

**THE RELATIONSHIPS BETWEEN ETHNIC IDENTITY,
COLLECTIVE SELF-ESTEEM AND ACADEMIC SELF-EFFICACY
AMONG STUDENTS AT A HIGHER LEARNING INSTITUTION**

By

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ABSTRACT

THE RELATIONSHIPS BETWEEN ETHNIC IDENTITY, COLLECTIVE SELF-ESTEEM AND ACADEMIC SELF-EFFICACY AMONG STUDENTS AT A HIGHER LEARNING INSTITUTION

Previous research has shown relationships between ethnic identity and other aspects of the self-concept such as efficacy and self-esteem, particularly among minority groups. This study examined the relationships between ethnic identity, collective self-esteem and academic self-efficacy. These relationships were examined among an overall sample of 144 respondents, and among two distinct samples consisting of Black and White respondents, respectively. Results showed positive correlations between ethnic identity and academic self-efficacy, collective self-esteem and academic self-efficacy, and between ethnic identity and collective self-esteem for the overall sample. Similar results were found for the sample consisting of Black respondents only. For the White sample, a positive correlation was found between collective self-esteem and ethnic identity only. The study further examined the relationships between academic self-efficacy and the ethnic identity and collective self-esteem subscales. For the overall sample, positive correlations were found between academic self-efficacy and the ethnic identity search and commitment subscales. Correlations for this sample were also found between academic self-efficacy and the membership self-esteem and private collective self-esteem subscales. For the Black sample, correlations were found between academic self-efficacy and the ethnic identity search and commitment subscales. Furthermore, there were correlations between academic self-efficacy and the membership self-esteem subscale, as well as the private collective self-esteem subscale for Black respondents. For the White sample, no relationships were found between academic self-efficacy and any of the collective self-esteem and ethnic identity subscales. Furthermore, limitations of the current study were identified and, subsequently, recommendations for future research were made. It was recommended that future research include other aspects of the self-concept such as personal self-esteem and actual academic achievement, so as to determine the relationships between these and the variables examined in the current study.

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CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

This chapter begins with a historical overview of South Africa, providing the country's demographic information, as well as past and recent significant events and settings that gave way to trends in contemporary South Africa, which led to the conceptualisation of the research problem for this study. This is followed by a discussion of the research problem, with references to its manifestation in the South African context, especially drawing from existing local, though limited, and international research. This is followed by the definition of concepts, wherein important concepts used throughout the study, as well as variables of interest in this study, are defined and operationalised to ensure accurate measurement thereof. Justification and aims of the study are also presented, followed by a chapter outline, which briefly describes what is presented in the following chapters in this dissertation and, lastly, the conclusion.

1.2 HISTORICAL OVERVIEW

South Africa is considered one of the most diverse countries in the world. The country's racial distribution can be divided into four main groupings, namely, Black, White, Indian and Coloured. Of these, Blacks are in the majority, making up 79% of the total population. This is followed by Whites, who make up 9%, Coloureds at 9% and Asians/Indians, who make up only 3% of the country's population (Statistics South Africa, 2010). In addition, these race groups can further be divided into various ethnic groups. For instance, White South Africans

are mainly English and Afrikaans-speaking. Black South Africans are more diversified and consist of nine main ethnic groupings, namely, Zulu, Xhosa, Swati, Ndebele, Tswana, Sotho, Pedi, Venda and Tsonga (Alexander, 2006). The association of language with ethnicity is presented and substantiated in detail in section 1.5.1 in this chapter.

It is this diversity that has led to South Africa being renowned as a ‘rainbow nation’, a term coined to promote national unity while simultaneously acknowledging the diversity within South African society. This diversity is particularly in relation to “... ethnicity as the defining experience of all South Africans” (Boyce, 1999, p. 235). This stance followed the dissolution of the apartheid government, which had, for decades, emphasised these ethnic and racial differences to promote racial division and discrimination. Ironically, some may argue, it is the celebration of these differences that may prevent the development of a unified national identity among all South Africans and possibly hamper nation building (Gibson, 2004). The social identity theory (SIT) states that social identity is inextricably linked with the elevation of the ingroup’s status above other groups. The ingroup, in this regard, refers to “the social group to which an individual perceives himself or herself as belonging” (Baron & Byrne, 1997, p. 206), whereas the outgroup refers to any other group that the individual does not perceive himself or herself as belonging to. In view of this, group membership is seen as playing a critical role in individuals’ self-identification, particularly during intergroup contact.

According to Tajfel (1981), intergroup relations are typically characterised by the adoption of generalisations about other social actors, especially those belonging to the outgroups. Such generalisations, also known as ‘stereotypes’, are a tactic that is inadvertently used to save the cognitive efforts that are often involved during social interactions. In these instances, individuals typically refer to what are considered as known facts about other individuals, solely based on the latter’s membership to certain social groups. These

stereotypes then serve as quick references that offer a superficial and effortless medium of interaction that does not require one to interact with others in a unique manner requiring in-depth interest in, as well as understanding of others (Baron & Byrne, 2003).

Tajfel (1981) adds that stereotypes are usually accompanied by prejudices that are also held against members of the outgroups. This notion suggests that intergroup contact, wherein references to stereotypes are common, are also typically permeated by negative stereotypes and, therefore, prejudices. Moreover, the adoption of negative stereotypes and prejudices about others is also associated with the unrealistic elevation of one's group above others. This is known as ingroup bias and may further strengthen one's identification with the ingroup (Baron & Byrne, 2003). This further suggests that intergroup contact may lead to greater emphasis on individuals' identification as members of various groups and, subsequently, salient social identities as members of each of those groups.

In the South African context, the apartheid government restricted interracial contact as far as possible. In that era, interracial marriages and sexual relationships were banned, criminalised and rendered illegal. This was done under the auspices of what were then known as the Prohibition of Mixed Marriages Act of 1949 and the Immorality Act of 1950. In addition, access to various public amenities such as recreational parks, public transport and public restrooms was demarcated along racial lines, which also prevented social contact between races (Reservation of Separate Amenities Act of 1953). Furthermore, the Group Areas Act of 1950 ensured that members of a given race would be strictly confined to a certain residential area. This meant that Blacks, Whites, Asians/Indians and Coloureds could only reside in areas specifically reserved for that particular race, to the exclusion of others.

1.3 RESEARCH PROBLEM

The measures undertaken by the apartheid government, as described in section 1.2, are assumed to have brought about a heightened awareness of racial differences and, consequently, elevated stereotypes, prejudice, as well as salient race identities (Roefs, 2006). Tajfel (1981) also posits that racial prejudice and the awareness thereof by the targeted group is likely to lead to stronger identification with the ingroup. This assumption is also consistent with the tenets of the SIT as discussed in section 1.2 (Baron & Byrne, 2003; Tajfel, 1981). Furthermore, Turner (1982) posits that a positive social identity among individuals as members of a given social group is fostered by, among others, favourable comparisons with other groups. It is important to note that the apartheid system, on the one hand, primarily involved the advocacy of White supremacy and, on the other, the oppression and marginalisation, as well as emphasis on the perceived inferiority of other races, particularly Black South Africans (Gibson, 2004).

Such practices and ideologies would be expected to have varying implications for individuals' self-concepts, particularly with regard to their identification as members of a certain race and, subsequently, race identity. Furthermore, this is also undeniably linked with perceptions regarding the status of one's race in relation to other races, as well as individuals' feelings about belonging to a certain race. The latter is known as collective self-esteem, as it is related to the evaluation of the value of the social group to which one belongs, especially in broad comparison with other groups (Downie, Mageau, Koestner, & Liodden, 2006).

For instance, members of the marginalised groups may experience conflicting perceptions of their groups upon realising the pervasive negative perception of the ingroup by other groups, as well as in the wider socio-political context. On the one hand, individuals' collective self-esteem may be adversely affected by prejudice, as a result of others' negative

evaluation of the group. On the other hand, members of the marginalised group may maintain high regard for the group, despite negative evaluation by the outgroups. This paradox is embodied in Wiley, Perkins, and Deaux's (2008) reference to "double consciousness" (p. 385), referring to instances in which individuals' own view of the ingroup is not necessarily negatively affected by their awareness of the unfavourable views widely held by the outgroups. It is in view of these various possibilities and conjectures that the current study assumes that there may be a relationship between race identity and collective self-esteem in post-apartheid South Africa, given past and present, as well as real and perceived trends of racial prejudice in South African society. This is especially considering the persistence of strained intergroup relations in contemporary South African society, despite the official dissolution of the apartheid government in 1994, though arguably to a lesser extent than pre-democratic South Africa. Roefs (2006) cites the South African Social Attitudes Survey (SASAS), which indicated that most Black respondents perceived White South Africans as most racist in comparison to other races, whereas White respondents thought the same of Black South Africans in general.

During the apartheid era, systematic racism in the education context was embodied in education policies that demarcated education along racial lines and also ensured disparities in the quality of education for members of different races and, notably, inferior education for Black learners (Bantu Education Act of 1953; Extension of University Education Act of 1959). For Black learners, the Bantu Education Act (1953) primarily served to prepare these learners for a skilled labour force and also ensured limited access to professional career opportunities. The South African education system has since undergone major changes with the advent of a democratic government. Despite this, similarly to trends in South African society in general, Kasese-Hara (2006) and Robus and MacLeod (2006) argue that racial prejudice is prevalent in various forms in higher learning institutions (HLIs) across South

Africa. In 2008, the then Minister of Education, Naledi Pandor, commissioned an investigation into racial discrimination in public HLIs in South Africa (Department of Education, 2008). The report revealed that racial prejudice is highly prevalent in these institutions. Kasese-Hara (2006) and Robus and MacLeod (2006) attribute the prevalence of racism in these contexts to the apartheid government's classification of HLIs according to race, which ensured that HLIs generally enrolled students of a particular race only, to the exclusion of others (Extension of University Education Act of 1959). In relation to this, Robus and Macleod (2006) state that this tendency to differentiate institutions according to race subsequently led to the assignment of distinct race identities to the institutions.

In view of the above, it could be argued that racially and culturally diverse contexts such as HLIs may give rise to prejudice, especially given the prevalence of racial prejudice in post-apartheid South African society. The SASAS (as cited by Roefs, 2006) revealed that educational institutions were identified by Black and White respondents as one of the contexts in which instances of racial discrimination were most likely to occur. In addition, the study showed that among Black and White youth aged 16 to 24, a significant number believed that race relations had not improved and, in certain cases, had worsened since 1994. These observations show that perceptions of strained race relations are prevalent among the youth who, incidentally, are possibly in the majority as an age group in HLIs. It is in this regard that the current study assumes that perceptions of prejudice may have implications on the salience of social identity among individuals or, in this instance, students, particularly with regard to their membership to certain races or ethnicities.

It is important to note that the apartheid government also used ethnic differences to advance its divisive cause. This was also evident in the establishment of Bantustans or homelands, which were touted as independent, self-governing states for Black South Africans of various ethnicities (Bantu Homelands Constitution Act of 1971; Promotion of Bantu self-

government Act of 1959). These served to emphasise ethnic differences among Black South Africans and, arguably, further hindered a united front against apartheid by the various ethnic groups (Khunou, 2009; Kiguwa, 2006). It is in view of this that Boyce (1999) suggests that, in order to promote nation building in a democratic South Africa, ethnicity, which was used as a divisive force by the apartheid government, would have to be subdued in the interests of a shared national identity among all South Africans.

Roefs (2006) states that, according to the SASAS, national and group identities, which include race and ethnicity, are equally salient in South African society. Furthermore, the study revealed that ethnic and race identities were especially salient among Black South Africans. This apparent allegiance to ethnicity and ethnic identity, coupled with its divisive role during the apartheid era, serve as justification for the current study to include ethnic identity, rather than race identity, as one of the main variables of interest in this study.

Various international studies have shown that the mere perception of prejudice may have adverse implications on individuals' self-esteem or efficacy beliefs. In a study by Major, Quinton, and Schmader (2003) involving female respondents, results showed that covert prejudice had more negative effects on the respondents' personal self-esteem than overt. In this regard, overt prejudice refers to open, blatant displays of discrimination, whereas covert prejudice is more subtle. In another study, Steele and Aronson (1995) argued that individuals generally experience stereotype threat, referring to the fear of living up to negative stereotypes held about the ingroup during task performance. This fear, the study concluded, led to poor performance that resulted from participants' awareness of the negative stereotypes generally held about them (the participants) as members of a certain group and fears of living up to these. Similarly, Woolf, Cave, Greenhalgh, and Dacre (2008) carried out a study in which the possible effects of stereotype threat were investigated among Asian medical students in the UK. The study revealed that both the students and academic staff

were aware of pervasive stereotypical assumptions held about Asian students. Some of the students felt that the teachers did not interact with them in a meaningful way, which they attributed to the stereotypes. In view of this, the students' awareness of the stereotypical assumptions held about them or mere perception thereof, may produce negative feelings about the learning environment and, ultimately, negatively affect their ability to learn (Woolf et al., 2008). This could, in turn, have negative implications for students' general academic self-efficacy, since the stereotypical assumptions and resultant negativity among these students occur within an educational context.

In view of the above, it could be argued that intergroup contact in HLIs, especially given the historically racialised nature of these institutions as well as the broader South African context, may give rise to real or perceived prejudice and, subsequently, have varying implications for students' self-efficacy, particularly academic self-efficacy in this context. It is in view of the interplay between the various social, socio-political and intrapersonal factors, that this study seeks to investigate the relationship between academic self-efficacy, collective self-esteem and ethnic identity. Ethnic identity and collective self-esteem are of special interest in the current study, as they represent individuals' identification with a social group and the value attached to such identification or to the group itself notwithstanding external influences such as the outgroups' perceptions of the ingroup. In addition, academic self-efficacy will be considered in relation to these factors since, in an academic context, maladaptive efficacy beliefs are expected to manifest through low academic self-efficacy specifically in relation to the performance of tasks that generally enhance academic achievement.

1.4 RESEARCH QUESTIONS

Research questions for the current study are stated below.

- i. What is the nature of the relationship between ethnic identity and academic self-efficacy?
- ii. What is the nature of the relationship between collective self-esteem and academic self-efficacy?
- iii. What is the nature of the relationship between ethnic identity and collective self-esteem?
- iv. Are any of the specified relationships between the variables, or lack thereof, influenced by race?

1.5 DEFINITION OF CONCEPTS

In this subsection, fundamental concepts used in this study are defined and operationalised. This also includes the variables under study, namely, ethnic identity, collective self-esteem and academic self-efficacy. This is so as to clarify the context in which the concepts are used in the study, which may differ from other contexts, as well as to ensure that this leads to the adoption of appropriate measures that will accurately measure the variables under study.

1.5.1 ETHNIC GROUP

Alexander (2001) posits that language serves as one of the major social markers in South Africa in conjunction with race, class and culture, among others. Furthermore, he points out that liberation movements in apartheid South Africa envisioned a national, united South

African identity, while simultaneously recognising language groups as equally “valid sub-national identities” (p. 143), possibly due to the realisation of strong identification with these groups by their respective members. This recognition, it could be argued, points to the awareness of distinct identities in South Africa that may have been constructed on the basis of affiliation with language groups.

In the South African context, it could be argued that the apartheid government’s emphasis on linguistic differences between Black South Africans, as well as the advocacy of Afrikaner nationalism, played a critical role in the assumption of distinct ethnic identities by members of the different language groups (Alexander, 2001; Bekker, 1993). This is especially taking into account some variations in cultural practices between members of these groups (Afolayan, 2004; Magubane, 1998). These differences, however slight, may have reinforced the perception of innate differences among the groups, which further led to the uncritical assumption of distinct identities. This view is supported by Eriksen’s (1993) observation that the imposition of labels on members of certain groups, as well as unequal power relations reminiscent of apartheid agencies in South Africa may lead to the appropriation and internalisation of the new, imposed or advocated identities by the subjects.

Neff (2007) distinguishes between race and ethnicity in the South African context in his argument that ‘race’ is based on the distinction in physical features between social groups, whereas the perceived differences between ‘ethnic groups’ are based on a common language and shared histories specific to each group. In the South African context, race refers to distinct physical features such as skin colour between individuals. Moreover, individuals within a larger racially homogenous group may further be differentiated according to their native languages, which point to a shared history and culture, much more so than race. It is in this regard that Neff considers ethnicity, rather than race, as an important social indicator in South Africa. In this instance, Neff (2007) argues, ethnic groups are typically more

homogeneous than race groups, with members of the same ethnic group having a lot more in common with one another than they would with fellow members of their overriding race group.

According to Berry, Poortinga, Segall, and Dasen (1992), a group constitutes socially interacting individuals who strive to maintain their interaction and whose behaviours are collectively governed by a social structure and set norms. In this regard, a common ethnicity in the form of extended lineage to an earlier cultural group or common characteristics such as ways of dress or language leads to the description of these individuals as an ethnic group. In the same manner, Eriksen (1993) posits that an important characteristic of ethnicity is that it essentially involves multiple social groups that have some social contact with one another. In this instance, differentiation between ethnic groups stems from group members' view of themselves as distinctive in some ways from these other groups. Eriksen adds that a group can be considered as a distinct ethnic group if its cultural differences influence its interaction with members of other social groups whose cultural practices differ from its own. In South Africa, cultural affinity is mainly demonstrated by membership to a particular language group. This description also meets Berry et al.'s (1992) criteria for an ethnic or ethnocultural group described above.

In view of the arguments presented above, 'ethnic group', in the context of this study, is used to refer to a group of people whose identification as a group is based on a common language and associated traditions, especially following the realisation that there are various customary practices associated with most language groups in South Africa that go beyond racial identification (Afolayan, 2004; Ball, Giles, & Hewstone, 1984; Magubane, 1998).

1.5.2 ETHNIC IDENTITY

Ball et al. (1984) assert that a social identity is primarily based on the tendency to categorise the social world in terms of various groups, which leads to the identification of oneself as a member of a certain group. This is in relation to the SIT, which assumes that one's self-definition includes identification as a member of various social groups which, in turn, involves three processes, namely, social categorisation according to social groups, social identification and social comparison between rival groups (Jarvis, 2000; Tajfel, 1978). In view of this, ethnic identity refers to the tendency by individuals to define themselves in relation to the environment in terms of their membership to certain ethnic groups.

Aboud (1981) explains this incorporation of ethnic identity into one's self-identity in his statement that "ethnic self-identity means knowing that oneself is defined in part by attributes which are in turn used to define an ethnicity" (p. 39). In view of this, if one measured ethnic identity in the context of this study, it would be expected of the differences between subjects scoring differently on an ethnic identity measure to manifest through the general importance that subjects attach to membership to the ethnic group, as well as self-identification according to such membership. For instance, someone with a significantly high level of ethnic identity may place considerable value on his or her belonging and commitment to the ethnic group. In contrast, someone with a relatively low ethnic identity is expected to place considerably less value on his or her membership to the group.

1.5.3 COLLECTIVE SELF-ESTEEM

According to Turner (1982), the positive evaluation of one's social group contributes to a positive social identity. Such an evaluation is based on subjective social comparisons, wherein an individual compares the status of his or her own social group with others and consequently perceives his or her social group as either superior or inferior to the others. Favourable comparisons that lead one to conclude that one's group is superior lead to high self-esteem (Turner, 1982). Since such self-esteem is specifically related to membership to a particular group, this study will primarily deal with collective self-esteem rather than personal self-esteem. This means that collective self-esteem involves the evaluation of oneself within the social realm in terms of membership to a particular group, in the context of this study, ethnic group; as well as the perceived standing of the group in relation to others.

Similarly to the above stance, Downie et al. (2006) posit that collective self-esteem is an evaluation of the value of the social group to which one belongs. In this regard, collective self-esteem is related to self-evaluation specifically pertaining to group membership. In view of this, an individual's membership to a certain group and being embedded in a social context comprising various other groups seems inevitably linked to feelings of esteem regarding the group to which one belongs. In the context of this study, collective self-esteem is used to refer to feelings of esteem relating to membership to an ethnic group.

In view of the above, a measure of collective self-esteem will be used to assess respondents' self-esteem in relation to their ethnic groups. Positive appraisal of an individual's ethnic group is expected to be reflected by a high score on the collective self-esteem measure in use. In contrast, the perception that one's group is inferior to others is expected to be reflected by a low collective self-esteem score.

1.5.4 ACADEMIC SELF-EFFICACY

Self-efficacy refers to individuals' beliefs in their abilities to perform certain tasks (Louw & Edwards, 1997). Individuals with high self-efficacy believe in their abilities to deal with challenging situations while those with low self-efficacy do not. Chemers, Hu, and Garcia (2001) define academic self-efficacy as perceptions regarding one's academic capabilities. In view of this, it is argued that academic self-efficacy is related to beliefs regarding the effectiveness with which one can perform academic tasks or achieve academically.

It is important to note that academic self-efficacy refers to the subjective beliefs held about one's abilities that do not necessarily reflect actual academic performance. Therefore, an academic self-efficacy measure should ideally include tasks that can reasonably predict academic achievement. This will help respondents conceptualise their (perceived) abilities to perform these tasks and ultimately lead to beliefs about their academic self-efficacy. As a result, students who believe in their abilities to perform such tasks would be expected to get a high score on academic self-efficacy, whereas respondents who are relatively less confident of their abilities to perform those tasks can be expected to have a lower score on academic self-efficacy.

1.6 JUSTIFICATION, AIM AND OBJECTIVES OF THE STUDY

Internationally, numerous studies have found links between real or perceived prejudice, ethnic identity, self-efficacy and self-esteem (e.g., Phillips Smith, Walker, Fields, Brookins, & Seay, 1999; Umaña-Taylor, 2004; Umaña-Taylor & Updegraff, 2007; Woolf et al., 2008). These have been found to be more pronounced among students from minority groups. The minority groups cited in the above-mentioned studies are often subjects of racial

discrimination and prejudice in the contexts of those studies, for example, Latin Americans and African Americans in the USA and Asian students in the UK.

In view of the above, it would be interesting to note the relationship patterns between the above-mentioned variables in the South African context. This is especially considering the disparities between the local and international contexts, particularly with regard to groups that are regarded as a national minority or majority and which of these are often subjects of prejudice. In the South African context, Blacks are a national majority who, owing to the apartheid system, were systematically subjected to racial prejudice. In contrast, Whites are a minority in the national context who, as a minority group, enjoyed various privileges offered by the apartheid system, which were largely inaccessible to other races in South Africa. Studies by Marais (1995) and Yamauchi (2005) depict some of these inequalities specifically with regard to the allocation of resources in educational contexts. These disparities undoubtedly created the potential for animosity, especially among the politically conscious, and further strengthening of racial divisions and prejudice. Despite the dissolution of the apartheid government in 1994, the country's racially divided past does not mean that South Africa is necessarily rid of racial prejudice or the perception thereof from all sects.

It is worth noting that the current study takes place in a context where the racial composition does not reflect the national context. In the context of this study, Black students are a minority, with White students in the majority, which is directly opposite to the national racial composition (Statistics South Africa, 2010). At the time of the study, enrolment figures of the HLI from which the sample was drawn showed that 59% of all registered students were White, followed by Black students at 35%, with Indian and Coloured students being the least represented at only 4% and 2%, respectively.

The international studies on minority groups cited above would suggest that the salience of ethnic identity and collective self-esteem, as well as the relationships between

these and intrapersonal factors such as self-esteem and efficacy beliefs, are somehow linked to the participants' minority status as a group. It could be argued, however, that a group's general predisposition to prejudice may give rise to the trends described in the studies, more so than mere minority status. Therefore, these trends highlight the importance of the replication of such studies in the South African context, thereby acknowledging the unique nature of South African society and the need to represent it as such in social research.

Against the backdrop of international studies in this research area, the aim of the current study is to investigate the nature of the relationships between ethnic identity, collective self-esteem and academic self-efficacy among tertiary education students. A study on these relationships would ideally help in giving an indication of trends with regard to these phenomena in the South African context. Overall, this study will enable us to gain better understanding of the implications that a macro context such as an ethnically, culturally and racially diverse society may have for individuals' functioning.

1.7 CHAPTER OUTLINE

In Chapter 2, the theoretical background of the study is presented and includes an in-depth discussion of the social identity theory and how it is linked to the variables in this study.

In Chapter 3, the socio-cultural context is identified as one of the spheres that may have implications on general self-esteem and efficacy beliefs. More specifically, ethnic identity is consistently shown to have such an effect, especially among minority students. Furthermore, the chapter includes a discussion regarding what the relationship between ethnic identity and collective self-esteem may be, especially considering the fact that collective self-esteem is a multi-dimensional concept involving not only one's subjective evaluation of the group, but also one's awareness of the group's evaluation by others within the group, as well

as members of the outgroups. In addition, academic self-efficacy is included as a variable in the study, as it is viewed as a good measure of efficacy beliefs in the context in which the study takes place, namely, an academic institution. In view of this, the chapter also considers the possibility of relationships between ethnic identity and academic self-efficacy, as well as collective self-esteem and academic self-efficacy.

In Chapter 4, the research methodology is discussed. In the chapter, the appropriateness of a correlational design for the study is discussed, followed by the statement of null and alternative hypotheses. Moreover, data collection procedures and instruments, as well as data analysis methods are described. The Multigroup Ethnic Identity Measure, the race-specific Collective Self-Esteem Scale and the Academic Self-Efficacy Scale were adopted to measure ethnic identity, collective self-esteem and academic self-efficacy, respectively. Furthermore, various statistical tests were run to determine whether the assumptions for a multiple regression analysis had been met prior to the actual analysis of the data.

Chapter 5 includes a description of the study sample and results from the analyses. The results obtained for the overall, Black and White samples are presented separately so as to indicate any emerging differences specifically between Black and White respondents with regard to the nature of the correlation between any of the variables.

Chapter 6 includes the interpretation of results obtained from the analyses. In this chapter, the varying results obtained for the overall, Black and White samples are interpreted, followed by a discussion of apparent similarities and differences between these samples and possible justifications for the differences and similarities, where applicable. The chapter concludes with a discussion of the limitations of the current study as identified by the researcher as well as recommendations for future studies on the topic, followed by the conclusion.

1.8 CONCLUSION

This chapter began with a historical overview that indicated social and socio-political trends in the South African context spanning from the apartheid era to post-apartheid South Africa. This was followed by a discussion of the research problem, describing various aspects of South African society and whose main source seems to be the country's racially divided past. The discussion included how socio-political trends in South Africa may have resulted into the interaction between ethnic identity, collective self-esteem and academic self-efficacy, which were identified as primary variables of interest in this study. This resulted from the observation of factors such as race and ethnic identification, self-esteem and efficacy beliefs, having been found to be related in various international studies. Lastly, the justification for the study followed, as well as the aim and objectives of the study which were broadly stated as an investigation into the relationship between ethnic identity, collective self-esteem and academic self-efficacy among students.

In the following chapter, the theoretical background for this study is discussed.

CHAPTER 2

THEORETICAL BACKGROUND

2.1 INTRODUCTION

In this chapter, the theoretical assumptions that informed the current study are presented. The chapter begins with a brief discussion of the key assumptions of the social psychological approach, as well as how it forms the basis of the study. This discussion includes a description of the approach and its relevance to the study. This is followed by a presentation of the social identity theory as a derivative of the social psychological approach. Lastly, the application of the social identity theory to the three variables in this study is discussed, as well as the relationships between them, as explained by the theory.

2.2 THE SOCIAL PSYCHOLOGICAL APPROACH

The social psychological approach is a perspective used to study human behaviour with a primary focus on interpersonal relations (Jarvis, 2000). This approach assumes that humans, as social beings, engage in social situations in which they impact on one another in various ways. Proponents of social psychology acknowledge that cultural diversity in various parts of the world requires research into ways in which multicultural contexts influence interpersonal relations and, ultimately, an individual's self-identity (Baron & Byrne, 2003).

Considering the multiple roles that individuals play in society, one tends to belong to various social groups at any given time, with each forming part of one's self-identity (Ervin & Stryker, 2001). This acknowledgement of multiple group membership means that certain group memberships or identities informed by an individual's membership to a particular

group are more salient in certain contexts than others (Tajfel, 1978). This particular study is concerned with self-identity with specific reference to students' memberships to various ethnic or race groups, as well as self-esteem associated with such group memberships. These factors will be examined specifically in relation to the participating students' academic self-efficacy or their evaluation of their academic abilities.

The social psychological approach is applicable in this study, as shown by the study's investigation of the maintenance of self-identity and self-esteem by individuals, specifically with regard to their membership to certain ethnic groups. The key assumption in this study is that individuals' general self-appraisal is influenced by their membership to an ethnic group as well as the contexts in which they find themselves. In this regard, it is assumed that group membership ideally results into a stable ethnic identity and collective self-esteem, though these are influenced by one's commitment to the group as well as the value attached by an individual to his or her group. The value attached by one to the ingroup may be partly influenced by or moderated by the outgroups' perceptions of the ingroup. Furthermore, it is assumed that ethnic identity and collective self-esteem have implications for academic self-efficacy as the latter reflects beliefs about one's capabilities, particularly in multicultural academic settings such as those in the context of this study. The emphasis on multicultural settings is based on the assumption that, similarly to the social psychological approach, a multicultural environment leads to the relative neglect of individual attributes and more emphasis on intergroup differentiation. The relationships between the variables discussed above as well as the manifestation thereof in real settings are discussed in detail in chapter 3.

2.3 THE SOCIAL IDENTITY THEORY

The social identity theory or SIT is a model within the social psychological approach that seeks to explain behaviour on the basis of an individual's membership to certain social groups. This theory assumes that one's self-definition as a member of a social group primarily involves three processes, namely, social categorisation, social identification and social comparison (Jarvis, 2000; Tajfel, 1978). These three stages are presumed to play a critical role in the differentiation between social actors as members of distinct social groups and ultimately have implications for an individual's functioning in various contexts (Jarvis, 2000).

Firstly, social categorisation refers to the deliberate division of people into social categories on the basis of similarities or distinctions between them. This means that one tends to differentiate between others according to characteristics that render them either similar or different from oneself, and in the same way, similar or different from other social actors. In this manner, individuals perceive others in terms of their differentiation as members of either the ingroup or the outgroups (Baron & Byrne, 2003). The ingroup, in this instance, refers to individuals that are similar to oneself in certain ways, thereby leading to the perception of these individuals as members of the same group as one. In contrast, the outgroup refers to everyone else who is not a member of the ingroup. This means that social actors are essentially classified as members of either the ingroup or the outgroup at any given time. This, according to Tajfel (1978), simplifies our perception of the social environment and, in the process, helps guide individuals' behaviour.

Secondly, social identification refers to an identity that individuals adopt by virtue of membership to a particular group (Baron & Byrne, 2003). For instance, the categorisation of oneself as a student leads to self-identification as a student, which also means that one is

likely to adopt behaviours that are associated with students. In addition, Tajfel (1978) adds that social identity is not merely a result of convenience, but considerable emotional significance is also attached to the group to which one belongs. This allusion to emotional significance may justify the apparent link between social identity and self-esteem (Baron & Byrne, 2003).

Thirdly, social comparison refers to instances in which the ingroup is constantly being compared with the outgroups. Jarvis (2000) adds that self-esteem arising from self-identification as a group member means that the ingroup has to favourably compare with the outgroups in order for the group members to maintain their self-esteem. Such self-esteem can only be acquired on the condition that an individual believes that the ingroup is, in some ways, superior to the outgroups.

Furthermore, Baron and Byrne (2003) refer to the ultimate attribution error, which is the tendency to make more favourable comparisons about the ingroup, whereas unfavourable attributions are typically made to members of the outgroups. The seemingly innate bias associated with group membership and subsequent identification with the group inevitably leads to prejudice and discriminatory practices. Prejudice refers to negative attitudes held against members of the outgroup and is solely based on individuals' membership to that group (Baron & Byrne, 2003). In addition, discrimination is aptly referred to as "prejudice in action" (p. 211) as it involves the negative treatment of members of the outgroups.

The general inclination towards undermining the outgroups in order to enhance individuals' self-esteem by emphasising the supremacy of the ingroup as described above, is likely to result into extreme rivalry that can ultimately develop into prejudices. Clearly, this radical stance may lead to the assumption of stereotypical views about the outgroups (Baron & Byrne, 2003). This tendency limits an individual's understanding of others as unique individuals and, rather, brings about the perception of others merely as members of the

detested groups. This distinction between the ingroup and the outgroups, possibly coupled with prejudice against the outgroups, may foster feelings of commitment towards the ingroup. This may, in turn, lead to the salience of identification as a member of a particular group, thus fostering a strong social identity associated with membership to a group (Baron & Byrne, 2003).

2.4 APPLICATION OF THE SOCIAL IDENTITY THEORY

The SIT alludes to a distinction between personal identity and social identity. Personal identity, on the one hand, is based on individual attributes that distinguish one from the next person while social identity, on the other hand, refers to an individual's view of himself or herself in relation to a specific social group that he or she identifies with (Baron & Byrne, 2003). This latter form of identity is preceded by depersonalisation, a term used to describe the shift from the definition of oneself in terms of individual attributes towards a more inclusive one that involves membership to a particular group (Louw & Edwards, 1997).

In an academic context, various factors can lead to the perception of similarities among individuals, which serve as equally valid forms of social categorisation. An example of this is a student identity, where social actors share a common identity as students. It is argued, however, that the environment may, in some way, prompt the individual's reference to ethnic identity as a social identity rather than any other form of identification. Therefore, the predominance of ethnic identification is likely to be triggered by certain aspects within the environment that lead to ethnic identity as an overriding form of identification.

