10.1080/03601271003723586
- Institute for Justice and Reconciliation. (2013). *Confronting exclusion: Time for radical reconciliation. SA reconciliation barometer survey: 2013 Report*. Retrieved from: <http://reconciliationbarometer.org/wp-content/uploads/2013/12/IJR-Barometer-Report-2013-22Nov1635.pdf>
- Islam, M. R., & Hewstone, M. (1993). Dimensions of contact as predictors of intergroup anxiety, perceived outgroup variability, and outgroup attitude: An integrative model. *Personality and Social Psychology Bulletin*, 19, 700-710. doi: 10.1177/0146167293196005.

- Jackson, J. W. (1993). Contact theory of intergroup hostility: A review and evaluation of the theoretical and empirical literature. *International Journal of Group Tensions*, 23, 43-65.
- Kauff, M., Schmid, K., Lolliot, S., Al Ramiah, A., & Hewstone, M. (2016). Intergroup contact effects via ingroup distancing among majority and minority groups: Moderation by social dominance orientation. *PloS one*, 11, 1-28.
doi:10.1371/journal.pone.0146895
- Keuzenkamp, S. (2010). Monitoring acceptance of homosexuality in the Netherlands.
Retrieved from
https://www.scp.nl/english/Publications/Publications_by_year/Publications_2010/Monitoring_Acceptance_of_homosexuality_in_the_Netherlands
- Kinloch, G. (1985). Racial attitudes in South Africa: A review. *Genetic, Social, and General Psychology Monographs*, 11, 261-281. Retrieved from
<http://psycnet.apa.org/psycinfo/1986-29795-001>
- Kline, R. B. (1998). *Principles and practice of structural equation modeling*. New York, NY: Guilford.
- Lee, B., Farrell, C. R., & Link, B. G. (2004). Revisiting the contact hypothesis: The case of public exposure to homelessness. *American Sociological Review*, 69, 40-63. Retrieved from <http://www.jstor.org.ez.sun.ac.za/stable/3593074>
- Lett, H. A. (1945). Techniques for achieving interracial cooperation. *Proceedings of the Institute on Race Relations and Community Organization*. Chicago, IL: University of Chicago and the American Council on Race Relations.
- Lever, H. (1965). An experimental modification of social distance in South Africa. *Human Relations*, 18, 149-154. doi: 10.1177/001872676501800204

- Levin, S., Van Laar, C., & Sidanius, J. (2003). The effects of ingroup and outgroup friendships on ethnic attitudes in college: A longitudinal study. *Group Processes and Intergroup Relations*, 6, 76-92. doi: 10.1177/1368430203006001013
- Little, T. D., Cunningham, W. A., Shahar, G., & Widaman, K. F. (2002). To parcel or not to parcel: Exploring the question, weighing the merits. *Structural Equation Modeling*, 9, 151-173. doi: 10.1207/S15328007SEM0902_1
- Lolliot, S. D. (2013). *The secondary transfer effect of contact* (Unpublished doctoral dissertation). Oxford, England, Oxford University.
- Lolliot, S., Fell, B., Schmid, K., Wölfer, R., Swart, H., Voci, A., . . . & Hewstone, M. (2014). Measures of intergroup contact. In G. Boyle, D. Sklofske, & G. Matthews (Eds.), *Measures of personality and social psychological constructs* (pp. 652-683). London, UK: Academic Press.
- Lolliot, S. D., Schmid, K., Hewstone, M., Al Ramiah, A., Tausch, N., & Swart, H. (2013). Generalized effects of intergroup contact: The secondary transfer effect. In G. Hodson & M. Hewstone (Eds.), *Advances in intergroup contact* (pp. 81-112). New York, NY: Psychology Press.
- MacCallum, R. C., & Austin, J. T. (2000). Applications of structural equation modeling in psychological research. *Annual Review of Psychology*, 51, 201-226. doi: 10.1146/annurev.psych.51.1.201
- Mail & Guardian. (2016, January 13). *Chris Hart saga: Standard Bank chief executive takes hardline stance on racism*. Retrieved from <http://mg.co.za/article/2016-01-13-standard-bank-chief-executive-takes-hardline-on-racism>
- McClendon, M. J. (1974). Interracial contact and the reduction of prejudice. *Sociological Focus*, 7, 47-65. doi: 10.1080/00380237.1974.10571409

- McGuigan, W. M., & Scholl, C. (2007). The effect of contact on attitudes toward old order Amish. *Journal of Applied Social Psychology*, 37, 2642-2659. doi: 10.1111/j.1559-1816.2007.00274.x
- Moholola, F., & Finchilescu, G. (2006). *Intergroup attitudes of Black South African students attending multiracial and single race schools*. Paper presented at the conference on “Contact and Intergroup Relations: 50 Years on” (Vol. 50), Ithala Game Lodge, South Africa.
- Muthén, L. K., & Muthén, B. O. (1998-2013). *Mplus user's guide* (3rd ed.). Los Angeles, CA: Muthén and Muthén.
- Openshaw, L. (2015). *The secondary transfer effect of intergroup contact: An experimental study of direct and extended contact* (Doctoral dissertation). Stellenbosch, Stellenbosch University.
- Ortiz, M., & Harwood, J. (2007). A social cognitive theory approach to the effects of mediated intergroup contact on intergroup attitudes. *Journal of Broadcasting and Electronic Media*, 51, 615-631. doi: 10.1080/08838150701626487
- Oswald, D. L., Clark, E. M., & Kelly, C. M. (2004). Friendship maintenance: An analysis of individual and dyad behaviors. *Journal of Social and Clinical Psychology*, 23, 413 - 441. doi: 10.1521/jscp.23.3.413.35460
- Page-Gould, E., Mendoza-Denton, R., & Tropp, L. R. (2008). With a little help from my cross-group friend: Reducing anxiety in intergroup contexts through cross-group friendship. *Journal of Personality and Social Psychology*, 95, 1080-1094. doi: 10.1037/0022-3514.95.5.1080
- Paolini, S., Hewstone, M., Cairns, E., & Voci, A. (2004). Effects of direct and indirect cross-group friendships on judgements of Catholics and Protestants in Northern Ireland: The

