The behavioural self-regulation strategies of Indian South African students as minority group on a university campus

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Dissertation submitted in partial fulfilment of the requirements for the degree Master of Arts in Research Psychology at the North-West University

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This mini-dissertation forms part of the requirements for the completion of the degree Masters of Arts in Research Psychology at the Potchefstroom Campus of the North-West University. It has been prepared in article format (manuscript to be submitted for publication) with three chapters and complies with the requirements identified by the North-West University in rule: A.4.4.2.9.

Chapter 1 includes an overview of self-regulation, with the aim of providing the reader with background information relevant to this study. Chapter 2 presents the manuscript that will be submitted to the *Journal of Psychology in Africa* for possible publication. The manuscript includes an introduction, a problem statement, the aims of the study, the methodology used, the findings of the study, as well as a discussion and conclusion based on these findings. Finally, Chapter 3 presents the researcher’s personal reflection on the research process.

The manuscript in Chapter 2 was compiled in adherence to the requirements set out by the *Journal of Psychology in Africa*, with the aim of possibly submitting it for publication.

All the chapters in this mini-dissertation have been styled according to the specifications of the APA (American Psychological Association, 6th edition) publication guidelines for the purpose of examination. However, the figures were included in the text to ease the examination process of this mini-dissertation. This will be amended before the manuscript is submitted for publication.

This mini-dissertation was language edited by an editor that is accredited with the South African Translators Institute (SATI).
All the phases of data collection (i.e. the group discussion, questionnaire, and individual interviews) were conducted in the participants’ language of choice, namely English. For an example of the questionnaire, see Appendix A.

Lastly, this mini-dissertation was submitted to Turnitin to establish the similarity index in comparison with other publications. It was established that the content of this mini-dissertation falls within the norms of acceptability regarding plagiarism.
SUMMARY

There seems to be a gap in the literature on the psychological experiences of Indian South African (ISA) students as a racial minority in South African university contexts. The aims of this study are therefore to: (a) identify the typical thoughts, emotions and actions of a sample of ISA students in response to their status as a racial minority group on a university campus; to (b) explore the self-regulation strategies they employ in response to these thoughts, emotions and actions; and to (c) determine the perceived cause-and-effect relationships between these thoughts, emotions, actions and the subsequent self-regulation strategies.

This study employed interactive qualitative analysis (IQA: Northcutt & McCoy, 2004), a method based on the principles of action research, grounded theory, and concept mapping. The essential aim of IQA is to develop a hypothetical model to show the perceived cause-and-effect relationships of participants’ experiences. A non-probability sample of eight full-time ISA contact students on a historically White South African university campus was recruited by putting up an advertisement across the campus after ethical approval was received.

Eight themes were identified, namely (1) unwanted emotions; (2) introspection; (3) engaging interpersonally; (4) managing the situation; (5) making friends with people from other races; (6) tolerance; (7) feeling overwhelmed; and (8) being judged for being different. A hypothetical cause-and-effect model was then developed according to IQA guidelines. The model shows that participants respond with unwanted emotions (e.g. anger and sadness) when they experience that they are being judged for being different. Participants then feel overwhelmed by these emotions and this is followed by attempts at introspection, engaging with trusted others, and results in a sense of having to manage the situation. Two feedback loops are involved in this process: the first includes tolerance of the experience of being judged, which
eventually feeds back into introspection, and the second includes deliberate attempts to make friends with people from other racial groups, which feeds back into engagement with trusted others.

This study supports previous research regarding the importance of race in South African university students’ experience of discrimination and socialisation, as well as the significance of social support as an adaptive strategy. The study also shows that IQA is a valuable method when exploring self-regulation in a social context as it contributed to a better understanding of the participants’ perceived relationship between being judged, their available resources and the different self-regulation strategies they used as a racial minority on a university campus.

Limitations of the study pertain to the relatively small sample and lack of generalisability of the findings. However, the model provided new hypotheses that need further exploration. As such, further research has to explore among other things the validity of this model, the experiences of minorities other than ISAs, if ISAs cross-group interactions may lead to lower race-based sensitivity (RS) and how self-regulation influences perceptions of being judged.

*Keywords*: self-regulation, Indian South African, university students, racial minority group, ethnicity, race, South Africa
OPSOMMING

Daar is ’n merkbare tekort aan literatuur oor die psigologiese ervaring van Indiëër Suid-Afrikaanse (ISA) studente as ’n etniese minderheidsgroep binne die konteks van Suid-Afrikaanse universiteitskampusse. Die doelwit van hierdie studie was om: (a) die tipiese kognisies, emosies, en gedrag van ISA-studente met betrekking tot hulle status as ’n minderheidsgroep op ’n universiteitskampus te identifiseer; (b) die self-reguleringsstrategieë wat hulle in reaksie op hulle kognisies, emosies en gedrag gebruik te ondersoek; en om (c) vas te stel wat hulle sien as die oorsaak-en-gevolg verbande tussen hierdie kognisies, emosies, en gedrag en die self-reguleringsstrategieë wat hulle volg.

Die studie het Interaktiewe Kwalitatiewe Analise (IKA: Northcutt & McCoy, 2004) as navorsingsmetode gebruik. Die oorhoofde doel van IKA is om ’n hipotetiese model te onwikel wat die deelnemers se subjektiewe waarnemings van die oorsaak-en-gevolg verbande van hulle ervaringe vasvang. ’n Nie-waarskynlikheidsteekproef van agt voltydse ISA-kontakstudente op ’n histories Wit Suid-Afrikaanse universiteit is gedoen deur ’n advertensie op die kampus te versprei nadat etiekkläring ontvang is.

Agt temas is geïdentifiseer, naamlik: (1) ongewenste emosies; (2) introspeksie; (3) interpersoonlike interaksie; (4) om die situasie te bestuur; (5) om vriende te maak met mense van ander rasgroep; (6) verdraagsaamheid; (7) gevoelens van oorweldiging; en (8) om geoordeel te word omdat jy anders is. Vervolgens is ’n hipotetiese oorsaak-en-gevolg model ontwikkel op grond van die riglyne wat deur IKA daargestel word. Die model toon dat die deelnemers ongewenste emosies, soos byvoorbeeld woede en hartseer, ervaar wanneer hulle ondervind dat hulle geoordeel word op grond van hulle Andersheid. Dié emosionele ervaring word gevolg deur verskillende pogings tot self-regulerings, wat insluit: introspeksie, interpersoonlike interaksie met
mense wat hulle vertrou, en pogings om die situasie te bestuur. Deelnemers se self-reguleringstrategieë kan een van twee terugvoerlusse volg. Die eerste terugvoerlus bestaan uit pogings om die ervaring van oordeel te verdra, wat daartoe lei dat die deelnemers introspeksie doen. Die tweede terugvoerlus bestaan uit doelbewuste pogings om vriende te maak met mense van ander rasgroep, wat gevolg word deur interpersoonlike interaksie tussen deelnemers en hulle naaste vertrouelinge.

Die studie beaam bestaande navorsing wat die belangrike rol van ras in Suid-Afrikaanse universiteitstudente se ervarings van diskriminasie en sosialisering aandui, sowel as die beduidendheid van sosiale ondersteuning as ’n toepaslike self-reguleringstrategie. Die studie dui verder aan dat IKA ’n waardevolle metode is om self-regulering binne ’n sosiale konteks te ondersoek. Die metode fasiliteer ’n beter begrip van die subjektiewe oorsaak-en-gevolg verbande tussen die deelnemers se ervarings van veroordeling, hulle beskikbare hulpbronne en hulle verskillende self-reguleringsstrategieë in reaksie op hulle status as ’n etniese minderheidsgroep op ’n universiteitskampus.

Die beperkings van die studie het veral betrekking op die klein steekproef en die gevolglike onwenslikheid van ’n veralgemening van die resultate na die breër bevolking. Nietemin genereer die model sekere hipoteses vir verdere studie. Meer navorsing is nodig om die geldigheid van die model te bepaal, om die ervarings van studente van ander rassegroep in Suid-Afrika te ondersoek, om te bepaal of ISAs se interaksie met studente van ander rassegroep tot laer rassensensitiwiteit lei, en om te bepaal hoe self-regulering die ervarings van oordeel beïnvloed.

*Sleutelwoorde: self-regulering, Indiër Suid-Afrikaner, universiteit studente, ras minoriteit, etnisiteit, ras, Suid-Afrika*
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My parents, Beulah and Johan, have been the best friends and supportive system I could have asked for. Thank you for every small attempt at advice and everything else. I could not, and would not, have completed this without your support.
I would also like to thank God for all his generous help and for giving me energy, motivation, interest, creativity, and the opportunity to study what I like. I cannot thank You enough!

I dedicate this research to all the people mentioned above and to all Indian South African students on South African university campuses.
PERMISSION TO SUBMIT FOR EXAMINATION

I, the promoter of this study, hereby declare that the article entitled “The behavioural self-regulation strategies of Indian South African students as minority group on a university campus,” written by JJP le Grange, reflects the research regarding the subject matter. I hereby grant permission that he may submit the article for examination purposes and I confirm that the dissertation submitted, is in fulfilment of the requirements for the degree Master of Arts in Research Psychology at the North-West University. The article may also be submitted to the Journal of Psychology in Africa for publication.

Prof Karel Botha
JOURNAL OF PSYCHOLOGY IN AFRICA: GUIDELINES FOR AUTHORS

Manuscripts

Manuscripts should be written in English and conform to the publication guidelines of the latest edition of the American Psychological Association (APA) publication manual of instructions for authors. Manuscripts can be a maximum of 7,000 words.

Submission

Manuscripts should be prepared in MSWord, double-spaced with wide margins and submitted via email to the Editor-in-Chief.

Manuscript format

All pages must be numbered consecutively, including those containing the references, tables and figures. The typescript of a manuscript should be arranged as follows:

• Title: this should be brief, sufficiently informative for retrieval by automatic searching techniques and should contain important keywords (preferably <13).

• Author(s) and Address(es) of author(s): The corresponding author must be indicated. The author’s respective addresses where the work was done must be indicated. An e-mail address, telephone number and fax number for the corresponding author must be provided.

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statement of the abstract should summarise the information presented in the paper but should not include references.

• Text: (1) Per APA guidelines, only one space should follow any punctuation; (2) Do not insert spaces at the beginning or end of paragraphs; (3) Do not use colour in text; and (4) Do not align references using spaces or tabs, use a hanging indent.

• Tables and figures: These should contain only information directly relevant to the content of the paper. Each table and figure must include a full, stand-alone caption, and each must be sequentially mentioned in the text. Collect tables and figures together at the end of the manuscript or supply as separate files. Indicate the correct placement in the text in this form <insert Table 1 here>. Figures must conform to the journals style. Pay particular attention to line thickness, font and figure proportions, taking into account the journal’s printed page size – plan around one column (82 mm) or two column widths (170 mm). For digital photographs or scanned images the resolution should be at least 300 dpi for colour or greyscale artwork and a minimum of 600 dpi for black line drawings. These files can be saved (in order of preference) in PSD, PDF or JPEG format. Graphs, charts or maps can be saved in AI, PDF or EPS format. MS Office files (Word, PowerPoint, Excel) are also acceptable but DO NOT EMBED Excel graphs or PowerPoint slides in a MS Word document.

Referencing

Referencing style should follow latest edition of the APA manual of instructions for authors.
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CHAPTER 1: A BRIEF OVERVIEW OF SELF-REGULATION
This chapter aims to provide a brief overview of self-regulation to provide a foundation for the use of this concept in Chapter 2. Accordingly, this chapter: a) provides a definition of self-regulation; ii) explains self-regulation broadly; b) briefly focuses on the control theory as a specific process of self-regulation; c) expounds what is considered to be adaptive and maladaptive forms of self-regulation; d) applies self-regulation to the social milieu; and e) links self-regulation to the experience of students from racial minority groups.