The current study focuses on individuals' ethnic identity as a form of social identity. It would be expected of an academic context to foster a more prominent student identity than any other form of identification, as suggested above. Tajfel (1978), however, posits that

individuals' memberships to various groups may mean that some forms of identification are more salient in certain contexts than others. The current study's focus on ethnic identity, rather than a student identity, is based on the assumption that an academic context in which there is a consistent and common student identity may relatively lessen individuals' identification as students in interpersonal relations. Since proponents of the SIT argue that interpersonal relations are typically influenced by intergroup differentiation, students in such a context may resort to other forms of identification where others are perceived in terms of their membership to other types of social groups (Jarvis, 2000). This is especially considering arguments that in social interactions, individuals tend to undermine others' individual attributes and simply refer to generalisations or stereotypes, as these require less effort and reduce the complexity of social situations (Baron & Byrne, 2003; Tajfel, 1978).

Robus and MacLeod (2006) argue that racism in HLIs in South Africa has been largely reinforced by previous apartheid policies that led to the distinction between universities according to racial composition, where most universities predominantly enrolled students of a specific race to the exclusion of other race groups. This trend has led to current references to historically White, Black or liberal universities in post-apartheid South Africa, despite the systematic changes denouncing apartheid policies that served to promote racial segregation in academic institutions. Kasese-Hara (2006) also argues that racial prejudice is still prevalent in academic institutions and attributes this to the previous racial classification of these institutions in the apartheid era. On this basis, the continued prevalence of racial prejudice and discrimination could emphasise intergroup differences among students in these institutions. This could ultimately evoke self-definitions based on race, ultimately leading to salient ethnic and racial identities.

Alternatively, Crocker (1999) suggests that individuals carry prejudices directed towards the ingroup into various situations. This means that the discrimination of a certain

group in the broader social context may result into an individual member of the group carrying the stigma attached to the group into other contexts. This leads to the activation of schemas relating to large-scale prejudice in other unrelated contexts for members of the stigmatised group. This further explains the typically subjective classification of individuals according to race in seemingly racially neutral contexts. Furthermore, the SIT posits that the comparisons made between the ingroup and outgroups by social actors are highly prevalent during social interaction (Tajfel, 1978). This suggests that one of the conditions under which an individual may place emphasis on his or her social identity is when comparisons are being actively made between the ingroup and the outgroups. Furthermore, the SIT assumes that individuals typically hold favourable views about the ingroup, while they simultaneously hold unfavourable views about members of the outgroups (Baron & Byrne, 2003). This tendency, influenced by self-serving biases, draws attention to the subjectivity and apparent inaccuracy of individuals' perceptions of others. This observation highlights the need to consider the role of ethnic or racial identity in the self-definition of individuals in an academic context. It is in view of these tendencies that the current study assumes that ethnic identity is one of the primary forms of identification for students in a multicultural HLI.

It is important to note that the typically automatic designation of an individual to an ethnic group means that individuals do not choose membership to an ethnic group that they generally deem as superior to other groups and, therefore, prefer. This restriction may compel individuals to identify with an ethnic group that they would not voluntarily choose to identify with. A clear distinction in stable characteristics between members of various groups, such as physical appearance or language, does not allow any individual to simply leave the despised group for a more superior group (Turner, 1982). As a result, individuals may compensate for the shortcomings of their group by pointing out and emphasising positive aspects of the group while unfairly criticising the outgroups. This ultimately leads to

perceptions that the ingroup is superior to the outgroups and enhances the group members' self-esteem, which obviously relates to the perceived supremacy of the group to which one belongs. This view is compatible with Turner's (1982) notion that identification with social groups also serves as a predominant means for individuals to enhance self-esteem.

The current study is concerned with, among others, the relationship between ethnic identity and collective self-esteem. The SIT, however, assumes that personal, rather than collective self-esteem, plays an important role in social identity. It could, however, be argued that this theory fails to take into account the possible contribution of collective self-esteem to the adoption and salience of a social identity. The theory's emphasis on intergroup relations suggests that identification with a certain social group affects one's self-esteem, particularly as a member of that specific group. Similarly, collective self-esteem refers to an evaluation of the social group to which one belongs with emphasis on feelings of esteem associated with membership to that particular group (Downie et al., 2006).

Similarly to the SIT's assumptions, collective self-esteem takes into account the fact that as social beings, individuals tend to place value on group memberships, which ultimately influences the nature of social interactions between members of various social groups. On this basis, it is argued that membership to any social group is associated with feelings of esteem relating to membership to that group. In relation to this, Wiley et al. (2008) further make a distinction between 'public regard' and 'private regard' as constituents of collective self-esteem. Public regard refers to individuals' understanding or perceptions of the evaluation of their ingroup by other social actors, whereas private regard refers to one's evaluation of the group, independently of others' views. Wiley et al. (2008) posit that both of these factors contribute towards overall positive feelings associated with membership to one's group or collective self-esteem.

The pervasive references to the need for superiority within the SIT may explain the occurrences of prejudice and discrimination, which essentially serve to undermine the outgroups and, at the same time, elevate the status of the ingroup (Baron & Byrne, 2003). Such high regard for the ingroup is largely subjective. This means that members of any given group may not share the negative stereotypes associated with the ingroup by members of the outgroups. Similarly, perceptions that one's group is superior to others may not be shared by members of the outgroups. As a result, collective self-esteem essentially comprises, among others, the interaction between an individual's view of the ingroup as well as the outgroups' perceptions of one's group.

The depersonalisation associated with intergroup contact, wherein individuals view one another merely on the basis of membership to distinct social groups, suggests that a salient ethnic identity also has implications for collective self-esteem (Louw & Edwards, 1997). This is especially considering the fact that, despite the self-serving biases associated with the ingroup, individuals may also be aware of the negative stereotypes held against their ingroup by members of the outgroups. In this regard, the interaction between the individuals' own views of the ingroup as well as those held by members of the outgroup may determine overall collective self-esteem. On the basis of the above, one of the aims of the current study is to determine the existence of collective self-esteem, particularly in relation to ethnic group membership and identification. Furthermore, the study seeks to investigate whether collective self-esteem, similarly to the SIT's view of personal self-esteem, forms an integral part of social identity.

Ervin and Stryker (2001) argue that the multiple roles played by each individual in society mean that various competencies are required for the fulfilment of each of these roles. This trend, Ervin and Stryker argue, has shifted emphasis from global self-esteem to context-specific esteem associated with the evaluation of one's ability to perform in various contexts.

In relation to this, academic self-efficacy in the current study relates to beliefs regarding one's abilities to perform academic tasks (Ferla, Valcke, & Cai, 2009). The current study focuses on this subjective evaluation of one's abilities following various studies' indication that increased academic self-efficacy consistently influences academic performance positively (Bandura, 1995; Nurmi, Aunola, Salmela-Aro, & Lindroos, 2003; Zimmerman, 1995).

Various other studies suggest that there is a relationship between academic self-efficacy and ethnic identity (Eccles, Wong, & Peck, 2006; Phillips Smith et al., 1999; Pilegge & Holtz, 1997). Other studies suggest that despite the perceptions of negative regard for one's group by the outgroups, high ethnic identity and self-esteem are maintained (Spencer-Rodgers & Collins, 2006). The maintenance of self-esteem despite the outgroups' negative perceptions, in this regard, could mean that collective self-esteem is also maintained. A similar phenomenon was found by Wiley et al. (2008), wherein individuals belonging to a group that was, in general, negatively regarded by the outgroups maintained high regard for the group, despite the outgroups' negative perceptions of the group.

As described above, collective self-esteem necessarily comprises at least three factors, namely, identification with a group, individual group members' evaluation of the group, also referred to as private regard, as well as their perception of the outgroups' evaluation of the ingroup, which is referred to as public regard (Wiley et al., 2008). In view of this, in a collective self-esteem measure comprising all these dimensions, public regard may significantly differ from private regard. As a result, the overall score on collective self-esteem may differ significantly from at least one of the constructs in the collective self-esteem measure. For instance, positive private regard may enhance overall collective self-esteem, while negative public regard may simultaneously decrease it. The inclusion of both of these aspects of collective self-esteem has significant implications for an individual's overall

score on collective self-esteem. Similarly, each of the constructs of collective self-esteem may influence academic self-efficacy either positively or negatively, which may also differ for the relationship between academic self-efficacy and the overall score on collective self-esteem.

The studies mentioned above highlight the critical role of intrapersonal factors that are, in turn, influenced by the socio-cultural context in shaping self-efficacy beliefs. The SIT emphasises intergroup relations and how these may affect an individual's behaviour in social contexts (Baron & Byrne, 2003). This theory, however, seems to fail in acknowledging the possible effects of group membership in relation to self-efficacy, although the relationship between social identity and personal self-esteem are acknowledged by the theory.

It could be argued that a negative or low social identity has equally negative implications for personal self-esteem referred to in the SIT. In a study involving a sample of White Afrikaans-speaking respondents, the respondents felt that membership to this group would no longer contribute positively to their personal self-esteem in the post-apartheid era (Korf & Malan, 2002). Among other reasons, this was due to the perception that the Afrikaner ethnic group is perceived negatively by members of the outgroups in contemporary South Africa. The resultant negative self-esteem may negatively affect general feelings of self-efficacy, specifically in multicultural contexts that seem to challenge one's identification with the group through, for example, prejudice and other forms of discrimination as described by respondents in Korf and Malan's (2002) study. It is important, however, to note that this compromised sense of self-esteem may apply to individuals in relation to the broader social context. In contrast, contexts in which these individuals are a majority may give rise to their private regard for the ingroup as well as personal self-esteem. This could simply be due to regular contact between members of the ingroup where the reinforcement of the Afrikaner ethnic identity and the value attached thereto occurs.

Although institutional racism has been abolished in post-apartheid South Africa, as noted above, evidence suggests that HLIs are contexts in which racial prejudice is highly prevalent (Department of Education, 2008; SASAS, as cited by Roefs, 2006). These trends undeniably give way to hostile intergroup relations that, in turn, have negative effects on the marginalised individuals in these contexts, similarly to those referred to by Korf and Malan (2002) above. In this regard, low academic self-efficacy in the context of this study may simply be a result of a compromised self-esteem and general sense of self-efficacy arising from possibly hostile intergroup relations in a multicultural academic context. It must be noted that individuals may make inaccurate assumptions that social interactions with members of the outgroups are informed by prejudices held by the latter against the ingroup. This mere perception of prejudice may influence the behaviour of the apparently victimised individual, as well as his or her interaction with members of the outgroups and, consequently, other aspects of the self-concept such as personal self-esteem, collective self-esteem and efficacy beliefs or, more specifically, academic self-efficacy.

2.5 CONCLUSION

This chapter included a presentation of the theoretical assumptions that form the basis of this study as well as their application in the context of the study. Firstly, the social psychological approach and its assumptions were discussed. This was followed by a discussion of the assumptions of the SIT. The chapter concludes with an integration of the relationships between the three variables in this study, namely, ethnic identity, collective self-esteem and academic self-efficacy; as well as the manner in which these relationships are accounted for by the SIT.

The literature review is presented in the next chapter.

CHAPTER 3

LITERATURE REVIEW

3.1 INTRODUCTION

This study is aimed at investigating factors in the socio-cultural context that are related to academic self-efficacy. The study focuses on ethnic identity and collective self-esteem as possible variables within the socio-cultural context that may be linked to academic self-efficacy. This chapter begins with a presentation of academic self-efficacy and its importance. This is followed by a discussion of the relationships between academic self-efficacy and collective self-esteem, academic self-efficacy and ethnic identity, as well as ethnic identity and collective self-esteem.

3.2 ACADEMIC SELF-EFFICACY

Ervin and Stryker (2001) posit that the multiple roles played by individuals in society inevitably leads to a multiplicity of identities. This is demonstrated by the various relationships in which individuals are involved, which include networks ranging from interpersonal relationships to groups, organisations and communities, among others. Such differentiation of roles and relationships also means that various capabilities are required for the satisfactory assumption of each of these roles by the individual. Furthermore, the individual has an appraisal of his or her worth with regard to the way in which he or she plays each of the roles. This view has resulted into less emphasis on global self-esteem that views an individual as a unitary object (Ervin & Stryker, 2001). Rather, more emphasis is placed on the role-specific nature of self-esteem, which means that an individual has varying forms

of self-esteem as these relate to each of the roles or identities assumed by the individual. The current study seeks to investigate the extent of academic self-efficacy among tertiary education students. This takes into account the notion that an academic context demands specific capabilities that could enable one to thrive in such a context. The inclusion of academic self-efficacy as a variable in this study is an acknowledgement of its salience in an academic context, as a form of self-evaluation among students.

Ferla et al. (2009) draw a distinction between the academic self-concept and academic self-efficacy. According to these authors, the academic self-concept generally refers to “individuals’ knowledge and perception of themselves in academic situations” (Ferla et al., 2009, p.499). This means that the academic self-concept incorporates all the individual’s perceptions regarding his or her academic experiences. Furthermore, Bandura (1995) defines general self-efficacy as the belief in one’s ability to effectively execute tasks in order to effectively manage a given situation, as required. More specifically, Chemers et al. (2001) define academic self-efficacy as the confidence relating to the ability to master one’s academic work. The working definition for academic self-efficacy assumed particularly for this study is that it involves beliefs regarding the extent to which one can achieve academically.

On the basis of general conceptualisations of academic self-efficacy found in literature, the academic self-efficacy measure used in the current study requires respondents to indicate their perceived competency in performing tasks such as taking notes, studying, research, time allocation and general academic performance. Studies have consistently shown that people’s ability to perform certain tasks tends to be largely influenced by the beliefs that they hold about their own abilities. This means that academic self-efficacy plays a critical role in determining actual academic performance. Nurmi et al. (2003) investigated, among others, the relationship between expectation of academic success and actual

performance. Results showed that students' expectation of academic success predicted academic performance, which further reinforced the subjects' expectation of success. Similarly, Zimmerman (1995) suggests that academic self-efficacy influences persistence and the amount of efforts that are put into academic tasks. Furthermore, academic self-efficacy may positively affect persistence in a particular academic task, which ensures mastery of the task and, ultimately, academic success. Bandura (1995) also asserts that the belief in one's ability to perform well academically ultimately has an impact on academic accomplishments as well as preparation for an occupational career.

The role of academic self-efficacy in influencing academic performance, as described above, highlights its importance. On this basis, this study seeks to investigate factors that are associated with or give rise to academic self-efficacy. Bandura (1995) describes four sources of self-efficacy beliefs, namely, mastery experiences, social persuasion, physiological and emotional states, as well as vicarious experiences. Firstly, mastery experiences as a source of self-efficacy beliefs refer to repeated successes experienced by an individual when performing a task. Secondly, people are open to social persuasion in such a way that they may be verbally persuaded to believe in their capabilities to perform a task. Thirdly, physiological and emotional states such as stressful reactions to a situation or mood may be relied on by the individual to judge whether he or she is capable of performing a task. Lastly, vicarious experiences involve observing people similar to oneself succeeding at a particular task.

Usher and Pajares (2006) tested the influence of the factors specified by Bandura (1995) on academic self-efficacy among students. Results from the study showed that all the four factors significantly influenced academic self-efficacy. There were differences, however, between genders and races, with mastery and social persuasions having a significant influence on academic self-efficacy among girls. For boys, however, mastery and

vicarious experiences were the best predictors of academic self-efficacy. Furthermore, mastery experiences and social persuasions were the best predictors of academic self-efficacy among African-American students.

In another study, Saracaloğlu and Dinçer (2009) found a significant correlation between self-efficacy and academic motivation. This suggests that individuals who are motivated to achieve academically also tend to have strong self-efficacy. Similarly to other studies, Carroll et al. (2009) discerned the relationship between academic self-efficacy and achievement in their study. These authors also posit that delinquency moderates the relationship between these variables. This is to say, students with low academic self-efficacy tend to display delinquent behaviour such as stealing and drug use which, in turn, hampers academic achievement.

While other studies have focused on the relationship between factors within the individual and academic self-efficacy, Carroll et al.'s (2009) reference to delinquency illuminates the role of other factors in the social context that somehow influence or are influenced by academic self-efficacy. The current study also acknowledges the roles played by the social context. More specifically, this study is concerned with the extent to which the socio-cultural context is linked to academic self-efficacy. In the study, variables of interest within the socio-cultural context are ethnic identity and collective self-esteem.

It is important to note that this study does not seek to make causal inferences about the relationships between ethnic identity, collective self-esteem and academic self-efficacy. Rather, the interest is in whether these variables correlate with one another. Correlation primarily refers to the relationship between variables, such that an increase in one variable is associated with an increase in another. The latter refers to a positive correlation, whereas a negative correlation involves an increase in one variable being associated with a decrease in

another (Black, 1999). The nature of the relationships is considered in the following subsections.

3.3 COLLECTIVE SELF-ESTEEM AND ACADEMIC SELF-EFFICACY

Leary and Baumeister (2000) define self-esteem as primarily relating to judgements about the self. Such judgements include an affective component, which means that they are accompanied by positive or negative feelings. Downie et al. (2006) further distinguish between personal and collective self-esteem. According to these authors, personal self-esteem, on the one hand, refers to the evaluation of oneself as an individual within a broad social context. Collective self-esteem, on the other hand, refers to the evaluation of the value of the social group to which one belongs (Downie et al., 2006). This means that collective self-esteem is related to self-evaluation particularly as a member of a certain social group. Collective self-esteem takes into account the fact that an individual is essentially embedded in a social context comprising various social groups. On this basis, membership to any social group is associated with feelings of esteem with regard to the group (Turner, 1982).

According to Crocker (1999), self-esteem is not necessarily stable across contexts, but differs according to each situation. Furthermore, various features in each situation result into the continuous construction of self-esteem in each situation. The exception, Crocker argues, is the denigration of self-esteem resulting from discrimination. In such instances, a member of a social group that is being discriminated against carries the “collective representations” (p. 89) or stereotypes associated with his or her group into other situations. These collective representations may be made relevant by the often subtle features of each situation. In this regard, a given situation may consist of various factors that draw attention to stereotypes held

against a member of a certain group, thereby contributing to the perceived stigmatisation of the individual.

This view suggests that feelings of inferiority regarding the ingroup are often a result of discrimination in a larger context, which may negatively affect self-esteem in situations containing features that activate the individual's self-conceptualisation as a subject of discrimination. In such instances, Crocker (1999) argues, one may develop low self-esteem following the assumption that one is being rejected by virtue of membership to a certain group. Downie et al. (2006) also associate self-esteem with the acceptance or rejection of an individual on the basis of his or her membership to a certain group. Personal esteem is regarded by these authors as the result of the subjective perception by an individual as to whether he or she is evaluated desirably by others. From this perspective, collective self-esteem is related to the extent to which one perceives one's social group as being favourably or unfavourably evaluated by others. In the context of the current study, collective self-esteem is used to refer to feelings of esteem relating to membership to an ethnic group.

It is important to place emphasis on perceptions, as collective self-esteem is subjective in nature and may differ across members of one social group. This has led to self-esteem being described as a "sociometer" (Leary & Baumeister, 2000, p.2). In view of this, Leary and Baumeister also state that self-esteem does not only involve detached self-evaluation, but essentially involves an affective component. This means that individuals do not only cognitively evaluate their performance as either positive or negative, but also concurrently develop positive or negative feelings, which are based on the individuals' appraisal of their own performance. Leary and Baumeister (2000) add that self-esteem is not sought after for its own sake, but because it serves as a monitor of the perceived value that is attached to an individual by others, which also affects one's inclusion in a group. In the same manner, it could be argued that low collective self-esteem stems from the perception that

one's social group is not positively evaluated by other groups. For the member of the group that is being negatively evaluated, this also means that one's group is not valued and its members cannot form meaningful relationships with others.

Several studies have investigated the relationship between self-esteem and discrimination. Major et al. (2003) investigated the effects of covert, overt and no prejudice on self-esteem. Overt prejudice refers to open, blatant displays of discrimination, whereas covert prejudice is more subtle. In the demonstration of overt prejudice, female participants were required to demonstrate creativity during their participation in a task. They were told that the evaluator of their creative work is male and prejudiced against women. In the covert prejudice condition, however, participants were simply told that the male evaluator evaluates men and women differently (Major et al., 2003). Results indicated that covert prejudice had more negative effects on the female participants' personal self-esteem than overt. The justification for this is that covert prejudice is more ambiguous in its delivery and, therefore, participants are slightly uncertain as to whether the negative feedback is, indeed, due to their poor performance. With overt prejudice, however, poor evaluation could be justifiably attributed to the evaluator's prejudice. On this basis, individuals' self-esteem was protected by their perception that negative feedback was largely influenced by the evaluator's prejudiced attitudes.

The above results are indicative of the effects of prejudice on personal self-esteem only, and may not have similar implications for the female participants' collective self-esteem. In a study by Spencer-Rodgers and Collins (2006) involving Latinos, findings suggested that perceptions of negative regard for one's ingroup by others were associated with strong identification with the ingroup, as well as high self-esteem. Spencer-Rodgers and Collins hypothesised that although negative regard for the ingroup held by others can negatively influence personal self-esteem, the former's effects are buffered by the

individual's self-protective mechanisms, such as resilience, that enhance personal self-esteem. This leads to the enquiry as to whether the individual adopts equally protective mechanisms to buffer negative evaluation of the ingroup by others in order to maintain high collective self-esteem. This view is shared by Sherman and Cohen (2006), who posit that people tend to deal with threats to their self-concept by dismissing the threat as insignificant or through self-affirmations, in a bid to preserve their integrity.

It is important to bear in mind that collective self-esteem not only includes an individual's perception of how others evaluate his or her group, but also how the individual feels about the group that he or she belongs to (Wiley et al., 2008). In view of this, it could be argued that, similarly to personal self-esteem, a favourable view of the ingroup may remain intact despite negative evaluation of the group by others, thereby indicating that collective self-esteem is not wholly dependent on others' evaluation. This stance serves to dismiss the pervasive association of prejudice with low collective self-esteem. Prejudice may be associated with only a partly compromised sense of collective self-esteem, whereby the individual maintains high regard for the group despite negative evaluations by others, as discussed above. Prejudice may be either covert or overt, as described above. This means that, in practical settings, it may prove difficult to study the concept, as respondents in such a context would be less likely to detect covert prejudice. This, in turn, would prevent any reasonable conclusions about the relationship between prejudice and collective self-esteem as it manifests in the social context.

Wiley et al. (2008) investigated the extent to which evaluations by others affect individuals' regard for the ingroup. These authors used a collective self-esteem scale that would indicate the relationship between 'public regard' and 'private regard' among participants. Public regard, in this case, refers to the evaluation of one's group by others, whereas private regard refers to one's evaluation of the group, both of which form part of

collective self-esteem. Wiley et al.'s findings indicated that second-generation Black participants of Western Indian origin in the USA believed that others evaluated their group negatively. In contrast to their scores on public regard, these participants' scores on private self-regard were considerably high. These results suggested that participants viewed their groups favourably, despite their acknowledgement of negative evaluations of the ingroup by the outgroups. Wiley et al. (2008) refer to this phenomenon as "double consciousness" (p. 389), wherein the outgroups' unfavourable views of the group are not reflected in the participants' own views of their group.

The above findings suggest that individuals' self-efficacy may not be affected by the outgroups' negative evaluation of one's group. Furthermore, these results would suggest that the participants' self-efficacy is independent of, if not enhanced, by the outgroups' negative evaluations. This view affirms Spencer-Rodgers and Collins' (2006) view that individuals employ self-protective mechanisms to prevent the possibly damaging effects to the self-concept that may occur due to negative evaluations of the ingroup by others. Academic self-efficacy is primarily considered to be personal beliefs about one's capabilities, particularly in an academic context. In view of this, it could also be argued that negative public regard is not necessarily associated with low academic self-efficacy and that it may, in fact, enhance academic self-efficacy, as suggested by Spencer-Rodgers and Collins in their reference to the employment of self-protective mechanisms. This is also similar to Eccles et al.'s (2006) suggestion that learners who experience discrimination may adopt an agentic perspective in reaction to the latter, wherein they seek to defy stereotypes by, for instance, acknowledging the importance of education and showing commitment towards their academic pursuits.

It is important, however, to note that overall collective self-esteem is not only determined by public regard and private regard. This means that the findings cited above do not necessarily mean that collective self-esteem, as a whole, has no bearing on academic self-

efficacy. The collective self-esteem scale used by Wiley et al. (2008) consists of four subscales whose combined results yield an overall score on collective self-esteem. These are membership self-esteem, importance to identity, private collective self-esteem and public collective self-esteem (Luhtanen & Crocker, 1992). In this regard, private regard referred to by Wiley et al. (2008) is similar to private collective self-esteem, whereas public regard refers to public collective self-esteem. In their study, Wiley et al. excluded membership self-esteem and only focused on the remaining three subscales.

Wiley et al.'s (2008) findings suggest that, in the context of this study, there would be a negative correlation between public collective self-esteem and private collective self-esteem, a negative correlation between public collective self-esteem and academic self-efficacy and, possibly, a positive correlation between private collective self-esteem and academic self-efficacy. In view of this, the current study will also involve an examination of the relationship between each of the four subscales of the collective self-esteem scale and academic self-efficacy. This is to ensure that, in addition to the analysis on collective self-esteem and academic self-efficacy, the study further examines which of the collective self-esteem subscales has a stronger correlation with academic self-efficacy than the others. The analyses of the relationships between the subscales of the collective self-esteem scale in use and academic self-efficacy further serves to acknowledge collective self-esteem as a multi-dimensional construct.

In addition to the analysis of the collective self-esteem subscales, the current study will primarily examine the relationship between the overall score on collective self-esteem and academic self-efficacy. This is especially considering Steele and Aronson's (1995) argument that individuals generally fear living up to negative stereotypes about their ingroup; this phenomenon is referred to as 'stereotype threat'. In their study, these authors concluded that individuals tended to perform poorly when they were aware that poor performance would

reinforce the negative stereotypes held about the group's abilities. This fear and concurrent realisations of pervasive negative evaluations by the outgroups could lead to self-doubt and, consequently, low academic self-efficacy in an academic context. Woolf et al. (2008) carried out a similar study during which the possible effects of stereotype threat were investigated among Asian medical students. The study revealed that both the students and academic staff were aware of pervasive stereotypical assumptions held regarding Asian students. Certain teachers admitted to interacting differently with the Asian students, whereas some of these students felt that the teachers did not interact with them in a meaningful way due to the stereotypes. In such situations, Woolf et al. argue, the teachers' stereotypical assumptions may hamper learning, as they feel less positive about teaching those students. In the same manner, the students' awareness of the stereotypical assumptions may produce negative feelings about the learning environment and negatively affect their ability to learn. This may, in turn, negatively affect the students' academic self-efficacy, since the stereotypical assumptions and resultant negativity among these students occur within an educational context.

3.4 ETHNIC IDENTITY AND ACADEMIC SELF-EFFICACY

An 'ethnic group', according to Ball et al. (1984), is used to refer to a group of people whose identification as a group is based on a common language and associated traditions, especially following the realisation that there are different cultural practices associated with each group. This definition is similar to various authors' definition of an ethnic group (e.g., Berry et al., 1992; Eriksen 1993). Similarly, Maré (1992) states that a group can be founded on cultural symbols such as language, religion or way of dress, which may give individuals a sense of community.

Race generally refers to distinct physical features between individuals, for example, skin colour. Neff (2007) argues that in the South African context, individuals within a given racially homogenous group can further be differentiated according to their native languages. The latter, Neff argues, point to a shared history and culture among the native speakers of that particular language. In this regard, in the South African context, ethnicity encompasses both racial and linguistic differentiation, wherein members of a given race group can further be distinguished from one another on the basis of their native languages, which subsequently lead to their definition as distinct ethnic groups. This is especially considering the distinct cultural practices associated with each language group and the fact that language is also acknowledged as one of the primary subnational identities for many South Africans (Afolayan, 2004; Alexander, 2001; Grossberg, Struwig, & Pillay, 2006; Magubane, 1998).

Maré (1992) further states that an ethnic group refers to a group of individuals who acknowledge that they belong together and recognise this interrelationship as a legitimate basis for their identity. In view of this, in the context of this study, ethnic identity refers to the tendency by individuals to define themselves in relation to the broader social context in terms of their membership to certain ethnic groups. Furthermore, Oyserman (2008) asserts that ethnic identity is not a one-dimensional concept, but primarily involves one's self-identification as a member of the ingroup, as well as perception of the ingroup as a distinct entity from broader society.

Tajfel (1981) states that an individual is, at any given time, a member of some or other social group. Each of these memberships contributes to his or her image and, consequently, self-definition. This view further draws attention to ethnic identity as, primarily, a function of self-definition according to group membership. Ethnic identity as an important component of self-definition, as shown above, seems to play a significant role in

the structure of the self-concept. The self-concept, in this regard, refers to all factors that contribute towards an individual's self-definition (Baron & Byrne, 2003).

Jackson and Bracken's (1998) view of the self-concept as a multi-dimensional concept is evident in their use of a global self-concept scale that involved constructs relating to the participants' self-definition in various contexts such as academic, affective, social and family contexts. This view acknowledges the fact that various contexts can bring about any of the dimensions of the self-concept referred to above. In addition, the interaction between any of the contexts can, in turn, elicit various self-definitions. In this regard, academic self-efficacy could be considered salient in an academic context, whereas ethnic identity is likely to be salient in a social context. It could be argued, however, that a multicultural academic setting could simultaneously elicit salient self-definitions that are pertinent to both an academic and social context. A multicultural setting, in this instance, refers to a racially and ethnically diverse environment that brings about or gives rise to cultural diversity. It is on the basis of these apparent interactions that the current study seeks to investigate the nature of the relationship between ethnic identity and academic self-efficacy. The current study will examine the relationships between these variables among individuals in a racially and ethnically diverse HLL. This is especially considering the effects of prejudice on other aspects of an individual's self-concept.

Eccles et al. (2006) carried out a study to determine if racial or ethnic discrimination affects the academic self-efficacy of African-American students. In addition, the study sought to determine if ethnic identity acted as a buffer against the possibly harmful effects of racial discrimination. These authors assume that racial or ethnic discrimination is capable of hindering an individual's psychological development. Psychological development and well-being, in turn, have a direct bearing on the individual's self-concept. Impaired self-esteem that occurs as a result of discrimination may have a negative effect on self-efficacy,

particularly academic self-efficacy in an academic context. This notion stems from Spencer-Rodgers and Collins' (2006) assumption that self-efficacy is context-specific. According to this view, different types of contexts may require an individual to master certain tasks, which then forces the individual to develop self-efficacy regarding tasks that are related to a specific context.

In relation to the above, Verkuyten (2009) argues that multiculturalism tends to threaten individuals' self-identity, with individuals in a multicultural context inclined to develop a strong ethnic identity. This, it is argued, may be due to subjective perceptions of the threat of multiculturalism to these individuals' identities. This phenomenon may explain the reported salience of ethnic identity among minority groups in various studies, wherein they may believe that their identity is under threat (Abu-Rayya, 2006; Umaña-Taylor, 2004).

Korf and Malan (2002) conducted a study on the perceived threat to ethnic identity among a White Afrikaans-speaking sample in post-apartheid South Africa. Respondents for whom ethnic identity served as a central identity and carried a lot of significance in their self-identification, also considered the post-apartheid socio-political context as a significant threat to the continuity of Afrikaners as a distinctive ethnic group. In contrast, respondents who did not categorise themselves as having the Afrikaner ethnic identity as central to their self-definition did not experience threat to the distinctive continuity of the group. The study was conducted against the backdrop of major changes in the socio-political context following the dissolution of the apartheid government, which saw Afrikaans-speaking Whites moving from a privileged position as a political majority to a less privileged one as a political minority, thus leaving them with less political and social power (Korf & Malan, 2002). These findings are consistent with Verkuyten's (2009) above-mentioned study.

Verkuyten (2009) further states that a strong ethnic identity is associated with "global self-feelings" (p. 424), referring to individuals feeling good about themselves in general.

Pilegge and Holtz (1997) further concluded that a strong social identity, in conjunction with high self-esteem, is associated with high achievement and self-set performance standards by the individual. In contrast, individuals with high self-esteem and a weak social identity in Pilegge and Holtz's study were found to be relatively less capable of achievement. This further alludes to a discernible link between social identity and self-efficacy, particularly academic self-efficacy, in an educational context.

The association between the context and type of self-efficacy led Eccles et al. (2006) to conclude that there are two possible ways of coping with discrimination. These are the agentic perspective and the development of oppositional identities amongst victims of discrimination. On the one hand, the agentic perspective refers to the emphasis on education among minority groups, with the assumption that it is a potent weapon against discrimination. On the other hand, the development of oppositional identities occurs when learners who experience discrimination in academic settings detach themselves from academic activities with the assumption that they are likely to experience discrimination in future academic and occupational contexts.

Similar trends have been observed in the South African context, wherein a lot of importance is generally attached to education among all South Africans. Despite this, statistics show that in 1994, only 16-21% of Black learners and 22% of Coloured learners reached Matric, as compared to 68.8% of Indian learners and 72.5% of White learners (Strauss, Plekker, Strauss, & van der Linde, 1994). Recent statistics show that 23.2% and 27.3% of 17 year old Black and Coloured children, respectively, do not attend school. This is in contrast with 14.62% and 14.0% of Indian/Asian and White 17 year-olds, respectively, who do not attend school. Furthermore, 16.6% of 16 year old Black learners, followed by 13.6% of Indian/Asian learners, 10.7% of Coloured learners and only 6.6% of White learners are not in school (Statistics South Africa, 2008). Differences in socio-economic conditions

have been largely deemed responsible for such discrepancies, as they negatively affect access to education, resources and facilities particularly in schools that are located in poor communities (Spren & Vally, 2006).