- mediating role of an anxiety-reduction mechanism. *Personality and Social Psychology Bulletin*, 30, 770-786. doi: 10.1177/0146167203262848
- Paolini, S., Hewstone, M., Voci, A., Harwood, J., & Cairns, E. (2006). Intergroup contact and the promotion of intergroup harmony: The influence of intergroup emotions. In R. Brown & D. Capozza (Eds.), *Social identities: Motivational, emotional and cultural influences* (pp. 209-238). Hove, England: Psychology Press.
- Patchen, M. (1999). *Diversity and unity: Relations between racial and ethnic groups*. Chicago: Nelson-Hall.
- Paulhus, D. L. (1984). Two-component models of socially desirable responding. *Journal of Personality and Social Psychology*, 46, 598-609. doi: 10.1037/0022-3514.46.3.598
- Pettigrew, R. (2016). *Accuracy and the laws of credence*. Oxford, UK: Oxford University Press.
- Pettigrew, T. F. (1971). *Racially separate or together?* New York, NY: McGraw-Hill.
- Pettigrew, T. F. (1986). The contact hypothesis revisited. In H. Hewstone & R. Brown (Eds.), *Contact and conflict in intergroup encounters* (pp. 169-195). Oxford, England: Basil Blackwell.
- Pettigrew, T. F. (1997). Generalized intergroup contact effects on prejudice. *Personality and Social Psychology Bulletin*, 23, 173-185. doi: 10.1177/0146167297232006
- Pettigrew, T. F. (1998). Intergroup contact theory. *Annual Review of Psychology*, 49, 65-85. doi: 10.1146/annurev.psych.49.1.65
- Pettigrew, T. F. (2009). Secondary transfer effect of contact: Do intergroup contact effects spread to noncontacted outgroups? *Social Psychology*, 40, 55-65. doi: 10.1027/1864-9335.40.2.55

- Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, 90, 751-783. doi: 10.1037/0022-3514.90.5.751
- Pettigrew, T. F., & Tropp, L. R. (2008). How does intergroup contact reduce prejudice? Meta-analytic tests of three mediators. *European Journal of Social Psychology*, 38, 922-934. doi: 10.1002/ejsp.504
- Pillay, N. S., & Collings, S. J. (2004). Racism on a South African campus: A survey of students' experiences and attitudes. *Social Behavior and Personality*, 32, 607-617. doi:10.2224/sbp.2004.32.7.607
- Plant, E. A. (2004). Responses to interracial interactions over time. *Personality and Social Psychology Bulletin*, 30, 1458-1471. doi: 10.1177/0146167204264244
- Plant, E. A., Butz, D. A., & Tartakovsky, M. (2008). Interethnic interactions: Expectancies, emotions, and behavioral intentions. *Group Processes and Intergroup Relations*, 11, 555-574. doi: 10.1177/1368430208095827
- Plant, E. A., & Devine, P. G. (1998). Internal and external motivation to respond without prejudice. *Journal of Personality and Social Psychology*, 75, 811-832. doi:10.1037/0022-3514.75.3.811
- Plant, E. A., & Devine, P. G. (2003). The antecedents and implications of interracial anxiety. *Personality and Social Psychology Bulletin*, 29, 790-801. doi: 10.1177/0146167203029006011
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879-903. doi: 10.1037/0021-9010.88.5.879

- Riek, B. M., Mania, E. W., & Gaertner, S. L. (2006). Intergroup threat and outgroup attitudes: A meta-analytic review. *Personality and Social Psychology Review*, 10, 336-353. doi:10.1207/s15327957pspr1004_4
- Robbins, I., Cooper, A., & Bender, M. P. (1992). The relationship between knowledge, attitudes and degree of contact with AIDS and HIV. *Journal of Advanced Nursing*, 17, 198-203. doi: 10.1111/j.1365-2648.1992.tb01874.x
- Roccas, S., & Brewer, M. B. (2002). Social identity complexity. *Personality and Social Psychology Review*, 6, 88-106. doi: 10.1207/S15327957PSPR0602_01
- Schmid, K., Hewstone, M., Küpper, B., Zick, A., & Wagner, U. (2012). Secondary transfer effects of intergroup contact A cross-national comparison in Europe. *Social Psychology Quarterly*, 75, 28-51. doi: 10.1177/0190272511430235
- Schrieff, L. E., Tredoux, C. G., Dixon, J. A., & Finchilescu, G. (2005). Patterns of racial segregation in university residence dining-halls. *South African Journal of Psychology*, 35, 433-443. doi: 10.1177/008124630503500303
- Schrieff, L. E., Tredoux, C. G., Finchilescu, G., & Dixon, J. A. (2010). Understanding the seating patterns in a residence-dining hall: A longitudinal study of intergroup contact. *South African Journal of Psychology*, 40, 5-17. Retrieved from <http://journals.sagepub.com.ez.sun.ac.za/doi/pdf/10.1177/008124631004000102>
- Schwartz, L. K., & Simmons, J. P. (2001). Contact quality and attitudes toward the elderly. *Educational Gerontology*, 27, 127-137. doi:10.1080/03601270151075525
- Shange, N. (2016, January 8). *Velaphi Khumalo suspended with full pay*. Times Live. Retrieved from <http://www.timeslive.co.za/local/2016/01/08/Velaphi-Khumalo-suspended-with-full-pay>