**Definition of Self-Regulation**

Numerous fields of study (including economics, environmental protection, business management, natural sciences, etc.) examine the concept of self-regulation. The title of this study qualifies the focus as ‘behavioural self-regulation’ to situate this research within the domain of psychology. Self-regulation is an adaptive process of controlling, maintaining, or changing one’s thoughts, feelings, and actions to achieve a desired, socially embedded, or prescribed condition or to move away from undesired conditions (cf. Berger, 2011; Carver & Scheier, 1998, 2016, 2017; Forgas, Baumeister, & Tice, 2009; Heatherton, 2011; Karoly, 2012). ‘Behavioural’ for the purpose of this study is used in a broad sense to include the action, emotional, and cognitive strategies as targets of self-regulation. The term ‘action’ is used to indicate specific behaviour in terms of motoric responses.

**The Process of Self-Regulation**

Various models exist to explain the process of self-regulation. This section considers a general explanation of self-regulation and a more specific explanation of the process of self-regulation, which this study refers to as the ‘control theory of behavioural self-regulation’ (hereafter, ‘control theory’, see Carver & Scheier, 1998). The wider explanation provides a basic
framework and background so that readers may understand the complex jargon and process of control theory.

Control theory was selected for this study due to its: i) usefulness in explaining adult self-regulation by integrating seemingly disjointed theoretical explanations of self-regulation (MacKenzie, Mezo, & Francis, 2012); and ii) its explanation of the interplay between action and emotion (Carver & Scheier, 1998). In fact, Carver and Scheier (2016) concede that a person is not limited to indirectly influencing their emotions via action, sometimes emotion may be the direct target for self-regulation. This prompts this paper to include theories of emotion regulation, which describes instances where a person tries to influence their emotions directly (e.g. Gross, 1998, 2014, 2015). MacKenzie et al. (2012) include emotion regulation as posited by Gross (1998) as a feature of control theory, thereby giving precedence to an explanation of control theory rather than the process of emotion regulation. This chapter is limited to control theory, where emotion is indirectly influenced by changes of action (Carver, 2004; Carver & Scheier, 1998). At first glance, control theory may seem complex. As such, the discussion starts with reference to a general explanation of self-regulation.

A General Explanation of Self-Regulation

In its most simple form, self-regulation can be described as a process that aids a person’s movement towards their goals over time and across different settings (Karoly, 1993). Self-regulation also refers to the changes individuals make to stay on track with their movements towards a goal in spite of obstacles or impulses that may deter such movements (Carver & Scheier, 2016). Goals, as “internal representations of desired states” (Austin & Vancouver, 1996, p. 338), are inextricably linked to a person’s self-regulatory efforts (Forgas et al., 2009; Karoly, 2012). Strictly speaking, self-regulation involves all behaviour related to goals (see the essential
processes of self-regulation in Vancouver & Day, 2005), starting at the point of merely dreaming about or considering specific life goals to its execution on a daily basis. Self-regulation, therefore, involves the planning of a goal, as well as the existent movement (or striving) towards that goal (Vancouver & Day, 2005). Nevertheless, this study aims to understand the movement towards already existent goals and therefore excludes the planning process inherent in self-regulation.

The goals of self-regulation can take different forms. There may be a goal towards which a person self-regulates, or an anti-goal, which refers to undesired circumstances that the person wishes to avoid by self-regulating away from them (Carver & Scheier, 1998, 2017). Goals can furthermore be distinguished in terms of how abstract they are (Carver & Scheier, 1998, 2000, 2016; Gross, 1998). Higher up on the hierarchy of abstraction one may see ‘be goals’ (such as being a good person), which are not obvious as specific types of behaviours. These ‘be goals’ may be reached by ‘do goals,’ which are more concrete, in other words goals that actually resemble behaviour (e.g. giving money to the poor; Carver & Scheier, 1998, 2000, 2016). Even more concrete than this, ‘do goals’ may be translated to exact actions such as withdrawing cash or signing a form that grants an organisation permission to give money to the poor (i.e. motor control goals: Carver & Scheier, 1998, 2000). According to Carver and Scheier (1998), ‘be goals’ is said to be on a higher hierarchical level than ‘do goals,’ and one of these ‘be goals’ (e.g. a goal to be accepted) may consist of multiple ‘do goals’ (e.g. going on a date, telling close friends about some new accomplishments, etc.). Moreover, Carver and Scheier (2017) also distinguish between goals consisting of a movement towards preferred endpoints (e.g. getting 82% in a semester test) and goals that involve a process (e.g. being a good friend). Goals may
arise from an individual’s current situation, or may be reflected in the whims or impulses on which one chooses to act (cf. Carver & Scheier, 2013).

Thus far, it has been established that self-regulation involves planning goals and the efforts made towards goals or away from negative experiences. However, during the process of self-regulation, negative internal (e.g. impulsivity, lack of motivation) and external factors (e.g. lack of finances, lack of social support) may challenge a person’s self-regulation. In addition, challenges may provoke certain impulses, thoughts, feelings, actions, or alternative goals that may be in conflict with the goals that are important to a person. Once a person becomes aware of challenges or conflicts like these, they may use their executive attention and other cognitive processes related to self-regulation to monitor and resolve these challenges (Karoly, 2012) to aid their movement towards a goal. One way in which a person may resolve these conflicts is through a type of self-regulation called self-control. Self-control occurs when one set of goals or initial impulses (thoughts, feelings, and actions) are in conflict with other important goals and the person overrides or changes these initial goals or impulses to facilitate a movement towards the most important goals (Berkman, Hutcherson, Livingston, Kahn, & Inzlicht, 2017; Inzlicht & Schmeichel, 2012). However, this effort may cause stress, which is defined by Lazarus and Folkman (1984) as “a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being” (p. 19). Following stress, a person may employ “constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person” (i.e. coping: Lazarus & Folkman, 1984, p. 141). Here, coping may be employed as a type of self-regulation strategy (Aspinwall & Taylor, 1997;
Botha, 2013) to deal with these challenges and the experience of stress that arise from them (cf. De Ridder & Kuijer, 2006).

Figure 1. A depiction of the general process of self-regulation.
A BRIEF OVERVIEW OF SELF-REGULATION

Figure 1 depicts self-regulation as explained above. Here, (a) captures self-regulation as a movement towards a goal. In (b) a challenge from outside interferes and thwarts the person’s trajectory towards the goal. In (c) this may trigger additional self-regulation efforts by the individual to change their responses to these challenges, and possibly also the challenge itself.

**Assimilative and accommodative processes of self-regulation.** So far, self-regulation has been depicted as a process with which individuals try to change their situation, change their motivation, or change aspects of themselves to align them with their goals. The attempt to change the situation may be equated to an assimilative mode of self-regulation while the attempt to change goals, downgrade expectations, or even detach from goals may be equated to an accommodative mode of self-regulation (Brandtstädter, 2006; Brandtstädter & Rothermund, 2002). According to Brandtstädter (2006), a person will switch from assimilation to accommodation when they start to believe that a goal is unattainable, which may follow an individual’s unsuccessful attempts at reaching or moving towards their goals.

It is important to note that neither assimilation or accommodation can be labelled as ‘good’ or ‘bad,’ and that the value of these processes may be dependent on contextual variables. Brandtstädter (2006) follows a similar argument and gives the example of a person who stays within an assimilative mode, despite a goal being irretrievably lost, consequently wasting resources and increasing the risk of feeling helpless or depressed. In addition, feelings of depression or other ruminative thought processes may actually be beneficial when it facilitates a person’s movement towards accommodation, but a movement towards accommodation may be detrimental if there is still a chance that assimilation would aid a person’s movement towards a goal (Brandtstädter, 2006). It seems as if a complex monitoring system is necessary to select the
most applicable process. Ideally, this monitoring system will utilise the feedback it receives in such a way that the person makes a timely switch between these two modes of self-regulation.

The general explanation above gives a background against which the more complex explanations of control theory can be examined. The focus now shifts to control theory.

**Carver and Scheier’s Control Theory of Behavioural Self-Regulation**

The control theory aids in understanding the process of self-regulation by proposing that the self-regulation of behaviour entails a feedback process with a continuous closed feedback loop (Carver & Scheier, 1988, 1998). This closed feedback loop consists of four components, i.e. an input, comparator, reference value (or goal), and output (Carver & Scheier, 1998). For a visual depiction of this closed feedback loop, see Figure 2.

![Figure 2. The feedback loop in control theory. Adapted from On the Self-Regulation of Behaviour (p. 32), C. S. Carver and M.S. Scheier, 1998, Cambridge, UK: Cambridge University Press. Copyright 1998 by Cambridge University. Adapted with permission from Cambridge University Press.](image-url)
Within this closed feedback loop, whenever a person focuses on themselves, they engage their *comparator* (Carver & Scheier, 1998). The *comparator* receives perceived *input* from the environment regarding a person’s current state and compares it with the person’s *goals* (Carver & Scheier, 1998). In other words, the process evaluates if there is a difference between where the person is (e.g. the input from the environment), and what the person wants (e.g. their goals, needs, or standards). If there is a discrepancy, the person will produce output as behaviour that aims to reduce the difference detected by the comparator (Carver & Scheier, 1998, 2016). For example, a person may increase the time spent on studying algebra (behaviour as output) with the aim of decreasing the perceived difference between their current position (e.g. getting a B for an exam) and where they want to be (the goal of getting an A overall) (cf. Carver & Scheier, 1998). The crux of this feedback control system is to create the subjective judgement of “input information that is not discriminable from the standard” (Carver & Scheier, 1998, p. 12). According to Carver and Scheier (1998), if the comparator detects no differences, the behavioural output will cease.

However, discrepancy reduction is not always the case, because control theory presupposes two different feedback loops. The one feedback loop includes a movement towards goals, whereas the other feedback loop is concerned with the avoidance of or movement away from anti-goals (Carver & Scheier, 1998). In the example of behaviour directed towards academic goals in the previous paragraph, the feedback loop aims to reduce discrepancies. This type of feedback loop is called a *negative feedback loop* (Carver & Scheier, 1998, 2016). When a person tries to avoid an anti-goal, they engage a *positive feedback loop*, as the control system generates behaviour that aims to increase the discrepancy or difference between the anti-goal and their experience. Carver and Scheier (1998) argue that the positive feedback loop (i.e. creating a
discrepancy and moving away from an undesired condition) would go on indefinitely if it were not captured by a negative feedback loop. For example, moving away from someone who insults me (i.e. a positive feedback loop), may eventually be captured by a movement towards the people who love me and from whom I sense acceptance (i.e. the consequent ‘capturing’ negative feedback loop). This establishes the pervasiveness of negative feedback loops in human behaviour (Carver & Scheier, 1998).

In both positive and negative feedback loops, the initial output’s (or behaviour’s) effect on the environment will be gauged by the comparator to determine the efficacy of the output (cf. Carver & Scheier, 1998). This serves as subsequent input in the next loop and therefore determines the type of adjusted output (behaviour) of each successive loop. It is therefore a continuous feedback loop until the goal is reached (a perceived state where the discrepancy is nullified) or the undesired condition is successfully avoided (Carver & Scheier, 1998).

The feedback loops discussed above represents the primary feedback loop, which may be seen as the feedback loop concerned with behaviour (Carver & Scheier, 1998). A second feedback loop runs concurrently with the primary feedback loop. This loop evaluates the rate at which the primary feedback loop increases or decreases the detected discrepancies, in other words the efficacy of the primary feedback loop (Carver & Scheier, 1998). The secondary feedback loop is responsible for the creation of emotion and notions of confidence or doubt (Carver & Scheier, 1998). For example, when a person’s rate of discrepancy reduction (output of the primary feedback loop sensed as input by the secondary feedback loop) is lower than expected (the goal of the secondary feedback loop), negative emotions and a sense of doubt may arise. This emotional quality of the secondary feedback loop consequently prompts increased efforts in the primary feedback loop with the aim of increasing the detected rate of discrepancy.
reduction (Carver & Scheier, 1998). Contrarily, a higher than expected rate of discrepancy reduction may lead to positive emotions and a sense of confidence, with subsequent ‘coasting’ or reduction of behavioural efforts in the primary feedback loop (Carver & Scheier, 1998). Therefore, the secondary feedback loop aims to produce a neutral experience of emotion by either increasing the rate of behaviour when an individual experiences negative emotions or decreasing the rate of behaviour when an individual experiences positive emotions. Without adding further complexity, it may be important to note that the type of positive or negative emotions arising from approaching a goal (i.e. a negative feedback loop) and avoiding an anti-goal (i.e. a positive feedback loop) differs qualitatively (Carver & Scheier, 1998). The difference between the type of positive or negative emotions arising from approach or avoidance will be discussed later in this chapter.