Crowder and South (2003) add that adolescents' exposure to poor socio-economic conditions in a given neighbourhood is likely to lead to limited educational aspirations and, therefore, contribute to the drop-out rate. This view stems from the assumption that in such neighbourhoods, adolescents may be largely exposed to residents with limited education and poor socio-economic conditions. This, according to Crowder and South, leads to adolescents adopting low expectations for themselves following their observation of neighbourhood norms and, ultimately, failing to pursue academic achievement and being more likely to drop out of school. In relation to this, Van der Berg (2008) posits that the South African education system has inherited the inequality of resources between Black and White schools as previously advocated by the apartheid government. This has negatively affected the current quality of education in poorly-resourced schools that are primarily in poor Black communities (Marais, 1995; Yamauchi, 2005).

In view of the above, poor school resources coupled with poor socio-economic conditions could lead to learners setting very low performance standards for themselves, which is possibly concurrent with low academic self-efficacy (Pilegge & Holtz, 1997). This goes against Eccles et al.'s (2006) argument that a sense of belonging is likely to foster commitment to academic achievement and, possibly, academic self-efficacy. A sense of belonging, in this instance, refers to "feelings of relatedness" (Eccles et al., 2006, p. 409) to that particular context. According to these authors, learners in poor communities, who are also predominantly Black, would be expected to have a strong sense of belonging in their academic environment since their schools are situated in residential areas that are also predominantly occupied by Blacks (Marais, 1995; Yamauchi, 2005). This sense of

belonging, however, does not seem to positively influence academic achievement among Black learners or result into low drop-out rates among these learners (Statistics South Africa, 2008; Strauss et al., 1994). Rather, poor socio-economic conditions and limited resources in these communities seem to play a significant role in drop-out rates and general academic achievement among these learners.

The development of oppositional identities referred to by Eccles et al. (2006) above may be more applicable in multicultural contexts such as multiracial educational institutions (e.g., schools and HLIs). In such contexts, the sense of belonging could be undermined by real or perceived discrimination on the basis of stable characteristics such as race or ethnicity, thereby leading to a negative self-concept that may hamper academic self-efficacy. Despite this, Eccles et al. conclude that a strong ethnic identity serves as a buffer against the possibly negative effects of racial discrimination on academic self-efficacy. Similarly, Umaña-Taylor and Updegraff (2007) posit that self-esteem, ethnic identity and cultural orientations may be a protective factor against the effects of discrimination and psychological well-being among Latino youth. It is against this backdrop that the current study focuses on ethnic identification as an important variable to study, specifically with regard to its relationship with academic self-efficacy.

The majority of findings linking ethnic identity with academic self-efficacy, self-esteem or other positive aspects of the self-concept focus on the experiences of minority groups in multicultural settings (Abu-Rayya, 2006; Phillips Smith et al., 1999; Spencer-Rodgers & Collins, 2006; Umaña-Taylor & Updegraff, 2007). In the South African context, however, Black South Africans are a majority in the national context, whereas they may be a minority in certain contexts. Similarly, White South Africans are considered a minority, nationally, though they may be a majority in other contexts. In contrast, this study is conducted in a racially, ethnically and culturally diverse HLI that is considered historically

White and, therefore, with White students in the majority and Black students as a minority. Results from this study will, therefore, give an indication of the salience of ethnic identity and collective self-esteem among respondents in a context that varies from the national racial composition.

In order to gain a better understanding of trends among the various races in the current study, analyses of the results will be grouped according to the respondents' race. In this study, race is defined according to the assumptions of Statistics South Africa (2010) as Black, White, Indian and Coloured. This will enable an observation of the significance attached to ethnic identity, collective self-esteem and academic self-efficacy by members of different races. In addition, the current study will help determine the existence of any relationships between the three variables, as well as whether any of the relationships, or lack thereof, manifests differently for members of the various race groups.

A study by Franchi and Swart (2003) found that tertiary education students still hold on to racial identities, as defined by the apartheid government, in present-day South Africa, though implicitly. There is, however, an acknowledgement of more than one identity, whereby South Africans may simultaneously hold a national South African identity as well as various racial identities based on membership to a given race group. This view is also acknowledged by Gong (2007), who states that in multicultural societies, individuals tend to identify with more than one social group. Gong's study showed that Asian-Americans, African-Americans and White Americans held independent ethnic identities, as well as an interdependent national identity as Americans.

Despite Franchi and Swart's (2003) above-mentioned observations regarding the importance attached to racial and national identities, the existence and salience of ethnic identities in South Africa cannot be denied. During the apartheid era, the then government's tendency to emphasise ethnic differentiation was demonstrated through, among others,

Afrikaner nationalism, as well as the establishment of Bantustans for various Black South African ethnic groups (Alexander, 2001; Bekker, 1993). Bantustans refer to homelands that were demarcated according to ethnicity and recognised as self-governing independent states by the South African government (Bantu Homelands Constitution Act of 1971; Promotion of Bantu self-government Act of 1959). These measures undeniably fuelled strong ethnic identification in that era (Kiguwa, 2006). Khunou (2009) further argues that the establishment of the Bantustans were a ploy by the apartheid government to prevent a united front against the apartheid system by the Black majority.

Studies support the view that ethnicity is still a significant form of self-identification for many South Africans. A study carried out in 2004 (FutureFact PeopleScape survey, as cited in Alexander, 2006) showed that self-identification by means of ethnicity is most pronounced among Black South Africans, in comparison with other races, and is surpassed only by a national South African identity and an African identity. Similarly, the SASAS of 2003 (as cited in Roefs, 2006), indicated that language and race identities were equally strong forms of group identity, particularly among Black South Africans. These trends highlight the need to examine the salience of ethnic identity resulting from identification with a given ethnic group, as well as how these influence individual functioning, especially in ethnically or racially diverse contexts that give rise to prejudice and discrimination. In the current study, academic self-efficacy has been identified as an important indicator of individuals' ability to succeed in an academic environment. In view of these, an investigation into the relationship between ethnic identity and academic self-efficacy in a multicultural HLI will indicate the extent to which individual functioning is related to membership to social groups, as well as the importance attached to such membership by individuals.

Similarly to the collective self-esteem scale, ethnic identity is considered a multi-dimensional concept, as shown by Phinney's (1992) multigroup ethnic identity measure.

This is a widely used ethnic identity measure that involves two subscales that measure ethnic identity search and ethnic identity commitment, respectively. In view of this, the current study investigates the relationship between ethnic identity and academic self-efficacy, as well as the relationship between each of the subscales of the multigroup ethnic identity measure and academic self-efficacy. This is to ensure that, in addition to the analysis of the relationship between ethnic identity and academic self-efficacy, the study further examines which of the measure's subscales correlate more with academic self-efficacy.

3.5 ETHNIC IDENTITY AND COLLECTIVE SELF-ESTEEM

In South Africa, cultural affinity is mainly demonstrated by membership to a particular language group, referred to as an 'ethnic group'. This description also meets various authors' criteria for an ethnic group (Alexander, 2001; Ball et al., 1984; Berry et al., 1992; Maré, 1992). Furthermore, according to Berry et al. (1992), a group constitutes socially interacting individuals who strive to maintain their interaction and whose behaviours are collectively governed by a social structure and set norms. A common ethnicity in the form of extended lineage to an earlier cultural group or common characteristics such as ways of dress or language leads to the description of these individuals as an ethnic group. In addition, these individuals must proclaim identification with the group.

Firstly, ethnic identity refers to the definition of oneself in terms of membership to a certain ethnic group (Aboud, 1981). Secondly, collective self-esteem refers to feelings of esteem related to membership to a certain social group and, in the current study, it will be considered in relation to membership to an ethnic group (Downie et al., 2006). Though distinct, these concepts are both linked to group membership, as ethnic identity is related to

self-identification as a member of an ethnic group, while collective self-esteem follows from the evaluation of oneself with regard to such self-identification.

It can be argued that the strength of an ethnic identity is related to one's commitment to the group as well as practices associated with the ethnic group. Such practices are typically held in high regard by members of the group and may include shared language, values, rites of passage, food and ways of dress (Afolayan, 2004; Berry et al., 1992). In the South African context, language, coupled with race, serves as an important marker of ethnicity (Neff, 2007). In the same manner, Berry et al. (1992) argue that language use and maintenance as a function of ethnic identity is an issue of contention in plural societies. In such instances, a language associated with a given ethnic group may be rendered redundant in favour of another, more dominant language that receives general preference in the broader social context.

Although South Africa has adopted an inclusive linguistic policy that encourages multilingualism in education, a study conducted by McKay and Chick (2001) in three multicultural schools revealed that the use of first languages by Black learners was discouraged in the school environment, in favour of English. The latter was promoted on the grounds that it was "... a unifying force, a vehicle for economic advancement ..." (McKay & Chick, 2001, p. 400) and a resource. In recent media reports, references have been made to learners being discouraged to communicate in their home languages in English-medium schools (Sapa, 2010). The Pan South African Language Board (PanSALB) has expressed concern with this phenomenon, which is said to be prevalent in such schools despite the national inclusive language policy ("Media release," 2010).

Such experiences may reduce the value that individuals attach to their language as an important aspect of their ethnic identification. Non-English speakers may come to value the dominant language in favour of their own. This is evident in a study conducted by

Barkhuizen (2002), which indicated that a sample of high school students preferred English over Xhosa, as a language of learning and teaching and for general use after their high school education. In relation to this, Erez and Gati (2004) posit that attraction to a cultural practice in the macro context, coupled with the perception that one's own cultural practices are irrelevant, reduces the significance attached to the preservation of one's own culture and may, ultimately, lead to a less salient ethnic identity.

Kiguwa (2006) refers to language as not simply a communication tool, but essentially a symbolic system through which we construct meanings and representations of ourselves and others. This observation highlights the significance that language holds in individuals' self-definition and self-identification. The devaluation of one's language in the public sphere, therefore, has negative implications on the identity of the group members who have come to define themselves and relate to various aspects of the external environment through their language.

Umaña-Taylor (2004) posits that there is a proven link between individuals' self-esteem and ethnic identity, both of which form part of the self-concept. This observation points to the fact that the various components that make up the self-concept influence one another in many ways. The self-concept refers to all aspects that contribute to self-identification (Baron & Byrne, 2003). If Umaña-Taylor's (2004) above-mentioned assumption is true, then collective self-esteem would also be affected by the salience of ethnic identity or lack thereof. This is especially considering the fact that both are influenced by group membership. As a result, language maintenance in plural societies, as referred to by Berry et al. (1992) above, may bring about a heightened sense of ethnic identity, as well as collective self-esteem. In contrast, failure to realise the value of one's language in the broader social context may compromise collective self-esteem and, possibly, ethnic identity.

In her study, Umaña-Taylor (2004) found no significant relationship between ethnic identity and self-esteem amongst Latino students from a predominantly Latino school, a predominantly non-Latino school and a balanced Latino/non-Latino school. In contrast, significant differences were found between students from the three schools with regard to ethnic identity. Students attending a predominantly non-Latino school scored significantly higher than the other two groups on levels of ethnic identity. Umaña-Taylor (2004) concludes that ethnic identity for Latino students, regardless of school context, was relatively high when compared to previous studies with White students. This supposedly highlights the fact that the consistent salience of ethnic identity among Latinos in various contexts is fostered by their status as a minority in the broader social context.

In the South African context, Umaña-Taylor's (2004) findings would suggest that, in comparison with other racial groups, Black South Africans would have a less salient ethnic identity due to their status as a national majority. In the same manner, her study would posit that Black South Africans would have a more salient ethnic identity in a social context in which they are a minority. It is argued, however, that such a justification is not applicable in the South African context since Black South Africans, although a national majority, have proved to have more salient race and ethnic identities in previous studies, which is possibly due to their previously marginalised status in the broader social context (FutureFact PeopleScape survey, as cited in Alexander, 2006; Roefs, 2006).

It could be argued that the marginalisation of some groups in the broader social context may inadvertently cultivate a strong sense of identity among the group's members. This sect may include individuals who realise the value of their identification with the group and continue to show commitment to the group, despite this marginalisation. Furthermore, strong identification may also occur in resistance to the group's marginalisation by the outgroups.

According to Turner (1982), a positive social identity is fostered by, among others, favourable comparisons with other social groups. Turner further posits that unfavourable comparisons may lead to feelings of low prestige and, consequently, a negative social identity. From this view, individuals who have low regard for their ingroup as a result of the outgroups' perceptions may also concurrently have low ethnic identity and, possibly, low collective self-esteem. This assumption, however, may not hold true for individuals with a strong ethnic identity that is independent of the outgroups' negative perceptions. These individuals may have already made unfavourable comparisons of their group with others, especially if the group is openly marginalised in the broader social context. Despite this, such individuals may maintain a strong ethnic identity as an expression of commitment to the group. Spencer-Rodgers and Collins (2006) also suggest that the devaluation of one's ethnic group by the outgroups is likely to enhance the salience of ethnic identity. This means that the individual firmly incorporates ethnic identification into his or her self-concept and is more likely to define himself or herself in terms of ethnic group membership, in spite of the group's devaluation by others. An instance of this in the South African context is Korf and Malan's (2002) study, in which they argue that White Afrikaans-speaking South Africans maintained a salient ethnic identity by isolating themselves from the negative aspects associated with their group by the outgroups and focusing on positive aspects of the ingroup.

Similarly, low regard for the ingroup by members of the outgroups may not negatively affect overall collective self-esteem. This is especially considering the fact that collective self-esteem is not considered a one-dimensional concept, as it incorporates both the outgroups' perceptions of the group, as well as the ingroup members' own evaluation of the group (Wiley et al., 2008). This trend is evident in a study by Wiley et al. indicating that, for a certain marginalised group, private regard for the ingroup remained high despite the

ingroup members' awareness of negative evaluations of the ingroup by members of the outgroups.

The complexities of the relationships between prejudice, ethnic identity and collective self-esteem as described above are evident. This is especially considering observations throughout this literature review consistently showing that ethnic identity and collective self-esteem are, to a large extent, mediated by prejudice. In a practical context, prejudice may be covert and, therefore, difficult to identify and study (Baron & Byrne, 2003). Therefore, for the purposes of this study, prejudice will be disregarded, and only the relationship between ethnic identity and collective self-esteem will be considered.

3.6 CONCLUSION

This chapter includes a review of literature relating to the three variables in this study, which are, academic self-efficacy, ethnic identity and collective self-esteem. The chapter began with a discussion of academic self-efficacy, its importance and various intrapersonal and academic factors that may contribute to its salience. This was followed by an investigation into identified factors within the socio-cultural context that may be related to academic self-efficacy, which are ethnic identity and collective self-esteem. The relationships between these variables and academic self-efficacy were examined, followed by a discussion on the nature of the relationship between ethnic identity and collective self-esteem.

In the next chapter, the research methodology used in the current study will be discussed.

CHAPTER 4

RESEARCH METHODOLOGY

4.1 INTRODUCTION

The purpose of the current study was to investigate the relationships between perceived ethnic identity, academic self-efficacy and collective self-esteem. Three scales were used to measure the salience of each of the variables among the respondents. In addition, the study sought to determine if there are any differences with regard to the salience of the variables and their relationships between members of different races. As a result, any emerging differences or similarities were observed between Black and White respondents, as well as differences between results for either race group and those of the overall sample consisting of all race groups that participated in the study. In addition, a survey was used, in which respondents rated themselves on each of the scales on the questionnaire by indicating the extent to which the items on the scales applied to them.

In this chapter, the procedures followed during the course of the study will be discussed. These include the research design used, the variables involved in the study, sampling and data collection procedures, measurement instruments used to measure the variables, as well as the data analysis methods. The chapter concludes with a discussion of the ethical procedures followed in the study.

4.2 RESEARCH DESIGN

In this study, a correlational design was used. The objective of a correlational design is to determine if there is a relationship between two or more variables, such that a change in one

variable is associated with a change in another (Creswell, 2002). In this regard, a positive correlation means that an increase in one variable is associated with an increase in the other, whereas a negative correlation means that an increase in one variable is associated with a decrease in the other. On this basis, a correlational design seeks to describe the nature of the relationship between variables (Black, 1999; Creswell, 2002). This study seeks to describe the nature of the perceived relationship between three variables, namely, ethnic identity, collective self-esteem and academic self-efficacy.

Information regarding these perceptions was gathered through the use of a survey. Survey research includes the collection of information from the chosen sample consisting of a large number of people. This information is generally collected through the completion of questionnaires by either the respondents or an interviewer based on the responses given by the respondents (Antonius, 2003). As a result, information gathered from the survey will enable inferences regarding the nature of the correlations between the variables to be made.

4.3 VARIABLES

This study involves an exploration of the relationships between three variables, which are, ethnic identity, collective self-esteem and academic self-efficacy. These variables were discussed at length in chapters 1 and 3 and will only be referred to briefly here.

Firstly, ethnic identity refers to the importance that subjects attach to their self-identification specifically according to membership to an ethnic group (Berry et al., 1992). As a result, it is expected that the differences in the importance attached to respondents' identification as members of various ethnic groups will manifest in the form of different scores on this variable.

In relation to membership to a given ethnic group, collective self-esteem may arise from the comparisons made by an individual between his or her own ethnic group and other ethnic groups (Turner, 1982). These comparisons may result in personal feelings of inferiority or superiority that are dependent on the appraisal of the relative superiority or inferiority of one's ethnic group. As a result, collective self-esteem is related to the evaluation of oneself within the social realm in terms of membership to an ethnic group (Turner, 1982). In this study, collective self-esteem is used to refer to feelings of esteem relating to membership to an ethnic group.

Lastly, academic self-efficacy specifically refers to one's perceptions regarding one's academic capabilities (Chemers et al., 2001).

4.4 HYPOTHESES

Three null and three alternative hypotheses were stated in this study and are listed below. Sub-hypotheses are also stated in this section.

Null Hypotheses

- i. There is no relationship between ethnic identity and academic self-efficacy.
- ii. There is no relationship between ethnic identity and collective self-esteem.
- iii. There is no relationship between collective self-esteem and academic-self efficacy.

Alternative Hypotheses

- i. As ethnic identity increases, academic self-efficacy increases.
- ii. As ethnic identity increases, collective self-esteem increases.
- iii. As collective self-esteem increases, academic self-efficacy increases.

In addition to the main hypotheses stated above, the current study also seeks to determine if there are any differences between Black and White respondents in the manifestation of the relationships described above. In view of this, sub-hypotheses relating to the role of race in mediating the nature of the relationships are stated below.

Null Sub-Hypotheses

- i. The relationship between ethnic identity and academic self-efficacy is the same for Black and White students.
- ii. The relationship between collective self-esteem and academic self-efficacy is the same for Black and White students.
- iii. The relationship between ethnic identity and collective self-esteem is the same for Black and White students.

Alternative Sub-Hypotheses

- i. There is a difference between Black and White students with regard to the relationship between ethnic identity and academic self-efficacy.

- ii. There is a difference between Black and White students with regard to the relationship between collective self-esteem and academic self-efficacy.
- iii. There is a difference between Black and White students with regard to the relationship between ethnic identity and collective self-esteem.

4.5 SAMPLING

Sampling methods can be divided into two major categories, namely, probability and non-probability sampling (Black, 1999). Probability sampling methods involve random sampling, which is a sampling technique that ensures that members of a population have an equal opportunity of being included in a study, thereby ensuring the selection of a representative sample. This has led to probability sampling methods enjoying preference especially in studies that seek to generalise their results to other settings. In contrast, non-probability sampling methods do not involve random sampling and, as a result, may lead to the inclusion of a sample that is not representative of the general population. Despite their disadvantages, non-probability sampling methods may be preferred as they enable the researcher to get a homogenous group of respondents that are appropriate for the nature of the study (Black, 1999).

The population of interest in this study is undergraduate tertiary education students. Convenience sampling, which is a type of non-probability sampling, was used to select respondents who meet these criteria (i.e., undergraduate tertiary institution students). Convenience sampling involves the selection of a group of respondents who volunteer participation in the study or are simply accessible to the researcher and, therefore, convenient to include in the study (Black, 1999; Gay & Airasian, 2003). In the current study, respondents were included simply on the basis of their willingness to participate in the study.

Other requirements were that the volunteers be registered as undergraduate students at the HLI in question. The main criticism against convenience sampling, however, is that it is a major source of sampling bias and may yield an unrepresentative sample, thereby limiting the population to which the results for the study can be generalised (Gay & Airasian, 2003). Despite this argument, the selected sample, drawn by means of convenience sampling, is appropriate since the current study is concerned with the perceptions of tertiary education students at a specific HLI.

4.6 DATA COLLECTION PROCEDURES

Prior to the collection of data, the researcher sought permission in advance from lecturers of several undergraduate courses to recruit students from these courses. Upon approval by the lecturer, a lecture slot was agreed upon by the lecturer and the researcher for the actual recruitment of respondents and data collection. A research assistant then attended one of the lectures, where he or she informed students of that course about the study during the last quarter of the lecture. Following this, those willing to participate in the study were given the questionnaire to complete as well as a consent form. Completed questionnaires were immediately submitted to the research assistant. Secondly, students were also informed of the study in several undergraduate student residences. In these instances, approval was initially sought from the relevant heads of the student residences. Once again, those who agreed to participate in the study were then given the consent form and questionnaire to complete and, subsequently, handed it back to the research assistant. These procedures were repeated until the required sample size was obtained.

4.7 MEASUREMENT INSTRUMENTS

Three measures were included in the questionnaire completed by the respondents. The Multigroup Ethnic Identity Measure (MEIM), the race-specific Collective Self-Esteem Scale (CSES) and the Academic Self-Efficacy Scale (ASE) were used to measure perceived ethnic identity, collective self-esteem and academic self-efficacy, respectively.

Each respondent indicated the applicability of each statement to himself or herself, which resulted in an overall score being assigned to an individual for each measure. In addition, respondents were required to provide biographical information including age, gender and race. This was to enable the researcher to determine any emerging differences between the respondents based on some of these characteristics with regard to their performance on each of the three measures. Ultimately, only race was examined, as age and gender were considered beyond the scope of the current study.

The three measures on which the respondents scored themselves are described in the following subsection.

4.7.1 THE MULTIGROUP ETHNIC IDENTITY MEASURE

The MEIM, used to measure ethnic identity, comprises two factors, namely, ethnic identity search, which consists of a developmental and cognitive component, while ethnic identity commitment entails an affective and attitudinal component (Phinney, 1992). Items 1, 2, 4, 8 and 10 are related to ethnic identity search, while items 3, 5, 6, 7, 9, 11 and 12 are related to ethnic identity commitment. Items 13, 14 and 15 are used as a means to categorise individuals in terms of their ethnicity (See Appendix A). Responses range from 1 to 4 and the overall score on the MEIM for an individual can be determined by obtaining the mean for

each respondent's score (Phinney, 1992). A high score on the measure indicates a high level of ethnic identity and vice versa (Romero & Roberts, 1998).

The reliability of a measure refers to its ability to consistently measure a trait or phenomenon over time (Trochim, 2001). According to Phinney (1992), the MEIM has shown consistent reliability, typically with alphas above 0.80 across respondents from various ethnic and age groups. In the current study, Cronbach's alpha coefficient was 0.86. This indicates that the scale is reliable, particularly with the sample in this study, since a Cronbach value of 0.7 or more is preferred (Pallant, 2001).

4.7.2 THE RACE-SPECIFIC COLLECTIVE SELF-ESTEEM SCALE

The race-specific CSES was used to measure respondents' perceived level of collective self-esteem. The race-specific version, used in the current study, requires respondents to base their responses on their membership to a particular race or ethnicity (Crocker, n.d.a). This measure comprises four subscales, namely, membership self-esteem, private collective self-esteem, public collective self-esteem and importance to identity (See Appendix B). Items 1, 5, 9 and 13 are related to membership self-esteem. Items 2, 6, 10 and 14 are related to private collective self-esteem. Items 3, 7, 11 and 15 are related to public collective self-esteem. Lastly, items 4, 8, 12 and 16 are related to the importance attached to a given identity (Crocker, n.d.b).

Luhtanen and Crocker (1992) have reported alpha coefficients of between 0.7 and 0.8, which is considerably high. In the current study, however, the overall reliability of the CSES was relatively low, as shown by the Cronbach alpha coefficient of 0.344. Greater reliability was shown by the four subscales of the CSES with a Cronbach value of 0.60. This result means that, as a whole, the CSES does not consistently measure collective self-esteem,

particularly in this study. The subscales, however, are more consistent than the overall CSES in measuring membership self-esteem, private collective self-esteem, public collective self-esteem and importance to identity, respectively.

4.7.3 THE ACADEMIC SELF-EFFICACY SCALE

The ASE was used to measure academic self-efficacy (Chemers et al., 2001). The measure comprises eight items that require respondents to indicate their confidence in their abilities, which are essentially related to academic performance (See Appendix C). The items are related to general perceived academic ability and include tasks and skills related to academic achievement such as note taking, test taking, writing abilities and scheduling of tasks.

Chemers et al. (2001) have reported a considerably high Cronbach alpha coefficient of 0.81. In the current study, the scale has shown good reliability, with a Cronbach alpha coefficient of 0.74. This means that the ASE can consistently assess the level of academic self-efficacy among respondents.

4.8 DATA ANALYSIS METHOD

Multiple regression analysis was used to analyse the data, as it is based on correlation. Whereas the latter is primarily concerned with the relationship between at least two variables, multiple regression explores the relationship between one dependent variable and two or more independent variables (Creswell, 2002; Pallant, 2005). This is to say, multiple regression is concerned with the extent to which two or more predictors or independent variables are able to predict the dependent variable (Pallant, 2001).

In the SPSS analysis for this study, perceived ethnic identity and collective self-esteem are specified as predictors, whereas perceived academic self-efficacy is specified as a dependent variable. Although references are made to prediction, no assumptions about causal relationships between the variables are made. This study does not involve active control or manipulation of any of the variables by the researcher, which would lead to causal inferences. Rather, the study involves the observation of pre-existing characteristics, as well as the nature of the relationships between these, thereby leading to inferences about correlation (Black, 1999). On this basis, multiple regression analysis will examine the strength with which each of the independent variables influences the dependent variable (Foster, Barkus, & Yavorsky, 2006). In addition, the relationship between the two independent variables will also be examined. As a result, interpretation of the results will include an observation of the relationships between all three variables.

As described above, the first multiple regression analysis involved ethnic identity and collective self-esteem as predictors of academic self-efficacy. In this instance, ethnic identity was measured through the MEIM, while the CSES was used to measure collective self-esteem. In addition, the subscales for the MEIM and the CSES were, respectively, also specified as predictors in subsequent analyses, with academic self-efficacy as the dependent variable. Reasons for the use of these subscales as predictors are specified below.

A scale or measure generally measures a particular construct and, therefore, consists of various items that ideally represent the construct that the measuring instrument, as a whole, intends to measure (Black, 1999). Furthermore, these items may be grouped according to the different constructs that they are related to. These groupings suggest that each subscale within an overall measure assesses or measures a distinct construct (Black, 1999). Despite this apparent distinction between the subscales, the assumption is that they all contribute adequately to the measuring of the main construct that the overall measure is concerned with.

In view of the above, each of the subscales for the MEIM and the CSES were also subsequently specified as predictors to determine the extent to which each of the constructs measured by those subscales correlated with academic self-efficacy. This will enable the researcher to further draw conclusions about correlations between academic self-efficacy and the specific constructs that each subscale measures. This is especially considering the notion that, for instance, each MEIM subscale is still related to the overall construct measured by the MEIM, namely, ethnic identity. Similarly, each of the subscales of the CSES is related to the latter's overall construct, namely, collective self-esteem. Taking into account the undeniable link between the overall measures and their respective subscales highlights the fact that the use of these subscales as predictors is still consistent with the initially stated hypotheses. In this regard, ethnic identity and collective self-esteem are the all-encompassing variables, with the subscales as derivatives of these overall constructs.

The multiple regression analysis described above was run for all 144 respondents in the main analysis. In addition to this, multiple regression analyses were run for Black and White respondents, respectively, in order to determine if the relationships between the three variables differed for Black and White respondents. Eight of the respondents, whose race was classified as "Other", Coloured or Indian, were not included in this race-based analysis. This is because the number of respondents in this group, at only eight, is too small and does not meet the minimum requirements for a multiple regression analysis (Harris, 1985; Howell, 2002; Tabachnick & Fidell, 1983). Furthermore, gender and age differences between the respondents were also not taken into account in the analysis, as these factors are beyond the scope of the current study. The multiple regression analysis was preceded by the subjection of data to various statistical tests to determine if the data meets the assumptions for a multiple regression analysis. Evaluation of these assumptions is presented in the section below.

4.9 EVALUATION OF ASSUMPTIONS FOR MULTIPLE REGRESSION ANALYSIS

In this section, various aspects of the study are evaluated in order to determine the appropriateness of a multiple regression analysis. In this regard, the researcher will present the general assumptions of multiple regression and also examine whether the current study, especially the data, meets those assumptions, thus indicating whether or not multiple regression analyses may be run. Firstly, sample size as the basic requirement of a multiple regression requirements will be discussed, taking into account the various analyses that will be run in this study, including the overall sample of 144 respondents, as well as the separate race-based analyses including Black and White respondents, respectively.

Secondly, a presentation of statistical analyses will follow, showing the current data's performance with regard to assumptions relating to multicollinearity, normality, linearity, homoscedasticity, independence of residuals and outliers. As already discussed in this chapter, the current study will examine the relationships between the ASE score and the overall scores on the MEIM and the CSES, respectively. This analysis will be run for the overall sample and repeated separately for the Black and White samples. In addition, the relationship between each of the MEIM subscales and the ASE, as well as between the CSES and the ASE will be examined. Once again, these analyses will be run for the overall sample, as well as the Black and White samples, separately. In this regard, the extent to which the various samples included in this study meet the assumptions of multiple regression will also be examined. This means that the overall sample will be examined with regard to its ability to meet the various multiple regression assumptions under three conditions. Firstly, the overall sample's ability to meet these assumptions will be examined with the MEIM and the CSES as independent variables, secondly, with the MEIM subscales as independent variables and, thirdly, with the CSES subscales as independent variables. These procedures will be

repeated for the Black and White samples separately. Lastly, a sub-section on outliers will follow, indicating any resultant outliers for the three overall measures, namely, the MEIM, the CSES and the ASE.

4.9.1 SAMPLE SIZE

In the current study, the ASE will be consistently used as a dependent variable, whereas the overall MEIM and CSES will be used as predictors. In addition, each of the subscales of the latter measures will also be used as predictors in separate analyses.

Tabachnick and Fidell (1983) suggested a formula to be used to meet sample size requirements, which would ideally enable the generalisation of results to the rest of the population from which that particular sample was drawn. According to the formula, $N > 50 + 8(m)$, with 'N' referring to the sample size and 'm' referring to the number of independent variables in the study. On the basis of the formula, this particular study would require a sample size that is greater than 66 since there are two independent variables for the overall sample analysis. In this study, the overall sample size is 144 and, therefore, far above the minimum required. This means that Tabachnick and Fidell's requirement for the overall sample size of 144 in this study has been met. For the separate race-based analyses, the sample size for Black respondents is 81, whereas there are only 55 White respondents. In this regard, the White sample size of 55 would fall short of Tabachnick and Fidell's (1983) requirement, meaning that the sample does not meet the requirements for a multiple regression analysis.

In contrast, Harris (1985) proposes that the sample size (N) for a multiple regression analysis must exceed the number of predictors (p) by at least 50. Taking this into account, following Harris' proposal would mean that for the two overall measures, a sample size of at

least 52 is required. This would be suitable for the overall sample size in this study, which is 144. This means that all the sample sizes of 144 for the overall analysis, as well as 81 and 55 respondents for the Black-only and White-only samples, respectively, meet the requirements for multiple regression analyses. Of the two measures, the CSES, with four subscales, has more subscales. In this regard, the analysis involving the use of the CSES subscales as predictors would require a sample size of at least 54. In this regard, all three sample sizes, once again, meet the requirement for multiple regression analyses.

Other authors have suggested the formula: $N \geq p + 40$, with N referring to the sample size and p to the number of predictor variables (Howell, 2002). In relation to this study, this formula would require a sample size of at least 42 for the overall analyses involving the two overall measures as predictors. This would also be suitable for the race-based analyses, since both the Black and White samples exceed 42. Furthermore, both these samples, as well as the overall sample of 144, would be suitable for the multiple regression analyses involving either the four CSES subscales or the two MEIM subscales as predictors since, in these analyses, a sample size of at least 44 and 42, respectively, is required.

The discussion above shows that all the three different samples in this study meet the basic requirements for sample size when a multiple regression analysis is conducted.

4.9.2 EVALUATION OF ASSUMPTIONS FOR OVERALL MULTIPLE REGRESSION ANALYSIS WITH OVERALL MEIM AND CSES – OVERALL SAMPLE

4.9.2.1 Multicollinearity

Collinearity refers to instances when independent variables correlate highly with one another (Howell, 2002). The main objective of avoiding collinearity between independent variables is so as to ensure that each variable measures a distinct construct that justifies the inclusion of that variable in the analysis.

As shown in Table 4.1, the correlation between the overall MEIM score and the overall CSES score is 0.529. According to Pallant (2001), correlation values of 0.7 or higher between the independent variables denote a correlation that is too high, referred to as “multicollinearity”, in which case at least one independent variable would have to be discarded from the analysis. In this instance, however, a correlation of 0.529 between scores on the MEIM and the CSES means that the correlation between these independent variables is not too high. This means that all of the independent variables can be retained in the study and multiple regression analysis can be used.

TABLE 4.1: CORRELATION BETWEEN INDEPENDENT VARIABLES

Correlations

		AS Score	MEIM Overall Score	CSES Overall Score
Pearson Correlation	AS Score	1.000	.217	.213
	MEIM Overall Score	.217	1.000	.529
	CSES Overall Score	.213	.529	1.000
Sig. (1-tailed)	AS Score	.	.005	.005
	MEIM Overall Score	.005	.	.000
	CSES Overall Score	.005	.000	.
N	AS Score	144	144	144
	MEIM Overall Score	144	144	144
	CSES Overall Score	144	144	144

4.9.2.2 Normality, Linearity, Homoscedasticity, Independence of Residuals

Residual scatterplots were run for the dependent variable scores, i.e., the ASE, to determine normality, linearity and homoscedasticity. Residuals refer to “the differences between the obtained and the predicted dependent variable (DV) scores” (Pallant, 2001, p. 137).