- Shook, N. J., Hopkins, P. D., & Koech, J. M. (2016). The effect of intergroup contact on secondary group attitudes and social dominance orientation. *Group Processes and Intergroup Relations*, 19, 328-342. doi:10.1177/1368430215572266
- Statistics South Africa. (2011). *Census 2011: Statistical release P0301.4 (Revised)*. Retrieved from <http://www.statssa.gov.za/publications/P03014/P030142011.pdf>
- Statistics South Africa. (2015). *Mid-year population estimates 2015: Statistical release P0302 (Revised)*. Retrieved from <https://www.statssa.gov.za/publications/P0302/P03022015.pdf>
- Stellenbosch University. (2013a). *Transformation and Diversity*. Retrieved from <http://www.sun.ac.za/english/Pages/Diversity.aspx>
- Stellenbosch University. (2013b). *Student Profile*. Retrieved from <http://www.sun.ac.za/english/Pages/Student-Profile.aspx>
- Stellenbosch University. (2013c). *Diverse Staff Complement*. Retrieved from http://www.sun.ac.za/english/Pages/diversity_staff.aspx
- Stellenbosch University. (2014). *Table 4: Enrolments by programme level, gender and race*. Retrieved from http://www.sun.ac.za/english/_layouts/15/WopiFrame.aspx?sourcedoc=/english/Documents/Statistics/2014/Statistiese%20Profiel%202013%20-%20Tabel%204.xlsx&action=default
- Stellenbosch University. (2015). *Student enrolments by year and race*. Retrieved from http://www.sun.ac.za/english/_layouts/15/WopiFrame.aspx?sourcedoc=/english/Documents/Statistics/2015/Statistiese%20Profiel%202015%20-%20Figuur%202.xlsx&action=default

- Stephan, W. G. (1987). The contact hypothesis in intergroup relations. In C. Hendrick (Ed.), *Review of personality and social psychology: Group processes and intergroup relations* (pp. 13-40). Newbury Park, CA: Sage.
- Stephan, W. G., & Stephan, C. W. (1985). Intergroup anxiety. *Journal of Social Issues*, 41, 157-175. doi:10.1111/j.1540-4560.1985.tb01134.x
- Swart, H. (2008). *Affective mediators of intergroup contact: Cross-sectional and longitudinal analyses in South Africa* (Unpublished doctoral dissertation). Oxford University, Oxford, England.
- Swart, H., Hewstone, M., Christ, O., & Voci, A. (2010). The impact of cross-group friendships in South Africa: Affective mediators and multigroup comparisons. *Journal of Social Issues*, 66, 309-333. doi: 10.1111/j.1540-4560.2010.01647.x
- Swart, H., Hewstone, M., Christ, O., & Voci, A. (2011). Affective mediators of intergroup contact: A three-wave longitudinal study in South Africa. *Journal of Personality and Social Psychology*, 101, 1221-1238. doi:10.1037/a0024450
- Swart, H., Kagee, A., Moeschberger, S., & Hewstone, M. (in preparation). Intergroup contact under negative conditions: A study of xenophobic prejudice in a South African township.
- Tam, T., Hewstone, M., Cairns, E., Tausch, N., Maio, G., & Kenworthy, J. (2007). The impact of intergroup emotions on forgiveness in Northern Ireland. *Group Processes and Intergroup Relations*, 10, 119-136. doi: 10.1177/1368430207071345
- Tam, T., Hewstone, M., Harwood, J., Voci, A., & Kenworthy, J. (2006). Intergroup contact and grandparent-grandchild communication: The effects of self-disclosure on implicit and explicit biases against older people. *Group Processes and Intergroup Relations*, 9, 413-429. doi: 10.1177/1368430206064642

- Tausch, N., Hewstone, M., Kenworthy, J. B., Cairns, E., & Christ, O. (2007). Cross-community contact, perceived status differences, and intergroup attitudes in Northern Ireland: The mediating roles of individual-level versus group-level threats and the moderating role of social identification. *Political Psychology*, 28, 53-68. doi: 10.1111/j.1467-9221.2007.00551.x
- Tausch, N., Hewstone, M., Kenworthy, J. B., Psaltis, C., Schmid, K., Popan, J. R., . . . & Hughes, J. (2010). Secondary transfer effects of intergroup contact: Alternative accounts and underlying processes. *Journal of Personality and Social Psychology*, 99, 282 -302. doi: 10.1037/a0018553
- Thomae, M., Zeitlyn, D., Griffiths, S. S., & Van Vugt, M. (2013). Intergroup contact and rice allocation via a modified dictator game in rural Cameroon. *Field Methods*, 25, 74-90. doi:10.1177/1525822X12466981
- Tredoux, C., & Dixon, J. A. (2009). Mapping the multiple contexts of racial isolation: The case of Long Street, Cape Town. *Urban Studies*, 46, 761-777. doi: 10.1177/0042098009102128
- Tredoux, C., & Finchilescu, G. (2010). Mediators of the contact–prejudice relation among South African students on four university campuses. *Journal of Social Issues*, 66, 289-308. doi:10.1111/j.1540-4560.2010.01646.x
- Tropp, L. R. (2006). Stigma and intergroup contact among members of minority and majority status groups. In S. Levin & C. van Laar (Eds.), *Stigma and group inequality: Social psychological perspectives* (pp. 171–191). Mahwah, NJ: Erlbaum.
- Tropp, L. R., & Pettigrew, T. F. (2005). Differential relationships between intergroup contact and affective and cognitive dimensions of prejudice. *Personality and Social Psychology Bulletin*, 31, 1145-1158. doi: 10.1177/0146167205274854

- Turner, R. N., & Brown, R. (2008). Improving children's attitudes toward refugees: An evaluation of a school-based multicultural curriculum and an anti-racist intervention. *Journal of Applied Social Psychology*, 38, 1295-1328. doi: 10.1111/j.1559-1816.2008.00349.x
- Turner, R. N., Hewstone, M., & Voci, A. (2007). Reducing explicit and implicit outgroup prejudice via direct and extended contact: The mediating role of self-disclosure and intergroup anxiety. *Journal of Personality and Social Psychology*, 93, 369-388. doi:10.1037/0022-3514.93.3.369
- Turner, R. N., & West, K. (2012). Behavioural consequences of imagining intergroup contact with stigmatized outgroups. *Group Processes and Intergroup Relations*, 15, 193-202. doi:10.1177/1368430211418699
- Turner, R. N., West, K., & Christie, Z. (2013). Out-group trust, intergroup anxiety, and out-group attitude as mediators of the effect of imagined intergroup contact on intergroup behavioral tendencies. *Journal of Applied Social Psychology*, 43, E196-E205. doi:10.1111/jasp.12019
- Van Laar, C., Levin, S., Sinclair, S., & Sidanius, J. (2005). The effect of college roommate contact on ethnic attitudes and behaviors. *Journal of Experimental and Social Psychology*, 41, 329-345. doi:10.1016/j.jesp.2004.08.002
- Verkuyten, M. (2005). Ethnic group identification and group evaluation among minority and majority groups: Testing the multiculturalism hypothesis. *Journal of Personality and Social Psychology*, 88, 121-138. doi:10.1037/0022-3514.88.1.121
- Vezzali, L., Capozza, D., Giovannini, D., & Stathi, S. (2011). Improving implicit and explicit intergroup attitudes using imagined contact: An experimental intervention with elementary school children. *Group Processes and Intergroup Relations*, 15, 203-212. doi:10.1177/1368430211424920