How does control theory link with the earlier discussion of the dual processes of accommodation and assimilation inherent in self-regulation? Control theory as presented here focuses on the assimilative efforts to achieve goals. Most of the processes of accommodation described earlier in this chapter are included in Carver and Scheier’s (2003) explanation of different ways in which a person may disengage from a goal. This situates these types of disengagement within the accommodative mode of self-regulation. The different ways in which a person may disengage from goals include: a) the pursuit of alternative goals; b) the formulation of new goals; c) the pursuit of other goals; d) construing and pursuing more feasible (in other words realistic) goals; and e) even the lack of any pursuit following a detachment from a goal (Carver & Scheier, 2003).

Whenever a goal seems out of reach, a person experiences negative emotions. However, the experience of such emotions may be curtailed if the person disengages from a goal (Carver &
Scheier, 1998). This implies that disengagement is not inherently maladaptive and illustrates an agreement with the conclusion drawn by authors of the dual process framework (Brandtstädtter, 2006; Brandtstädtter & Rothermund, 2002). Furthermore, Wrosch, Scheier, Carver, and Schulz (2003) link all of the different types of disengagement discussed in the previous paragraph, except disengagement followed by a lack of goal pursuit, to positive adaptive behaviours. These positive adaptive outcomes may include energy and resources in pursuit of other goals and the possibility of experiencing more positive emotions (Wrosch et al., 2003). By changing a goal to one that is more feasible and less demanding rather than wholly abandoning it, participants may experience the benefit of still pursuing a goal within a similar domain as the original goal (Carver, Scheier, & Fulford, 2008)

In control theory, the reference value or goal is more or less stable and changes through accommodation are part of a more gradual process (cf. Carver & Scheier, 1998). In other words, a person would rather change their efforts towards a goal (i.e. assimilation) than follow the process of disengagement (Carver & Scheier, 1998). Based on this, it may be easier to disengage from a goal that is lower on the hierarchy of goals (Carver & Scheier, 2003; Wrosch et al., 2003), in other words goals that are ‘do goals’ or ‘motor control goals.’ Goals higher on the hierarchy (in other words ‘be goals’), may be important to person’s sense of self and may be more difficult to disengage from (Carver & Scheier, 1998, 2003; Wrosch, et al. 2003).

Following the brief delineation of control theory above, one may wonder what constitutes adaptive and maladaptive self-regulation and how it fits in with the experiences of racial minority groups. The paragraphs below aim to address these questions.
Adaptive and Maladaptive Self-Regulation

Self-regulation is seen as one of the processes inherent to adaptation (Matthews, Schwean, Saklofske, & Mohamed, 2000) and resilience (Karoly, 2010). Adaptive self-regulation may include: i) using new information or feedback from the environment to update one’s beliefs (i.e. the strength of open-mindedness: Peterson & Seligman, 2004), response techniques (cf. Bilalić, McLeod, & Gobet, 2008), or cognitive commitments (cf. mindfulness in Langer, 2009); ii) deliberately focusing on oneself to prolong the limited resource of self-control (cf. Baumeister, DeWall, Ciarocco, & Twenge, 2005); iii) the flexible and appropriate use of either or both accommodative or assimilative self-regulation strategies (Brandtstädter & Rothermund, 2002); (v) conserving resources by the appropriate use of implicit, habitual, or automatic self-regulation (Karoly, 2010); and vi) disengaging from unrealistic or impeded goals to free up resources for efforts towards other desired conditions (Carver, Scheier, & Fulford, 2008).

In contrast, stress may feed into instances of distress or psychopathology, where the symptoms of psychopathology are the sequelae of maladaptive self-regulation or a disturbance in the system of self-regulation (Karoly, 2010). In other words, self-regulation can be seen as a mediating factor between the experiences of stress and its subsequent escalation or development into distress and related pathology. Some examples of maladaptive self-regulation include i) self-regulating towards pathologic, dangerous, or evidently unrealistic goals (Karoly, 2010), ii) the overuse or neglect of deliberate or automatic forms of self-regulation (Karoly, 2010), iii) the inability to disengage from a goal when needed or a premature disengagement from a goal (Carver et al., 2008); iv) the use of negative appraisals, ruminative coping and self-attention, or a lack of monitoring of the external environment in presence of distress (Matthews et al., 2000); and v) applying experiential avoidance (which refers to the avoidance of displeasing emotions or
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thoughts: Biglan, 2009). A further link with accommodation can be seen here, since maladaptive assimilation in a dual process framework (Brandstädter, 2006) is the same as that of Carver et al. (2008). These different, yet complementary takes on self-regulation view premature disengagement or the failure to disengage from a goal when it is evidently lost, to be examples of maladaptive self-regulation.

How does the aforementioned literature link to self-regulation in a social setting? It is widely accepted that the individual and his environment are interrelated and mutually influence each other during the process of self-regulation (Bandura, 1978; Jackson, Mackenzie, & Hobfoll, 2000; Karoly, 2010; Mischel & Ayduk, 2004). Given this, together with the interpersonal nature of possible experiences related to being a member of a racial minority (e.g. stereotype threat or perceived discrimination), the attention now turns to explaining self-regulation as it unfolds within the social milieu.

**Self-Regulation within the Social Milieu**

Authors such as Jackson et al. (2000) argue that self-regulation is not in fact an individual process, but something that happens in “a network of socially mediated factors such as family, organizational, and group-based needs, goals, and desires” (p. 276). This specific focus on how the social milieu influences self-regulation is called *communal self-regulation* and it is important to understand how communities and individuals adapt in view of issues such as a discrimination or negative stereotypes (Jackson et al. 2000).

Moreover, self-regulation is a crucial process for maintaining relationships (Vohs & Ciarocco, 2004) and its success is also influenced by the social support an individual receives from significant others (cf. Finkel & Fitzsimons, 2011). The goals towards which one self-regulates may be prescribed by external sources (Forgas et al., 2009) such as one’s community,
A brief overview of self-regulation

university, family, parents, or friends. An example of such goals may be found in laws that condemn and punish discrimination. In addition to this, the social reactions of a person serve as input for another person’s primary and secondary feedback loops (cf. Carver & Scheier, 1998). Another example of social regulation may be found where people directly regulate someone else’s emotions (i.e. extrinsic emotion regulation: Gross, 2014), for example telling a joke to make an anxious friend laugh or calm down.

Another important example of communal self-regulation is when people regulate a sense of self, which is defined in terms of its group membership (such as a racial group or even a rugby team). This is called group self-regulation, which involves the movement towards goals salient to a person’s in-group (Sassenberg & Woltin, 2009) and indicates the porous nature of self-chosen and group-chosen goals. This brings us to the final and crucial consideration of this chapter, which is the application of self-regulation theory to racial minority experiences. In the next section, this chapter concludes with a consideration of the goals important to racial minority members’ self-regulation, how self-control may be affected by adverse race-related experiences, and specific examples of self-regulation are explained in terms of self-regulation theory.

Self-Regulation and Racial Minorities

A probable goal of any member of a social group is to feel that they have the potential to grow or contribute to their group (cf. with social actualisation as a symptom of flourishing: Keyes, 2009). Moreover, racial minorities may present with goals of social acceptance, including a sense of belonging (Baumeister & Leary, 1995) and relatedness (which refers to feelings of an affiliation with and belonging to others: Deci & Ryan, 2000). Any negative race-related experiences affecting racial minorities’ belonging may create an awareness of a discrepancy between where they as racial minority members are, and where they want to be.
These negative race-related experiences are anti-goals and may include perceived racial discrimination, social exclusion, and stereotype threat. Stereotype threat refers to an instance where a minority member may be afraid of behaving in such a way as to confirm stereotypes associated with the minority in-group (Steele & Aronson, 1995) and may exhaust a person’s self-control resources (Inzlicht, McKay, & Aronson, 2006; Johnson, Richeson, & Finkel, 2011; Schmader, Johns, & Forbes, 2008). It has also been shown that self-control deteriorates following instances of social exclusion (Baumeister et al., 2005), and self-control even diminishes following interracial interactions devoid of racism (Bair & Steele, 2010).

**Control Theory and the Self-Regulation of Students from Racial Minority Groups**

The self-regulation of minority students can be understood better with the application of control theory as explained above.

**An example of action and emotion in a positive feedback loop.** Alexander and Tredoux (2010) illustrate the spatial segregation of race at a South African university. Their work serves as ample illustration of the engagement of a positive feedback loop and the consequent involvement of a negative feedback loop (cf. Carver & Scheier, 1998). In this study, the racial in-group members avoided spaces (the undesired condition) in which racial out-group members socialised. The participants followed (or curtailed) this by moving towards the place where the racial in-group members socialise (i.e. the engagement of a subsequent negative feedback loop: Carver & Scheier, 1998). The positive feedback loop was disengaged at the moment participants reached the safe space provided by their peers. This concerns the primary feedback loop, but as noted earlier in this chapter, a secondary feedback loop responsible for the experience of emotion runs conjunctively with the positive feedback loop. Seeing that the primary feedback loop tries to increase the discrepancy, the secondary feedback loop here is
concerned with whether or not this actual rate of increasing the discrepancy (i.e. the input of the secondary feedback loop) is as fast as expected (i.e. the goal of the secondary feedback loop). In Alexander and Tredoux (2010), the participants indicated that they experienced fear, specifically fear of rejection by students of other races if they should try to enter the racial out-group students’ social space. The negative emotions of fear and anxiety is linked to a positive feedback loop and signals that when participants want to move into the social space of racial others, the rate at which participants are avoiding the anti-goal (in this case being rejected) is perceived to be at a slower than desirable rate (cf. Carver & Scheier, 1998). In fact, by approaching these ‘off-limit’ spaces (or just thinking about it) may signal that a person is closing instead of increasing the discrepancy and by implication a lower than desirable rate of discrepancy enlargement is detected by the secondary feedback loop (cf. Carver & Scheier, 1998). This inevitably leads to the experience of fear or anxiety. By trying to move away and towards safety by moving towards their racial in-group, the participants increase this rate of discrepancy enlargement (seeing that their movement entails a positive feedback loop). If this rate of discrepancy enlargement (or moving away from the spaces of racial others) is progressing at a faster rate than what the participants expected it to happen, they may experience positive affect such as relief or contentment. If the expected rate is the same as their current rate of avoiding the anti-goal, the participants may experience no or a neutral affect (Carver & Scheier, 1998). Participants therefore regulated their experience of fear by moving away from these spaces. In other words, they indirectly influenced their emotional experience.

An example of action and emotion in a negative feedback loop. In Morrison (2010), students from racial minorities felt frustrated with the ignorant remarks of students from racial majorities. In accordance with the control theory, the first step is to determine whether the
ignorant remarks are an anti-goal or a challenge to the person’s existent movement towards a goal (such as the goal of being accepted). In other words, does this experience engage a positive or negative feedback loop? According to the control theory, the negative emotions of frustration, anger, depression or sadness derive from an approach system (Carver, 2004; Carver & Scheier, 1998). In other words, the self-regulation of participants reflects a movement towards a goal (i.e. a negative feedback loop: Carver & Scheier, 1998) that is obstructed by the experience of being the target of ignorant remarks. This means that the ignorant remarks make participants aware of the discrepancy between where they want to be and where they are (cf. Carver & Scheier 1998) and this causes the primary feedback loop to produce output to close this discrepancy. An example of this output is reflected in the actions of some of the participants who tried to educate students from the majority racial out-group on their culture (Morrison, 2010). These participants therefore closed this discrepancy (in other words reached the goal of receiving acceptance) as the participants felt accepted as a result of their educative efforts. However, some participants who did not try to educate racial others still felt frustration (Morrison, 2010). This feeling of frustration may be adaptive insofar as it motivates participants to take an accommodative approach. However, such efforts were not listed, which may imply that this self-regulation strategy may be maladaptive.