The Normal Probability Plot of the regression standardised residuals in Figure 4.1 depicts a more or less diagonal straight line from bottom left to top right. This, according to Pallant (2001), serves as an indication that no major deviation from normality has occurred and a multiple regression analysis can, therefore, be run.

Normal P-P Plot of Regression Standardized Residual

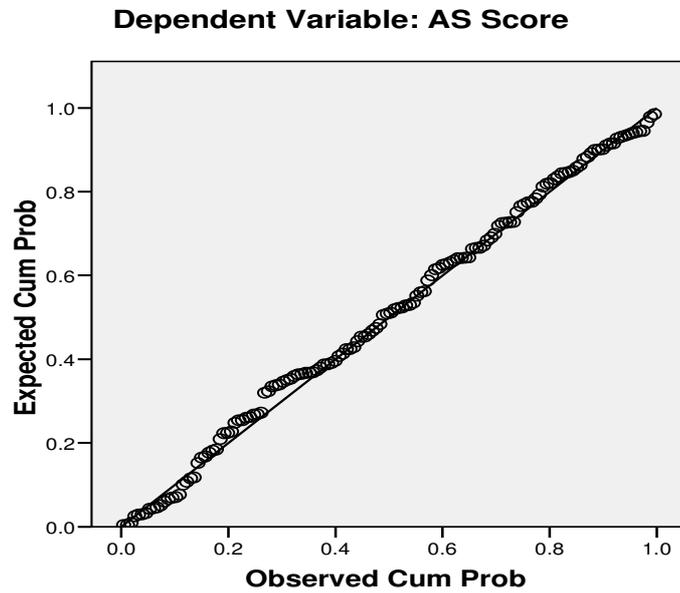


FIGURE 4.1: NORMAL PROBABILITY PLOT

In addition, the Scatterplot of the standardised residuals in Figure 4.2 shows a rectangular pattern, with the majority of the scores concentrated along the zero point in the centre, which means that all the assumptions for the use of a multiple regression analysis have been met (Tabachnick & Fidell, 1983). Furthermore, there is no distinct pattern of the residuals, such as a curvilinear pattern or some of the residuals being higher on one side than the other, which, according to Pallant (2001), is an indication that there is no violation of the assumptions.

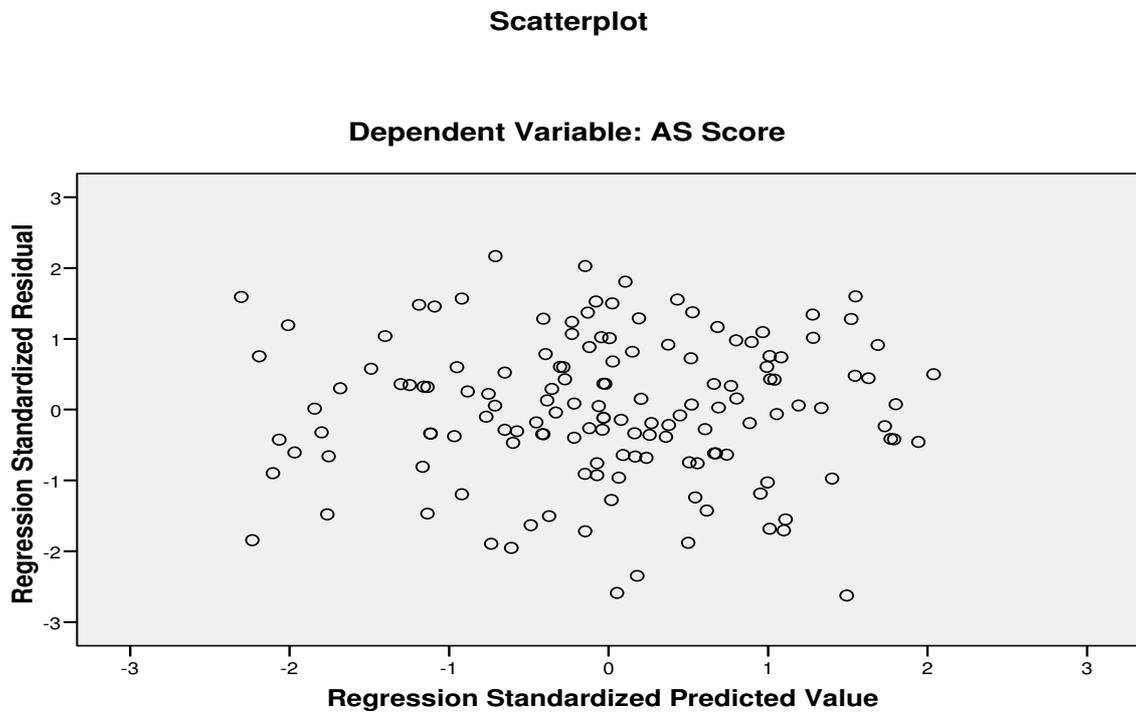


FIGURE 4.2: SCATTERPLOT OF THE STANDARDISED RESIDUALS

4.9.3 EVALUATION OF ASSUMPTIONS FOR OVERALL MULTIPLE REGRESSION ANALYSIS WITH OVERALL MEIM AND CSES – BLACK SAMPLE

4.9.3.1 Multicollinearity

The correlation between the CSES and MEIM scores is 0.518, as shown in Table 4.2. This correlation is not too high and, therefore, acceptable as it does not indicate multicollinearity. This means that both of these variables can be retained in the study, particularly for the sample involving Black respondents only.

TABLE 4.2: CORRELATION BETWEEN INDEPENDENT VARIABLES

Correlations

		AS Score	MEIM Overall Score	CSES Overall Score
Pearson Correlation	AS Score	1.000	.252	.223
	MEIM Overall Score	.252	1.000	.518
	CSES Overall Score	.223	.518	1.000
Sig. (1-tailed)	AS Score	.	.012	.023
	MEIM Overall Score	.012	.	.000
	CSES Overall Score	.023	.000	.
N	AS Score	81	81	81
	MEIM Overall Score	81	81	81
	CSES Overall Score	81	81	81

4.9.3.2 Normality, Linearity, Homoscedasticity, Independence of Residuals

The Normal Probability Plot in Figure 4.3 shows a reasonably diagonal straight line from bottom left to top right. This means that the data shows no major deviation from normality and that this assumption for a multiple regression analysis has not been violated.

Normal P-P Plot of Regression Standardized Residual

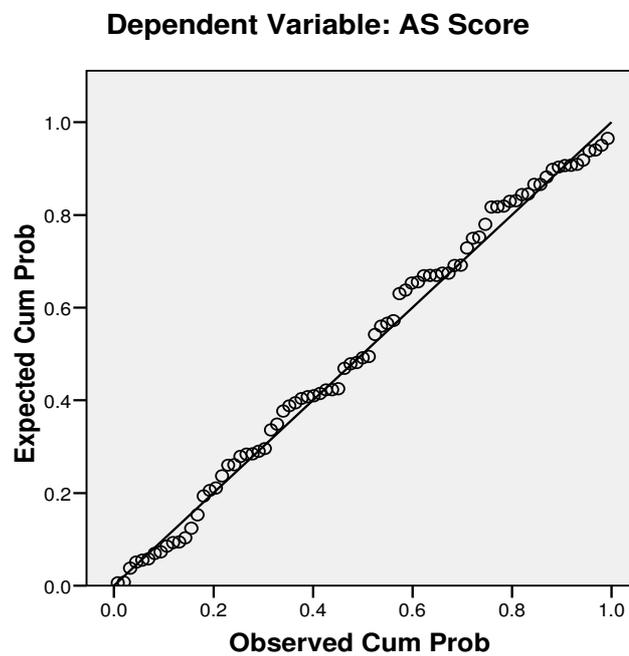


FIGURE 4.3: NORMAL PROBABILITY PLOT

Furthermore, the Scatterplot of the standardized residuals in Figure 4.4 shows a rectangular pattern with the majority of the scores concentrated along the zero point in the centre, with no distinct pattern of some residuals being higher on the other side than another. This pattern indicates that no violation of multiple regression assumptions has occurred.

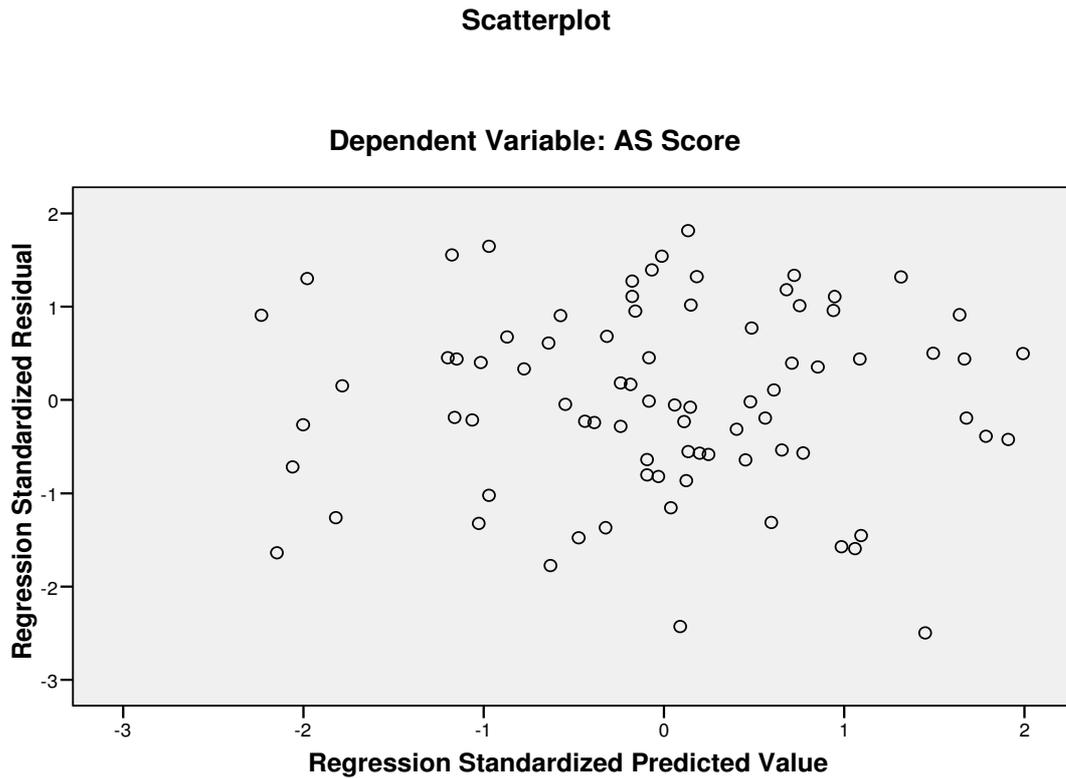


FIGURE 4.4: SCATTERPLOT OF THE STANDARDISED RESIDUALS

4.9.4 EVALUATION OF ASSUMPTIONS FOR OVERALL MULTIPLE REGRESSION ANALYSIS WITH OVERALL MEIM AND CSES – WHITE SAMPLE

4.9.4.1 Multicollinearity

The correlation between the CSES and MEIM scores is 0.548, as shown in Table 4.3. This correlation does not indicate multicollinearity, therefore both independent variables can be retained in the study for the sample involving White respondents only.

TABLE 4.3: CORRELATION BETWEEN INDEPENDENT VARIABLES

Correlations

		AS Score	MEIM Overall Score	CSES Overall Score
Pearson Correlation	AS Score	1.000	.132	.194
	MEIM Overall Score	.132	1.000	.548
	CSES Overall Score	.194	.548	1.000
Sig. (1-tailed)	AS Score	.	.169	.078
	MEIM Overall Score	.169	.	.000
	CSES Overall Score	.078	.000	.
N	AS Score	55	55	55
	MEIM Overall Score	55	55	55
	CSES Overall Score	55	55	55

4.9.4.2 Linearity, Homoscedasticity, Independence of Residuals

The Normal Probability Plot in Figure 4.5 shows a reasonably diagonal straight line from bottom left to top right. This means that the data shows no major deviation from normality and that basic assumptions for a multiple regression analysis have not been violated.

Normal P-P Plot of Regression Standardized Residual

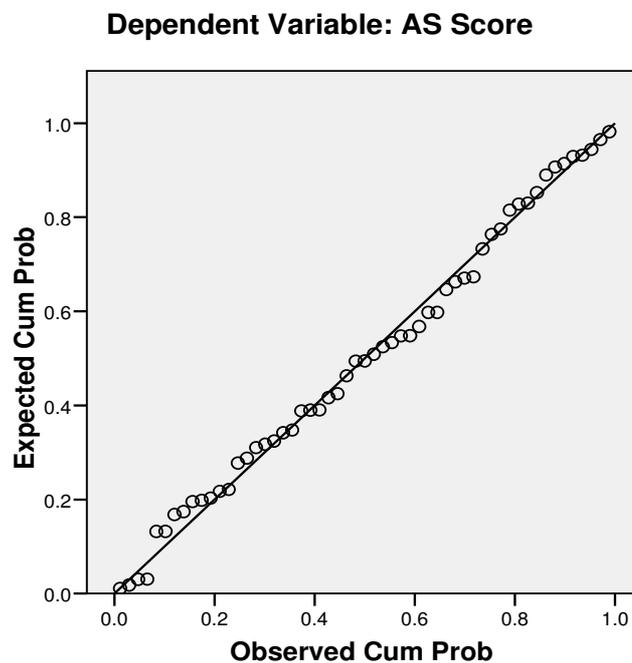


FIGURE 4.5: NORMAL PROBABILITY PLOT

Furthermore, the Scatterplot of the standardized residuals in Figure 4.6 shows a rectangular pattern and the majority of the scores are concentrated along the zero point in the centre, with no distinct pattern of some residuals being higher on the other side than another. This indicates that no violation of multiple regression assumptions has occurred.

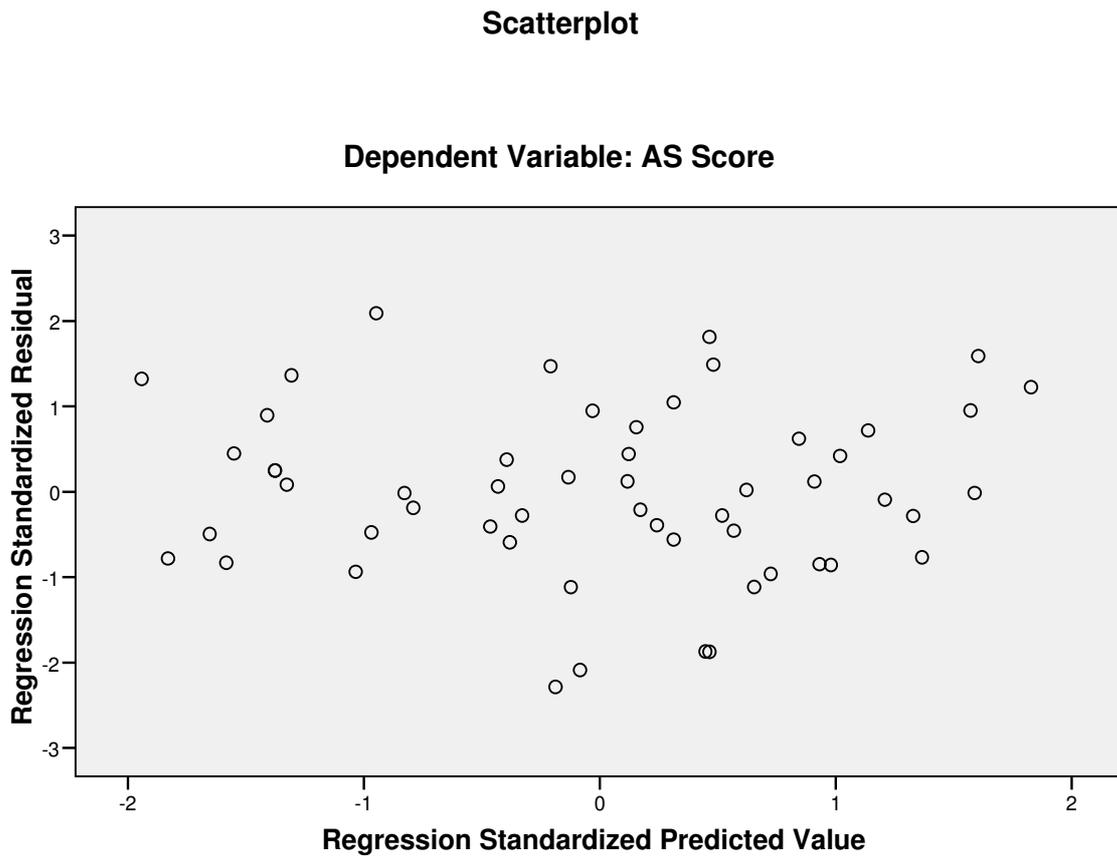


FIGURE 4.6: SCATTERPLOT OF THE STANDARDISED RESIDUALS

4.9.5 EVALUATION OF ASSUMPTIONS FOR MULTIPLE REGRESSION ANALYSIS WITH MEIM SUBSCALES – OVERALL SAMPLE

4.9.5.1 Multicollinearity

The correlation between the scores on the two MEIM subscales, namely, commitment and ethnic identity search, is 0.570, as shown in Table 4.4. This correlation is not too high and, therefore, does not indicate multicollinearity. This means that both of the MEIM subscales can be retained in this study as independent variables, specifically for the overall sample.

TABLE 4.4: CORRELATION BETWEEN INDEPENDENT VARIABLES

Correlations

		AS Score	MEIM ethnic id search	MEIM Commitment
Pearson Correlation	AS Score	1.000	.192	.193
	MEIM ethnic id search	.192	1.000	.570
	MEIM Commitment	.193	.570	1.000
Sig. (1-tailed)	AS Score	.	.011	.010
	MEIM ethnic id search	.011	.	.000
	MEIM Commitment	.010	.000	.
N	AS Score	144	144	144
	MEIM ethnic id search	144	144	144
	MEIM Commitment	144	144	144

4.9.5.2 Normality, Linearity, Homoscedasticity, Independence of Residuals

The Normal Probability Plot in Figure 4.7 shows a reasonably diagonal straight line from bottom left to top right. This means that the data shows no major deviation from normality and that this assumption for a multiple regression analysis has not been violated.

Normal P-P Plot of Regression Standardized Residual

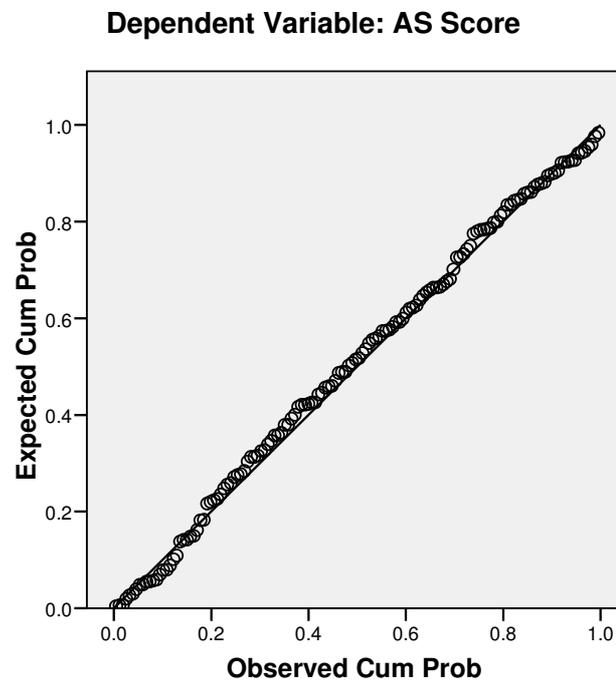


FIGURE 4.7: NORMAL PROBABILITY PLOT

In addition, the Scatterplot of the standardized residuals in Figure 4.8 below shows a rectangular pattern and the majority of the scores concentrated along the zero point in the centre, with no distinct pattern of some residuals being higher on one side than the other. This pattern indicates that no violation of multiple regression assumptions has occurred.

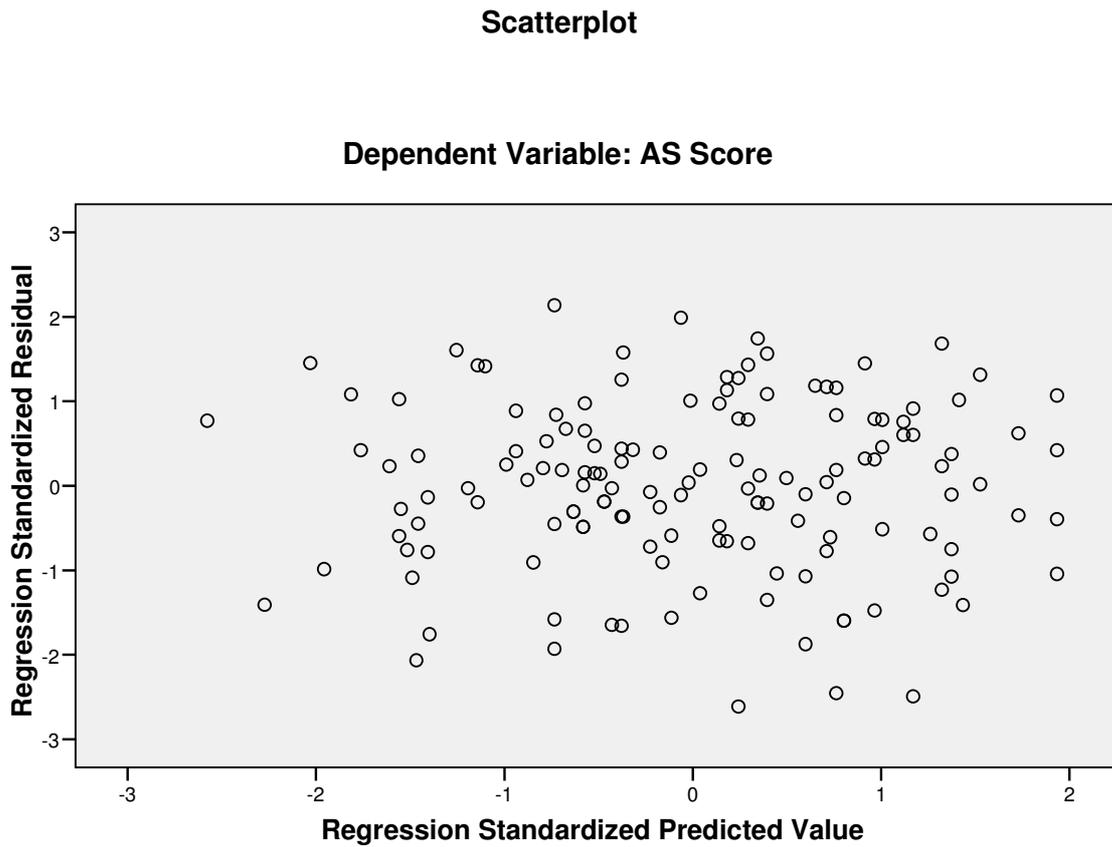


FIGURE 4.8: SCATTERPLOT OF THE STANDARDISED RESIDUALS

4.9.6 EVALUATION OF ASSUMPTIONS FOR MULTIPLE REGRESSION ANALYSIS WITH MEIM SUBSCALES – BLACK SAMPLE

4.9.6.1 Multicollinearity

The correlation between scores on the two MEIM subscales is 0.599, as shown in Table 4.5. This correlation is not too high and, therefore, does not indicate multicollinearity. This means that both MEIM subscales can be retained in the study as independent variables, particularly for the sample involving Black respondents only.

TABLE 4.5: CORRELATION BETWEEN INDEPENDENT VARIABLES

Correlations

		AS Score	MEIM ethnic id search	MEIM Commitment
Pearson Correlation	AS Score	1.000	.218	.233
	MEIM ethnic id search	.218	1.000	.599
	MEIM Commitment	.233	.599	1.000
Sig. (1-tailed)	AS Score	.	.026	.018
	MEIM ethnic id search	.026	.	.000
	MEIM Commitment	.018	.000	.
N	AS Score	81	81	81
	MEIM ethnic id search	81	81	81
	MEIM Commitment	81	81	81

4.9.6.2 Normality, Linearity, Homoscedasticity, Independence of Residuals

The Normal Probability Plot in Figure 4.9 shows a reasonably diagonal straight line from bottom left to top right. This means that the data shows no major deviation from normality and that this assumption for a multiple regression analysis has not been violated.

Normal P-P Plot of Regression Standardized Residual

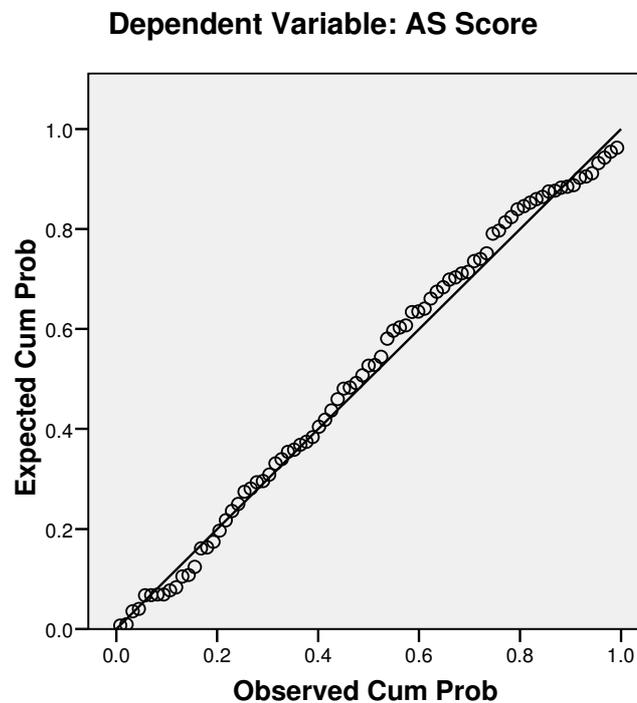


FIGURE 4.9: NORMAL PROBABILITY PLOT

Furthermore, the Scatterplot of the standardized residuals in Figure 4.10 below shows a rectangular pattern and the majority of the scores are concentrated along the zero point in the centre, with no distinct pattern of some residuals being higher one side other side than the other. This pattern indicates that no violation of multiple regression assumptions has occurred.

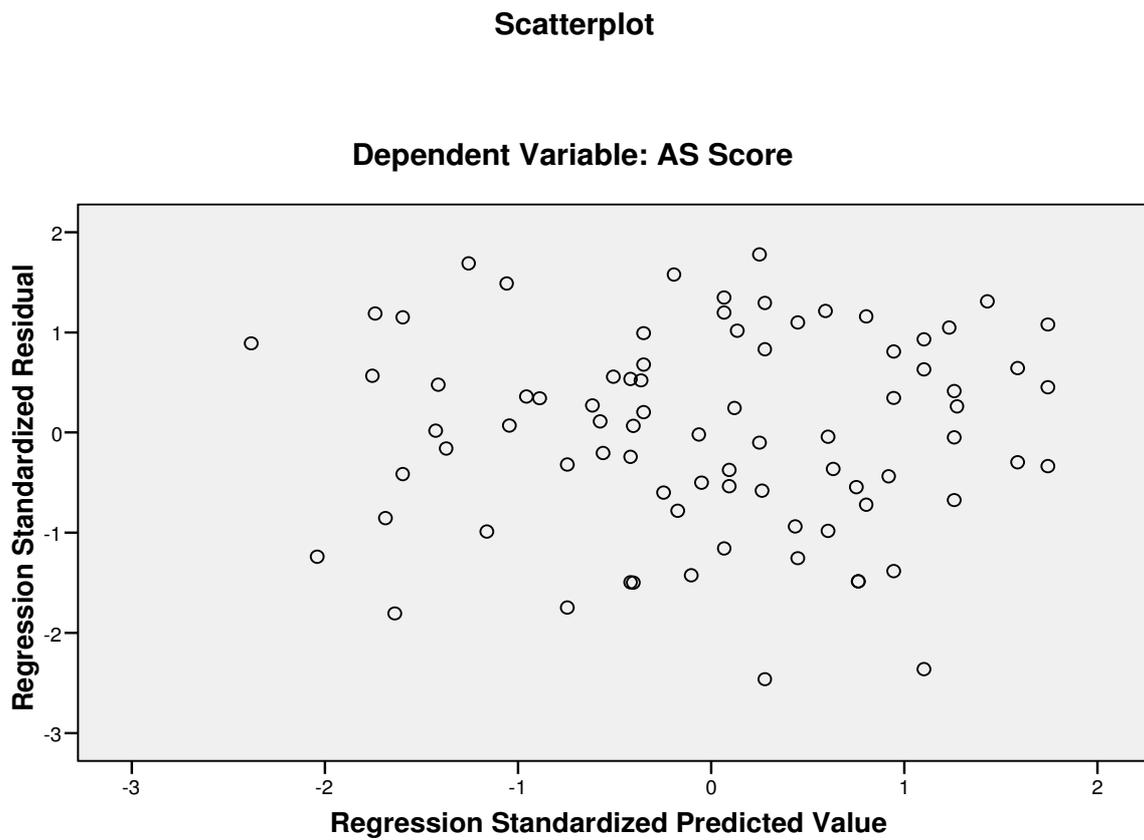


FIGURE 4.10: SCATTERPLOT OF THE STANDARDISED RESIDUALS

4.9.7 EVALUATION OF ASSUMPTIONS FOR MULTIPLE REGRESSION ANALYSIS WITH MEIM SUBSCALES – WHITE SAMPLE

4.9.7.1 Multicollinearity

The correlation between scores on the two MEIM subscales is 0.550, as shown in Table 4.6. This correlation is not too high and, therefore, does not indicate multicollinearity. This means that both of these variables can be retained in the study, particularly for the sample involving White respondents only.

TABLE 4.6: CORRELATION BETWEEN INDEPENDENT VARIABLES

Correlations

		AS Score	MEIM ethnic id search	MEIM Commitment
Pearson Correlation	AS Score	1.000	.139	.102
	MEIM ethnic id search	.139	1.000	.550
	MEIM Commitment	.102	.550	1.000
Sig. (1-tailed)	AS Score	.	.155	.230
	MEIM ethnic id search	.155	.	.000
	MEIM Commitment	.230	.000	.
N	AS Score	55	55	55
	MEIM ethnic id search	55	55	55
	MEIM Commitment	55	55	55

4.9.7.2 Normality, Linearity, Homoscedasticity, Independence of Residuals

The Normal Probability Plot in Figure 4.11 shows a reasonably diagonal straight line from bottom left to top right. This means that the data shows no major deviation from normality and that this assumption for a multiple regression analysis has not been violated for this sample.

Normal P-P Plot of Regression Standardized Residual

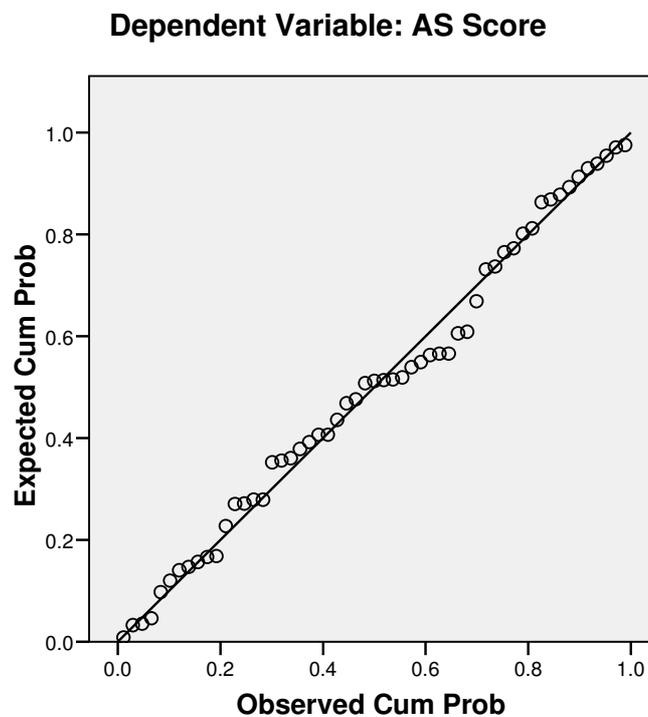


FIGURE 4.11: NORMAL PROBABILITY PLOT

Furthermore, the Scatterplot of the standardized residuals in Figure 4.12 shows a rectangular pattern and the majority of the scores are concentrated along the zero point in the centre, with no distinct pattern of some residuals being higher on one side than the other. This pattern indicates that no violation of multiple regression assumptions has occurred.