- Vezzali, L., & Giovannini, D. (2011). Secondary transfer effect of intergroup contact: The role of intergroup attitudes, intergroup anxiety, and perspective taking. *Journal of Community and Applied Social Psychology*, 22, 125-144. doi:10.1002/casp.1103
- Vezzali, L., Stathi, S., Giovannini, D., Capozza, D., & Trifiletti, E. (2015). The greatest magic of Harry Potter: Reducing prejudice. *Journal of Applied Social Psychology*, 45, 105-121. doi: 10.1111/jasp.12279
- Voci, A., & Hewstone, M. (2003). Intergroup contact and prejudice toward immigrants in Italy: The mediational role of anxiety and the moderational role of group salience. *Group Processes and Intergroup Relations*, 6, 37-54. doi: 10.1177/1368430203006001011
- Vonofakou, C., Hewstone, M., & Voci, A. (2007). Contact with outgroup friends as a predictor of meta-attitudinal strength and accessibility of attitudes toward gay men. *Journal of Personality and Social Psychology*, 92, 804–820. doi:10.1037/0022-3514.92.5.804
- Waite, M. (2012). *Paperback Oxford English dictionary*. Oxford, UK: Oxford University Press.
- Weigert, K. M. (1976). Intergroup contact and attitudes about a third group: A survey of Black soldiers' perceptions. *International Journal of Group Tensions*, 6, 110-124.
- Welker, K. M., Slatcher, R. B., Baker, L., & Aron, A. (2014). Creating positive out-group attitudes through intergroup couple friendships and implications for compassionate love. *Journal of Social and Personal Relationships*, 31, 706-725. doi:10.1177/0265407514522369
- Welsh, D. (2009). *The rise and fall of Apartheid*. Charlottesville: University of Virginia Press.
- Welsh, D., & Spence, J. E. (2011). *Ending Apartheid*. Harlow, England: Longman/Pearson.

- West, S. G., Finch, J. F., & Curran, P. J. (1995). Structural equation models with nonnormal variables: Problems and remedies. In R. H. Hoyle (Ed.), *Structural equation modeling: Concepts, issues, and applications* (pp. 56-75). Thousand Oaks, CA: Sage.
- Weston, R., & Gore, P. A. (2006). A brief guide to structural equation modeling. *The Counseling Psychologist*, 34, 719-751. doi: 10.1177/0011000006286345
- Wicks, J. (2016, January 4). 'It's just the facts' - Penny Sparrow breaks her silence. News24. Retrieved from <http://www.news24.com/SouthAfrica/News/its-just-the-facts-penny-sparrow-breaks-her-silence-20160104>
- Wilder, D. A. (1984). Intergroup contact: The typical member and the exception to the rule. *Journal of Experimental Social Psychology*, 20, 177-194.
- Williams, R. M. (1947). *The reduction of intergroup tensions*. New York, NY: Social Science Research Council.
- Wilner, D. M., Walkley, R. P., & Cook, S. W. (1952). *Human relations in interracial housing: A study of the contact hypothesis*. Minneapolis, MN: University of Minnesota Press.
- Wilson, T. C. (1996). Prejudice reduction or self-selection? A test of the contact hypothesis. *Sociological Spectrum*, 16, 43-60. doi:10.1080/02732173.1996.9982119
- Works, E. (1961). The prejudice-interaction hypothesis from the point of view of the Negro minority group. *American Journal of Sociology*, 67, 47-52. doi: 10.1086/223049
- Wright, S. C., Aron, A., McLaughlin-Volpe, T., & Ropp, S. A. (1997). The extended contact effect: Knowledge of cross-group friendships and prejudice. *Journal of Personality and Social Psychology*, 73, 73-90. doi: 10.1037/0022-3514.73.1.73

APPENDICES

APPENDIX A

ELECTRONIC SURVEY INVITATION

Dear student

I am conducting an electronic survey exploring your **social opinions and experiences as a student at the University of Stellenbosch**. Should you submit a completed survey, you will be entered into a cash prize draw where you can win R1,000.00. The winner of this cash prize draw will be notified electronically on [DATE HERE].

To access the survey and further information related to it, please go to the following link by moving your mouse arrow onto the link and then double clicking with the left mouse button.

[URL HERE]

Your participation is voluntary, anonymous, and confidential.

We look forward to your participation in this study.

Best wishes,

Dr Hermann Swart

Department of Psychology

Stellenbosch University

APPENDIX B

INFORMED CONSENT FORM

Afrikaans volg hier onder

Social Opinions and Experiences of Stellenbosch University Students

You are asked to participate in a research study conducted by Dr Hermann Swart, Department of Psychology at Stellenbosch University on the **Social Opinions and Experiences of Stellenbosch University Students**. This research has received the necessary ethical clearance from the Research Ethics Committee (Humanities) at Stellenbosch University (REC clearance number: HS1051/2014), as well as the necessary Institutional clearance from Stellenbosch University. You were selected as a possible participant in this study because you are a registered student at Stellenbosch University.

1. PURPOSE OF THE STUDY

The purpose of this study is to gather information from students about some of their social experiences on campus and on specific social attitudes and opinions of students, and how these experiences and opinions develop over time. This survey forms part of a series of four studies that we are conducting over the course of the next year that aims to study and compare the social opinions and experiences of students across the four largest communities represented on campus (namely white, coloured, black (African), and Indian South African students). This survey forms the second wave of data collection comprising this series. Your participation in this survey will make a valuable contribution to our understanding of the range of social opinions and experiences of students attending Stellenbosch University.