As a result of the discrepancy created, participants’ secondary feedback loop may sense that their rate of movement towards the goal of acceptance is lower than expected, giving rise to feelings of frustration. By educating others, the participants in Morrison’s (2010) study would be able to ensure that this perceived rate of discrepancy reduction increases, which may alleviate their experience of frustration. They may feel neutral if the movement towards acceptance is
going at the expected rate and may even feel positive emotions such as joy and happiness when this movement is going faster than expected.

In conclusion, efficient approach-related self-regulation leads to feelings of joy or happiness (Carver & Scheier, 1998) and inefficient approach-related self-regulation leads to feelings of sadness, anger, and frustration (Carver, 2004, Carver & Scheier, 1998). Conversely, efficient avoidance-related self-regulation leads to feelings of contentment and relief (Carver & Scheier, 1998) and inefficient avoidance-related self-regulation leads to feelings of guilt, anxiety, and fear (Carver & Scheier, 2013).

**Conclusion**

Self-regulation as considered in this study relates to people’s movement towards goals or movements away from anti-goals. This process of self-regulation may be impeded by challenges. When these challenges arise, people try to regulate their thoughts, feelings, and behaviours to influence these challenges and their responses to these challenges in such a way that they may still reach their goals. This type of self-regulation is called assimilation. However, sometimes people may adjust their goals or pursue new goals in the face of challenges to their self-regulation, and this process in itself may benefit an individual’s self-regulation. This type of self-regulation is called accommodation. The ability to switch between assimilation and accommodation may rest on adequate and timely judgements regarding the information received from the environment.

Based on the above understanding of self-regulation, the chapter considered a model founded on control theory. Control theory provides a nuanced explanation of the continuous feedback process inherent in self-regulation and how this process includes self-regulation as an approach process concerned with discrepancy reduction or an avoidance process in the form of
discrepancy enlargement. This feedback process consists of a primary feedback loop aimed at changing the discrepancies and a secondary feedback loop responsible for the creation of emotion. The secondary feedback loop produces behaviour by comparing the rate at which a discrepancy is changed with the expected rate of change (reference value). Depending on whether or not this detected rate of discrepancy change is in line, above, or below the reference value, produces emotions of different valences (e.g. positive or negative emotions). Control theory furthermore posits that the emotions that derive from the effectiveness of an approach vis-á-vis the effectiveness of avoidance differ qualitatively. The experience of these emotions then influences the rate at which the discrepancies are changed, as well as the implied change of the discrepancies themselves. Even though most of the outputs of the primary and secondary feedback loops illustrate an assimilative process, disengagement as output may reflect an accommodative process. This provides a valuable outline of how individuals monitor their environment for discrepancies; how they assimilate by directly regulating their actions and indirectly regulating their emotions; and how they accommodate by changing their goals or pursuing new goals. Consequently, these theoretical considerations provide a good framework to identify and situate the iterative processes of thoughts, emotions, and actions.

The chapter turned from the process of self-regulation to focus on a brief consideration of what type of process can be seen as adaptive or maladaptive. A brief description of different types of maladaptive and adaptive self-regulation ensued and concluded with a further consideration of the similarity between adaptive or maladaptive accommodation and disengagement as espoused in control theory.

Next, self-regulation of the individual within the social milieu received attention. Here concepts such as communal self-regulation capture the way in which ‘individual’ process of self-
regulation becomes inseparable from the social milieu. Sassenberg and Woltin’s (2009) conceptualisation of group self-regulation serves as an example of communal self-regulation. Brief descriptions of how goals or other people are influenced by the process of self-regulation as situated within the social milieu followed the theoretical discussion.

The consideration of the social milieu seemed to naturally flow into a discussion of how self-regulation plays a role in the lives of racial minorities, and more specifically university students from racial minority groups. This is understandable, since the ideas of race, minority, and the power dynamics they imply, are socially constructed phenomena. Here the primary and secondary feedback loops of control theory were used to explain the real-life responses of students to their racial minority status. This part of the chapter added to control theory by specifically focusing on the different types of self-regulation: linked to positive and negative emotions, and effective and ineffective approach or avoidance self-regulation. This concludes the theoretical considerations necessary to understand and interpret the research phenomena discussed in Chapter 2.

Preview

Chapter 2 specifically explores the experience of Indian South African (hereafter, ISA) students on a South African university campus with the aim of examining what these students perceive to be their self-regulation strategies in response to these experiences. This study is, as far as the researcher knows, the first to focus on the specific experiences and self-regulation of ISAs and may generate much needed hypotheses to inform and broaden the scientific discourse on students from racial minorities on a South African university campus. Given the prevalence of this type of discourse in the international context, it might be time to consider the South African
context, as different contextual variables can make the experience of students from racial minority groups incomparable to that of such students in other countries.
References


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A BRIEF OVERVIEW OF SELF-REGULATION


CHAPTER 2: THE BEHAVIOURAL SELF-REGULATION STRATEGIES OF INDIAN SOUTH AFRICAN STUDENTS AS MINORITY GROUP ON A UNIVERSITY CAMPUS
The behavioural self-regulation strategies of Indian South Africans as minority group on a university campus

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Abstract

This study aimed to develop a hypothetical model of Indian South African (ISA) students’ experiences as racial minorities on a historically White South African university campus and how they self-regulate in response to these experiences. Interactive qualitative analysis (IQA) was employed with eight students (4 female; 4 male) to explore their perceived experiences as racial minority students on the university campus and how they self-regulate the thoughts, feelings, and actions arising from these experiences. Subsequently, eight themes were identified, namely: (1) unwanted emotions; (2) introspection; (3) engaging interpersonally; (4) managing the situation; (5) making friends with people from other races; (6) tolerance; (7) feeling overwhelmed; and (8) being judged for being different. Following this, a hypothetical model with two possible feedback loops was developed. The model’s limitations and implications for research are discussed below.

Keywords: self-regulation, Indian South African, university students, racial minority group, ethnicity, race, South Africa
This study explores the self-regulation of a group of Indian South African students (ISAs) as a racial minority on a university campus. In general, literature suggests that students from racial minority groups on university campuses often have experiences of exclusion (e.g., Cornell & Kessi, 2017), discrimination (Daniels & Damons, 2011; Jones, Castellanos, & Cole, 2002) or being treated as stereotypes of their racial groups (Bourke, 2010; Morrison, 2010; Steele & Aronson, 1995).

Although ISAs are classified as one group in terms of race in South African censuses (see Statistics South Africa, 2012, 2016) there is still debate on the classification of ISAs as a homogenous ethnic group because of the enduring religious, cultural, and linguistic plurality within the group (Vahed & Desai, 2010). Even though this plurality exists, ISAs are viewed as a homogenous racial group for the purposes of this study. The researcher is aware that demarcating ISAs as a racial group in a post-racial South African society may indeed be contrary to the aims of a non-racial society. Nevertheless, demarcating a specific population in accordance with their possible shared experience as a racial group justifies this demarcation.

The rationale of this homogenisation lies in research that suggests that the cognisance of race still influences and guides the sentiments expressed towards racial out-group members in South Africa (Lefko-Everett, 2012), as well as the interaction between people from different races (Hofmeyer & Govender, 2015). Moreover, ISAs seem to be the target of negative stereotypes, such as being exploitive and wary of integration (High Level Committee on the Indian Diaspora, 2001; Nyar, 2012).

South African research on university campuses found that: a) negative racial experiences such as being stigmatized and perceiving racial discrimination were prominent (Cornell & Kessi, 2017; Daniels & Damons, 2011); b) students ‘segregated’ and interacted socially based on their
race (Alexander & Tredoux, 2010; Schrieff, Tredoux, Dixon, & Finchilescu, 2005) or a combination of race and class (Bhana, 2014); and c) stereotypes such as ISAs being exploitive, racist, selfish, traditional, or hardworking seemed to be present in the perceptions of students (Talbot & Durrheim, 2012).

Perceived social exclusion, stigma, and perceived discrimination may be associated with increased psychological distress (Hartzenbuehler, Nolen-Hoeksema, & Dividio, 2009); diminished psychological well-being (Paradies et al., 2015; Schmitt, Branscombe, Postmes, & Garcia, 2014); depletion of a person’s self-control resources (Bair & Steele, 2010; Baumeister, DeWall, Ciarocco, & Twenge, 2005; Inzlicht, McKay, & Aronson, 2006); and poor health-related behaviours (Pascoe & Richman, 2009; Terrell, Miller, Foster, & Watkins Jr, 2006). Given the implications these negative experiences may have and the important role self-regulation plays in resilience (Karoly, 2010), coping (Carver, 2007; Carver, Scheier, & Fulford, 2008) and social interactions (Forgas, Baumeister, & Tice, 2009; Heatherton, 2011), it may be valuable to explore ISAs responses to possibly adverse race-related experiences.

Self-regulation can be defined as an adaptive process of controlling, maintaining, or changing experienced thoughts, feelings, and actions to achieve a desired socially embedded or prescribed condition or to move away from undesired conditions (cf. Berger, 2011; Carver & Scheier, 1998, 2016, 2017; Forgas et al., 2009; Heatherton, 2011; Karoly, 2012). Although self-regulation includes the phases of goal formulation, planning, and forethought (see Botha, 2013; or Vancouver & Day, 2005), this research specifically focuses on movement towards goal attainment.

Carver and Scheier’s (1998) cybernetic theory of self-regulation states that if a discrepancy is detected between the environment and a person’s goal, the individual will make
an effort to close that difference. In this process, the primary feedback loop, which is concerned with the distance created between the goal and the current situation, produces behaviour to decrease the perceived discrepancy. A secondary feedback loop that causes emotion runs simultaneously and is concerned with the rate of discrepancy reduction (or efficacy) of the primary feedback loop (Carver & Scheier, 1998). According to Carver and Scheier (1998), negative emotions may result when the perceived rate of discrepancy reduction is lower than expected. This will result in increased efforts to speed up the rate of discrepancy reduction. In contrast, positive emotions may result when the rate of discrepancy reduction is higher than expected. A person will feel neutral when he or she manages to keep this perceived rate of the discrepancy reduction close to the expected rate of discrepancy reduction (Carver & Scheier, 1998). When the secondary feedback loop detects a rate so low that efforts to speed up this rate are in vain, sadness may result and prompt the person to disengage from these goals (Carver, 2004; Carver & Scheier, 1998).

The process of trying to close these discrepancies or to change the situation in such a way that it aids one’s trajectory towards goals can be typified as assimilative self-regulation strategies (Brandtstädter & Rothermund, 2002). However, as is evident with the experience of sadness, individuals may disengage, which may include various actions, for example changing their goals (e.g. making the goals more feasible), pursuing new goals, or pursuing no goals at all (Carver & Scheier, 2003; Wrosch, Scheier, Carver, & Schulz, 2003). This process of changing one’s goal or one’s perspective of the goal in the face of resource deficits, situational constraints, or following the belief that the goal may not be attained, may be distinguished as accommodative self-regulation (Brandtstädter, 2006).
A probable goal that may present itself in the self-regulation of any student from a racial minority group is the fundamental human need of belonging (Baumeister & Leary, 1995) and relatedness (which refers to procuring relationships or social experiences signalling safety, belongingness, and closeness: Deci & Ryan, 2000). In this sense, self-regulation may be an important mechanism to facilitate a person’s social efforts towards belonging (Heatherton, 2011).