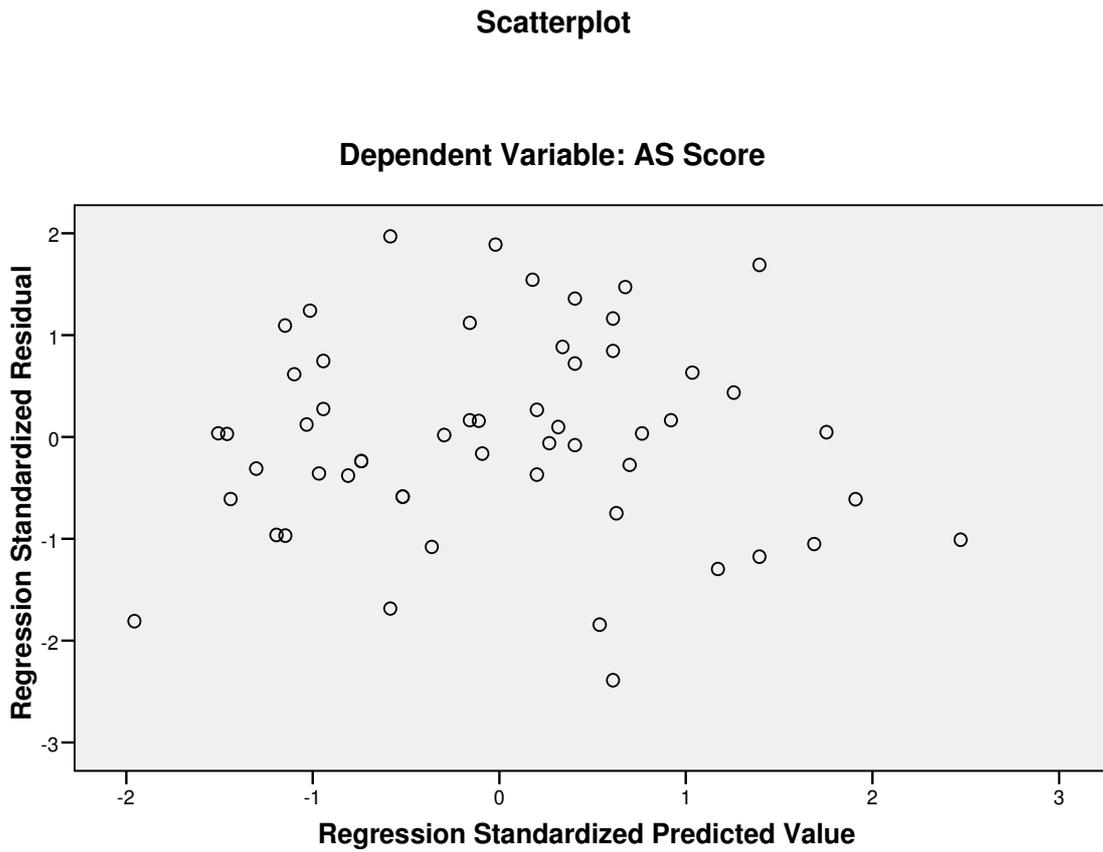


FIGURE 4.12: SCATTERPLOT OF THE STANDARDISED RESIDUALS

4.9.8 EVALUATION OF ASSUMPTIONS FOR MULTIPLE REGRESSION ANALYSIS WITH CSES SUBSCALES – OVERALL SAMPLE

4.9.8.1 Multicollinearity

Table 4.7 shows the correlations between the four CSES subscales. According to Tabachnick and Fidell (1996), a correlation of 0.7 or more between the independent variables is considered too high. Such a correlation could mean that the variables are measuring the same construct, with either variable presumably not generating unique information (Howell, 2002). In such instances, one of the variables may have to be removed from the analysis. As shown in Table 4.7, none of the correlations between the CSES subscales are higher than 0.6. This means that each of these variables can be retained in the study, specifically for the overall sample, as they do not show multicollinearity.

TABLE 4.7: CORRELATION BETWEEN INDEPENDENT VARIABLES

		Correlations				
		AS Score	CSES Membership SE	CSES Private CSE	CSES Public CSE	CSES Importance to Id
Pearson Correlation	AS Score	1.000	.252	.182	.087	.076
	CSES Membership SE	.252	1.000	.568	.365	.285
	CSES Private CSE	.182	.568	1.000	.185	.284
	CSES Public CSE	.087	.365	.185	1.000	.038
	CSES Importance to Id	.076	.285	.284	.038	1.000
Sig. (1-tailed)	AS Score	.	.001	.014	.149	.181
	CSES Membership SE	.001	.	.000	.000	.000
	CSES Private CSE	.014	.000	.	.013	.000
	CSES Public CSE	.149	.000	.013	.	.325
	CSES Importance to Id	.181	.000	.000	.325	.
N	AS Score	144	144	144	144	144
	CSES Membership SE	144	144	144	144	144
	CSES Private CSE	144	144	144	144	144
	CSES Public CSE	144	144	144	144	144
	CSES Importance to Id	144	144	144	144	144

4.9.8.2 Normality, Linearity, Homoscedasticity, Independence of Residuals

The Normal Probability Plot in Figure 4.13 shows a reasonably diagonal straight line from bottom left to top right. In this regard, the data shows no major deviation from normality and this assumption for a multiple regression analysis has not been violated.

Normal P-P Plot of Regression Standardized Residual

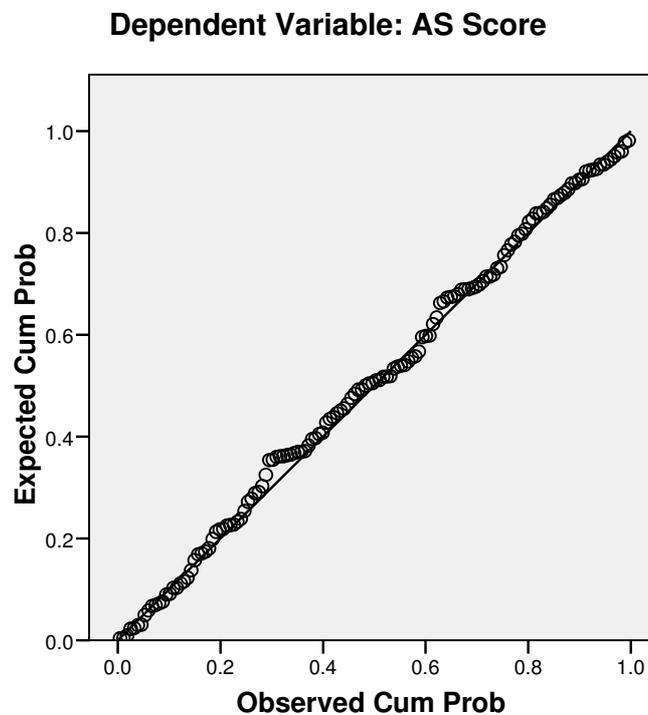


FIGURE 4.13: NORMAL PROBABILITY PLOT

Furthermore, the Scatterplot of the standardized residuals in Figure 4.14 shows a rectangular pattern and the majority of the scores are concentrated along the zero point in the centre, with no distinct pattern of some residuals being higher on one side than the other. This pattern indicates that no violation of multiple regression assumptions has occurred.

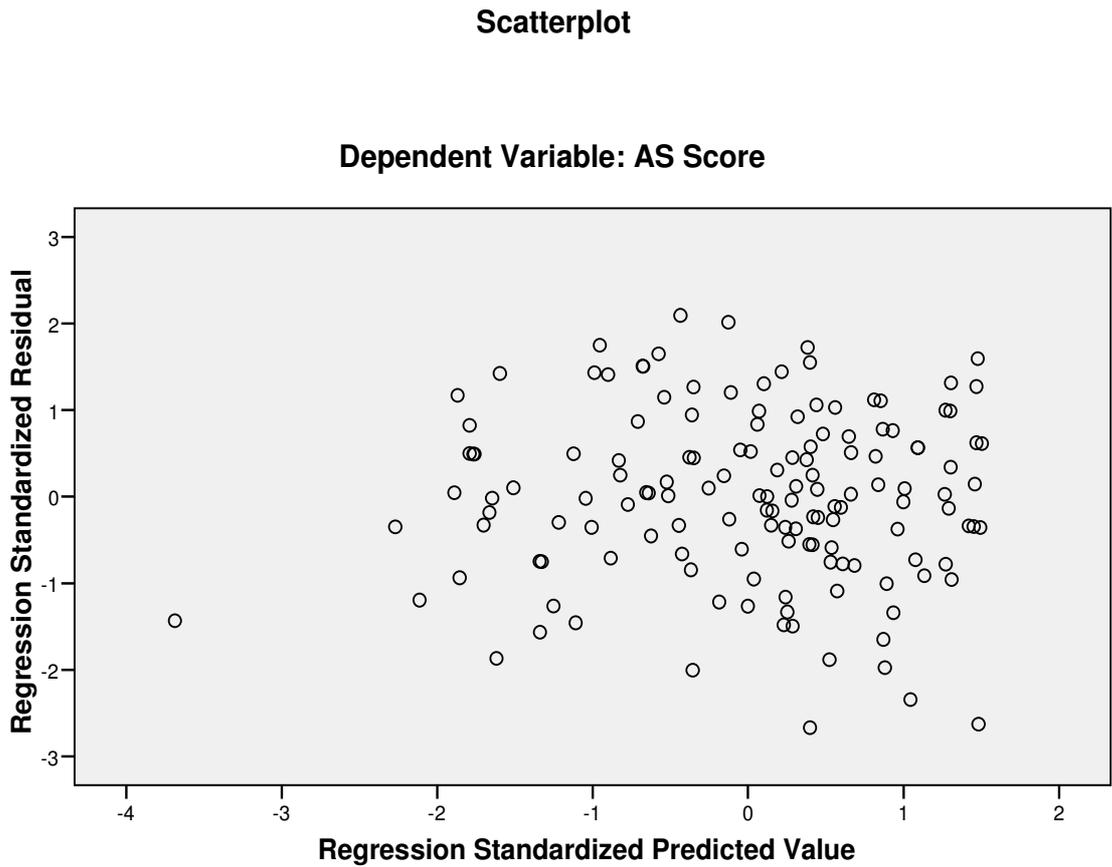


FIGURE 4.14: SCATTERPLOT OF THE STANDARDISED RESIDUALS

4.9.9 EVALUATION OF ASSUMPTIONS FOR MULTIPLE REGRESSION ANALYSIS WITH CSES SUBSCALES – BLACK SAMPLE

4.9.9.1 Multicollinearity

Table 4.8 shows the correlations between the four CSES subscales for the sample including Black respondents only. None of these correlations are higher than 0.6. This means that each of the CSES subscales can be retained as independent variables in this study, particularly for the sample involving Black respondents only.

TABLE 4.8: CORRELATION BETWEEN INDEPENDENT VARIABLES

		Correlations				
		AS Score	CSES Membership SE	CSES Private CSE	CSES Public CSE	CSES Importance to Id
Pearson Correlation	AS Score	1.000	.288	.235	-.019	.099
	CSES Membership SE	.288	1.000	.479	.290	.380
	CSES Private CSE	.235	.479	1.000	.042	.349
	CSES Public CSE	-.019	.290	.042	1.000	.106
	CSES Importance to Id	.099	.380	.349	.106	1.000
Sig. (1-tailed)	AS Score	.	.005	.017	.433	.189
	CSES Membership SE	.005	.	.000	.004	.000
	CSES Private CSE	.017	.000	.	.356	.001
	CSES Public CSE	.433	.004	.356	.	.173
	CSES Importance to Id	.189	.000	.001	.173	.
N	AS Score	81	81	81	81	81
	CSES Membership SE	81	81	81	81	81
	CSES Private CSE	81	81	81	81	81
	CSES Public CSE	81	81	81	81	81
	CSES Importance to Id	81	81	81	81	81

4.9.9.2 Normality, Linearity, Homoscedasticity, Independence of Residuals

The Normal Probability Plot in Figure 4.15 shows a reasonably diagonal straight line from bottom left to top right. In this regard, the data shows no major deviation from normality and this assumption for a multiple regression analysis has not been violated.

Normal P-P Plot of Regression Standardized Residual

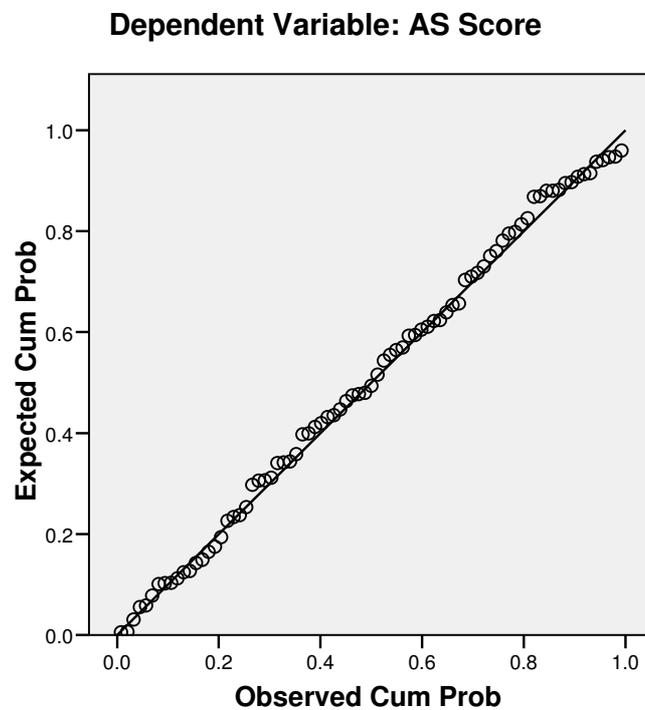


FIGURE 4.15: NORMAL PROBABILITY PLOT

Furthermore, the Scatterplot of the standardized residuals in Figure 4.16 shows a rectangular pattern and the majority of the scores are concentrated along the zero point in the centre, with no distinct pattern of some residuals being higher on one side than the other. This pattern indicates that no violation of multiple regression assumptions has occurred.

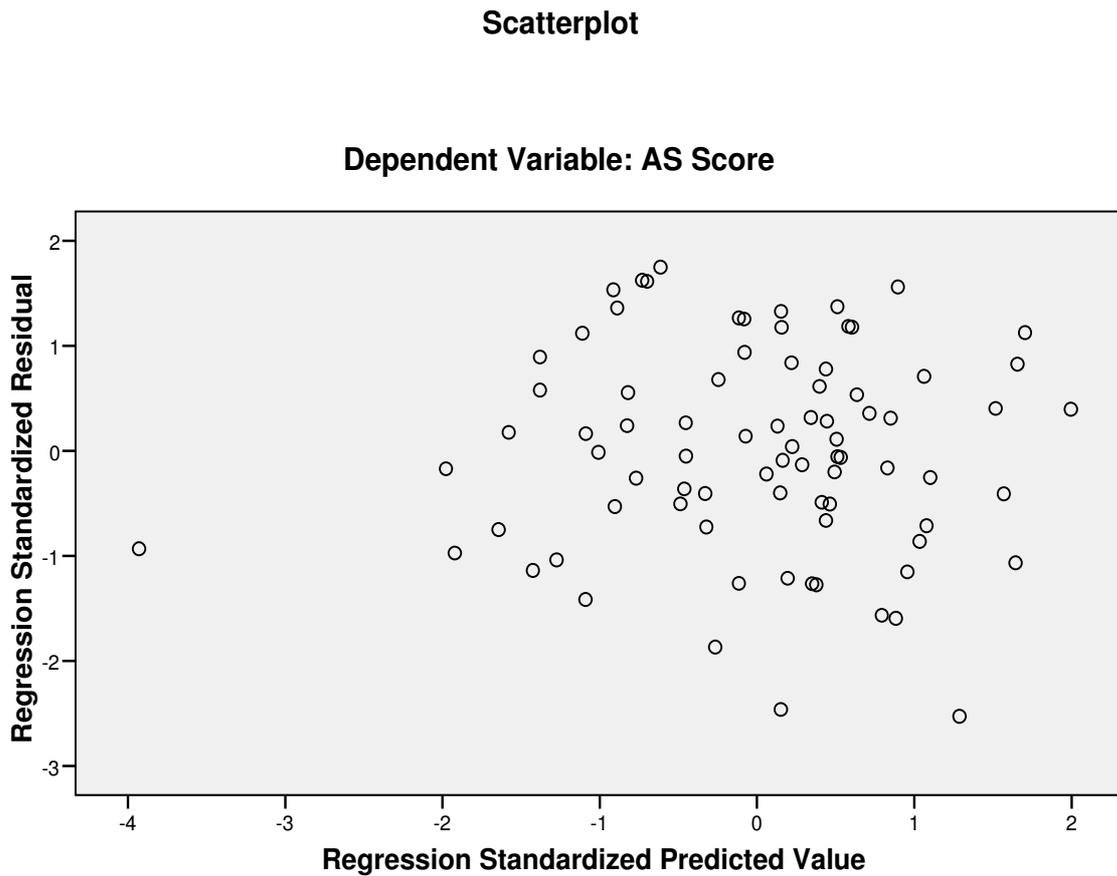


FIGURE 4.16: SCATTERPLOT OF THE STANDARDISED RESIDUALS

4.9.10 EVALUATION OF ASSUMPTIONS FOR MULTIPLE REGRESSION ANALYSIS WITH CSES SUBSCALES – WHITE SAMPLE

4.9.10.1 Multicollinearity

Table 4.9 shows the correlations between the four CSES subscales for the sample including White respondents only. Only one of the correlations between these subscales is more than 0.7. A correlation of 0.741 was found between the membership self-esteem and private collective self-esteem subscales. Tabachnick and Fidell (1996) warn against the uncritical retention of independent variables whose correlations are 0.7 or higher.

TABLE 4.9: CORRELATION BETWEEN INDEPENDENT VARIABLES

		Correlations				
		AS Score	CSES Membership SE	CSES Private CSE	CSES Public CSE	CSES Importance to Id
Pearson Correlation	AS Score	1.000	.122	.091	.206	.130
	CSES Membership SE	.122	1.000	.741	.353	.348
	CSES Private CSE	.091	.741	1.000	.405	.134
	CSES Public CSE	.206	.353	.405	1.000	.104
	CSES Importance to Id	.130	.348	.134	.104	1.000
Sig. (1-tailed)	AS Score	.	.188	.253	.066	.172
	CSES Membership SE	.188	.	.000	.004	.005
	CSES Private CSE	.253	.000	.	.001	.165
	CSES Public CSE	.066	.004	.001	.	.224
	CSES Importance to Id	.172	.005	.165	.224	.
N	AS Score	55	55	55	55	55
	CSES Membership SE	55	55	55	55	55
	CSES Private CSE	55	55	55	55	55
	CSES Public CSE	55	55	55	55	55
	CSES Importance to Id	55	55	55	55	55

As part of the multiple regression analysis, SPSS performs collinearity diagnostics as an additional measure of collinearity, as shown in Table 4.10. The value of the Tolerance

statistic generally lies between 0 and 1. Pallant (2001) suggests that a very low value of Tolerance, which is near zero, is probably due to multicollinearity. Furthermore, Allison (1999) posits that a Tolerance value of 0.4 and higher is acceptable. In this instance, rounded off, the Tolerance values for the membership self-esteem and private collective self-esteem subscales, which raised concerns of collinearity above, are 0.4 for each subscale. This suggests that these subscales may be retained for the analysis as they meet Allison’s (1999) and Pallant’s (2001) requirements for inclusion. On this basis, all the CSES subscales may be retained as independent variables in this study, particularly for the White sample.

TABLE 4.10: MULTICOLLINEARITY AND TOLERANCE

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	4.483	.735		6.100	.000		
CSES Membership SE	.034	.181	.042	.188	.851	.386	2.591
CSES Private CSE	-.022	.154	-.031	-.144	.886	.411	2.436
CSES Public CSE	.136	.107	.193	1.278	.207	.829	1.206
CSES Importance to Id	.069	.103	.100	.667	.508	.845	1.184

a. Dependent Variable: AS Score

4.9.10.2 Normality, Linearity, Homoscedasticity, Independence of Residuals

The Normal Probability Plot in Figure 4.17 shows a reasonably diagonal straight line from bottom left to top right. This means that the data shows no major deviation from normality and that this assumption for a multiple regression analysis has not been violated.

Normal P-P Plot of Regression Standardized Residual

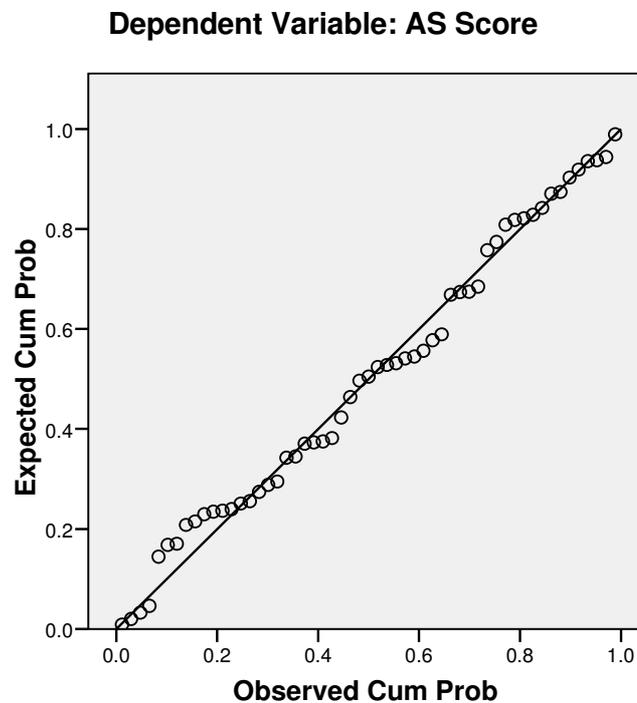


FIGURE 4.17: NORMAL PROBABILITY PLOT

In addition, the Scatterplot of the standardized residuals in Figure 4.18 shows a rectangular pattern with the majority of the scores concentrated along the zero point in the centre, with no distinct curvilinear pattern or some residuals being higher on one side than the other. This pattern indicates that no violation of multiple regression assumptions has occurred.

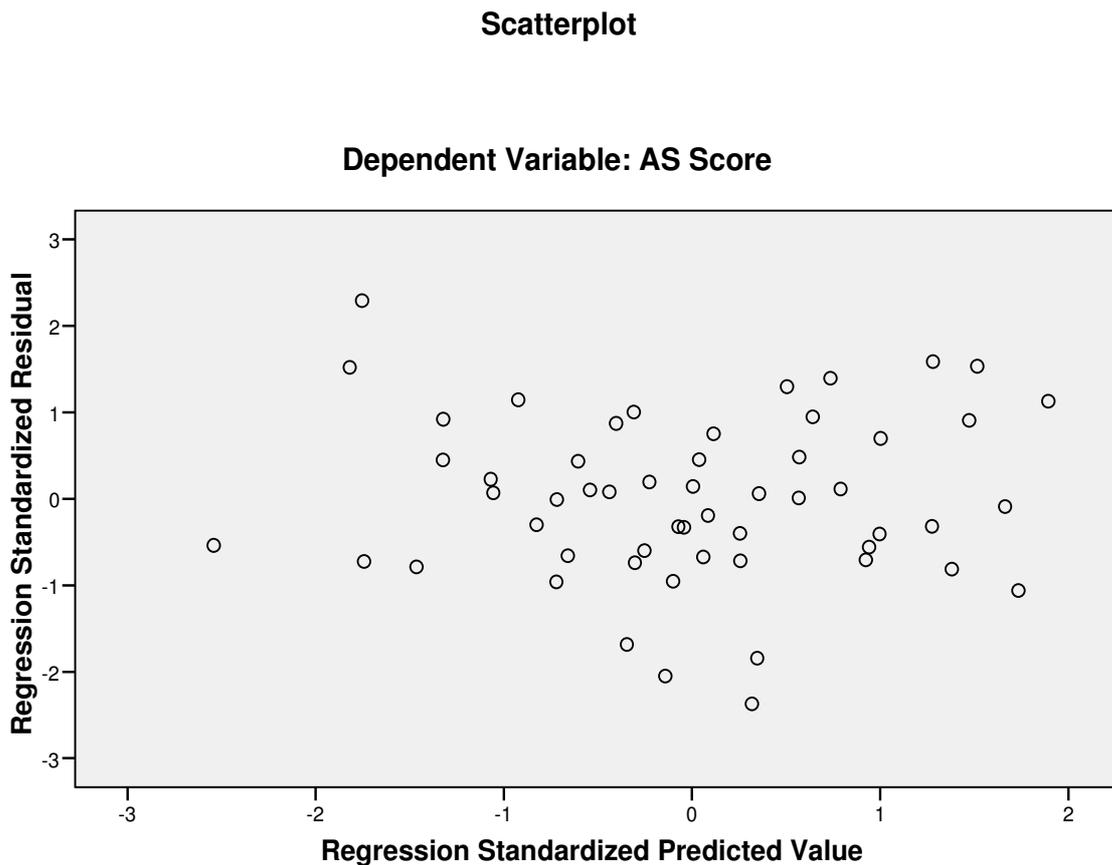


FIGURE 4.18: SCATTERPLOT OF THE STANDARDISED RESIDUALS

4.9.11 OUTLIERS

Outliers refer to sensitive cases that are either far above or below the majority of other cases and have an overall effect on the interpretation of the data (Pallant, 2001). An outlier identification analysis was run for all three variables involved in this study and results are shown in Figures 4.19 to 4.24. The histograms, which are Figures 4.19, 4.21 and 4.23, depict

normal distributions of the data for all three variables. In all three instances, the scores are concentrated in the centre and gradually decline towards the two extremes (Pallant, 2005). This serves as an indication that the data is normally distributed and that there are no outliers. Furthermore, the boxplots shown in Figures 4.20, 4.22 and 4.24, also show that there are no outliers for all three variables. If there are any outliers, SPSS typically attaches a number to the boxplot, which is also an identification number of the case that is considered an outlier (Pallant, 2005). In this instance, none of the three boxplots specify cases of outliers.