2. PROCEDURES

Should you agree to participate in this survey, you will be asked to read through and answer a range of questions relating to your social opinions and experiences on campus. In order to submit the survey, all the questions that are posed to the participants require an answer. Should you feel that there is a question that you do not wish to answer, you are free to withdraw your participation (see below). It should not take you longer than thirty to forty minutes to complete the survey, and you can complete this survey anywhere and at any time so long as you have access to a computer and an internet connection. Please note that the completed surveys for participants that choose to participate in more than one of the four studies that comprise this research will be matched over time using an anonymous, unique identifier provided by each participant, thereby ensuring the anonymity of all participants.

3. POTENTIAL RISKS AND DISCOMFORTS

It is not expected that this research should cause you any risk and discomfort. However, if at any time you feel distressed, you have the right to withdraw at any time. If you should feel any psychological discomfort, you may access free counselling services at the Stellenbosch University Centre for Student Counselling and Development located at 37 Victoria Street, Stellenbosch (Tel: 021 808 4707).

4. POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

Your participation in this study could lead to improved knowledge on social attitudes amongst Stellenbosch students. This information could contribute to the promotion of more positive attitudes and friendships amongst Stellenbosch University students, as well as contributing to the knowledge base of Social Psychology. The findings from this research will be published in peer-reviewed, accredited scientific journals.

5. PAYMENT FOR PARTICIPATION

Participants that submit a complete survey will be eligible to enter themselves into the Cash Prize Draw for R1,000.00. You will be asked to provide a valid telephone number where you might be contacted in the event that you are the winner of the Cash Prize. Participants that take part in all four surveys over the duration of the study will be entered into an additional Cash Prize Draw for R1,000.00.

6. CONFIDENTIALITY AND ANONYMITY

Your participation in this study is completely confidential. No other student or staff member at the University will have access to your responses. Only the principle researcher, Dr Hermann Swart, will have access to the data that you provide.

No personal or identifying information will be collected from you. Each survey will be assigned a unique identifier that will

not be traceable to the personal identity of any one participant. Your participation in this study will therefore be anonymous.

7. PARTICIPATION AND WITHDRAWAL AND RIGHTS OF PARTICIPANTS

You may withdraw your consent and participation from this study at any time without penalty. There is a 'quit' button on each page that will allow you to exit the survey at any point in time. The principle investigator may withdraw you from this research if circumstances arise which warrant doing so. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research subject, contact Ms Maléne Fouché (mfouche@sun.ac.za; 021 808 4622) at the Division for Research Development.

8. IDENTIFICATION OF INVESTIGATORS

If you have any questions or concerns about the research, please feel free to contact Dr. Hermann Swart (Principle Investigator): hswart@sun.ac.za / 021 808 9061

Should you agree with these terms and conditions, please select the '**I Agree**' icon at the bottom of the page. In doing so, you will be giving your consent to participate in this study, and you will then be directed to the survey.

Should you not agree with the terms and conditions, please select the '**I do not Agree**' icon at the bottom of the page, and you will be exited from this portal.

Best wishes,
Dr Hermann Swart

*** I have read the terms and conditions above and**

- ☐ AGREE to participate in this survey
- ☐ DO NOT AGREE to participate in this survey

Inwilliging om Deel te Neem aan Hierdie Studie

Sosiale Opinies en Ervarings van Studente aan Stellenbosch Universiteit

U word gevra om deel te neem aan 'n navorsingstudie wat uitgevoer word deur Dr. Hermann Swart, Departement van Sielkunde by Stellenbosch Universiteit oor die **Sosiale Opinies en Ervarings van Suid-Afrikaanse Studente**. Hierdie navorsing het die nodige etiese klaring ontvang van die Navorsingsetiesekomitee (Humaniora) by Stellenbosch Universiteit (NEK klaringsnommer: HS1051 / 2014), sowel as die nodige Institusionele klaring vanaf Stellenbosch Universiteit. U is gekies as 'n moontlike deelnemer aan hierdie studie, want u is 'n geregistreerde student aan Stellenbosch Universiteit.

1. DOEL VAN DIE STUDIE

Die doel van die studie is om inligting in te samel van studente oor hulle sosiale ervarings op kampus en oor spesifieke sosiale houdings en opinies van studente en hoe hierdie ervarings en opiniess ontwikkel oor tyd. Hierdie opname vorm deel van 'n reeks van vier studies wat ons sal uitvoer oor die verloop van die volgende jaar wat daarop gemik is om die sosiale opinies en ervarings van studente vanuit die vier grootste verteenwoordigende populasiegroepe op kampus (naamlik wit, bruin/kleurling, swart, en Indiese Suid-Afrikaanse studente) met mekaar te vergelyk. Hierdie vorm die tweede opname van die reeks van studies wat tans uitgevoer word. U deelname aan hierdie studie sal 'n waardevolle bydrae maak tot ons begrip van die omvang van sosiale menings en ervarings van studente aan Stellenbosch Universiteit.

2. PROSEDURES

Indien u instem om deel te neem aan die studie, sal u gevra word om 'n reeks vrae deur te lees en te beantwoord oor u sosiale menings en ervarings op kampus. Om hierdie opname te voltooi word vereis dat al die vrae wat aan die deelnemers gestel word, beantwoord word. Indien u voel dat daar 'n vraag is wat u nie wil antwoord nie, is u vry om u deelname aan hierdie studie te onttrek (sien hieronder). Dit behoort u nie langer as dertig tot veertig minute te neem om die opname te voltooi nie en u kan hierdie opname enige plek en op enige tyd voltooi solank u toegang tot 'n rekenaar en internet-toegang het. Let asseblief daarop dat die voltooië opnames van die deelnemers wat kies om deel te neem aan meer as een van die vier studies in hierdie navorsingsprojek met mekaar verbind sal word oor tyd met behulp van 'n anonieme, unieke identifiseerder wat deur elke deelnemer voorsien word, en sodoende word die anonimiteit van alle deelnemers verseker.