Previous research shows that racial minorities self-regulate their race-related experiences in different ways, for example ignoring (Kubiliene, Yan, Kumsa, & Burman, 2015; Wilkins, 2012), accepting (Kubiliene et al., 2015) or changing the meaning they attach to it (Bobowik, Basabe, & Páez, 2014; Crocker, Voelkl, Testa, & Major, 1991; Wilkins, 2012). They also regulate by behaving in a manner that aims to disprove stereotypes attributed to their racial in-group (Cornell & Kessi, 2017; Torres & Charles, 2004; Wilkins, 2012), and by educating ignorant others about their race, culture, (Johnston-Guerrero, 2017; Makomenaw, 2012; Morrison, 2010) or religion (Tummala-Narra & Claudius, 2013). Moreover, they attempt to deal with these experiences by seeking social support from important others (Alexander & Tredoux, 2010; Barnett, 2004; Brown, 2008; Greyerbiehl & Mitchell, 2014; Guiffrida & Douthit, 2010; Herndon & Hirt, 2004; Makomenaw, 2012; Morrison, 2010).

**Problem Statement**

It is clear from the literature that behavioural self-regulation may be a key factor in responding to one’s status as a member of a minority group. Previous research on university students from racial minority groups in South Africa primarily focused on all the historically disadvantaged race groups (Indians/Asians, Africans, Coloureds, etc.) by referring to all these racial groups collectively as Blacks (e.g. Alexander & Tredoux, 2010; Cornell & Kessi, 2017), whereas other exclusively focused on specific racial groups such as Africans (e.g. Elliker, Kotze,
& Coetzee, 2017) or Coloureds (e.g. Daniels & Damons, 2011; Swart, Hewstone, Christ, & Voci, 2011). Most literature refers to ISAs only briefly (e.g. Pattman, 2007; Bhana, 2014) as a subgroup of the collective term ‘Blacks.’ To the researchers’ knowledge, only one study, i.e. Wiebesiek, Rudwick, and Zeller (2011), specifically focuses on ISA students. However, the focus of this study was specifically on how ISA students perceive South African Indian English as a unique variant of English. Consequently, there seems to be a gap in the literature on the psychological experiences of ISA students as a racial minority in South African university contexts. This study may therefore contribute to the appeal for more studies to elucidate the process of self-regulation in South African contexts (Botha, 2013). The explorative nature of this research may provide new hypotheses for further scientific inquiry into the self-regulation strategies and processes of ISAs as a racial minority group on a South African campus. In addition, by studying a specific racial group, this research may supplement scientific and psychological discourse on the possibly distinctive experiences of different racial minorities on the university campuses in South Africa.

Aims

The aims of this study are to: (a) identify the typical thoughts, emotions and actions of a sample of ISA students in response to their status as a racial minority group on a university campus; to (b) explore the self-regulation strategies they employ in response to these thoughts, emotions and actions; and to (c) determine their perceived cause-and-effect relationships between these thoughts, emotions, and self-regulation strategies.
Methodology

Design

This study employed interactive qualitative analysis (IQA), which is a qualitative research design based on the principles of action research, grounded theory, and concept mapping. The essential aim of IQA is to develop a hypothetical model to show the perceived cause-and-effect relationships of participants’ experiences (Northcutt & McCoy, 2004).

Participants

The study was conducted on a historically White South African university campus. A non-probability, volunteer sample (Cohen, Manion, & Morrison, 2011) of eight full-time ISA contact students was recruited by putting up an advertisement across the campus. The sample consisted of four male and four female students, aged between 18–23. All participants identified themselves as Muslim ISAs, were fluent in reading and writing English or Afrikaans, and none had any prior relationship with the researcher.

Procedure and Ethical Considerations

This study was approved by the ethics committee of the North-West University, where the student is registered (approval number NWU-00077-17-A1), as well as by the registrar of the university where participants were recruited. Students who were willing to participate responded to the advertisement by contacting an independent person who facilitated the informed consent process. This included a detailed exposition of the risks and benefits related to this study, mitigation strategies, as well as the voluntary nature of participation. After consent was provided, participants were invited to attend the four-hour IQA discussion group session, which took place after hours in a private meeting room on campus. In addition to drinks and a light lunch made available during the discussion group process, each participant also received a small amount of
cellular data as a token of appreciation for taking part in the relatively long process of data gathering.

**Data Collection and Analysis**

IQA data collection and analysis consist of sequential, yet integrated processes (cf. Northcutt & McCoy, 2004). Participants were first asked to write down individually on note cards the typical thoughts, emotions and actions they experience and follow in relation to their status as members of a minority ethnic group on the campus. They were then randomly divided into groups of two participants each with the instruction to share, discuss, and identify common experiences – a process that involves inductive coding. One member of each group then had to put their cards on a black board randomly and explain their shared experiences to the larger group. This was followed by phase two, axial coding, where the whole group sorted and clustered all the cards on the board according to their perceived similarity (i.e. creating themes) and gave a name to each of these themes. Both researchers facilitated this process according to the guidelines set out by Northcutt and McCoy (2004). They ensured that the commentary, conversation, and suggestions of the group take precedence over the facilitation of the researchers, yet at the same ensuring that the final themes described a distinct category, were easy to denote, and did not overlap with other themes (Northcutt & McCoy, 2004, pp. 99-103).

After the group reached consensus on the eight themes, the researchers deductively compiled a short questionnaire to measure the perceived cause-and-effect relationship between all these themes (i.e. theoretical coding: Northcutt & McCoy, 2004). The questionnaire included a detailed explanation of the themes, followed by the items depicting the possible cause-and-effect between all eight themes. Each question compared the two themes and participants had to
choose the relationship best describing their experience as a student from a racial minority group, for example:

A → B (Theme A causes theme B);

A ← B (Theme B causes theme A); or

A O B (These themes are not related to each other).

Participants received the questionnaire via e-mail and had to send it back within 48 hours of receipt. Following the guidelines of Northcutt and McCoy (2004, pp. 160-163), the frequency assigned to each of these relationships was recorded in descending order to calculate the cumulative frequencies (CF: see Table 2). In turn, the cumulative percentage of relations (CPR) was calculated based on the total of the possible relationships between the eight themes (56), where each relationship signified 1.785% (or 1/56th) of all the relationships. Eventually, the cumulative percentage frequency was calculated (CPF, which refers to the cumulative percentage of the total number of votes, 186, cast by participants). Lastly, a calculation of power (P), which “is an index of the degree of optimization of the system” (Northcutt & McCoy, 2004, p. 160) was calculated by subtracting the CPR from CPF.

Based on the power of each cause-and-effect relationship, an inter-relational diagram (IRD) was compiled to produce a delta value (Δ) for each theme. The delta value was then used to distinguish the themes based on where they are situated in terms of their perceived causal influence on another, and to eventually construct the model following the systematic process elucidated by Northcutt and McCoy (2004, pp. 173-184). Due to ambiguities in the frequency analysis (participants were equally divided in how they perceived the cause-and-effect relationships between Themes 2, 3 and 4) Northcutt and McCoy’s (2004, p. 169) guidelines were strictly followed. As this did not resolve the ambiguities successfully, the researchers decided to
construe all three possible models and to ask the participants in follow-up discussions for clarity on the model that best reflect their experience. Consequently, the participants chose Model 3 (see Figure 2).

Trustworthiness

IQA has a high level of credibility, firstly because open and axial coding are done by the participants themselves rather than by the researchers, and secondly because the steps described by Northcutt and McCoy (2004, pp. 169-184) were strictly followed and noted to leave a comprehensive audit trail. The model itself was generated by the two researchers independently as a form of member checking. Method triangulation was ensured by including individual feedback sessions with participants where they received feedback on the three models generated and asked to reflect on and choose the model most applicable to their experience as students from a racial minority group on campus (cf. Patton, 1999).

Results

The participants identified eight themes, namely (1) unwanted emotions; (2) introspection; (3) engaging interpersonally; (4) managing the situation; (5) making friends with people from other races; (6) tolerance; (7) feeling overwhelmed; and (8) being judged for being different. For an explanation of these different themes, see Table 1.

Table 1

<table>
<thead>
<tr>
<th>No</th>
<th>Theme</th>
<th>Description of theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Unwanted emotions</td>
<td>Unwanted emotions in this study specifically refers to feelings of sadness and anger. It may also include other negative emotions that arise from the</td>
</tr>
</tbody>
</table>
participants’ experience as a racial minority group on this university campus. Verbatim example: “That [the emotions following discrimination] is the anger and sadness.”

2. Introspection

This primarily refers to participants writing down the feelings that arise from their experiences as a student from a racial minority group. This theme may also include other individual forms of expressing and making sense of their emotions, such as expression through drawing, painting, making music, venting by talking to oneself, meditating, focusing on the meaning of their emotional experience, or other ways of internally focusing on their thoughts, emotions, behaviour, and experiences. Verbatim examples: “We try and understand the process of what’s going on...”; “…write out your feelings.”

3. Engaging interpersonally

According to the participants, they often engage interpersonally with trusted individuals like family and friends when they need to discuss aspects related to their experience as minority group. These engagements include talking about specific events. These interpersonal engagements also include the use of humour and laughter about their experiences and, finally, also sharing and eating comfort food as a way of relieving tension. Verbatim quotes: “With these emotions, we talk to people that we trust”; “We usually believe some of these things to be really humorous...logically the humour is laughter, when we can laugh about that [sic].”

4. Managing the situation

This theme includes ISAs’ efforts to adapt to the macrosocial environment or adapting their thoughts and feelings to the importance or magnitude of the perceived situation. Managing the situation also includes other strategies, such as trying to make sense of their thoughts following an experience of being judged or voicing their opinion towards someone who has wronged them. It therefore seems as if this theme consists of two subthemes, namely a self-reflective
process and assertive or ‘confrontational’ process. However, participants integrated this as one theme. Verbatim examples: “Is it really worth it going in-depth and putting all our energy in such a thing that is so small or so big, it depends again on the individual [sic].”; “I voice my opinion, if there is something that I dislike I will say so.”; “We try and educate them about us.”

5 Making friends with people from other races

This theme denotes deliberate efforts on the side of the participants to become acquainted with or friends of racial out-group students. Verbatim example: “Make friends with other races/racial group.”

6 Tolerance

This theme refers to instances where participants do not react or overlook their experiences of being judged for being different. It also refers to tolerating racial out-group members. In addition, this theme refers to staying with their group of friends or focusing on getting their degree (e.g. “we focus on what we came here to do”). Lastly, this theme includes being or feeling happy when someone respects them, or the experience of happiness when they go on as normal despite the experience of being judged for being different. Verbatim examples: “We overlook most of the things and due to overlooking we forget about them,” or “...you hide until you can face them.”

7 Feeling overwhelmed

This theme addresses feeling overwhelmed by emotions following an experience as a racial minority group. A subgroup also included feelings of surprise or shock following interactions with racial out-group members knowledgeable about their culture or religion. Verbatim examples “…when people come up to us, we’re overwhelmed, because either they know a lot about it or they don’t know about us” or “…it is feeling overwhelmed [sic]”

8 Judged for being different

Although some participants clearly indicated that they do not feel discriminated against, it was present to such an extent that it emerged as a theme. This theme
includes some participants’ perceptions of racial out-group members as: a) discriminating on the basis of the participants’ race, b) judging the participants on their religious or cultural clothing, or c) having misconceptions regarding the participants’ religion or culture (e.g. “Sometimes I felt discriminated against”). It also includes participants’ perceptions of being a racial minority member on a university campus under investigation. In terms of religion, the female participants indicated that their dress code made them susceptible to further differentiation based on religion and the judgements they perceive to result from such a differentiation or “othering” (e.g. “judged by our clothing [sic]”).

Each of the themes of engaging interpersonally, managing the situation, and tolerance, seems to have subthemes that can be seen as disparate and different themes. Participants felt that these seemingly disparate themes reflect the same interrelated strategy, despite the researchers urging them to consider it otherwise. Given the importance of participants’ meaning making in IQA, we stayed with the decision of the participants.

The frequency analysis of the perceived relationships between the themes is shown in Table 2. The affinity pair of 1 ← 8 has the highest frequency (8), indicating that all the participants perceived that being judged for being different (Theme 8) causes unwanted emotions (Theme 1).

Table 2.