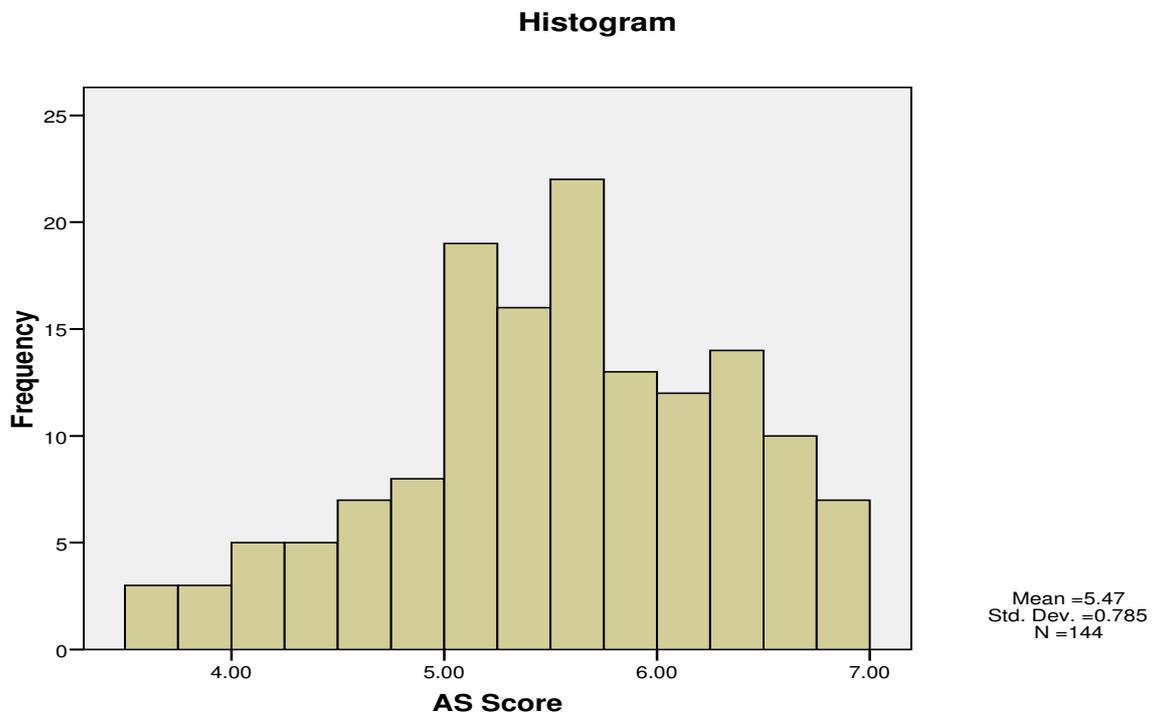


FIGURE 4.19: ASE OUTLIERS

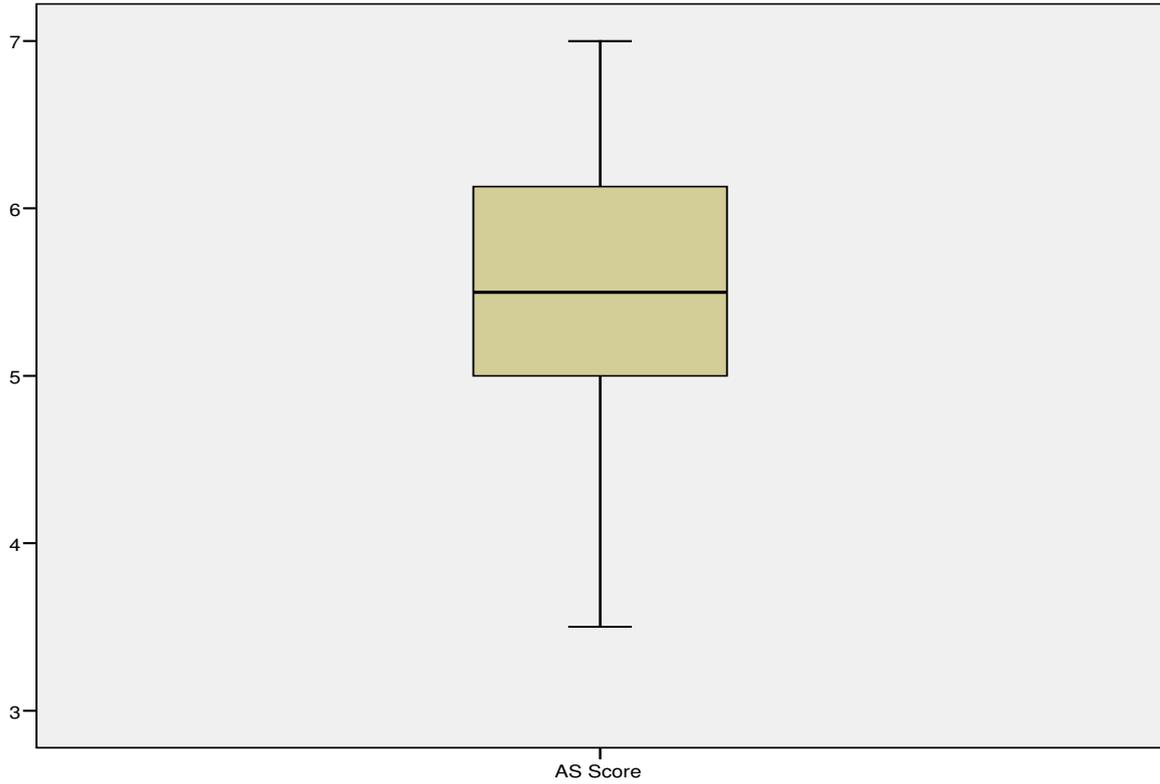


FIGURE 4.20: ASE OUTLIERS

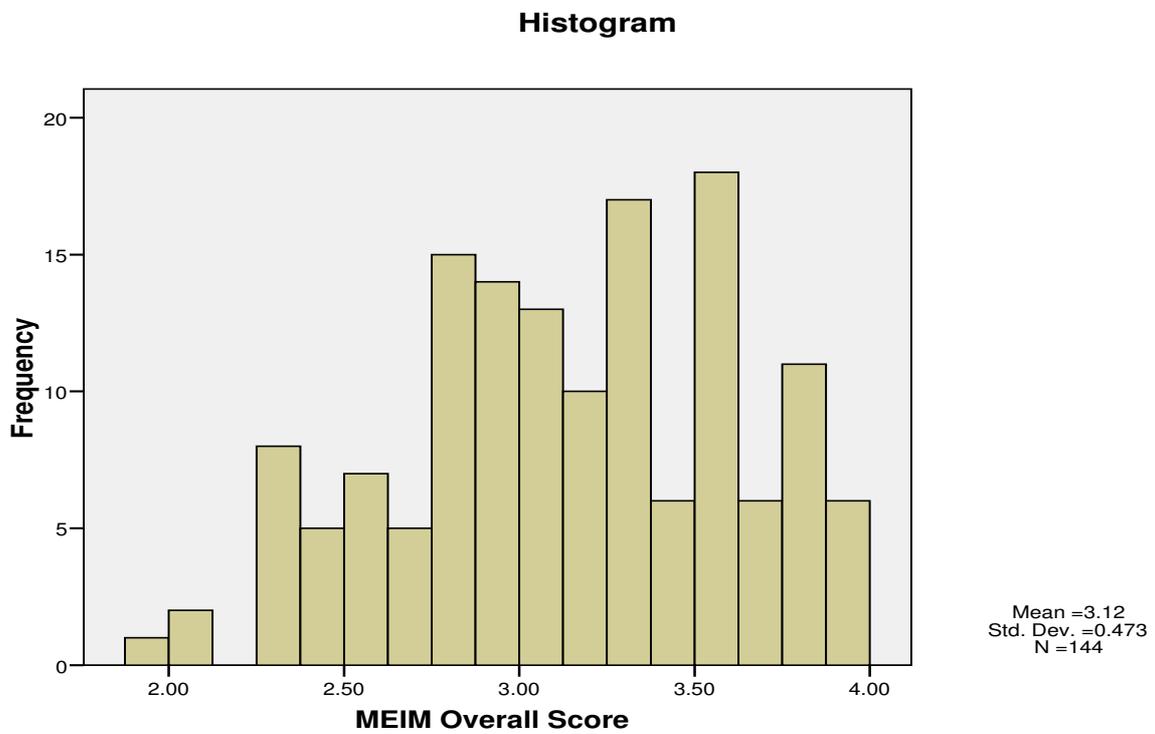


FIGURE 4.21: MEIM OUTLIERS

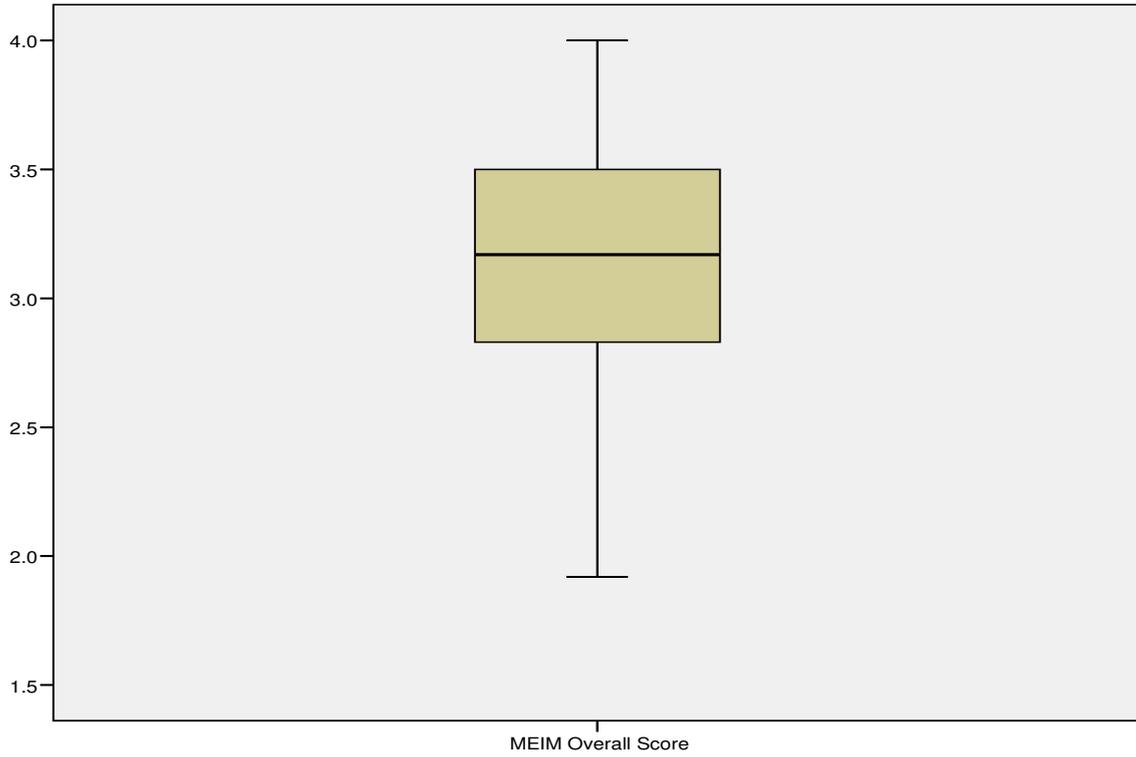


FIGURE 4.22: MEIM OUTLIERS

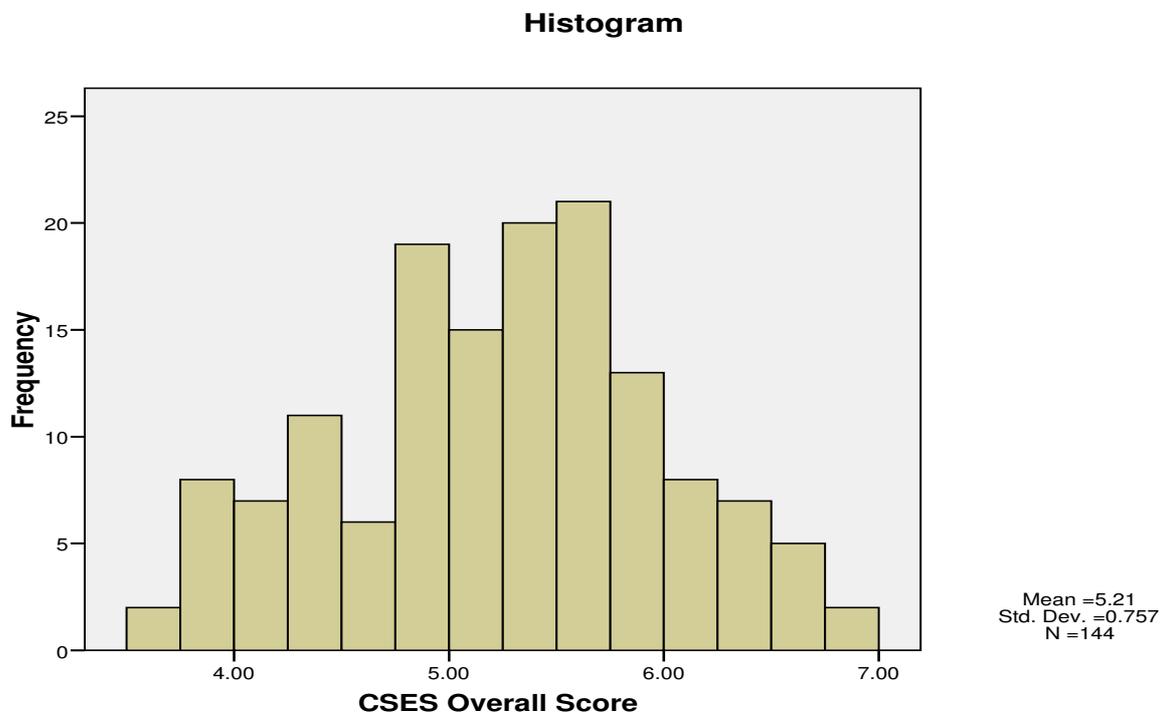


FIGURE 4.23: CSES OUTLIERS

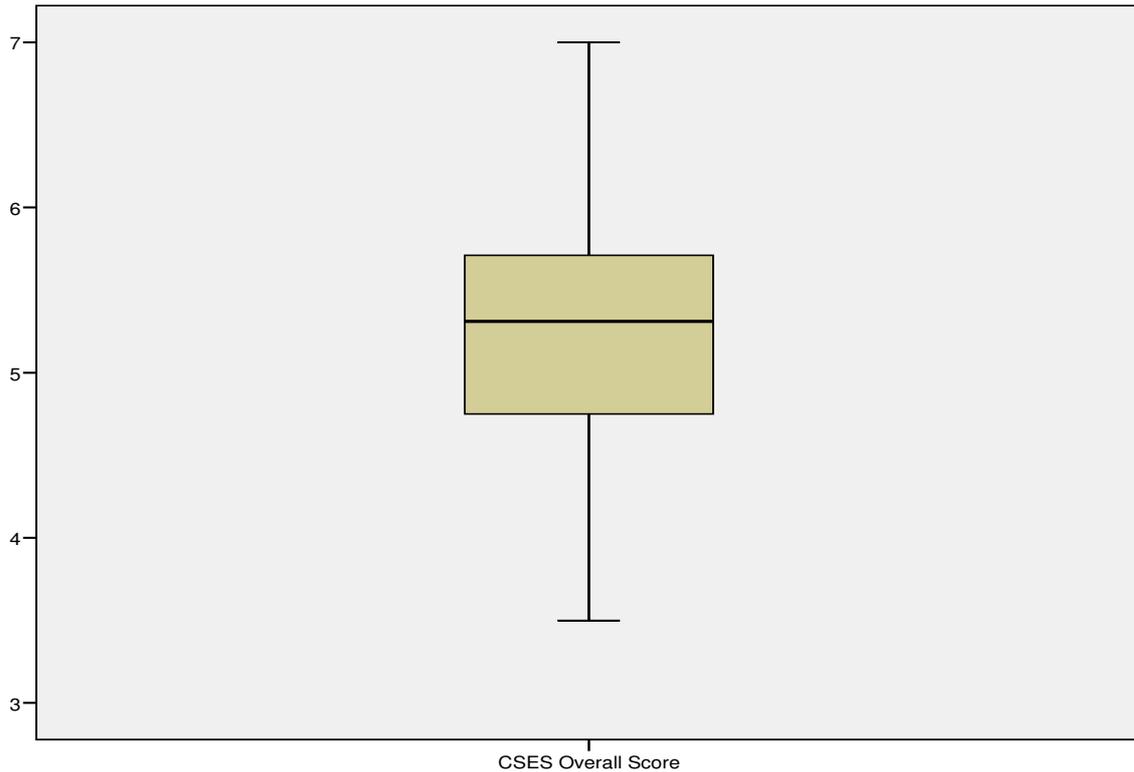


FIGURE 4.24: CSES OUTLIERS

4.10 VALIDITY

The validity of a research design refers to the extent to which logical conclusions can be drawn regarding the variables involved in the study (Trochim, 2006). In this regard, logical conclusions refer to those that represent the best approximate of the truth, which can be attained by reducing the potential for error when drawing these conclusions by considering the suitability of various aspects of the study including, among others, the choice of a sampling technique, data collection methods and data analysis methods. Since a correlational design is used in this study, only conclusion and external validity will be considered.

4.10.1 CONCLUSION VALIDITY

Conclusion validity refers to the certainty with which one can conclude or infer that there is indeed a relationship between variables of interest in a study. According to Trochim (2006), potential threats to conclusion validity include the use of an unsuitable research design, not meeting the assumptions of the method used to analyse the data, as well as the use of insufficient statistical power to draw inferences.

Firstly, a correlational design was used in this study, seeking to identify relationships between three variables. As a result, multiple regression analysis was used as it is concerned with the extent to which two or more independent variables can predict the dependent variable (Pallant, 2001). Secondly, various analyses were run to determine if the assumptions of a multiple regression analysis were met, which would justify the use of this type of analysis. The analyses proved that the assumptions of multiple regression analysis have been met, thereby proving that multiple regression analysis is suitable for use in this study. Thirdly, a significance level of 0.05 was used to ensure that there is reasonable statistical power to conclude whether or not there is a relationship between the variables in this study. Significance levels are generally indicated on SPSS when one runs the analysis.

In addition, Trochim (2006) suggests that low reliability of measures is a major threat to conclusion validity, with results possibly indicating that there is no relationship between the variables when there is. Two of the measures used in this study have shown considerable reliability. The CSES, however, had low overall reliability, though its subscales independently proved considerably reliable.

Furthermore, Trochim (2006) argues that failure to collect enough data may lead to failure to detect a relationship between variables even when there is a relationship, thus

reducing conclusion validity. In this study, the sample size is 144 and is considered suitable, as it also justifies the use of multiple regression analysis.

4.10.2 EXTERNAL VALIDITY

External validity refers to the extent to which the results obtained can be generalised to other contexts including people, times and places (Trochim, 2006). The use of convenience sampling in this study compromises the external validity and, therefore, the ability to generalise findings from the study to other contexts (Black, 1999). In order to improve the generalisability of the results from this study, the sample included a total of 144 undergraduate students from various disciplines and ethnic backgrounds, aged between 17 and 30, though the majority were between the ages of 18 and 25. In addition, the first batch of questionnaires was completed by homogenous respondents who were all registered for a similar course of study. Subsequent batches of questionnaires were completed by respondents from several student residences to ensure that responses would not be limited to students from a particular field of study.

4.11 ETHICAL CONSIDERATIONS

Various ethical issues were considered prior to the commencement of this study. Firstly, ethical clearance was obtained from the Faculty of Humanities' Research and Ethics Committee at the University of Pretoria. This means that the conditions under which the study was to be conducted were approved beforehand by the committee, confirming that the study would pose minimal, if at all, risk or harm to respondents. In addition, voluntary participation, informed consent, confidentiality, anonymity and lack of harm to the

respondents are some of the ethical issues that were also addressed, as indicated below (Fowler, 2009; Gay & Airasian, 2003; Russell & Purcell, 2009; Trochim, 2006).

Voluntary participation requires individuals to volunteer their participation in research and not be coerced (Trochim, 2006). With regard to this, individuals who were willing to voluntarily participate in the study were identified and subsequently provided with a consent form. The consent form indicated the nature and purpose of the study, procedures to be followed by respondents upon agreeing to take part in the study, as well as ways in which the results would be used once the study is completed (See Appendix D). This ensured that respondents gave informed consent to be included in this study (Fowler, 2009; Russell & Purcell, 2009).

Furthermore, the study involved no foreseeable risk to the respondents, as they were only required to indicate the extent to which they agreed with items that appeared on the questionnaires. Risk of harm to respondents can be classified as either physiological or psychological (Russell & Purcell, 2009). In view of this, the nature of this study ensured that respondents were at no risk of either type of harm.

Respondents were assured of anonymity and confidentiality of their responses, as they were not required to indicate their names anywhere on the questionnaires. The principles of anonymity and confidentiality ensure that respondents cannot be identified outside of the context of the study and that they will not be identified to anyone who is not directly involved in the study (Gay & Airasian, 2003). Furthermore, those who volunteered to participate were required to sign the consent form, thus agreeing that they are aware of the implications of their participation in the study and also giving consent for the information provided by them to be used in the study.

4.12 CONCLUSION

This chapter was concerned with the research methodology used in the study. Firstly, the research design was presented, where a correlational design was identified as a suitable design for use in the current study. Secondly, ethnic identity, collective self-esteem and academic self-efficacy, identified as variables of interest in the study, were briefly referred to in this chapter. This was followed by the statement of hypotheses, wherein the researcher stated assumptions about the possible nature of the interaction between these three variables. Furthermore, the type of sampling used in the study was described, followed by a discussion of the data collection procedures. The measurement instruments used in this study to measure the salience of the variables among respondents followed. These measures were the Multigroup Ethnic Identity Measure, the race-specific Collective Self-Esteem Scale and the Academic Self-Efficacy Scale. Furthermore, the statistical properties of the measures were also taken into account, showing the reliability of each of the measures, as well as their respective subscales. A discussion of the data analysis method followed, where multiple regression analysis was deemed applicable, given the nature of the stated hypotheses. This was followed by the evaluation of assumptions for multiple regression analysis, which involved the preliminary examination of data so as to determine if the data meets the requirements for a multiple regression analysis. In addition, the validity of various aspects of the study was discussed, which would help ensure that results derived from this study would represent the best approximate of the truth, especially regarding the nature of the relationships between the variables. The chapter was concluded with a discussion of ethical considerations, which were measures taken by the researcher to ensure that ethical standards were met in order to avoid exposing respondents to any harm resulting from their participation in this study.

The next chapter presents the results obtained from the study.

CHAPTER 5

RESULTS

5.1 INTRODUCTION

This chapter begins with a description of the sample used in this study. This is followed by a brief discussion of the dependent and independent variables involved in this study. The chapter concludes with a discussion of the multiple regression analyses that were run, as well the rationale for this, followed by the presentation of all multiple regression results.

In the results section, firstly, the multiple regression analysis that was run involving all 144 respondents and all the three major variables of the study (i.e., academic self-efficacy, collective self-esteem and ethnic identity) is presented. The second analysis that was run, which sought to determine the relationships between the four subscales of the collective self-esteem scale and academic self-efficacy, follows. In addition, the third analysis that was run to determine the relationship between each of the two subscales of the ethnic identity measure and academic self-efficacy is also presented. This is followed by the repetition of these three analyses separately for Black and White respondents, so as to determine if the results differ for these two groups. Overall, the nine sets of multiple regression analysis that were run for the three different groups are presented in this chapter.

5.2 DESCRIPTION OF SAMPLE

The sample in this study consists of 144 respondents who are all undergraduate students at an HLI. The respondents vary with regard to age, gender, race and ethnicity. The respondents' biographical information is presented in detail below.

5.2.1 GENDER OF RESPONDENTS

Figure 5.1 below shows that the majority of the respondents are female (93), representing approximately two-thirds (65%) of the total sample, while 35% of the respondents are male.

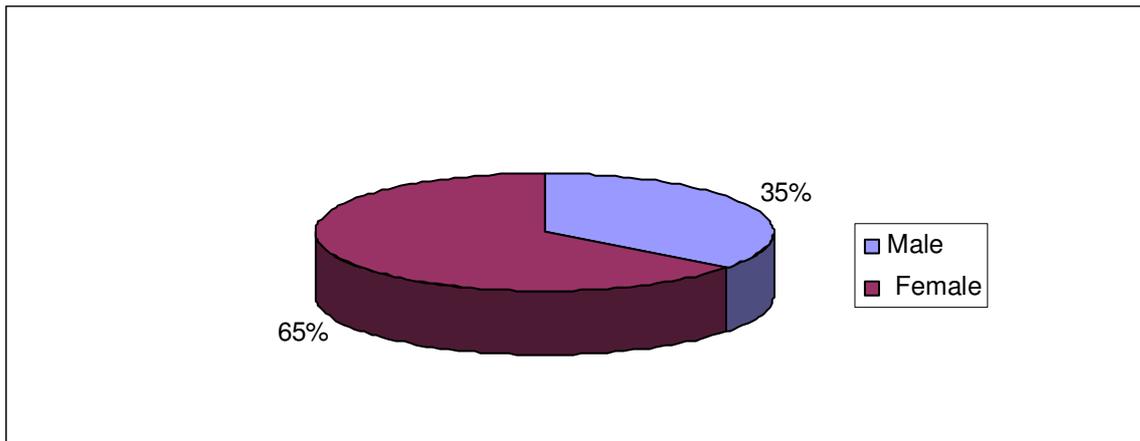


FIGURE 5.1: GENDER OF RESPONDENTS

5.2.2 RACE OF RESPONDENTS

As shown in Figure 5.2, the majority of the respondents are Black (56%), followed by White respondents (38%). In the minority, are Indian, Coloured and respondents classified as “Other”, who represent only 6% of the sample.

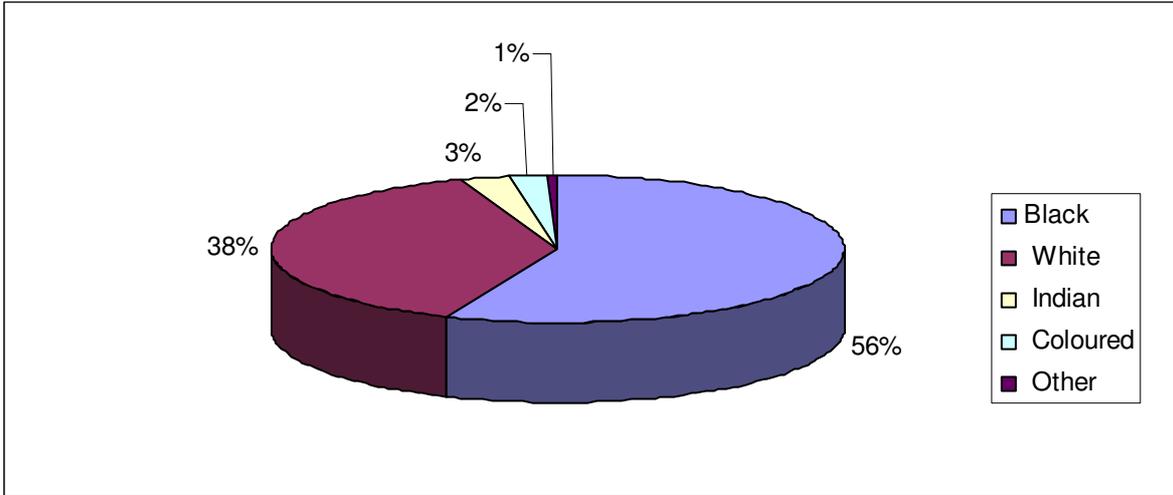


FIGURE 5.2: RACE OF RESPONDENTS

5.2.3 AGE OF RESPONDENTS

As shown in Figure 5.3 below, the respondents’ age ranged between 17 and 30. The majority of the respondents, at a total of 122 (85%), were between the ages of 19 and 22. Only 11 respondents (8%) were 23 years old or older, while 10 (7%) were 18 years old and only one was 17 years old.

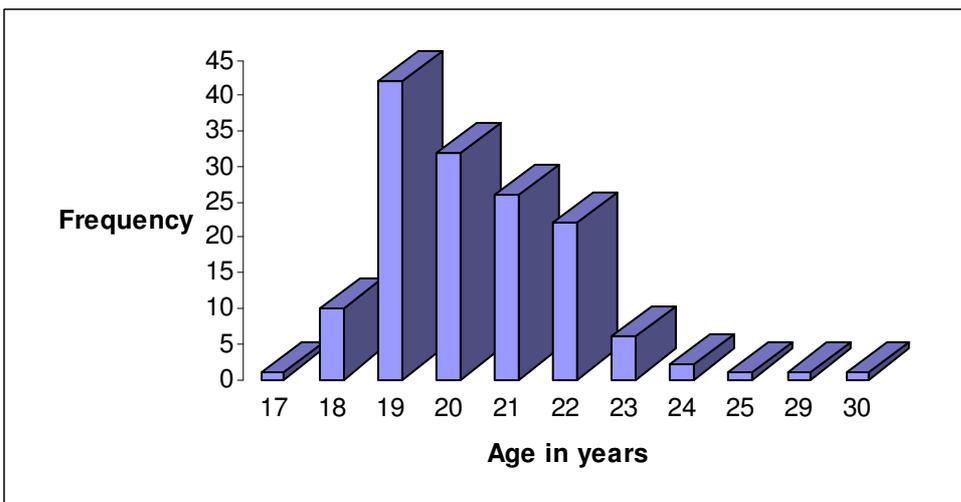


FIGURE 5.3: AGE OF RESPONDENTS

5.2.4 ETHNICITY OF RESPONDENTS

Of all 144 respondents, 18 of these failed to provide their ethnicity, which is expressed in terms of spoken language. Of the 126 respondents that did, the majority were Afrikaans (19%), followed by Pedi respondents at 16%. English and Ndebele respondents each represented 10% of the sample, followed by the Sotho respondents and those who described themselves as “Other”, each making up 7% of the total sample. With similar representation were the Tswana and Tsonga respondents at 6%, followed by Zulu respondents at 5% and Swazi respondents at 4%. In the minority, were Venda respondents and respondents of mixed ethnicity at 3% each, followed by Xhosa and Indian respondents at 2% each. See Figure 5.4 below.

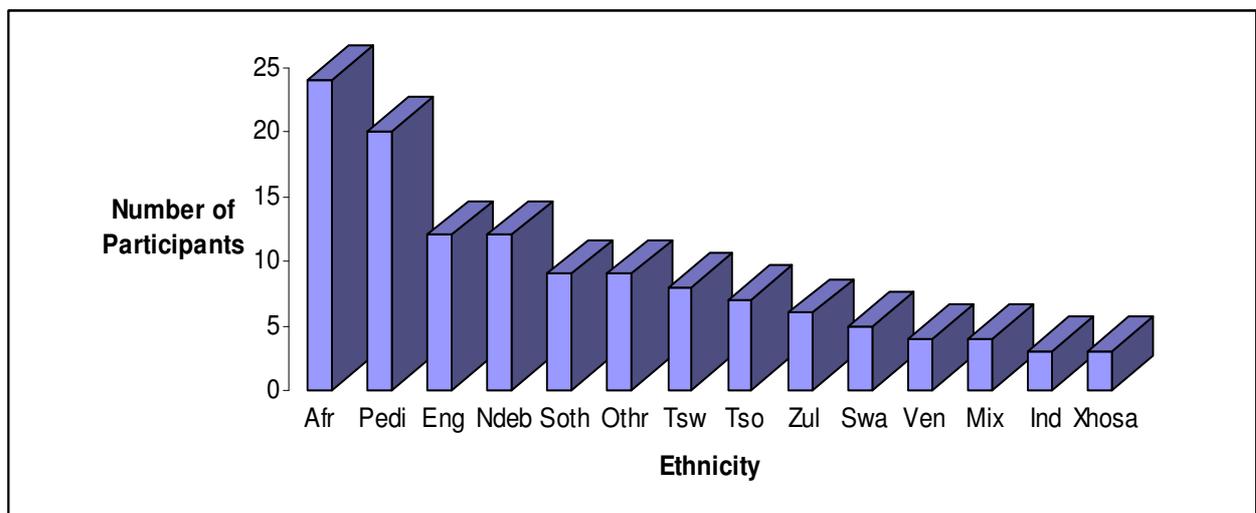


FIGURE 5.4: ETHNICITY OF RESPONDENTS

5.3 VARIABLES UNDER STUDY

The variables involved in this study are perceived ethnic identity, collective self-esteem and academic self-efficacy. Academic self-efficacy was specified as a dependent variable, whereas ethnic identity and collective self-esteem were specified as independent variables for the multiple regression analysis. Specification of academic self-efficacy as a dependent variable, with collective self-esteem and ethnic identity as independent variables does not, however, imply causality. Although allusions are made to prediction, the relationships between the predictor variables and academic self-efficacy are not considered causal (Black, 1999). According to Foster et al. (2006), multiple regression analysis is generally used to determine the relative importance of each of the independent or predictor variables in influencing the dependent variable.

In this instance, multiple regression analysis allows the observation of the relationships between the predictors and the dependent variable, as well as the nature of the correlation, if any, between the two predictors. In view of this, the relative importance of ethnic identity and collective self-esteem in influencing or predicting academic self-efficacy will be determined. In addition, the interpretation of the results will also involve an observation of the relationships between the two predictors, thus depicting the nature of the correlation between all three variables.

The variables described above were measured through the use of three measures. Academic self-efficacy was measured through the Academic Self-efficacy Scale or ASE, while the Multigroup Ethnic Identity Measure or MEIM measured ethnic identity and the race-specific Collective Self-Esteem Scale, also specified as the CSES, was used to measure collective self-esteem (Chemers et al., 2001; Luhtanen & Crocker, 1992; Phinney, 1992). Furthermore, the MEIM consists of two subscales, measuring ethnic identity search and

ethnic identity commitment, respectively (Phinney, 1992). The CSES consists of four subscales, namely, membership self-esteem, private collective self-esteem, public collective self-esteem and importance to identity (Luhtanen & Crocker, 1992).

In order to further investigate the relationships between the variables, each of the MEIM and CSES subscales were also included in the analyses. These were specified as independent variables, while the ASE was specified as the dependent variable. More specifically, the two MEIM subscales were, at one stage, specified as independent variables, with the ASE used as the dependent variable. Similarly, the four CSES subscales were also indicated as independent variables, with the ASE as the dependent variable. This was done so as to determine the extent to which each of the subscales correlates with scores on the ASE. This was done with the assumption that some of the scores on the subscales might correlate with the ASE in a way that differs significantly from the correlations between scores for the two main measures and the ASE.

5.4 MULTIPLE REGRESSION RESULTS

A multiple regression analysis was run to determine the nature of the relationships between the dependent and independent variables. The criteria for using multiple regression in this study have been met, as indicated in chapter 4. In total, nine sets of multiple regression analysis were run. Of these, three different analyses were run for all 144 respondents, specified as ‘overall’ analyses, while another three were run for Black respondents only and the last three included White respondents only.

The first overall multiple regression analysis included all 144 respondents with scores on both the CSES and the MEIM specified as predictors of the ASE scores, the dependent variable. The second analysis involved all the respondents, with the CSES subscales

specified as predictors of scores on the ASE. The third analysis involved all the respondents, with scores on the MEIM subscales used as predictors of scores on the ASE.

The use of the CSES subscales as independent variables stems from the assumption that each of the subscales may differ significantly in their prediction of academic self-efficacy. This could mean that some of the CSES subscales have a negative correlation with the ASE, while others have a positive correlation; despite the fact that the subscales all form one overall measure, namely, the CSES. In addition, some of the CSES subscales may have more predictive power over the ASE than others. Similarly, another analysis specifying scores on the two MEIM subscales as predictors of the ASE scores will determine if these subscales vary in their prediction of the ASE.

The three analyses described above were, firstly, run for all of the respondents, followed by analyses including Black respondents only and, lastly, analyses including White respondents only. The separate analyses involving Black and White respondents were conducted so as to determine which, between ethnic identity and collective self-esteem, was the more important predictor of academic self-efficacy for each race group. In addition, this will also enable an observation of any variations in the correlations between all the three main variables (i.e., overall academic self-efficacy, ethnic identity and collective self-esteem). Similarly, variations in the predictive power of the ASE by all the MEIM and CSES subscales, respectively, will also be determined for each race group.

For the race-based analyses, the CSES and the MEIM scores were initially included in the analysis as predictors of the ASE scores. This was done separately for the 81 Black respondents and 55 White respondents. Secondly, a multiple regression analysis was run, where scores on the four CSES subscales were specified as predictors of scores on the ASE. Once again, this analysis was run for Black respondents only, followed by a similar analysis involving White respondents only. Lastly, another multiple regression analysis was run with

scores on the two MEIM subscales specified as predictors of scores on the ASE. This analysis was run on Black respondents only and, lastly, White respondents only.

The above means that a total of nine multiple regression analyses were run. For this study, the analyses involving the use of all 144 respondents, Black respondents only, as well as White respondents only, were carried out separately and the results for each of these are presented separately in the following section.

5.4.1.1 OVERALL MULTIPLE REGRESSION RESULTS – OVERALL SAMPLE

This section presents the multiple regression analysis including all 144 respondents. The first sub-section includes multiple regression results wherein the overall MEIM and CSES scores were specified as independent variables, whereas the ASE was specified as the dependent variable. This is followed by a sub-section that involved the use of the two MEIM subscales (i.e., ethnic identity search and ethnic identity commitment) as the independent variables and the ASE as the dependent variable. Lastly, this is followed by a third sub-section involving the use of the CSES subscales (i.e., membership self-esteem, private collective self-esteem, public collective self-esteem and importance attached to identity) as independent variables and the ASE as the dependent variable.

Each of these analyses includes the evaluation of the model, evaluation of the independent variables and correlations. Firstly, the model refers to all the independent variables involved in each analysis. This means that the model differs for each multiple regression analysis, as it depends on the independent variables specified for each analysis. On this basis, model evaluation refers to the extent to which the combination of the independent variables involved accounts for the variance or change in the dependent variable (Pallant, 2001). Secondly, evaluation of the independent variables refers to an analysis of the relative

effectiveness or uniqueness with which each of the independent variables predicts the dependent variable (Pallant, 2001). Lastly, correlation refers to the nature of the relationships between all the variables involved in the analysis (Pallant, 2001; Trochim, 2006).

a) Evaluating the Model

The ‘model’ refers to the independent variables that are used as predictors of the dependent variable. In this regard, the model refers to both the MEIM and the CSES, which serve as predictors of the ASE. Model evaluation refers to an analysis of the amount of variance in the dependent variable that can be explained by all the independent variables (Pallant, 2001). Generally, the ‘adjusted R square’, which is found in the analysis, is multiplied by 100, which then gives the value as a percentage, indicating the extent to which the model explains the dependent variable. Tables 5.1 and 5.2 below show the results for model evaluation, inclusive of the MEIM and the CSES. In this instance, the model (i.e., the MEIM and the CSES) explains 4.7% of the variance in the ASE, the dependent variable (Table 5.1). Moreover, Table 5.2 shows that this result is statistically significant [$R = 0.246$, $R\text{ Square} = 0.061$, $\text{Adjusted } R\text{ Square} = 0.047$; $p < 0.05$].

TABLE 5.1: MODEL EVALUATION

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.246 ^a	.061	.047	.76654

a. Predictors: (Constant), CSES Overall Score, MEIM Overall Score

b. Dependent Variable: AS Score

TABLE 5.2: SIGNIFICANCE OF MODEL EVALUATION RESULTS

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.338	2	2.669	4.542	.012 ^a
	Residual	82.850	141	.588		
	Total	88.188	143			

a. Predictors: (Constant), CSES Overall Score, MEIM Overall Score

b. Dependent Variable: AS Score

b) Evaluating each of the Independent Variables

This sub-section deals with the contribution of each of the independent variables to the prediction of the dependent variable. The aim of this analysis is to establish which of the independent variables makes a more unique contribution to the prediction of academic self-efficacy, the dependent variable. The analysis in Table 5.3 reveals that the MEIM makes a more unique contribution to the prediction of the ASE, the dependent variable, than the CSES. This conclusion is based on the fact that the MEIM has the larger beta coefficient of the two, which is 0.144, as compared to the CSES, with a beta coefficient of 0.137. The MEIM's unique contribution to the prediction of the ASE is, however, not statistically significant ($p > 0.05$). This result means that neither of the independent variables makes a statistically significant unique contribution to the prediction of the dependent variable (the ASE).

TABLE 5.3: UNIQUE PREDICTION OF DEPENDENT VARIABLE

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.988	.498		8.005	.000		
	MEIM Overall Score	.239	.160	.144	1.500	.136	.720	1.389
	CSES Overall Score	.142	.100	.137	1.425	.156	.720	1.389

a. Dependent Variable: AS Score

c) Correlations

This section deals with the nature of the correlation between the variables, which may be either positive or negative (Pallant, 2001). Table 5.4 shows that there is a statistically significant positive correlation between the overall MEIM score and the ASE ($r = 0.217$; $p < 0.05$). Similarly, there is a statistically significant positive correlation between the overall CSES score and the ASE ($r = 0.213$; $p < 0.05$).

In addition, Table 5.4 shows that there is a statistically significant positive correlation between the independent variables, namely, the overall MEIM and CSES scores ($r = 0.529$; $p < 0.05$). This result means that there is a significant positive relationship between these two independent variables.

TABLE 5.4: CORRELATION BETWEEN MEIM, CSES AND ASE

Correlations

		AS Score	MEIM Overall Score	CSES Overall Score
Pearson Correlation	AS Score	1.000	.217	.213
	MEIM Overall Score	.217	1.000	.529
	CSES Overall Score	.213	.529	1.000
Sig. (1-tailed)	AS Score	.	.005	.005
	MEIM Overall Score	.005	.	.000
	CSES Overall Score	.005	.000	.
N	AS Score	144	144	144
	MEIM Overall Score	144	144	144
	CSES Overall Score	144	144	144

5.4.1.2 MEIM SUBSCALES MULTIPLE REGRESSION RESULTS – OVERALL SAMPLE

In this sub-section, the MEIM subscales (i.e., ethnic identity search and ethnic identity commitment) are used as the independent variables and the ASE as the dependent variable.

a) Evaluating the Model

In this instance, the model includes the subscales of the MEIM, which are ethnic identity search and ethnic identity commitment, specified as MEIM Ethnic ID Search and MEIM Commitment, respectively, in this analysis. The ASE is specified as AS Score in the analysis. Table 5.5 shows that this model explains 3.4% of the variance in the dependent variable, i.e., the ASE. Furthermore, Table 5.6 indicates that this result is statistically significant [$R = 0.217$, $R \text{ Square} = 0.047$, $\text{Adjusted } R \text{ Square} = 0.034$; $p < 0.05$].