3. POTENSIEËLE RISIKO'S EN ONGEMAK

Hierdie studie hou geen voorsienbare risiko's of ongemak in nie, maar indien u op enige tyd ontsteld voel, het u die reg om van hierdie studie te onttrek op enige tyd. Indien u enige sielkundige ongemak ervaar kan u gratis toegang kry tot beradingsdienste by die Stellenbosch Universiteit Sentrum vir Studentevoorigting en Ontwikkeling geleë in Victoriastraat 37, Stellenbosch (Tel: 021 808 4707).

4. POTENSIEËLE VOORDELE VIR DEELNEMERS EN/OF DIE SAMELEWING

U deelname aan hierdie studie kan lei tot verbeterde kennis oor sosiale houdings onder Stellenbosch-studente. Hierdie inligting kan bydra tot die bevordering van meer positiewe houdings en vriendskappe onder Stellenbosch Universiteit se studente, sowel as om by te dra tot die kennis van Sosiale Sielkunde. Die bevindinge van hierdie navorsing sal gepubliseer word in eweknie-beoordeelde, geakkrediteerde wetenskaplike tydskrifte.

5. BETALING VIR DEELNAME

Deelnemers wat 'n volledige opname indien sal in aanmerking kom om hulself in te skryf vir die kontantprys trekking van R1,000.00. U sal gevra word om 'n geldige telefoonnommer te voorsien waar u dalk gekontak mag word in die geval waar u die wenner van die kontantprys is. Deelnemers wat deelneem aan al vier opnames oor die duur van die studie sal in aanmerking kom vir 'n bykomende kontantprys trekking van R1,000.00.

6. VERTROULIKHEID EN ANONIMITEIT

U deelname aan hierdie studie is heeltemal vertroulik. Geen ander student of personeel van die Universiteit sal toegang tot hê tot u antwoorde nie. Slegs die hoofnavorser, Dr. Hermann Swart, sal toegang tot die data hê wat u verskaf het.

Geen persoonlike of identifiserende inligting sal van u ingesamel word nie. Aan elke opname sal daar 'n unieke identifiseerder toegeken word wat nie teruggelei kan word na die persoonlike identiteit van enige een van die deelnemers nie. U deelname aan hierdie studie sal dus anoniem wees.

7. DEELNAME EN ONTTREKKING EN REGTE VAN DEELNEMERS

U kan u toestemming en deelname onttrek van hierdie studie op enige tyd sonder enige negatiewe gevolge. Daar is 'n 'verlaat'-knoppie op elke bladsy wat u sal toelaat om die opname te verlaat op enige tyd. Die hoofnavorser mag u onttrek van hierdie studie indien omstandighede dit regverdig. Deur u deelname aan hierdie navorsingstudie, doen u geensins afstand van enige wettige eise, regte of regsmiddele tot u beskikking nie. Indien u enige vrae het oor u regte as 'n navorsingsdeelnemer kan u vir Me. Maléne Fouché (mfouche@sun.ac.za; 021 808 4622) by die Afdeling vir Navorsingsontwikkeling kontak.

8. IDENTIFIKASIE VAN DIE NAVORSERS

Indien u enige vrae of kommentaar oor die navorsing het, voel asseblief vry om vir Dr. Hermann Swart (Hoofnavorser) te kontak: hswart@sun.ac.za / 021 808 9061

Indien u instem tot hierdie terme en voorwaardes, kies asseblief die "**Ek stem in**"-ikoon onder aan die bladsy. So sal u u toestemming gee om deel te neem aan hierdie studie en sal u na die opname herlei word.

Indien u nie instem tot hierdie terme en voorwaardes nie, kies asseblief die "**Ek stem nie in nie**"-ikoon onder aan die bladsy en u sal hierdie portaal verlaat.

Vriendelike groete
Dr. Hermann Swart

* **Ek het die bepalinge en voorwaardes hier bo gelees en**

- ☐ STEM IN vir deelname aan die opname
- ☐ STEM NIE IN vir deelname aan hierdie opname nie

APPENDIX C

BIOGRAPHIC QUESTIONNAIRE

Instructions

Instruksies

Please answer each of the following questions relating to your **Biographic and Demographic** information below as accurately as possible.

*Beantwoord asseblief elkeen van die volgende vrae oor u **Biografiese en Demografiese** inligting so akkuraat as moontlik.*

*** Please indicate your gender:**

Dui asseblief u geslag aan:

- ☐ Male / Manlik
- ☐ Female / Vroulik

*** How old are you today?**

Hoe oud is u vandag?

*** Please indicate which of the following categories below describes you best*:**

Dui asseblief aan watter een van die volgende kategorieë u die beste beskryf:*

- ☐ White South African / Wit Suid-Afrikaner
- ☐ Black (African) South African / Swart Suid-Afrikaner
- ☐ Coloured South African / Bruin/Kleurling Suid-Afrikaner
- ☐ Indian South African / Indiese Suid-Afrikaner
- ☐ Asian South African / Asiër Suid-Afrikaner

*** Please indicate your first (home) language:**

Dui asseblief u eerste- (huis-) taal aan:

- ☐ English
- ☐ Afrikaans
- ☐ isiXhosa
- ☐ isiZulu

☐ Other (please specify) / Ander (spesifiseer asseblief)

*** From the drop-down list below, please select the Faculty that you are currently enrolled in:**

Vanuit die lys hier onder, kies asseblief die Fakulteit waar u tans ingeskryf is:

*** How many years (including this year) have you been studying at Stellenbosch University (SU)? "In total, this is my...":**

Hoeveel jare (insluitend hierdie jaar) studeer u al aan die Universiteit Stellenbosch (US)? " In totaal is dit my...":

- ☐ 1st year / 1ste jaar
- ☐ 2nd year / 2de jaar
- ☐ 3rd year / 3de jaar
- ☐ 4th year / 4de jaar
- ☐ 5th year / 5de jaar
- ☐ 6th year / 6de jaar
- ☐ 7th year / 7de jaar
- ☐ 8th or more year / 8ste jaar of meer

☐ I wish to quit this survey / Ek wil hierdie opname verlaat

***Disclaimer:** The Department of Psychology does not acknowledge or endorse the legitimacy of these artificial categories, and accepts that individuals might categorize themselves in a number of different ways over-and-above or other than just ethnicity. This survey, however, aims to compare the points of view and experiences of individuals across these ethnic groups on campus, and it is therefore important that an individual's responses can be located within a given ethnic group. This does not mean that the individual identifies with or endorses the category rather that it provides a context for understanding his/her point of view or experience.