*Frequency and power analysis of the relationships between themes*

<table>
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<tr>
<th>Affinity Pair</th>
<th>Frequency</th>
<th>Cumulative Frequency (CF)</th>
<th>Cumulative Percent (CP)</th>
<th>Cumulative Percent Frequency (CPF)</th>
<th>Power</th>
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<td>Value</td>
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</tbody>
</table>
Note. a Ambiguous or double pairings; b The model that the participants chose included pairings 2 → 4 and 3 → 4, therefore, this model excluded pairing 2 ← 4 and 3 ← 4; c Power turning point. All the numbers used in the final IQA model are in bold, which includes the ambiguous relationships. The last row in bold represent the turning point. Theme 1 – Unwanted emotions; 2 – Introspection; 3 – Engaging interpersonally; 4 – Managing the situation; 5 – Making friends with people from other races; 6 – Tolerance; 7 – Feeling overwhelmed; 8 – Judged for being different

The power reached a maximum value of 27.59 (see the ‘Power’ column in Table 2, as well as Figure 1) at the 27th affinity pair (48.21 % of the 56 affinity pairs) and explains 75.81 % of the variance of the data (see the ‘CPF’ column in Table 2).

![Graph](image_url)

*Figure 1. Power analysis*

The inter-relational diagram (see Table 3: IRD) contains what participants perceived to be the cause-and-effect relations between the eight themes. Here the arrows denote these causes and O signify the absence of a perceived relationship. The delta values show that Themes 8, 1, and 7 were drivers in the model, in that order, which means that they represent the strongest causal themes. Conversely and in ascending order, Themes 6, 4, 3, 5, and 2 were effects (more often caused by other themes) in the model.
The model (Figure 2) shows that participants respond with unwanted emotions (e.g. anger and sadness) when they experience that they are being judged for being different. This leads to feeling overwhelmed, which in turn causes them to do introspection. The result of their introspection is that they engage with trusted others, which then produces a sense of having to manage the situation (by confronting those who have wronged them, adapting their thoughts or emotions to situation, or making sense of their thoughts). Managing the situation results in two feedback loops. In the first feedback loop (F1), participants move on from efforts to try to manage the situation, towards strategies indicating a tolerance of the experience of being judged, which eventually feeds back into introspection. Participants in feedback loop two (F2), after managing the situation, deliberately attempts to make friends with people from other racial groups, which feeds back into engaging with trusted others. Engaging in F1 and F2 may not be an either–or choice for participants and any participant may oscillate between different frequencies between F1 and F2 at any time. It is also possible that some initially prefer a certain feedback loop and then switch to another, or make no switch at all. It is beyond the scope of this
study to discuss the unending plethora of ways in which participants could utilise F1, F2, or both. Following this and in the interest of simplicity, the feedback loops are discussed separately, with cognisance of the possibility that both may be engaged by a single participant.

Figure 2. The final hypothetical IQA model. This hypothetical IQA model represents participants’ experience as a racial minority on this specific university campus, otherwise called the system influence diagram (SID).

Note. F1 and F2 denote feedback loops 1 and 2 respectively

Discussion

The model suggests that the perception or experience of being judged (when it does happen) forms the starting point of self-regulation for this group of participants. This experience concurs with literature demonstrating the prominence of race in the experience and socialisation of South African university students (Alexander & Tredoux, 2010; Cornell & Kessi, 2017; Daniels & Damons, 2011). The experience of being judged may create a discrepancy between
the participants’ goals of social acceptance, including a sense of belonging (Baumeister & Leary, 1995) and relatedness (Deci & Ryan, 2000), and where they currently find themselves, feeling judged for being different by racial out-group members. In other words, this discrepancy reflects a perceived difference between how they want things to be (i.e. goal) and how things are (i.e. experience).

The discrepancy leads participants to experience negative emotions, primarily anger and sadness, which subsequently causes them to feel overwhelmed by these emotions. In this case, the emotions they experience possibly makes them aware of the discrepancy and how it affects goals important to their well-being (Wranik & Scherer, 2010). Since participants indicated that they feel overwhelmed by these emotions, and feeling overwhelmed is an indication of the intensity of these emotions, the participants perceive the impeded goals as extremely important to attain (cf. Carver & Scheier, 1998). After all, the goal of belonging is crucial to racial minorities’ sense of well-being (Mendoza-Denton, Downey, Purdie, Davis, & Pietrzak, 2002).

Looking more closely at the two primary emotions they experience, anger and sadness may be explained by the attributions about their experience of being judged or its effect on their rate of movement towards their goals (cf. Carver & Harmon-Jones, 2009). The experience of anger could have resulted from participant attributions that being judged is a temporary obstruction to their goal of belonging (cf. Wranick & Shrerer, 2010). In comparison, participants who experience sadness may have construed this experience as an indication that their goal of belonging is lost (Stein & Levine, 1987; Stein, Liwag, & Wade, 1996). It is also possible that participants experience both these emotions, since both emotions arise from the same goal state discrepancies (i.e. wanting and not having something) and may be an indication that participants...
are still deciding (based on environmental feedback) whether their belonging goals are lost or can be reinstated through effort (see Stein et al., 1996).

In addition to the abovementioned attributions, being judged plausibly influenced, negated, or deteriorated participants’ perceived rate of progress towards their belonging goals (cf. Carver, 2004). Usually, this slower than expected rate of progress is accompanied by feelings of anger (Carver, 2004) and sadness (Carver & Scheier, 1998). If their rate of progress is lower than expected, but it could still be sped up by an increase in efforts, participants may experience anger (Carver, 2004). However, when participants believe subsequent efforts to speed up this rate is futile, sadness may most likely result (Carver, 2004; Carver & Scheier, 1998). In this case, participants experiencing sadness will most likely disengage from their goals to channel their resources to new or alternative goals (Carver, 2004; Carver & Scheier, 1998).

In response to feeling overwhelmed by their emotions, participants engage in introspection as an individual process during which they try to make sense of the intensity of the emotions and thoughts following the experience. Following Kross, Ayduk, and Mischel’s (2005) findings and arguments, if participants ask ‘why’ questions about their emotions, they may avoid rumination by engaging in rational and cognitive processing (see the cool system of Metcalfe & Mischel, 1999) and by making sense of their emotions in a detached way (i.e. self-distancing: Park, Ayduk, & Kross, 2016). Self-distancing may help to subdue their experience of anger (Kross et al., 2005) and lower their emotional reactivity or the intensity of their emotions (Park et al., 2016). Journaling, as a particular feature of this theme, may have helped participants to see the situation differently (Pennebaker & Chung, 2011) and to decrease the intense emotional reactions via self-distancing (Park et al., 2016).
If, however, participants focused on ‘what’ they feel, this may have intensified their feelings and led to rumination (Kross et al., 2005). Rumination refers to an inclination to examine and concentrate on one’s negative emotions (Drwal, 2008). The consequences of rumination may be that it cancels out the benefits of self-reflection (Takano & Tanno, 2009), and may increase the risk for depression (Miranda, Polanco-Roman, Tsypes, & Valderrama, 2013) and risk-taking (Borders & Hennebry, 2015) among racial minorities in contexts of perceived discrimination.

Participants then follow this phase of self-reflection and introspection by socially engaging with people who they trust, the latter referring to family and friends. This supports previous research indicating the use of social support or seeking affiliation from friends or family (Alexander & Tredoux, 2010; Barnett, 2004; Brown, 2008; see Guiffrida & Douthit, 2010 for a review; Herndon & Hirt, 2004; Morrison, 2010).

According to Zaki and Williams (2013), social engagement is an important resource in self-regulation. It could in this context perhaps be seen as a resource for overcoming social exclusion and a movement towards belonging. Social engagement in this case could have a further benefit in what Gross (2015) calls situation selection or the deliberate choice of a situation to replace negative emotions with positive ones, in this case trusted others. Therefore, by talking with people who they trust, participants may receive feedback in terms of the discrepancy detected (Bonanno & Burton, 2013; Carver & Scheier, 1998), which can provide safety signals crucial to a reappraisal of the situation (Zaki & Williams, 2013).

Subsequent to participants’ social engagement, they try to employ self-regulation strategies that they refer to as ‘managing the situation.’ This includes trying to understand or make sense of their own thoughts, adapting their response to the feeling of being judged, and
voicing their opinion towards someone who have wronged them. This theme, however, similar to introspection, also includes a self-reflection component in response to the information received from trusted others. This self-reflective strategy may include an evaluation of their awareness of the discrepancy, which reflects a metacognitive process (Robson, 2006). This stage of self-reflection could aid participants in making meaning of the feedback they received from trusted others, or could conceivably be another opportunity for rumination. The strategy of adapting and managing their thoughts, feelings, and behaviour depending on how they perceive their experiences as a minority, indicates continuous efforts to monitor their environment and behaviour in terms of social belonging and a consideration to flexibly adapt their behaviour to changes in the input received from others, their social milieu, and their internal processes (cf. Carver & Scheier, 1998, 2016).

Participants also indicated that they manage the situation by voicing their opinion towards someone who has wronged them. It was also indicated that they use this as an opportunity to educate others about their (participants’) religion or culture, supporting previous research on students from racial minorities (Johnston-Guerrero, 2017; Makomenaw, 2012; Morrison, 2010; Tummala-Narra & Claudius, 2013). This is the first instance where participants actively influence their environment, although it might still also reflect something about the anger they experience.

From managing the situation, participants’ self-regulation diverges down two possible paths, which is reflected as two feedback loops in the model. F1 is characterised by first attempting to tolerate the perception of being judged, and then feeding back into introspection. F2, in contrast, consists of making friends with people from other races, which feeds back into social engagement. One way of understanding the two feedback loops is by looking at how the
unfolding of participants’ negative emotions and self-reflective processes contribute to either accommodation or assimilation as self-regulative strategies. As indicated in the literature review, accommodation refers to those instances where individuals change their goals in the face of discrepancies and within contextual limitations, whereas assimilation refers to when individuals change their behaviour and bring it into balance with their goals (Brandstädter, 2006; Brandstädter & Rothermund, 2002). Based on this, it appears as if F1 represents an attempt to accommodate (thus to change the goal), whereas F2 represents an attempt to assimilate (thus to change their behaviour or the situation).

**Feedback Loop 1**

As indicated previously, sadness may result in a person thinking that the goal is lost (cf. Stein & Levine, 1987; Stein et al., 1996) or when the efforts to attain such a goal is too much and better used for other goals (Carver, 2004; Carver & Scheier, 1998, 2013). The behaviours following experiences of sadness may be disengagement (Carver, 2004, Carver & Scheier, 2013). For these reasons, participants who experienced sadness for being judged may engage in the accommodative strategies of disengagement in F1. Not only may the experience of sadness presuppose these accommodative self-regulation strategies in the theme of tolerance, but the use of F1 may also be the result of the self-reflecting processes (e.g. introspection and managing the situation) preceding F1. In other words, self-reflection could have resulted in rumination, which in turn could have facilitated accommodation (Brandstädter, 2006). In addition, within the theme of tolerating the experience of being judged, participants indicated that they also reflect whether or not the emotion they feel is worth it, which may give another hint as to why participants may choose to tolerate or ignore the experience of being judged. It is also plausible that the outcome of voicing their opinion towards those who have wronged them, especially if
negative, may influence their decision to use accommodative strategies. However, what specific actions constitute success or failure is not indicated in this model and is open to further exploration.

After the tolerance phase, it seems that participants may engage in introspection again, followed by social engagement and managing the situation. This process of gaining feedback by utilising their social support system and the accompanying self-reflection may constitute an effort to gauge the efficacy of their disengagement effort. It can either lead them to further self-regulate in the accommodative loop, or prompt the participants to consider the alternative ‘assimilative’ feedback loop (i.e. F2).