TABLE 5.5: MODEL EVALUATION

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.217 ^a	.047	.034	.77196

a. Predictors: (Constant), MEIM Commitment, MEIM ethnic id search

b. Dependent Variable: AS Score

TABLE 5.6: SIGNIFICANCE OF MODEL EVALUATION RESULTS

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.163	2	2.082	3.493	.033 ^a
	Residual	84.025	141	.596		
	Total	88.188	143			

a. Predictors: (Constant), MEIM Commitment, MEIM ethnic id search

b. Dependent Variable: AS Score

b) Evaluating each of the Independent Variables

This section deals with the contribution of each of the MEIM subscales to the prediction of the dependent variable. The analysis in Table 5.7 reveals that the MEIM commitment subscale makes a more unique contribution to the prediction of the ASE, with a beta coefficient of 0.123, as compared to the MEIM ethnic identity search subscale, with a beta coefficient of 0.122. This result is, however, not statistically significant ($p > 0.05$).

TABLE 5.7: UNIQUE PREDICTION OF DEPENDENT VARIABLE

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.366	.434		10.061	.000
	MEIM ethnic id search	.174	.143	.122	1.219	.225
	MEIM Commitment	.186	.151	.123	1.233	.220

a. Dependent Variable: AS Score

c) Correlations

This sub-section presents an analysis of the correlation between each of the MEIM subscales and the ASE.

Table 5.8 shows that there is a statistically significant positive correlation between the MEIM ethnic identity search subscale and the ASE ($r = 0.192$; $p < 0.05$). Similarly, there is a statistically significant positive correlation between the MEIM commitment subscale and the ASE ($r = 0.193$; $p < 0.05$). This means that scores on either variable can effectively predict the score on the ASE.

TABLE 5.8: CORRELATION BETWEEN MEIM SUBSCALES AND ASE

Correlations

		AS Score	MEIM ethnic id search	MEIM Commitment
Pearson Correlation	AS Score	1.000	.192	.193
	MEIM ethnic id search	.192	1.000	.570
	MEIM Commitment	.193	.570	1.000
Sig. (1-tailed)	AS Score	.	.011	.010
	MEIM ethnic id search	.011	.	.000
	MEIM Commitment	.010	.000	.
N	AS Score	144	144	144
	MEIM ethnic id search	144	144	144
	MEIM Commitment	144	144	144

5.4.1.3 CSES SUBSCALES MULTIPLE REGRESSION RESULTS – OVERALL SAMPLE

In this sub-section, the CSES subscales are used as the independent variables and the ASE as the dependent variable. The subscales are importance to identity, public collective self-esteem, private collective self-esteem and membership self-esteem. In the analysis, these subscales are specified as CSES Importance to ID, CSES Public CSE, CSES Private CSE, CSES Membership SE, respectively.

a) Evaluating the Model

This model includes subscales of the CSES. Table 5.9 indicates that the model explains 3.9% of the variance in the ASE, the dependent variable. Moreover, Table 5.10 shows that this result is statistically significant [$R = 0.256$, $R\text{ Square} = 0.066$, $\text{Adjusted } R\text{ Square} = 0.039$; $p = 0.05$].

TABLE 5.9: MODEL EVALUATION

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.256 ^a	.066	.039	.76997

a. Predictors: (Constant), CSES Importance to Id, CSES Public CSE, CSES Private CSE, CSES Membership SE

b. Dependent Variable: AS Score

TABLE 5.10: SIGNIFICANCE OF MODEL EVALUATION RESULTS

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.782	4	1.445	2.438	.050 ^a
	Residual	82.406	139	.593		
	Total	88.188	143			

a. Predictors: (Constant), CSES Importance to Id, CSES Public CSE, CSES Private CSE, CSES Membership SE

b. Dependent Variable: AS Score

b) Evaluating each of the Independent Variables

This sub-section deals with the contribution of each of the CSES subscales to the prediction of the ASE, the dependent variable. The analysis in Table 5.11 shows that the membership self-esteem subscale makes a statistically significant unique contribution to the prediction of the ASE with a beta coefficient of 0.221 ($p < 0.05$). This is in contrast with the remaining three CSES subscales, whose results of unique prediction are not statistically significant ($p > 0.05$).

TABLE 5.11: UNIQUE PREDICTION OF DEPENDENT VARIABLE

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.336	.459		9.443	.000
	CSES Membership SE	.166	.080	.221	2.067	.041
	CSES Private CSE	.043	.075	.058	.577	.565
	CSES Public CSE	-.003	.064	-.004	-.045	.964
	CSES Importance to Id	-.002	.054	-.003	-.032	.974

a. Dependent Variable: AS Score

c) Correlations

This sub-section presents the correlation between each of the CSES subscales and the ASE.

Table 5.12 shows the relationships between the four subscales of the CSES and the ASE. In this instance, the four CSES subscales are used as the independent variables, while the ASE is the dependent variable.

Table 5.12 indicates that there are significant positive correlations between the membership self-esteem subscale (CSES Membership SE) and the ASE ($r = 0.252$; $p < 0.05$), as well as between the private collective self-esteem subscale (CSES Private CSE) and the ASE ($r = 0.182$; $p < 0.05$). The public collective self-esteem subscale, however, does not have a statistically significant correlation with the ASE ($r = 0.087$; $p > 0.05$). Similarly, the correlation between importance to identity and the ASE is not statistically significant ($r = 0.076$; $p > 0.05$).

TABLE 5.12: CORRELATION BETWEEN CSES SUBSCALES AND ASE

		Correlations				
		AS Score	CSES Membership SE	CSES Private CSE	CSES Public CSE	CSES Importance to Id
Pearson Correlation	AS Score	1.000	.252	.182	.087	.076
	CSES Membership SE	.252	1.000	.568	.365	.285
	CSES Private CSE	.182	.568	1.000	.185	.284
	CSES Public CSE	.087	.365	.185	1.000	.038
	CSES Importance to Id	.076	.285	.284	.038	1.000
Sig. (1-tailed)	AS Score	.	.001	.014	.149	.181
	CSES Membership SE	.001	.	.000	.000	.000
	CSES Private CSE	.014	.000	.	.013	.000
	CSES Public CSE	.149	.000	.013	.	.325
	CSES Importance to Id	.181	.000	.000	.325	.
N	AS Score	144	144	144	144	144
	CSES Membership SE	144	144	144	144	144
	CSES Private CSE	144	144	144	144	144
	CSES Public CSE	144	144	144	144	144
	CSES Importance to Id	144	144	144	144	144

5.4.2.1 OVERALL MULTIPLE REGRESSION RESULTS – BLACK SAMPLE

This section presents multiple regression analyses involving 81 Black respondents. The first sub-section includes multiple regression results wherein the MEIM and the CSES were specified as independent variables, while the ASE was specified as the dependent variable. This is followed by a sub-section that involved the use of each of the two MEIM subscales as the independent variables and the ASE as the dependent variable. Lastly, this is followed by a third sub-section involving the use of each of the four CSES subscales as the independent variables and the ASE as the dependent variable.

a) Evaluating the Model

In this instance, the model is inclusive of the CSES and the MEIM. Table 5.13 shows that this model explains 5.1% of the variance in the ASE, the dependent variable. As shown in Table 5.14, this result is statistically significant [$R = 0.274$, $R \text{ Square} = 0.075$, $\text{Adjusted } R \text{ Square} = 0.051$; $p < 0.05$].

TABLE 5.13: MODEL EVALUATION

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.274 ^a	.075	.051	.79421

a. Predictors: (Constant), CSES Overall Score, MEIM Overall Score

b. Dependent Variable: AS Score

TABLE 5.14: SIGNIFICANCE OF MODEL EVALUATION RESULTS

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.997	2	1.999	3.169	.048 ^a
	Residual	49.201	78	.631		
	Total	53.198	80			

a. Predictors: (Constant), CSES Overall Score, MEIM Overall Score

b. Dependent Variable: AS Score

b) Evaluating each of the Independent Variables

This sub-section is concerned with determining the independent variable that makes a more unique contribution to the prediction of the ASE. The analysis in Table 5.15 shows that, with the Black group of respondents, the MEIM makes a more unique contribution to the prediction of the ASE, the dependent variable, than the CSES. This is based on the fact that the MEIM has the larger beta coefficient, which is 0.187, as compared to the CSES, with a beta coefficient of 0.126. The MEIM's unique contribution to the prediction of the ASE is, however, not statistically significant, with F at $p > 0.05$ (Table 5.15). This means that neither one of the independent variables makes a significant unique contribution to the prediction of the dependent variable (the ASE).

TABLE 5.15: UNIQUE PREDICTION OF DEPENDENT VARIABLE

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.727	.692		5.383	.000		
	MEIM Overall Score	.305	.207	.187	1.469	.146	.731	1.368
	CSES Overall Score	.141	.143	.126	.986	.327	.731	1.368

a. Dependent Variable: AS Score

c) Correlations

This sub-section will present the correlation between each of the independent variables (the MEIM and the CSES) and the ASE, the dependent variable. Furthermore, the correlation between the MEIM and the CSES will also be considered.

Table 5.16 shows that there is a statistically significant positive correlation between the overall MEIM score and the ASE ($r = 0.252$; $p < 0.05$). Similarly, there is a statistically significant positive correlation between the overall CSES score and the ASE ($r = 0.223$; $p < 0.05$).

Furthermore, Table 5.16 shows that there is a positive correlation between the overall MEIM score and the overall CSES score ($r = 0.518$; $p < 0.05$). The above results mean that there is a significant positive relationship between the MEIM and the ASE, the CSES and the ASE, as well as between the MEIM and the CSES among Black respondents.

TABLE 5.16: CORRELATION BETWEEN MEIM, CSES AND ASE

Correlations

		AS Score	MEIM Overall Score	CSES Overall Score
Pearson Correlation	AS Score	1.000	.252	.223
	MEIM Overall Score	.252	1.000	.518
	CSES Overall Score	.223	.518	1.000
Sig. (1-tailed)	AS Score	.	.012	.023
	MEIM Overall Score	.012	.	.000
	CSES Overall Score	.023	.000	.
N	AS Score	81	81	81
	MEIM Overall Score	81	81	81
	CSES Overall Score	81	81	81

5.4.2.2 MEIM SUBSCALES MULTIPLE REGRESSION RESULTS – BLACK SAMPLE

In this sub-section, the two MEIM subscales are specified as independent variables and the ASE as the dependent variable.

a) Evaluating the Model

The model, in this instance, includes the subscales of MEIM, which are ethnic identity search and ethnic identity commitment. In the analysis, these subscales are specified as MEIM ethnic ID search and MEIM Commitment, respectively. As shown in Tables 5.17 and 5.18, this model explains 4% of the variance in the ASE, though it is not statistically significant [$R = 0.253$, $R^2 = 0.064$, Adjusted $R^2 = 0.040$; $p > 0.05$].

TABLE 5.17: MODEL EVALUATION

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.253 ^a	.064	.040	.79905

a. Predictors: (Constant), MEIM Commitment, MEIM ethnic id search

b. Dependent Variable: AS Score

TABLE 5.18: SIGNIFICANCE OF MODEL EVALUATION RESULTS

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.396	2	1.698	2.660	.076 ^a
	Residual	49.802	78	.638		
	Total	53.198	80			

a. Predictors: (Constant), MEIM Commitment, MEIM ethnic id search

b. Dependent Variable: AS Score

b) Evaluating each of the Independent Variables

This sub-section involves determining which of the MEIM subscales makes a more unique contribution to the prediction of the ASE, the dependent variable.

The analysis in Table 5.19 shows that the MEIM commitment subscale makes a more unique contribution to the prediction of the ASE, the dependent variable, with a beta coefficient of 0.161, as compared to the MEIM ethnic identity search subscale, with a beta coefficient of 0.121. This result is, however, not statistically significant ($p > 0.05$). This means that neither of the MEIM subscales is considered to make a unique contribution to the prediction of the dependent variable.

TABLE 5.19: UNIQUE PREDICTION OF DEPENDENT VARIABLE

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	4.117	.586		7.023	.000		
MEIM ethnic id search	.161	.182	.121	.888	.377	.642	1.558
MEIM Commitment	.251	.214	.161	1.174	.244	.642	1.558

a. Dependent Variable: AS Score

c) Correlations

This sub-section will include the examination of the correlation between each of the MEIM subscales and the ASE.

Table 5.20 shows that there is a significant positive correlation between the MEIM ethnic identity search subscale and the ASE, the dependent variable ($r = 0.218$; $p < 0.05$). In addition, there is a significant positive correlation between the MEIM commitment subscale and the ASE ($r = 0.233$; $p < 0.05$).

TABLE 5.20: CORRELATION BETWEEN MEIM SUBSCALES AND ASE

Correlations

		AS Score	MEIM ethnic id search	MEIM Commitment
Pearson Correlation	AS Score	1.000	.218	.233
	MEIM ethnic id search	.218	1.000	.599
	MEIM Commitment	.233	.599	1.000
Sig. (1-tailed)	AS Score	.	.026	.018
	MEIM ethnic id search	.026	.	.000
	MEIM Commitment	.018	.000	.
N	AS Score	81	81	81
	MEIM ethnic id search	81	81	81
	MEIM Commitment	81	81	81

5.4.2.3 CSES SUBSCALES MULTIPLE REGRESSION RESULTS – BLACK SAMPLE

In this sub-section, the four CSES subscales are specified as independent variables and the ASE as the dependent variable.

a) Evaluating the Model

This particular model includes the four subscales of the CSES, namely, importance to identity, public collective self-esteem, private collective self-esteem and membership self-esteem. In the analysis, the subscales are specified as CSES Importance to ID, CSES Public CSE, CSES Private CSE and CSES Membership SE, respectively.

The model explains 5.8% of the variance in the dependent variable, i.e., ASE. This result is, however, not statistically significant, as shown in Tables 5.21 and 5.22 [R = 0.325, R Square = 0.105, Adjusted R Square = 0.058; $p > 0.05$].

TABLE 5.21: MODEL EVALUATION

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.325 ^a	.105	.058	.79135

a. Predictors: (Constant), CSES Importance to Id, CSES Public CSE, CSES Private CSE, CSES Membership SE

b. Dependent Variable: AS Score

TABLE 5.22: SIGNIFICANCE OF MODEL EVALUATION RESULTS

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.605	4	1.401	2.237	.073 ^a
	Residual	47.593	76	.626		
	Total	53.198	80			

a. Predictors: (Constant), CSES Importance to Id, CSES Public CSE, CSES Private CSE, CSES Membership SE

b. Dependent Variable: AS Score

b) Evaluating each of the Independent Variables

This section evaluates which of the four CSES subscales makes a unique contribution to the prediction of the ASE. Table 5.23 shows that the CSES membership self-esteem subscale makes a statistically significant unique contribution to the prediction of the ASE, the dependent variable, with a beta coefficient of 0.273 ($p < 0.05$). This is in contrast with the three remaining CSES subscales, whose results of unique prediction are not statistically significant ($p > 0.05$).

TABLE 5.23: UNIQUE PREDICTION OF DEPENDENT VARIABLE

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	4.254	.672		6.335	.000		
	CSES Membership SE	.207	.101	.273	2.040	.045	.657	1.523
	CSES Private CSE	.094	.099	.121	.949	.346	.728	1.374
	CSES Public CSE	-.081	.093	-.100	-.872	.386	.903	1.107
	CSES Importance to Id	-.026	.085	-.036	-.301	.764	.819	1.221

a. Dependent Variable: AS Score

c) Correlations

This sub-section presents the correlation between each of the four CSES subscales and the ASE.

Table 5.24 below indicates that there are significant positive correlations between the membership self-esteem subscale (CSES Membership SE) and ASE ($r = 0.288$; $p < 0.05$), as well as between the private collective self-esteem subscale (CSES Private CSE) and the ASE ($r = 0.235$; $p < 0.05$). The CSES importance to identity subscale, however, does not have a significant positive correlation with the ASE ($r = 0.099$; $p > 0.05$). Moreover, there is a negative correlation, though not statistically significant, between the public collective self-esteem scale and the ASE ($r = -0.019$; $p > 0.05$).

TABLE 5.24: CORRELATION BETWEEN CSES SUBSCALES AND ASE

		Correlations				
		AS Score	CSES Membership SE	CSES Private CSE	CSES Public CSE	CSES Importance to Id
Pearson Correlation	AS Score	1.000	.288	.235	-.019	.099
	CSES Membership SE	.288	1.000	.479	.290	.380
	CSES Private CSE	.235	.479	1.000	.042	.349
	CSES Public CSE	-.019	.290	.042	1.000	.106
	CSES Importance to Id	.099	.380	.349	.106	1.000
Sig. (1-tailed)	AS Score	.	.005	.017	.433	.189
	CSES Membership SE	.005	.	.000	.004	.000
	CSES Private CSE	.017	.000	.	.356	.001
	CSES Public CSE	.433	.004	.356	.	.173
	CSES Importance to Id	.189	.000	.001	.173	.
N	AS Score	81	81	81	81	81
	CSES Membership SE	81	81	81	81	81
	CSES Private CSE	81	81	81	81	81
	CSES Public CSE	81	81	81	81	81
	CSES Importance to Id	81	81	81	81	81

5.4.3.1 OVERALL MULTIPLE REGRESSION RESULTS – WHITE SAMPLE

This section presents multiple regression analyses involving 55 White respondents. The first sub-section includes multiple regression results wherein the MEIM and the CSES were specified as independent variables, while the ASE was specified as the dependent variable. This is followed by a sub-section that involved the use of the two MEIM subscales as the independent variables and the ASE as the dependent variable. Lastly, this is followed by a third sub-section involving the use of the four CSES subscales as independent variables and the ASE as the dependent variable.

a) Evaluating the Model

In this instance, the model is inclusive of the CSES and the MEIM. Table 5.25 shows that this model explains 0.2% of the variance in the ASE, the dependent variable. As shown in Tables 5.25 and 5.26, this result is not statistically significant [$R = 0.196$, $R\text{ Square} = 0.039$, $\text{Adjusted } R\text{ Square} = 0.002$; $p > 0.05$].

TABLE 5.25: MODEL EVALUATION

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.196 ^a	.039	.002	.77806

a. Predictors: (Constant), CSES Overall Score, MEIM Overall Score

b. Dependent Variable: AS Score

TABLE 5.26: SIGNIFICANCE OF MODEL EVALUATION RESULTS

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.261	2	.630	1.041	.360 ^a
	Residual	31.480	52	.605		
	Total	32.741	54			

a. Predictors: (Constant), CSES Overall Score, MEIM Overall Score

b. Dependent Variable: AS Score

b) Evaluating each of the Independent Variables

This sub-section is concerned with determining which of the independent variables, namely, the MEIM and the CSES, makes a more unique contribution to the prediction of the ASE. The analysis in Table 5.27 shows that neither independent variable makes a statistically significant, unique contribution to the prediction of the ASE. This is based on the fact that the results shown in Table 5.27 are not statistically significant ($p > 0.05$).

TABLE 5.27: UNIQUE PREDICTION OF DEPENDENT VARIABLE

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	4.406	.829		5.312	.000		
	MEIM Overall Score	.063	.284	.036	.222	.825	.699	1.430
	CSES Overall Score	.179	.167	.174	1.071	.289	.699	1.430

a. Dependent Variable: AS Score

c) Correlations

This sub-section explores the nature of the correlation between the ASE and each of the independent variables, namely, the MEIM and the CSES. In addition, the analysis will also show the nature of the correlation between the MEIM and the CSES.

Table 5.28 below shows that there is a positive correlation between the overall MEIM score and the ASE, though not statistically significant ($r = 0.132$; $p > 0.05$). Similarly, there is a positive correlation between the overall CSES score and the ASE, which is also not statistically significant ($r = 0.2194$; $p > 0.05$).

There is, however, a statistically significant positive correlation between the overall MEIM and CSES scores ($r = 0.548$; $p < 0.05$).

TABLE 5.28: CORRELATION BETWEEN MEIM, CSES AND ASE

Correlations

		AS Score	MEIM Overall Score	CSES Overall Score
Pearson Correlation	AS Score	1.000	.132	.194
	MEIM Overall Score	.132	1.000	.548
	CSES Overall Score	.194	.548	1.000
Sig. (1-tailed)	AS Score	.	.169	.078
	MEIM Overall Score	.169	.	.000
	CSES Overall Score	.078	.000	.
N	AS Score	55	55	55
	MEIM Overall Score	55	55	55
	CSES Overall Score	55	55	55

5.4.3.2 MEIM SUBSCALES MULTIPLE REGRESSION RESULTS – WHITE SAMPLE

In this section, the two MEIM subscales are used as independent variables, while the ASE is the dependent variable.

a) Evaluating the Model

In this instance, the model is inclusive of the two MEIM subscales, namely, the ethnic identity search subscale and the ethnic identity commitment subscale. As shown in Tables 5.29 and 5.30, this model’s explanation of the variance in the dependent variable is -1.7%, though it is not statistically significant [R = 0.143, R Square = 0.020, Adjusted R Square = -0.017; $p > 0.05$].

TABLE 5.29: MODEL EVALUATION

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.143 ^a	.020	-.017	.78539

a. Predictors: (Constant), MEIM Commitment, MEIM ethnic id search

b. Dependent Variable: AS Score

TABLE 5.30: SIGNIFICANCE OF MODEL EVALUATION RESULTS

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.665	2	.332	.539	.587 ^a
	Residual	32.076	52	.617		
	Total	32.741	54			

a. Predictors: (Constant), MEIM Commitment, MEIM ethnic id search

b. Dependent Variable: AS Score

b) Evaluating each of the Independent Variables

This section deals with the examination of which of the independent variables, namely, the MEIM subscales, makes a more unique contribution to the prediction of the dependent variable. The analysis in Table 5.31 reveals that the MEIM ethnic identity search subscale makes a more unique contribution to the prediction of the ASE, the dependent variable, with a beta coefficient of 0.119, as compared to the ethnic identity commitment subscale, with a beta coefficient of only 0.036. This result is, however, not statistically significant ($p > 0.05$).

TABLE 5.31: UNIQUE PREDICTION OF DEPENDENT VARIABLE

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	4.784	.747		6.402	.000		
	MEIM ethnic id search	.199	.274	.119	.727	.471	.697	1.434
	MEIM Commitment	.053	.240	.036	.219	.827	.697	1.434

a. Dependent Variable: AS Score

c) Correlations

In this sub-section, the nature of the correlation between each of the MEIM subscales and the ASE will be examined.

Table 5.32 shows that there is a positive correlation between the MEIM ethnic identity search subscale and the ASE, though not statistically significant ($r = 0.139$; $p > 0.05$). Similarly, there is a positive correlation between the MEIM commitment subscale and the ASE that is, however, not statistically significant ($r = 0.102$; $p > 0.05$).

TABLE 5.32: CORRELATION BETWEEN MEIM SUBSCALES AND ASE

Correlations

		AS Score	MEIM ethnic id search	MEIM Commitment
Pearson Correlation	AS Score	1.000	.139	.102
	MEIM ethnic id search	.139	1.000	.550
	MEIM Commitment	.102	.550	1.000
Sig. (1-tailed)	AS Score	.	.155	.230
	MEIM ethnic id search	.155	.	.000
	MEIM Commitment	.230	.000	.
N	AS Score	55	55	55
	MEIM ethnic id search	55	55	55
	MEIM Commitment	55	55	55

5.4.3.3 CSES SUBSCALES MULTIPLE REGRESSION RESULTS – WHITE SAMPLE

In this section, the four CSES subscales are specified as independent variables, whereas the ASE is used as a dependent variable.

a) Evaluating the Model

In this instance, the model refers to all four CSES subscales. Tables 5.33 and 5.34 indicate that this model explains -2.1% of the variance in the dependent variable [R = 0.234, R Square = 0.055, Adjusted R Square = -0.021; $p > 0.05$]. This result is not statistically significant.

TABLE 5.33: MODEL EVALUATION

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.234 ^a	.055	-.021	.78669

a. Predictors: (Constant), CSES Importance to Id, CSES Public CSE, CSES Private CSE, CSES Membership SE

b. Dependent Variable: AS Score

TABLE 5.34: SIGNIFICANCE OF MODEL EVALUATION RESULTS

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.797	4	.449	.726	.578 ^a
	Residual	30.944	50	.619		
	Total	32.741	54			

a. Predictors: (Constant), CSES Importance to Id, CSES Public CSE, CSES Private CSE, CSES Membership SE

b. Dependent Variable: AS Score

b) Evaluating each of the Independent Variables

This section is primarily concerned with identifying the independent variable that makes a more unique contribution to the prediction of the ASE. Table 5.35 below reveals that none of

the CSES subscales make a statistically significant unique contribution to the prediction of the ASE ($p > 0.05$).

TABLE 5.35: UNIQUE PREDICTION OF DEPENDENT VARIABLE

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	4.483	.735		6.100	.000		
CSES Membership SE	.034	.181	.042	.188	.851	.386	2.591
CSES Private CSE	-.022	.154	-.031	-.144	.886	.411	2.436
CSES Public CSE	.136	.107	.193	1.278	.207	.829	1.206
CSES Importance to Id	.069	.103	.100	.667	.508	.845	1.184

a. Dependent Variable: AS Score

c) Correlations

In this sub-section, the correlation between each of the CSES subscales and the ASE will be examined. The four CSES subscales are membership self-esteem, private collective self-esteem, public collective self-esteem and importance to identity. These subscales are specified in the analysis as the CSES Membership SE, CSES Private CSE, CSES Public CSE and CSES Importance to ID.

Table 5.36 shows that there is a positive correlation between each of the CSES subscales and the ASE, though none of these are statistically significant ($p > 0.05$), as indicated below: Membership self-esteem and the ASE ($r = 0.122$; $p > 0.05$); private collective self-esteem and the ASE ($r = 0.091$; $p > 0.05$); public collective self-esteem and the ASE ($r = 0.206$; $p > 0.05$); importance to ethnic identity and the ASE ($r = 0.130$; $p > 0.05$).

TABLE 5.36: CORRELATION BETWEEN CSES SUBSCALES AND ASE

		Correlations				
		AS Score	CSES Membership SE	CSES Private CSE	CSES Public CSE	CSES Importance to Id
Pearson Correlation	AS Score	1.000	.122	.091	.206	.130
	CSES Membership SE	.122	1.000	.741	.353	.348
	CSES Private CSE	.091	.741	1.000	.405	.134
	CSES Public CSE	.206	.353	.405	1.000	.104
	CSES Importance to Id	.130	.348	.134	.104	1.000
Sig. (1-tailed)	AS Score	.	.188	.253	.066	.172
	CSES Membership SE	.188	.	.000	.004	.005
	CSES Private CSE	.253	.000	.	.001	.165
	CSES Public CSE	.066	.004	.001	.	.224
	CSES Importance to Id	.172	.005	.165	.224	.
N	AS Score	55	55	55	55	55
	CSES Membership SE	55	55	55	55	55
	CSES Private CSE	55	55	55	55	55
	CSES Public CSE	55	55	55	55	55
	CSES Importance to Id	55	55	55	55	55

5.5 CONCLUSION

This chapter consists of the results obtained following data analysis. The chapter began with a brief description of the sample and variables involved in the analysis, followed by the results. Three sets of multiple regression were run, involving all 144 respondents, Black respondents only and White respondents only. Each of these analyses involved three different sets of independent variables, while academic self-efficacy, measured by the ASE, was consistently specified as the dependent variable for all three analyses. The predictors were, firstly, the MEIM and the CSES, which are main measures for ethnic identity and collective self-esteem, respectively. This was followed by the use of the two MEIM subscales, as well as the four CSES subscales as independent variables. Results for these analyses were presented in the chapter and a summary of these follows below.

5.5.1 MEIM, CSES and ASE

There was a significant positive correlation between the MEIM and the ASE for all respondents as well as for Black respondents, whereas results were not statistically significant for White respondents. Similarly, significant positive correlations were found between the CSES and the ASE for all respondents, as well as Black respondents, whereas results for White respondents were not significant. There was, however, a statistically significant, positive correlation between the MEIM and the CSES for all three groups.

5.5.2 MEIM Subscales and ASE

Statistically significant positive correlations were found between each of the MEIM subscales and the ASE in the analyses consisting of all 144 respondents and for Black respondents only. For White respondents, however, there were no statistically significant correlations between any of the MEIM subscales and the ASE. This result is consistent with the results involving the overall MEIM and the ASE above, wherein correlations between the MEIM and the ASE were statistically significant only for Black respondents, as well as the overall sample consisting of all 144 respondents, while no correlation was found among White respondents.

5.5.3 CSES Subscales and ASE

For the overall sample consisting of all 144 respondents, as well as the analysis involving Black respondents only, statistically significant positive correlations were found between the ASE and only two of the CSES subscales, namely, the membership self-esteem subscale and

the private collective self-esteem subscale. There were, however, no significant correlations between any of the CSES subscales and ASE for White respondents.

In the next chapter, findings obtained from this study will be discussed.

CHAPTER 6

DISCUSSION OF FINDINGS

6.1 INTRODUCTION

This chapter presents the discussion and interpretation of results obtained from chapter 5 in this study, as well as limitations of the current study and recommendations for future studies on the topic. Firstly, a brief background of the study will be presented, including an overview of variables of interest in the study, processes involved in the study, as well as the assumptions and hypotheses as derived from the literature review and theoretical approach. This will be followed by the discussion of findings, with focus on whether the results from the current study confirmed the specified alternative hypotheses or initial assumptions. Thirdly, the results will also be discussed in relation to all four research questions that were initially specified for this study. Fourthly, the limitations of the current study, as identified by the researcher, will be presented, followed by recommendations for future research and, lastly, the conclusion.

6.2 BACKGROUND OF THE STUDY

The primary aim of this study was to determine the nature of the relationships between ethnic identity, collective self-esteem and academic self-efficacy among tertiary education students. Firstly, ethnic identity refers to the importance that individuals tend to attach to their identification as members of certain ethnic groups (Berry et al., 1992). Secondly, collective self-esteem refers to the evaluation of oneself within the social realm in terms of membership to a particular group. In this study, collective self-esteem is considered in relation to

membership to an ethnic group (Turner, 1982). Thirdly, academic self-efficacy specifically refers to one's perceptions regarding one's academic capabilities (Chemers et al., 2001). More specifically, the study sought to determine the nature of the relationships between ethnic identity and academic self-efficacy, collective self-esteem and academic self-efficacy, as well as ethnic identity and collective self-esteem. Moreover, the study investigated whether any of the relationships between these variables, or lack thereof, was influenced by race.

The social identity theory (SIT) formed the theoretical basis of this study. In accordance with the SIT, it is assumed that the three variables of interest in this study are interrelated. The following main hypotheses were stated with regard to the relationships between the variables. Firstly, it was hypothesised that there is a positive correlation between ethnic identity and academic self-efficacy. This means that an increase in ethnic identity is associated with an increase in academic self-efficacy. Secondly, it was hypothesised that there is a positive correlation between collective self-esteem and academic self-efficacy. Thirdly, a positive correlation between ethnic identity and collective self-esteem was also hypothesised. In addition, it was assumed that the relationships between the above-mentioned variables are mediated by race, such that the relationships manifest differently for Black and White respondents. This led to the assumption of alternative sub-hypotheses, specifying that there would be differences between Black and White respondents in the manifestation of the relationships between all three variables.

Three measures were used in this study, namely, the Multi Ethnic Group Identity Measure (MEIM), the race-specific Collective Self-Esteem Scale (CSES) and the Academic Self-Efficacy Scale (ASE). Firstly, the academic self-efficacy measure was used to measure respondents' perceptions of their own academic self-efficacy (Chemers et al., 2001). Secondly, the MEIM was used to measure perceived ethnic identity and comprised two

factors, namely, ethnic identity search and ethnic identity commitment (Phinney, 1992). Thirdly, the CSES was used to measure perceived collective self-esteem and comprised four subscales, namely, membership self-esteem, private collective self-esteem, public collective self-esteem and importance to identity (Luhtanen & Crocker, 1992).

Further assumptions were made with regard to the specific measurement instruments that were subsequently used to measure the salience of the variables in this study. The CSES, measuring collective self-esteem, consists of four subscales, while the MEIM, measuring ethnic identity, consists of two subscales. Given these factors, it was also subsequently assumed that there would be a positive correlation between each of the four CSES subscales and academic self-efficacy, as well as between each of the two MEIM subscales and academic self-efficacy. More specifically, a positive relationship would be expected between academic self-efficacy and each of the four CSES subscales, namely, membership self-esteem, private collective self-esteem, public collective self-esteem and importance to identity. In the same manner, positive correlations were expected between academic self-efficacy and the MEIM ethnic identity search subscale, as well as the ethnic identity commitment subscale. The rationalisation for these assumptions stemmed from the notion that each of the subscales partially represents the overall construct assessed by its corresponding overall measure. This analysis would enable the researcher to draw conclusions about the relationships between academic self-efficacy and specific aspects of ethnic identity and collective self-esteem which, in this instance, are the two MEIM subscales and the four CSES subscales, respectively. Similarly to the initial main hypotheses, it was assumed that each of these subscales' correlations with academic self-efficacy would be different for Black and White respondents.