***Ontkenning:** Die Departement Sielkunde erken of onderskryf nie die geldigheid van hierdie kunsmatige kategorieë nie, en aanvaar dat individue hulle op verskeie maniere, of nie nêr volgens etnisiteit nie, klassifiseer. Hierdie opname poog egter om die sienings en ervarings van individue uit al die etniese groepe op kampus te vergelyk, en daarom is dit belangrik dat 'n individu se antwoorde binne die verband van 'n bepaalde etniese groep geplaas kan word. Dit beteken geensins dat die individu hom/haar met die kategorie vereenselwig óf dit onderskryf nie, maar bied bloot 'n konteks waarin sy/haar siening of ervaring begryp kan word.

APPENDIX D

MAIN SURVEY QUESTIONNAIRE

Constructs and scale names are noted in bold but will not be included in the final survey.

DIMENSIONS OF CONTACT

Cross-group friendships with Coloured South African Stellenbosch University students
(adapted from Swart et al., 2010, 2011):

*** How many Coloured South African friends do you have in general?**

Hoeveel Bruin/Kleurling Suid-Afrikaanse vriende/vriendinne het u oor die algemeen?

- ☐ None / Geen
- ☐ 1
- ☐ 2-3
- ☐ 4-5
- ☐ More than 5 / Meer as 5

*** In general, how often do you spend time with your Coloured South African friend(s)?**

Oor die algemeen, hoe gereeld bring u tyd saam met u Bruin/Kleurling Suid-Afrikaanse vriend(e)/vriendin(ne) deur?

- ☐ Never / Nooit
 - ☐ Rarely / Selde
 - ☐ Every now and then / Elke nou-en-dan
 - ☐ Very often / Baie Gereeld
 - ☐ All the time / Deurgaans
-

General contact with Black (African) South African Stellenbosch University students
(created for survey):

*** In general, how regularly do you have direct, face-to-face interactions (e.g., conversations) in SOCIAL SETTINGS with Black (African) South Africans?**

Oor die algemeen, hoe gereeld het u direkte, van aangesig-tot-aangesig SOSIALE INTERAKSIE (bv. gesprekke) met Swart Suid-Afrikaners?

- ☐ Never / Nooit
- ☐ Rarely / Selde
- ☐ Every now and then / Elke nou-en-dan
- ☐ Very often / Baie Gereeld
- ☐ All the time / Deurgaans

*** In general, how regularly do you have direct, face-to-face interactions (e.g., conversations) with Black (African) South Africans as part of the same SPORTS TEAM/SOCIAL CLUB/CAMPUS SOCIETY?**

Oor die algemeen, hoe gereeld het u direkte, van aangesig-tot-aangesig interaksie (bv. gesprekke) met Swart Suid-Afrikaners as deel van dieselfde SPORTSPAN/SOSIALE KLUB/KAMPUSVERENIGING?

- ☐ Never / Nooit
- ☐ Rarely / Selde
- ☐ Every now and then / Elke nou-en-dan
- ☐ Very often / Baie Gereeld
- ☐ All the time / Deurgaans

*** In general, how regularly do you have direct, face-to-face interactions (e.g., conversations) with Black (African) South Africans during LECTURES, PRACTICALS, and/or TUTORIALS?**

Oor die algemeen, hoe gereeld het u direkte, van aangesig-tot-aangesig interaksie (bv. gesprekke) met Swart Suid-Afrikaners tydens LESINGS/TUTORIALE KLASSE/PRAKTIESE KLASSE?

- ☐ Never / Nooit
- ☐ Rarely / Selde
- ☐ Every now and then / Elke nou-en-dan
- ☐ Very often / Baie Gereeld
- ☐ All the time / Deurgaans

MEDIATOR OF CONTACT

Intergroup anxiety towards Coloured South Africans in general (adapted from Swart et al., 2011; Stephan & Stephan, 1985):

Imagine that you are required to visit another University on a student exchange where there are only Coloured South Africans. On this exchange you have to work on different activities with a group of Coloured South African students whom you do not know. How do you think you would feel in this situation?

Verbeel jou jy word gevra om 'n ander Universiteit te besoek op 'n studente uitreueling waar daar slegs Bruin/Kleurling Suid-Afrikaners is. Op hierdie uitruiling, word jy gerva om te werk aan verskillende aktiwiteite met 'n groep van Bruin/Kleurling Suid-Afrikaanse studente wie jy nie ken nie. Hoe dink jy sou jy voel in hierdie situasie?

*** Tense**

Gespanne

- ☐ Not at all / Glad nie
- ☐ A little / So bietjie
- ☐ Unsure / Onseker
- ☐ Very / Baie
- ☐ Completely / Heeltemal

*** Scared**

Bang

- ☐ Not at all / Glad nie
- ☐ A little / So bietjie
- ☐ Unsure / Onseker
- ☐ Very / Baie
- ☐ Completely / Heeltemal

*** Awkward**

Ongemaklik

- ☐ Not at all / Glad nie
- ☐ A little / So bietjie
- ☐ Unsure / Onseker

- ☐ Very / Baie
- ☐ Completely / Heeltemal

Expectancies (adapted from Plant & Devine, 2003):

*** Even if we hadn't met before, a Black (African) South African would expect me to be prejudiced.**

Al het ons nog nooit ontmoet nie, sou 'n Swart Suid-Afrikaner verwag dat ek bevooroordeelend is.