**Feedback Loop 2**

In F2, participants engage in deliberate efforts to make friends with people of other races. These deliberate efforts may be understood as what they perceive to be the most viable course of action for reaching their social acceptance goals. This deliberate decision to make friends may have followed the feedback they received from interpersonal engagement and their attempts at self-reflection as a possible way to deal with being judged. Participants could also try to make friends with other racial groups with the aim of changing others’ perceptions of their religion or culture. These intentional attempts at trying to change their behaviours (through making friends) and thereby possibly influencing their environment (which they perceive to be judgmental), become the rationale for stating that F2 represents assimilation.

Successful experiences arising from these interracial interactions may satisfy their need for belonging on the wider university campus, as was seen in Mendoza-Denton et al. (2002). It may also lead to affective empathy (Swart, Hewstone, Christ, & Voci, 2011) and feelings of trust towards out-group members (Kenworthy et al., 2015) and further facilitate their integration as a
minority into the wider social sphere of the university campus involved in this study. Completing F2, these attempts at cross-racial friendships may give participants the chance to share positive experiences with others and may give them the chance to become sources of information to others who currently feel overwhelmed by the experience of being judged (cf. engaging in external social regulation: Zaki & Williams, 2013).

Failure at their attempts to make friends with people from other races may further jeopardise their perceived inefficacy of dealing with being judged and may give rise to more or other intense negative emotions (cf. Carver, 2004; Carver & Scheier, 2013). This also may be to their detriment in their efforts to belong to the wider university campus. Taking the control theory of self-regulation’s view of emotion, this may lead to feelings of sadness and may explain moves towards engaging interpersonally, as trusted others may be a source of social belonging and support during uncomfortable times. It may also explain an adaptively flexible switch on the side of the participants to the more accommodative loop (cf. Brandstädter & Rothermund, 2002).

Conclusion

The aims of this study were threefold, namely to identify the typical thoughts, emotions, and actions that follow the experience of being an ISA as a racial minority on a South African university campus; to explore the self-regulation strategies ISAs employ in response to their thoughts, emotions, and actions; and to determine the cause-and-effect relationships between these self-regulation strategies as the participants perceive them. This study used IQA, a qualitative methodological approach, to construct a hypothetical model of this perceived self-regulation process.

This study converges with previous research that illustrates the importance of race in South African university students’ experiences of discrimination and in their socialisation. This
study also supports previous research on the significance of social support as a strategy used by racial minorities following their experiences of being judged. Furthermore, this study indicates that IQA is a valuable method when exploring self-regulation in a social context as it contributes to a better understanding of the perceived relationship between being judged, the available resources and different self-regulation strategies used by ISAs as a racial minority on a university campus. Finally, the findings imply that the participants have the necessary self-regulation strategies to deal effectively with experiences related to those instances when they perceive judgement from racial out-group members. Both accommodative and assimilative processes may occur concurrently and the timely switch between accommodation and assimilation based on the nature of the situation may indicate adaptive flexibility in the ISAs of this study (Brandtstädter & Rothermund, 2002). Nevertheless, ascertaining the intersection of these processes is beyond the scope of this study and is purely speculative.

**Limitations and Future Directions**

It is important to state that this model was constructed based on the experiences of a small sample of eight participants. As such, it does not represent all ISAs on this specific university campus or those on other university campuses. The model rather reflects the shared experiences of the participants involved in the study in relation to their status as students from a racial minority group on this university campus. Although generalisability of the findings is therefore limited, the model provided new hypotheses that need further exploration.

It seems necessary for further research to explore the experiences of ISAs on this and other campuses and to determine the validity of this model. More research is also needed to explore the possibility that students from different racial groups have different experiences pertaining to their racial minority status on South African university campuses. Furthermore,
exploration can be done to see if ISAs’ cross-group interactions may lead to lower race-based sensitivity (RS). RS refers to an inclination to expect and monitor the environment for negative racial stressors, such as the experience of being judged (Mendoza-Denton et al., 2002), and previous research indicated that positive cross-group interaction may lead to lower RS (Page-Gould, Mendoza-Denton, & Mendes, 2014). Such a reduction in RS may be an interesting avenue for future research, as it may lower the participants’ anxious expectations or perceptions of being judged for being different. Lastly, further research may try to ascertain to what extent the self-regulation strategies of self-reflection, engaging interpersonally, pursuing other goals, or making friends from other race groups influence students from racial minority groups’ experience and perception of negative race-related stressors.
References


Hofmeyer, J. & Govender, R. (2015). SA Reconciliation Barometer: National reconciliation, race relations, and social inclusion (Briefing Paper No. 1). Cape Town, South Africa:


CHAPTER 3: PERSONAL REFLECTION ON THE RESEARCH PROCESS
This chapter offers a brief personal reflection on how I experienced the research process, specifically with regard to what I have learned about myself, others, and research in general. I am constrained by my personal propensity to use more words than needed, and with consideration of this flaw, I aim to make my account as short, sweet, and useful for you, the reader as possible.

**Personal Reflection**

Looking back at the research process, I vividly see the ups and downs and how it made me feel hopeful and demoralised at times. Yet each challenge of this arduous *and fulfilling* journey taught me something new, whether about myself, the participants, racial minorities in general, or the numerous ways in which research may be executed. I do believe that the support of my promoter was pivotal in me completing this study. His simplistic, yet detailed, attention to every facet of the research process is perhaps the most important skill that I started to learn as a novice researcher.

In the beginning of this journey, I was humbled by the fact that despite having completed courses on research and research methodology, I in fact know next to nothing. Perhaps this is a feeling a researcher has for his or her whole life. Although it was overwhelming at first, I changed my attitude and decided that taking the position of knowing nothing may be the best approach I could take towards contributing meaningful and usable research. This ethereal Zen-like position of not-knowing, made me a sponge that could soak up and seek out novel ways of learning something about myself, others, or the research process.

I knew nothing about psychology when I started on my journey of education. Looking back now at all I have read, I feel that I have found a field that interests me so much that pesky ideas for further research pop into my mind even when I have coffee with a friend. On initiating
the research, I had to construct a theoretical framework from nothing. The process of trying to sift out relevant from irrelevant information was especially difficult in the beginning. I decided to buy a small diary in which I would write down ideas and seemingly interesting passages. This process of writing about what I read eventually (even if this was three to four months later) helped me develop a focus that guided my literature research and subsequent writing efforts.

My research and the feedback received on my initial writing efforts developed my skill to question everything I read, to consider its implicit or explicit assumptions, and even my explicit (or sometimes ‘emergently implicit’) notions of what I have read. I learned that every finding and every result should be situated within its methodological constraints or epistemological assumptions. Although this developed after repeated efforts and with a lot of patience on the side of my study leader, it remained difficult to communicate in writing. To be honest, it still is. My study leader helped me to learn to state things simplistically and in a way that reflects the author’s voice, yet also reflects my own criticism or thoughts on the matter. I still can’t say how, but I seemed to have picked up on some of my study leader’s strategies for writing lucidly. In conjunction with this, I also searched for literature on how to write and how to write in such a way as to expose the possible relativity inherent in each finding or argument put forward by authors. This lead to my consequent marriage with hedging terms such as may, can, could, suggests, etc. This whole process of reading and writing, and then repeating it countless times, ultimately expanded my reading and writing ability.

Upon reviewing research on people’s explicit or implicit reactions towards racial minorities, I became more and more aware of how I too have certain implicit reactions towards people of different religions or races. For example, on an occasion of walking past a fully dressed Muslim, the first thought I had was related to the Paris attack, instead of thoughts of
interest or thoughts reflecting my open-minded disposition towards people from other religions. This is but one of many examples that led me to the proverbial mirror to ask myself whether or not this is how I want to see people from different religious, races, genders, or sexual orientations than myself. This brought me to ask whether I have a choice to influence these impulses or to succumb to its convenience. Moreover, reading the literature on the debilitating effects of racial stressors on racial minorities pounded the importance of these questions on my mind. I started making an effort, which I believe has led me to choose how I react to these automatic thoughts and their underlying assumptions. I decided that I have a choice to learn from these impulses and to learn to view and talk to out-group members on the basis on my own values and in view of how they express their individual “being” in the moment. This mindfulness approach reminiscent of Oprah’s book club may be the only way in which I can explain may deliberate reactions to my own biases.

Before the focus group began, I recorded these biases and other expectations I had in my small diary, together with the expectations I had about the possible outcomes of my research. I was aware that I wanted certain results, but that I owe it to the participants to tell their story as a racial minority on a South African university campus. To my knowledge, this is a first, yet small attempt at uncovering the experiences of Indian South Africans as a racial minority on university campus. Although I am inclined towards the performing art myself, I willingly decided to give the proverbial podium to my participants. I tried to research ways in which I may curtail my own biases by asking questions in a specific manner. This also led me to choose IQA as it could curtail the inherent power imbalance between the participants and me. Even normal supervision sessions taught me lessons, as my promotor has the ability to frame questions in such a way as to
truly understand what another person is telling him, the type of questions asked by a seasoned clinical psychologist. These are lessons that extend beyond the research process.

I have not had any significant exposure to Indian South Africans. This research allowed me to get their perspective and their experience on this campus. During the eating breaks following the formal focus group session or individual sessions, I had the chance to feed my curiosity by asking questions pertaining to their religion and culture. Questions too sensitive to ask, was entered into Google, and I learned a lot, especially about the Muslim faith, its dress codes, and its compassion (which sometimes seems to elude international media narratives). The participants welcomed all the questions I had and all of them kept in contact by asking if there was anything else I wanted to know, research-related or not. Of course, in my capacity as researcher, I also had to guard against forging any relationships or asking any questions that may irreparably bias and unduly influence my research. I was knowledgeable of this and erred on the side of keeping any interactions professional, to the point, and at a minimum.

Throughout this research process, I spoke to people who were disgruntled at their choice to pursue a Master’s degree on many occasions. Some reflected a choice to complete a post-graduate degree for reasons other than passions or reasons such as influence from significant others. This long process taught me the value of having a passion for what you do to such an extent that it can prompt you to push through seemingly overpowering obstacles. I really do not know how I would have done this without being exposed to this interesting field or the tangible passion my promoter has for this field.

However, passion will not always fill the page with words. This is where I started to turn to my friends, my parents, my study leader and to God for guidance. ‘Raising’ a mini-dissertation, without a doubt in my mind, requires a village. Sometimes your social support
system gives you direct ways of tackling the problem (such as my professor helping me to distinguish between relevant and irrelevant information), sometimes they were the healthy distractions, and sometimes talking to them about my ideas helped me make sense of my research. I learned that I am ironically willing to ask for help when I least need it, and to avoid others when I most needed them. This is something valuable I have learned through my research process. In fact, I believe this to be one of the most important insights I got about myself. How I will respond to this in future research endeavours may ultimately affect how I experience a sense of well-being by also pursuing my research goals.

To conclude, I learned a lot about ISAs, research in general, and myself. I became cognisant of personal growth areas such as my a) use of social support networks; b) my perceived deficient understanding and integration of disparate self-regulation models; c) efforts to control my implicit biases towards racial out-group members etc. I learned about the value of journaling the research process and how writing down one’s ideas can help one make sense of it. I acquired the skill of reading the findings of others and writing about them while retaining their important caveats. I learned the value using the choice one has to change one’s attitudes towards challenges and, most importantly, the value of knowledgeable, loving, and supportive people in one’s life. I learned a lot about how I self-regulate my own challenges. Now standing upon the precipice of what seems to be the end of this project, I will admit: I still know next to nothing!
APPENDIX A

The IQA Questionnaire

Name:

INSTRUCTIONS

- Please read through the questions carefully.
- Remember that there is no wrong or right answer
- Please carefully read the theme definitions and make sure you understand the definitions of the themes

Definition of Themes

Theme 1: Unwanted Emotions
Unwanted emotions in this study is defined as feelings of sadness and anger. It may also include the experience of other negative emotions as a result of being an Indian South African on this University campus

Theme 2: Introspection (Journaling your feelings)
Introspection in this study refers primarily to journaling your feelings, in other words, writing down the feelings that result from your experience as a racial minority member. It may however also involve any other, but similar ways of expressing your emotions safely, for example through drawings or painting, or venting by talking to yourself, meditating or internally focussing on the emotions/thoughts.