In view of the above, the analyses examined overall correlations between the MEIM and the CSES, the MEIM and the ASE, as well as between the CSES and the ASE. In

addition, further analyses examined the correlations between academic self-efficacy and each of the CSES and MEIM subscales. This is to say, the correlation between each of the two MEIM subscales and the ASE was examined, as well as the correlation between each of the four CSES subscales and the ASE. This was so as to determine if any of the subscales within either measure had statistically significant correlations with the ASE, more so than the other subscales in that particular measure.

In addition to the analyses described above involving all respondents, where applicable, distinctions were drawn between Black and White respondents regarding the correlation between academic self-efficacy and each of the two main predictor variables in this study, namely, ethnic identity and collective self-esteem. In this instance, the study took into account any distinctions between Black and White respondents regarding the correlations between the ASE and the overall MEIM and CSES measures. Further distinctions were made between the respondents with regard to the correlations between the ASE and each of the MEIM and CSES subscales, respectively. Lastly, further distinctions, where applicable, were made between Black and White respondents with regard to the correlation between ethnic identity and collective self-esteem. In this regard, only the correlations involving the overall measures, namely the overall MEIM and CSES, were taken into account, with no reference to any of the subscales.

Multiple regression analyses were run through SPSS, giving an indication of all relationships of interest in this study. Multiple regression analysis is a statistical method used to determine the extent to which two or more predictors or independent variables are able to predict the dependent variable (Pallant, 2001). In the analysis, ethnic identity and collective self-esteem were specified as predictors, whereas academic self-efficacy was regarded as the dependent variable. In this study, however, no inferences about causality between the variables are made. Rather, the study is concerned with inferences regarding the strength of

the relationship between academic self-efficacy and ethnic identity, as well as between academic self-efficacy and collective self-esteem (Foster et al., 2006). Furthermore, the multiple regression analysis also gave an indication of the relationship between the two predictor variables, namely, ethnic identity and collective self-esteem.

The following subsection includes a discussion of the results with regard to their confirmation, if any, of the specified alternative hypotheses, as well as any emerging differences between Black and White respondents. In addition, the relationships between the variables will be discussed with reference to their correspondence, or lack thereof, with the theoretical assumptions and previous findings as discussed in the literature and theory chapters.

6.3 DISCUSSION OF RESULTS

In this section, results from the study will be presented briefly, followed by the interpretation thereof. Firstly, results for the correlation between overall ethnic identity, as measured by the MEIM, and academic self-efficacy, as measured by the ASE, will be discussed. This will include a discussion on the correlation between each of the MEIM subscales and academic self-efficacy. In addition, the discussion will consider results for the total sample, as well as differences, if any, between Black and White respondents. Secondly, the correlation between overall collective self-esteem and academic self-efficacy will be discussed, as well as the correlation between each of the CSES subscales and academic self-efficacy. Once again, results for the total sample will be discussed, followed by a discussion of any emerging differences between Black and White respondents. Thirdly, correlation results for overall ethnic identity and collective self-esteem will be discussed. Results for the total sample will be discussed, as well as emerging differences between Black and White respondents.

6.3.1 ETHNIC IDENTITY AND ACADEMIC SELF-EFFICACY

Initial hypotheses in this study stated that there is a positive correlation between ethnic identity and academic self-efficacy. A summary of statistically significant correlations between the overall MEIM score and the ASE from all three analyses follows below:

- i. There is a statistically significant positive correlation between the overall MEIM score and the ASE for the overall sample.
- ii. There is a statistically significant positive correlation between the overall MEIM score and the ASE for the Black sample.
- iii. No statistically significant results were found for the White sample.

The above findings confirm the alternative hypothesis for the overall sample, as well as the sample consisting of Black respondents only. While there were no statistically significant results for the White sample, there was a statistically significant positive correlation between ethnic identity and academic self-efficacy for the Black sample and the overall sample that included all 144 respondents. This means that, for the overall and Black samples, as the score on ethnic identity increases, so does the score on academic self-efficacy. These results are compatible with previous findings from similar studies. For instance, Umaña-Taylor (2004) states that various studies have proven that there is a link between individuals' self-esteem and ethnic identity. Similarly, Pilegge and Holtz (1997) concluded that individuals with a strong social identity and a high self-esteem also tend to set high performance standards for themselves and also perform better.

In addition, findings from the current study indicate a strong correlation between ethnic identity and academic self-efficacy among Black respondents, who were a minority

group in the context of the study. As stated in chapter 1, at the time of data collection, 59% of registered students at the academic institution under study were White, with Black students making up 35% and the remaining 6% made up by Indian and Coloured students. This is consistent with previous findings wherein respondents who were considered a minority group consistently scored higher than the majority groups on ethnic identity (Abu-Rayya, 2006; Phillips Smith et al., 1999; Spencer-Rodgers & Collins, 2006; Umaña-Taylor & Updegraff, 2007; Verkuyten, 2009). These high ethnic identity scores among the minority groups also tended to strongly correlate with other positive feelings about the self, such as global self-esteem and general self-concept. The trends described above, which also proved applicable in this study, seem to substantiate Verkuyten's (2009) assertion that multiculturalism threatens individuals' self-identity. This argument stems from the assumption that individuals perceive a multicultural environment as a threat to their own cultural identity, which may lead them to place emphasis on the latter.

The prevalence of racism in higher educational institutions referred to by Kasese-Hara (2006) and Robus and MacLeod (2006) could mean that covert and/or overt prejudice is prevalent in the context of the study. This is especially in consideration of the fact that the study takes place in what is considered a historically White tertiary institution. Findings from the South African Social Attitudes Survey (as cited in Roefs, 2006), conducted in 2003, also showed that Black and White students identified educational institutions as one of the contexts in which racial discrimination is most likely to occur. A report from an investigation commissioned in 2008 by the then Minister of Education, Naledi Pandor, also revealed that racial discrimination is pervasive in public higher educational institutions in South Africa (Department of Education, 2008).

Real or perceived discrimination has been shown to positively influence the salience of ethnic identity among members of the groups that are typically subjects of racial prejudice

(e.g., Phillips Smith et al., 1999; Umaña-Taylor, 2004; Umaña-Taylor & Updegraff, 2007; Woolf et al., 2008). Furthermore, the correlation between ethnic identity and academic self-efficacy is consistent with Eccles et al.'s (2006) suggestion that the adoption of an agentic perspective leads to academic achievement and feelings of efficacy despite an individual's immersion in a context of prejudice and discrimination. In view of this, a strong ethnic identity, particularly among Black respondents in the current study, may serve as a buffer against the possibly negative effects of real or perceived discrimination and minimise the latter's negative effects on academic self-efficacy. In the same manner, Umaña-Taylor and Updegraff (2007) posit that a salient ethnic identity and cultural orientation, coupled with high self-esteem, enhanced psychological well-being among minority Latino youth.

The results for the overall sample and, particularly for Black respondents, are compatible with the tenets of the SIT. The SIT assumes that a salient social identity positively influences self-esteem. For the purposes of the study, academic self-efficacy is assumed to demonstrate self-esteem in an academic context, specifically in relation to the performance of academic tasks. One of the assumptions of the SIT is that there is a relationship between self-esteem and group membership. In this regard, strong identification is usually accompanied by positive feelings arising from membership to a certain group (Baron & Byrne, 2003; Turner, 1982).

According to the SIT, individuals tend to emphasise the superiority of their group by adopting self-serving biases that highlight positive aspects of the ingroup, especially in relation to the outgroups. These self-serving biases, though subjective and possibly inaccurate, ultimately help individuals form a positive image of the ingroup, thereby elevating the perceived status of the ingroup (Baron & Byrne, 2003). Proponents of the SIT assert that this process ultimately serves to enhance individuals' self-esteem. On this basis, it could be argued that academic self-efficacy reflects an enhanced general self-esteem resulting

from strong ingroup identification. In view of this, the assumptions of the SIT seem compatible with the findings from this study, wherein respondents' scores on ethnic identity correlated with scores on academic self-efficacy. This was especially true for Black respondents in this study.

6.3.2 MEIM SUBSCALES AND ACADEMIC SELF-EFFICACY

In keeping with the overall hypothesis relating to ethnic identity and academic self-efficacy, a positive correlation was expected between each of the MEIM subscales and the ASE. A summary of statistically significant correlations between the MEIM subscales and the ASE from all three analyses follows below:

- i. There is a statistically significant correlation between the MEIM ethnic identity search subscale and the ASE, as well as between the MEIM commitment subscale and the ASE for the overall sample.
- ii. There is a statistically significant positive correlation between the MEIM ethnic identity search subscale and the ASE, as well as between the MEIM commitment subscale and the ASE for the Black sample.
- iii. There is no statistically significant correlation between either of the MEIM subscales and the ASE for the White sample.

Initial expectations regarding the relationships between both MEIM subscales and the ASE were met for the overall sample and the sample consisting of Black respondents only. For these analyses, results showed a statistically significant positive correlation between the MEIM ethnic identity search subscale and the ASE, as well as between the MEIM

commitment subscale and the ASE. This means that, for the overall sample and Black respondents, as the score on either subscale increases, so does the score on academic self-efficacy. More specifically, as the score on ethnic identity search and ethnic identity commitment increases, respectively, so does the score on academic self-efficacy. For White respondents, however, no statistically significant correlations were found between any of the MEIM subscales and the ASE. The observed discrepancies between Black and White respondents could be a subject for further studies on this topic. The latter may also involve taking into account the psychometric properties of the MEIM, such as validity and reliability, particularly with regard to its performance in the South African context. This would ultimately help with the standardisation of the measure specifically for the South African context (Elkonin, Foxcroft, Roodt, & Astbury, 2001; Kanjee, 2001).

6.3.3 COLLECTIVE SELF-ESTEEM AND ACADEMIC SELF-EFFICACY

It was initially hypothesised that collective self-esteem has a positive correlation with academic self-efficacy. A summary of statistically significant correlations between the overall CSES and the ASE from all three analyses follows below:

- i. There is a statistically significant correlation between the overall CSES and the ASE for the overall sample.
- ii. There is a statistically significant positive correlation between the CSES and the ASE for the Black sample.
- iii. No statistically significant results were found for the White sample.

As shown above, the alternative hypothesis regarding the correlation between collective self-esteem and academic self-efficacy was confirmed only for the overall sample, as well as the sample consisting of Black respondents only. No statistically significant correlation was found for White respondents.

The significant results that were found, particularly among Black respondents, could be due to the notion of collective representations referred to by Crocker (1999). Collective representations, according to Crocker, refer to the tendency by members of a discriminated group to carry schemas of discrimination into other contexts. This is especially true in instances wherein the situation reasonably exposes one to discrimination, such as a context in which one is in the minority. These schemas may lead to members of the group that is being discriminated against developing a high collective self-esteem, which persists in spite of the outgroups' negative regard for the group, thereby having a positive effect on the former's academic self-efficacy.

Firstly, the outgroups' evaluation of one's group, being one of the several components of collective self-esteem, may negatively affect self-esteem to a certain extent. Despite this negative evaluation by the outgroups, Wiley et al. (2008) argue that an individual may still maintain a positive evaluation of his or her group. In view of this, Spencer-Rodgers and Collins (2006) suggest that individuals employ self-protective mechanisms to counteract the possibly damaging effects of negative regard for the group by the outgroups. This may ultimately strengthen individuals' identification with the ingroup and enhance self-esteem.

On this basis, it could be argued that enhanced regard for the ingroup, as a function of collective self-esteem, also positively affects academic self-efficacy. This is especially when considering the fact that the studies cited above primarily involved respondents from minority groups, who also tended to experience overt or covert discrimination. In view of this, it is argued that the correlation found between collective self-esteem, as measured by the CSES,

and academic self-efficacy, as measured by the ASE, among Black respondents in this study may be explained by trends observed in similar studies involving respondents who are often subjects of racial discrimination, particularly in a context in which they form a minority.

6.3.4 CSES SUBSCALES AND ACADEMIC SELF-EFFICACY

In keeping with the hypothesis relating to collective self-esteem and academic self-efficacy, a positive correlation was expected between each of the CSES subscales and the ASE. A summary of statistically significant correlations between the CSES subscales and the ASE from all three analyses follows below:

- i. There is a statistically significant correlation between the membership self-esteem subscale and the ASE, as well as between the private collective self-esteem subscale and the ASE for the overall sample.
- ii. There are statistically significant positive correlations between the membership self-esteem subscale and the ASE, and the private collective self-esteem subscale and the ASE for the Black sample.
- iii. No statistically significant results were found for the White sample.

Contrary to initial expectations, only two of the CSES subscales showed a positive correlation with the ASE. These findings indicate that, for the overall sample involving all 144 respondents, there was a statistically significant positive correlation between private collective self-esteem and academic self-efficacy, as well as between membership self-esteem and academic self-efficacy. Similar results were found for the sample involving

Black respondents only. For White respondents, however, no statistically significant correlations were found between any of the CSES subscales and the ASE.

The CSES primarily consists of four subscales, namely, membership self-esteem, importance attached to ethnic identity, private collective self-esteem and public collective self-esteem. In view of the above findings, the lack of correlation between private collective self-esteem and public collective self-esteem is compatible with the SIT's theoretical assumptions. According to the SIT, individuals' self-serving biases about the ingroup merely serve to elevate the status of the group, though they are not shared by the outgroups (Baron & Byrne, 2003). In the same manner, individuals' private collective self-esteem may be reasonably higher than public collective self-esteem due to discrepancies between how members of the group view it and how it is viewed by members of the outgroups.

In addition, the positive correlation found between membership self-esteem and academic self-efficacy for the overall sample and Black respondents also complements findings for ethnic identity and academic self-efficacy as discussed in section 6.3.1. It could be argued that membership self-esteem is closely linked to self-identification as a member of a group and, consequently, forms an integral part of ethnic identity. This is especially considering the fact that the MEIM primarily investigates the extent of commitment to one's ethnic group as well as the continuous search to strengthen one's ethnic identity by equipping oneself with knowledge regarding beliefs, practices and rituals associated with membership to the group (Phinney, 1992). Furthermore, the positive correlations found between the two CSES subscales and the ASE also seem to have influenced the positive correlation found between the overall CSES and the ASE. This is especially considering the fact that neither of the other two CSES subscales showed any statistically significant correlation with the ASE in all three analyses, whereas significant positive correlations were found between the overall CSES and the ASE in the overall sample consisting of all respondents and the analysis

involving Black respondents only. These findings show that private collective self-esteem and membership self-esteem, independently of the other CSES subscales, positively influenced the correlation between overall collective self-esteem, as measured by the CSES, and academic self-efficacy, as measured by the ASE.

6.3.5 ETHNIC IDENTITY AND COLLECTIVE SELF-ESTEEM

Initially, a positive correlation between ethnic identity and collective self-esteem was hypothesised. A summary of statistically significant correlations between the overall MEIM and CSES from all three analyses follows below:

- i. There is a statistically significant positive correlation between the overall MEIM and CSES for the overall sample.
- ii. There is a statistically significant positive correlation between the overall MEIM and CSES for the Black sample.
- iii. There is a statistically significant positive correlation between the overall MEIM and CSES for the White sample.

The above results indicate that the alternative hypothesis was confirmed for all three analyses involving all respondents, as well as for Black and White respondents in the separate race-based analyses. This is to say, statistically significant positive correlations were found between the MEIM and the CSES for the overall sample, as well as for the Black and White samples, respectively.

Louw and Edwards (1997) posited that intergroup contact often involves a certain level of depersonalisation. Depersonalisation, in relation to ethnic identity, refers to instances

when individuals view themselves on the basis of group membership. During interpersonal contact, they may merely distinguish between others only as members of either the ingroup or the outgroups, without considering each person's individual attributes (Turner, 1982). It is in such instances wherein individuals seek to emphasise their group's superiority by adopting self-serving biases that favour the ingroup and subsequently bring about pride in being a member of that group. In view of this, collective self-esteem seems to presuppose an individual's identification as a member of a particular group. Similarly, high ethnic identity seems to predetermine an equally high collective self-esteem. This is because collective self-esteem, as discussed in section 6.3.4, was found to be related to the extent to which individuals place value on their membership to a group, as well as identification as a member of that particular group.

Despite the above arguments and findings from the current study, the SIT only acknowledges the salience of social identity and influence on personal self-esteem with no reference to collective self-esteem. In view of this, some of the assumptions of the SIT may have to be revised to acknowledge the existence of collective self-esteem as well as its inextricable link with social identity.

6.4 SUMMARY OF RESULTS IN THE CONTEXT OF THE RESEARCH QUESTIONS

The following research questions were specified for the current study:

- i. What is the nature of the relationship between ethnic identity and academic self-efficacy?

- ii. What is the nature of the relationship between collective self-esteem and academic self-efficacy?
- iii. What is the nature of the relationship between ethnic identity and collective self-esteem?
- iv. Are any of the specified relationships between the variables, or lack thereof, influenced by race?

As indicated in earlier sections of this chapter, three separate analyses were run for each research question specified above. Overall analyses were run, involving all respondents in the study, as well as race-based analyses, which helped reveal any existing differences between an exclusively White sample and a Black sample with regard to the relationships between the specified variables.

For the overall analysis, there were positive correlations between ethnic identity and academic self-efficacy, collective self-esteem and academic self-efficacy, as well as between ethnic identity and collective self-esteem. These findings were also true for the separate sample involving Black respondents only. For the White sample, however, a significant positive correlation was found between ethnic identity and collective self-esteem only. This suggests that, for White respondents, academic self-efficacy neither influences nor is influenced by levels of ethnic identity or collective self-esteem.

Previous studies have also found correlations between the three main variables specified in this study, particularly among minority students (Phillips Smith et al., 1999; Umaña-Taylor, 2004; Umaña-Taylor & Updegraff, 2007; Woolf et al., 2008). With regard to the current study, it is argued that these correlations may have proved more pronounced among Black respondents due to their minority status in the context of the study and, therefore, possible predisposition to real or perceived prejudice. In addition, their

marginalisation in the broader socio-political context during the apartheid era may have also played a role. This is especially considering the notion that racism is highly prevalent in contemporary South Africa. A previous study indicated that educational institutions were identified by respondents as one of the contexts in which instances of racism are most likely to occur (SASAS, as cited in Roefs, 2006). These respondents went on to reveal that race relations had not improved since the establishment of democratic governance in 1994 and had, in fact, worsened.

With regard to the correlation between the MEIM subscales and academic self-efficacy, as measured by the ASE, as well as between the CSES subscales and academic self-efficacy, results for the overall analysis and for Black respondents from the race-based analysis were also identical. In these analyses, positive correlations were found between academic self-efficacy and each MEIM subscale, namely, the ethnic identity search and commitment subscales. These results are consistent with the positive correlation found between the overall MEIM and academic self-efficacy. For White respondents, however, no correlation was found between any of the MEIM subscales and academic self-efficacy.

For the CSES subscales, positive correlations were found between membership self-esteem and academic self-efficacy, as well as between private collective self-esteem and academic self-efficacy. These results were true for the overall sample, as well as the sample involving Black respondents only. On this basis, only two of the CSES subscales correlated with academic self-efficacy, with the exception of the public collective self-esteem subscale and the subscale relating to the importance attached to ethnic identity. For White respondents, however, no correlation was found between any of the CSES subscales and academic self-efficacy. A study by Wiley et al. (2008) suggests that individuals' private collective self-esteem may be largely unaffected by public collective self-esteem. This seems consistent with results from the current study, which show that the relationship between

private collective self-esteem and academic self-efficacy differs significantly from the relationship found between public collective self-esteem and academic self-efficacy. This inclination, it is argued, occurs in spite of the outgroups' negative perception of the ingroup, with members of the ingroup presumably adopting self-serving biases that elevate the ingroup's status and, ultimately, self-esteem relating to membership to the group (Turner, 1982; Wiley et al., 2008). In this regard, it is assumed that private collective self-esteem occurs in inverse proportion to public collective self-esteem. Furthermore, the apparent link between private collective self-esteem and group superiority, though subjective, seemingly accounts for the positive correlation found between the membership collective self-esteem subscale and academic self-efficacy among Black respondents, as well as the overall sample.

6.5 LIMITATIONS OF THE STUDY

Certain limitations regarding some of the aspects of the study have been identified. A discussion of these limitations will follow, thereby indicating ways in which future studies can take measures to control for such limitations and, consequently, yield more accurate results.

Firstly, the validity of the three measures, particularly with their use on the sample that was included in the current study, was not examined. The validity of a measure refers to the extent to which it measures what it intends to measure (Trochim, 2006). It is important to take into account the psychometric properties of a measure during its use on any sample, as these vary for each sample. This is especially considering the fact that none of the measures, namely, the MEIM, the CSES and the ASE, have been standardised specifically for the South African context (Elkonin et al., 2001; Kanjee, 2001). It is also important to note the psychometric properties of the measures for members of different race groups. This is

especially considering, among others, the ethnic, cultural and racial differences between members of South African society (Afolayan, 2004; Magubane, 1998). Due to the limited scope of this mini-dissertation, standardisation of the measures was not undertaken prior to the use of the measures in the current study.

Secondly, the internal consistency of the measures used in this study was examined, thereby indicating whether all items in each measure seem to measure the same underlying construct, as required (Pallant, 2001; Trochim, 2006). In this regard, the analysis showed that the overall CSES had low reliability, with $r = 0.34$. Pallant (2001) states that a reliability score of 0.7 or above is preferable. This means that reliability cannot be reasonably inferred for the CSES as a whole, with a score of only 0.34. The CSES subscales, however, showed greater reliability with $r = 0.6$.

The samples used in the current study consisted of an unequal number of Black and White respondents, though comparisons were subsequently made between the groups. The unequal sample sizes between these groups could compromise the accuracy of any conclusions that are reached regarding differences or similarities between the groups. This could mean that relationships between variables are less likely to be observed for the smaller group than among the larger group. This stems from Trochim's (2006) assertion that less data can lead to failure to detect a relationship when there is actually one. In view of this, a study seeking to compare results for two or more groups may yield reasonably accurate results if there are no major differences between the groups' sample sizes.

In relation to the above, the racial composition of the sample in the current study is in inverse proportion to the racial distribution of students at the HLI from which the sample was drawn. In this regard, Black respondents make up 56% of the total sample, while White respondents represent only 38% of the sample. In contrast, enrolment figures of the specified HLI show that, at the time of data collection, 59% of registered students were White, while

only 38% of these were Black. In view of this, it would be ideal to have a sample composition that matches the population to which the results are being generalised, especially considering the fact that comparisons are subsequently made between Black and White respondents with regard to the relationships between the variables. In this regard, proportional quota sampling would have been a more appropriate variation of non-probability sampling that would yield reasonable inferences regarding the data (Trochim, 2006).

There were eight respondents in this study who classified themselves as ‘mixed’ in the race category. These respondents were included in the overall analysis only, since they were too few to be included as an independent sample in the separate race-based analyses. It is argued, however, that their total exclusion from the overall analysis would have ensured that the overall sample consisted of Black and White respondents only. This would enable the researcher to observe the extent to which the correlations found between variables in the separate analyses involving either Black or White respondents reflect findings from the overall sample. In this regard, one would be able to determine with certainty if the correlations found for the overall sample were merely due to Black respondents markedly increasing the likelihood of correlations for the former. This is especially considering the fact that correlations for the overall sample were often similar to results obtained for the Black sample in the race-based analysis. In contrast, results obtained for the White sample seemed independent of trends in the overall analysis. This could mean that any correlations found, or lack thereof, between variables in the overall sample may have been unrealistically inflated by Black respondents’ scores, thus explaining the similarities between findings from the overall analysis and the analysis including Black respondents only.

Lastly, convenience sampling was used in this study. Convenience sampling is a non-probability sampling method that involves the drawing of a sample from an accessible group that is, however, not necessarily representative of the population at large (Gay & Airasian,

2003). The use of convenience sampling may compromise the external validity of the study, as it limits the generalisation of findings to the type of sample involved in the study and not to other contexts involving other subjects, places or times outside the study (Gay & Airasian, 2003; Trochim, 2006). As a result, if replicated in a different context, future studies may not yield findings that are similar to observations in the current study. Rather, probability sampling is generally recommended as it ensures that sampling bias does not occur and that the selected sample is adequately representative of the entire population from which it was drawn (Fowler, 2009; Gay & Airasian, 2003).

6.6 RECOMMENDATIONS FOR FUTURE RESEARCH

Firstly, future research relating to this study may prove more conclusive if the limitations described above are addressed effectively. In addition, several recommendations have been put forth in order to further broaden the scope of the current study. For instance, any future replication of this study may need to include personal self-esteem as one of the variables in the study, so as to determine the former's correlation particularly with academic self-efficacy. This would help confirm whether academic self-efficacy is simply a contextualised form of personal self-esteem or a distinct concept that is independent of and not moderated by general self-esteem.

Furthermore, future studies may also include actual academic achievement as one of the variables. This would help illuminate the nature of the relationship, as suggested by existing literature, between academic achievement and academic self-efficacy. In addition, such a study would indicate whether, similarly to academic self-efficacy, academic achievement is also influenced by socio-cultural factors such as ethnic identity and collective

self-esteem. In this regard, a longitudinal study may be undertaken, wherein respondents' academic achievement is tracked over a certain period (Payne & Payne, 2004).

Lastly, future research may also include other race groups that are a minority both in the national context as well as in the context of the study. This would help determine whether, for a given race group, the relationships between academic self-efficacy, ethnic identity and collective self-esteem, as well as other applicable variables as suggested above, are affected by membership to a group whose composition is similar in the micro and macro contexts.

6.7 CONCLUSION

Initially, three main hypotheses were specified for this study. Positive correlations were expected for ethnic identity and academic self-efficacy, collective self-esteem and academic self-efficacy, as well as between ethnic identity and collective self-esteem. The Academic Self-Efficacy Scale (ASE) was used to measure academic self-efficacy, while the race-specific Collective Self-Esteem Scale (CSES) was used to measure collective self-esteem, and the Multigroup Ethnic Identity Measure (MEIM) was used to measure ethnic identity. In turn, both the CSES and the MEIM consisted of subscales. This further led to the assumptions that positive correlations between academic self-efficacy and each of the MEIM and the CSES subscales could be expected. In addition, it was hypothesised that each of the above-mentioned correlations would be different for Black and White respondents.

Multiple regression analyses were run through SPSS to test the main hypotheses relating to the relationships between the ASE and the overall CSES and MEIM, as well as the subsequent assumptions regarding the relationship between the ASE and the respective CSES and MEIM subscales. The sub-hypotheses relating to the mediating role of race in the

relationships between the variables were also tested. The three alternative hypotheses as specified for the overall sample of 144 respondents all proved true. Results for the overall analysis showed statistically significant positive correlations between ethnic identity and academic self-efficacy, collective self-esteem and academic self-efficacy, as well as between ethnic identity and collective self-esteem. These findings were also true for the sample consisting of Black respondents only. For the White sample, however, a significant positive correlation was found between ethnic identity and collective self-esteem only. For this sample, positive correlations, though not statistically significant, were found between ethnic identity and academic self-efficacy, as well as between collective self-esteem and academic self-efficacy. In this regard, White respondents' academic self-efficacy was not influenced by either ethnic identity or collective self-esteem.

The relationships between the MEIM subscales and the ASE, as well as between the CSES subscales and the ASE, were also examined. For the overall sample, a statistically significant positive relationship was found between the ASE and each of the MEIM subscales, namely, the MEIM ethnic identity search and commitment subscales. These results were similar for the analysis consisting of Black respondents only. For White respondents, no statistically significant correlation was found between any of the MEIM subscales and the ASE. In addition, for the overall sample, statistically significant correlations were found between the ASE and the membership self-esteem subscale of the CSES, as well as between the ASE and the private collective self-esteem subscale. These results were similar for the analysis involving Black respondents only. For White respondents, however, no correlation was found between any of the CSES subscales and the ASE.

It was subsequently recommended that future studies explore possible reasons for the observed discrepancies between Black and White respondents with regard to the correlations

between academic self-efficacy and ethnic identity, as well as academic self-efficacy and collective self-esteem. It would especially be interesting to note the psychometric properties and performance of each of the three measures used in this study among the various race groups in the South African context. This would subsequently help with the standardisation of the measures specifically for the South African context.

Findings from this study may contribute towards the development of theories, particularly in social psychological research in the South African context. In addition, these findings may help explain the interaction between intrapersonal factors such as academic self-efficacy beliefs or achievement and the broader socio-cultural context. Furthermore, future research in this area could further explore other factors that may be related to self-efficacy beliefs, such as personal self-esteem and actual academic achievement. Lastly, the scope of this study could be further broadened by determining the applicability of findings from this study to other racially, ethnically and culturally diverse contexts such as occupational settings and other educational contexts preceding tertiary education.

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APPENDICES

A. MULTIGROUP ETHNIC IDENTITY MEASURE

In this country, people come from many different countries and cultures, and there are many different words to describe the different backgrounds or ethnic groups that people come from. Some examples of the names of ethnic groups are Zulu, Xhosa, Tswana, Venda, and many others. These questions are about your ethnicity or your ethnic group and how you feel about it or react to it.

Please fill in: In terms of ethnic group, I consider myself to be _____

Use the numbers below to indicate how much you agree or disagree with each statement.

(4) Strongly agree (3) Agree (2) Disagree (1) Strongly disagree

1- I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs.

2- I am active in organizations or social groups that include mostly members of my own ethnic group.

3- I have a clear sense of my ethnic background and what it means for me.

4- I think a lot about how my life will be affected by my ethnic group membership.

5- I am happy that I am a member of the group I belong to.

6- I have a strong sense of belonging to my own ethnic group.

7- I understand pretty well what my ethnic group membership means to me.

8- In order to learn more about my ethnic background, I have often talked
to other people about my ethnic group.

9- I have a lot of pride in my ethnic group.

10- I participate in cultural practices of my own group, such as special food,
music, or customs.

11- I feel a strong attachment towards my own ethnic group.

12- I feel good about my cultural or ethnic background.

13- My ethnicity is

(write in): _____

14- My father's ethnicity is (use numbers above)

15- My mother's ethnicity is (use numbers above)

B. RACE-SPECIFIC COLLECTIVE SELF-ESTEEM SCALE

INSTRUCTIONS: We are all members of different social groups or social categories. We would like you to consider **your ethnicity** in responding to the following statements. There are no right or wrong answers to any of these statements; we are interested in your honest reactions and opinions.

Please read each statement carefully, and respond by using the following scale from 1 to 7:

		Strongly Disagree	Disagree	Disagree Somewhat	Neutral	Agree Somewhat	Agree	Strongly Agree
a)	I am a worthy member of my ethnic group.	1	2	3	4	5	6	7
b)	I often regret that I belong to my ethnic group.	1	2	3	4	5	6	7
c)	Overall, my ethnic group is considered good by others.	1	2	3	4	5	6	7
d)	Overall, my ethnicity has very little to do with how I feel about myself.	1	2	3	4	5	6	7
e)	I feel I don't have much to offer to my ethnic group.	1	2	3	4	5	6	7
f)	In general, I'm glad to be a member of my ethnic group.	1	2	3	4	5	6	7
g)	Most people consider my ethnic group, on the average, to be more ineffective than other groups.	1	2	3	4	5	6	7
h)	The ethnic group I belong to is an important reflection of who I am.	1	2	3	4	5	6	7
i)	I am a cooperative participant in the activities of my ethnic group.	1	2	3	4	5	6	7
j)	Overall, I often feel that my ethnic group	1	2	3	4	5	6	7

	is not worthwhile.							
k)	In general, others respect my ethnicity.	1	2	3	4	5	6	7
l)	My ethnicity is unimportant to my sense of what kind of a person I am.	1	2	3	4	5	6	7
m)	I often feel I'm a useless member of my ethnic group.	1	2	3	4	5	6	7
n)	I feel good about the ethnicity I belong to.	1	2	3	4	5	6	7
o)	In general, others think that my ethnic group is unworthy.	1	2	3	4	5	6	7
p)	In general, belonging to my ethnicity is an important part of my self-image.	1	2	3	4	5	6	7

D. CONSENT FORM



CONSENT TO PARTICIPATE IN RESEARCH

Project Title: The Relationship between Ethnic Identity, Collective Self-Esteem and Perceived Self-Efficacy among Students at a Tertiary Education Institution

Researcher: Tsholofelo Angela Thomas

Introduction

You are being asked to take part in a research study being conducted by Angela Thomas for a mini-*dissertation* under the supervision of Dr Claire Wagner in the Department of Psychology at the University of Pretoria. You are being asked to participate because this study requires the experiences of students from various ethnic groups.

Please read this form carefully and ask any questions you may have before deciding whether to participate in the study.

Purpose

The purpose of this study is to investigate the relationship between students' levels of ethnic identity, collective self-esteem, and academic self-efficacy.

Research Procedures

If you agree to be in the study, you will be asked to complete a questionnaire that includes the Multigroup Ethnic Identity Measure, the Race Specific Collective Self-Esteem Scale, and the Academic Self-Efficacy Measure. The entire questionnaire will take approximately 15 minutes to complete. You may submit the questionnaire to the researcher after completing it.

Risks to Participants

Participation in this study does not pose any foreseeable risks or harm to the participants.

Confidentiality

You will not be required to write your name anywhere on the questionnaire and all information that you provide will be treated with confidentiality.

Voluntary Participation

Completion of this questionnaire shows voluntary participation in this study and you may withdraw from participation at any time without penalty.

Dissemination of Results

The results of this study will be disseminated in the form of a mini-dissertation, conference papers, and articles in academic journals. In addition, the information gathered from you needs to be stored for 15 years.

Contacts and Questions

If you have questions about this research study, please feel free to contact Angela Thomas at angela.thomas@tuks.co.za. / 0729506916

Statement of Consent:

Your signature below indicates that you have read and understood the information provided above, have had an opportunity to ask questions, and agree to participate in this research study.

Participant's Signature

Date

Researcher's Signature

Date