- ☐ Strongly Disagree / Verskil sterk
- ☐ Slightly Disagree / Verskil 'n bietjie
- ☐ Unsure / Onseker
- ☐ Slightly Agree / Stem 'n bietjie saam
- ☐ Strongly Agree / Stem sterk saam

*** When interacting with a Black (African) South African, he or she would see me as prejudiced no matter what I did.**

Wanneer ek met 'n Swart Suid-Afrikaner 'n interaksie het, sou hy of sy my sien as bevooroordeelend, maak nie saak wat ek doen nie.

- ☐ Strongly Disagree / Verskil sterk
- ☐ Slightly Disagree / Verskil 'n bietjie
- ☐ Unsure / Onseker
- ☐ Slightly Agree / Stem 'n bietjie saam
- ☐ Strongly Agree / Stem sterk saam

*** When interacting with a Black (African) South African, I would be unsure how to act in order to show him or her that I am NOT prejudiced.**

Wanneer ek met 'n Swart Suid-Afrikaner 'n interaksie het, sou ek onseker wees oor hoe om vir hom of haar te wys dat ek NIE bevooroordeelend is NIE.

- ☐ Strongly Disagree / Verskil sterk
- ☐ Slightly Disagree / Verskil 'n bietjie

- ☐ Unsure / Onseker
- ☐ Slightly Agree / Stem 'n bietjie saam
- ☐ Strongly Agree / Stem sterk saam

*** If I were interacting with a Black (African) South African, regardless of my behaviour, he or she would interpret my behaviour as prejudiced.**

As ek met 'n Swart Suid-Afrikaner 'n interaksie het, maak nie saak hoe my gedrag is nie, sou hy of sy my gedrag interpreteer as bevooroordeelend.

- ☐ Strongly Disagree / Verskil sterk
- ☐ Slightly Disagree / Verskil 'n bietjie
- ☐ Unsure / Onseker
- ☐ Slightly Agree / Stem 'n bietjie saam
- ☐ Strongly Agree / Stem sterk saam

*** When interacting with a Black (African) South African, I would imagine that he or she would be watching my behaviour closely for prejudice.**

Wanneer ek met 'n Swart Suid-Afrikaner 'n interaksie het, sou ek dink dat hy of sy my gedrag noukeuring sou waarneem vir vooroordeel.

- ☐ Strongly Disagree / Verskil sterk
- ☐ Slightly Disagree / Verskil 'n bietjie
- ☐ Unsure / Onseker
- ☐ Slightly Agree / Stem 'n bietjie saam
- ☐ Strongly Agree / Stem sterk saam

OUTCOMES

Positive outgroup attitudes towards Coloured South Africans in general (adapted from Swart et al., 2011; see also Wright et al., 1997):

*** When I think about coloured South Africans IN GENERAL, I have POSITIVE FEELINGS towards them.**

Wanneer ek aan Bruin/Kleurling Suid-Afrikaners oor die algemeen dink, het ek POSITIEWE GEVOELENS teenoor hulle.

- ☐ Completely Disagree / Stem glad nie saam nie
- ☐ Slightly Disagree / Stem nie heeltemal saam nie
- ☐ Unsure / Onseker
- ☐ Slightly Agree / Stem 'n bietjie saam
- ☐ Completely Agree / Stem heeltemal saam

*** When I think about Coloured South Africans IN GENERAL, I ADMIRE THEM.**

Wanneer ek aan Bruin/Kleurling Suid-Afrikaners OOR DIE ALGEMEEN dink, BEWONDER EK HULLE.

- ☐ Completely Disagree / Stem glad nie saam nie
- ☐ Slightly Disagree / Stem nie heeltemal saam nie
- ☐ Unsure / Onseker
- ☐ Slightly Agree / Stem 'n bietjie saam
- ☐ Completely Agree / Stem heeltemal saam

*** When I think about Coloured South Africans IN GENERAL, I am FILLED WITH RESPECT for them.**

Wanneer ek aan Bruin/Kleurling Suid-Afrikaners OOR DIE ALGEMEEN dink, is ek VOL RESPEK vir hulle.

- ☐ Completely Disagree / Stem glad nie saam nie
- ☐ Slightly Disagree / Stem nie heeltemal saam nie
- ☐ Unsure / Onseker
- ☐ Slightly Agree / Stem 'n bietjie saam
- ☐ Completely Agree / Stem heeltemal saam

*** When I think about Coloured South Africans IN GENERAL, I have NEGATIVE FEELINGS TOWARDS THEM.**

Wanneer ek aan Bruin/Kleurling Suid-Afrikaners OOR DIE ALGEMEEN dink, het ek NEGATIEWE GEVOELENS TEENoor HULLE.

- ☐ Completely Disagree / Stem glad nie saam nie
- ☐ Slightly Disagree / Stem nie heeltemal saam nie

- ☐ Unsure / Onseker
- ☐ Slightly Agree / Stem 'n bietjie saam
- ☐ Completely Agree / Stem heeltemal saam

Social distance towards Black (African) South Africans in general (adapted from Bogardus, 1933):

To what extent you would be happy to have:

Tot watter mate u gelukkig sal wees om:

*** Black (African) South Africans attending the SAME CLASSES as you?**

Swart Suid-Afrikaners te hê wat DIESELFDE KLASSE as u loop?

- ☐ Not at all / Glad nie
- ☐ A little / 'n Bietjie
- ☐ Unsure / Onseker
- ☐ Quite a lot / Redelik baie
- ☐ Completely / Heeltemal

a Black (African) South African as YOUR ROOMMATE/FLATMATE/HOUSEMATE?

'n Swart Suid-Afrikaner te hê as U KAMERMAAT/WOONSTELMAAT/HUISMAAT?

- ☐ Not at all / Glad nie
- ☐ A little / 'n Bietjie
- ☐ Unsure / Onseker
- ☐ Quite a lot / Redelik baie
- ☐ Completely / Heeltemal

*** a Black (African) South African as an INTIMATE PARTNER (i.e., boyfriend/girlfriend)?**

'n Swart Suid-Afrikaner te hê as 'n INTIEME METGESEL? (bv. kêrel/meisie?)

- ☐ Not at all / Glad nie
- ☐ A little / 'n Bietjie
- ☐ Unsure / Onseker

- ☐ Quite a lot / Redelik baie
- ☐ Completely / Heeltemal