Theme 3 Engage Interpersonally
This theme includes the following:

- Talking to your friends about your experiences
- Only consulting with friends
- Talking to people about your experience
- Talk to trusted individuals
- Speak to someone about what happened
- Talking to your parents about your experience
- Sharing / eating comfort food with another person
• Using humour with regards to your experiences as a racial minority group member
• Laughing about your experience with other.

**Theme 4 Managing the Situation**

• Adapting to the larger student community / social setting
• Try to understand (or make sense of...) your own thoughts, following your experience as a racial minority member on this campus
• Proper management of the situation
• Voice my opinion (towards someone who I perceived to have wronged me).

**Theme 5 Make Friends with People from Other Races**

This refers to when you deliberately become acquainted / friends with people from other races than yourself.

**Theme 6 Being Tolerant (or Tolerating the situation or people)**

Being tolerant includes the following responses to your experience as a racial minority member on this campus.

• Doing nothing, overlook it, let it go, feeling indifferent
• Tolerate others (“I do not attend functions, until I can face them”)
• Ask yourself, "Is the emotion really worth it"
• Stick with your group of friends
• Focusing on what you came here (the university) to achieve.
• Being Happy (“When someone respects you for your being” / "Happy, going on as normal"

**Theme 7 Feeling Overwhelmed**

Feeling overwhelmed as a result of your experience as a racial minority member on this campus.

**Theme 8 Being Judged for Being Different**

This theme includes the following experiences:
- Feeling discriminated against
- Feeling or being different
- Being judged by the clothing that you wear
- Unique (i.e. feeling or perceiving yourself to be unique as minority member on this campus)
- Perceiving other people to have a misconception about your religion and/or your culture.

**Questionnaire**

CHOOSE **ONE** OPTION ONLY IN EACH CASE:

1. ACCORDING TO MY EXPERIENCE, AS A MINORITY GROUP INDIAN STUDENT ON THIS CAMPUS:

<table>
<thead>
<tr>
<th>Unwanted emotions cause me to do Introspection (journaling/drawing/focusing on my feelings)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Introspection (journaling/drawing/focusing on my feelings) causes me to feel Unwanted emotions</td>
<td></td>
</tr>
<tr>
<td>Unwanted emotions and Introspection (journaling/drawing/focusing on my feelings) have no influence on each other</td>
<td></td>
</tr>
</tbody>
</table>

2. ACCORDING TO MY EXPERIENCE, AS A MINORITY GROUP INDIAN STUDENT ON THIS CAMPUS:

<table>
<thead>
<tr>
<th>Unwanted emotions cause me to Engage Interpersonally (talk, laughter, humour, comfort food)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal engagement (talk, laughter, humour, comfort food) causes me to feel Unwanted emotions</td>
<td></td>
</tr>
<tr>
<td>Unwanted emotions and Interpersonal engagement (talk, laughter, humour, comfort food) have no influence on each other</td>
<td></td>
</tr>
</tbody>
</table>
3. ACCORDING TO MY EXPERIENCE, AS A MINORITY GROUP INDIAN STUDENT ON THIS CAMPUS:

<table>
<thead>
<tr>
<th>Unwanted emotions cause me to Manage the situation (understanding, voicing my opinion, adaptation)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Managing the situation (understanding, voicing my opinion, adaptation) causes me to feel Unwanted emotions</td>
<td></td>
</tr>
<tr>
<td>Unwanted emotions and Managing the situation (understanding, voicing my opinion, adaptation) have no influence on each other</td>
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</tbody>
</table>

4. ACCORDING TO MY EXPERIENCE, AS A MINORITY GROUP INDIAN STUDENT ON THIS CAMPUS:

<table>
<thead>
<tr>
<th>Unwanted emotions cause me to Make friends with people from other races</th>
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</thead>
<tbody>
<tr>
<td>Making friends with people from other races causes me to feel Unwanted emotions</td>
<td></td>
</tr>
<tr>
<td>Unwanted emotions and Making friends with people from other races have no influence on each other</td>
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</tr>
</tbody>
</table>

5. ACCORDING TO MY EXPERIENCE, AS A MINORITY GROUP INDIAN STUDENT ON THIS CAMPUS:

<table>
<thead>
<tr>
<th>Unwanted emotions cause me Being judged for being different</th>
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</thead>
<tbody>
<tr>
<td>Being judged for being different causes me to feel Unwanted emotions</td>
<td></td>
</tr>
<tr>
<td>Unwanted emotions and Being judged for being different have no influence on each other</td>
<td></td>
</tr>
</tbody>
</table>
6. According to my experience, as a minority group Indian student on this campus:

| Unwanted emotions cause me to Feel overwhelmed (when I don’t understand) |  |
| Feeling overwhelmed (when I don’t understand) causes me to feel Unwanted emotions |  |
| Unwanted emotions and Feeling overwhelmed (when I don’t understand) have no influence on each other |  |

7. According to my experience, as a minority group Indian student on this campus:

| Unwanted emotions cause me to Be tolerant (doing nothing / letting it go) |  |
| Being tolerant (doing nothing / letting it go) causes me to feel Unwanted emotions |  |
| Unwanted emotions and Being tolerant (doing nothing / letting it go) have no influence on each other |  |

8. According to my experience, as a minority group Indian student on this campus:

| Introspection (journaling/drawing/focusing on my feelings) causes me to Engage Interpersonally (talk, laughter, humour, comfort food) |  |
| Interpersonal engagement (talk, laughter, humour, comfort food) causes me to do Introspection (journaling/drawing/focusing on my feelings) |  |
| Introspection (journaling/drawing/focusing on my feelings) and Interpersonal engagement (talk, laughter, humour, comfort food) have no influence on each other |  |
9. ACCORDING TO MY EXPERIENCE, AS A MINORITY GROUP INDIAN STUDENT ON THIS CAMPUS:

<table>
<thead>
<tr>
<th>Introspection (journaling/drawing/focusing on my feelings) causes me to Manage the situation (understanding, voicing my opinion, adaptation)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Managing the situation (understanding, voicing my opinion, adaptation) causes me to do Introspection (journaling/drawing/focusing on my feelings)</td>
<td></td>
</tr>
<tr>
<td>Introspection (journaling/drawing/focusing on my feelings) and Managing the situation (understanding, voicing my opinion, adaptation) have no influence on each other</td>
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</tbody>
</table>

10. ACCORDING TO MY EXPERIENCE, AS A MINORITY GROUP INDIAN STUDENT ON THIS CAMPUS:

<table>
<thead>
<tr>
<th>Introspection (journaling/drawing/focusing on my feelings) causes me to Make friends with people from other races</th>
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</thead>
<tbody>
<tr>
<td>Making friends with people from other races causes me to do Introspection (journaling/drawing/focusing on my feelings)</td>
<td></td>
</tr>
<tr>
<td>Introspection (journaling/drawing/focusing on my feelings) and Making friends with people from other races have no influence on each other</td>
<td></td>
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</tbody>
</table>

11. ACCORDING TO MY EXPERIENCE, AS A MINORITY GROUP INDIAN STUDENT ON THIS CAMPUS:

<table>
<thead>
<tr>
<th>Introspection (journaling/drawing/focusing on my feelings) causes me Being judged for being different</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Being judged for being different causes me to do Introspection (journaling/drawing/focusing on my feelings)</td>
<td></td>
</tr>
<tr>
<td>Introspection (journaling/drawing/focusing on my feelings) and Being judged for being different have no influence on each other</td>
<td></td>
</tr>
</tbody>
</table>
12. ACCORDING TO MY EXPERIENCE, AS A MINORITY GROUP INDIAN STUDENT ON THIS CAMPUS:

| Introspection (journaling/drawing/focusing on my feelings) causes me to Feel overwhelmed (when I don’t understand) |   |
| Feeling overwhelmed (when I don’t understand) causes me to do Introspection (journaling/drawing/focusing on my feelings) |   |
| Introspection (journaling/drawing/focusing on my feelings) and Feeling overwhelmed (when I don’t understand) have no influence on each other |   |

13. ACCORDING TO MY EXPERIENCE, AS A MINORITY GROUP INDIAN STUDENT ON THIS CAMPUS:

| Introspection (journaling/drawing/focusing on my feelings) causes me to be Tolerant (doing nothing / letting it go) |   |
| Being tolerant (doing nothing / letting it go) causes me to do Introspection (journaling/drawing/focusing on my feelings) |   |
| Introspection (journaling/drawing/focusing on my feelings) and Being tolerant (doing nothing / letting it go) have no influence on each other |   |

14. ACCORDING TO MY EXPERIENCE, AS A MINORITY GROUP INDIAN STUDENT ON THIS CAMPUS:

| Interpersonal engagement (talk, laughter, humour, comfort food) causes me to Manage the situation (understanding, voicing my opinion, adaptation) |   |
| Managing the situation (understanding, voicing my opinion, adaptation) causes me to Engage Interpersonally (talk, laughter, humour, comfort food) |   |
| Interpersonal engagement (talk, laughter, humour, comfort food) and Managing the situation (understanding, voicing my opinion, adaptation) have no influence on each other |   |
15. ACCORDING TO MY EXPERIENCE, AS A MINORITY GROUP INDIAN STUDENT ON THIS CAMPUS:

| Interpersonal engagement (talk, laughter, humour, comfort food) causes me to Make friends with people from other races |
| Making friends with people from other races causes me to Engage Interpersonally (talk, laughter, humour, comfort food) |
| Interpersonal engagement (talk, laughter, humour, comfort food) and Making friends with people from other races have no influence on each other |

16. ACCORDING TO MY EXPERIENCE, AS A MINORITY GROUP INDIAN STUDENT ON THIS CAMPUS:

| Interpersonal engagement (talk, laughter, humour, comfort food) causes me Being judged for being different |
| Being judged for being different causes me to Engage Interpersonally (talk, laughter, humour, comfort food) |
| Interpersonal engagement (talk, laughter, humour, comfort food) and Being judged for being different have no influence on each other |

17. ACCORDING TO MY EXPERIENCE, AS A MINORITY GROUP INDIAN STUDENT ON THIS CAMPUS:

| Interpersonal engagement (talk, laughter, humour, comfort food) causes me to Feel overwhelmed (when I don’t understand) |
| Feeling overwhelmed (when I don’t understand) causes me to Engage Interpersonally (talk, laughter, humour, comfort food) |
| Interpersonal engagement (talk, laughter, humour, comfort food) and Feeling overwhelmed (when I don’t understand) have no influence on each other |

18. ACCORDING TO MY EXPERIENCE, AS A MINORITY GROUP INDIAN STUDENT ON THIS CAMPUS:

| Interpersonal engagement (talk, laughter, humour, comfort food) causes me to be Tolerant (doing nothing / letting it go) |
| Being tolerant (doing nothing / letting it go) causes me to Engage Interpersonally (talk, laughter, humour, comfort food) |
laughter, humour, comfort food)

Interpersonal engagement (talk, laughter, humour, comfort food) and Being tolerant (doing nothing / letting it go) have no influence on each other

19. ACCORDING TO MY EXPERIENCE, AS A MINORITY GROUP INDIAN STUDENT ON THIS CAMPUS:

| Managing the situation (understanding, voicing my opinion, adaptation) causes me to Make friends with people from other races |
| Making friends with people from other races causes me to Manage the situation (understanding, voicing my opinion, adaptation) |
| Managing the situation (understanding, voicing my opinion, adaptation) and Making friends with people from other races have no influence on each other |

20. ACCORDING TO MY EXPERIENCE, AS A MINORITY GROUP INDIAN STUDENT ON THIS CAMPUS:

| Managing the situation (understanding, voicing my opinion, adaptation) causes me Being judged for being different |
| Being judged for being different causes me to Manage the situation (understanding, voicing my opinion, adaptation) |
| Managing the situation (understanding, voicing my opinion, adaptation) and Being judged for being different have no influence on each other |

21. ACCORDING TO MY EXPERIENCE, AS A MINORITY GROUP INDIAN STUDENT ON THIS CAMPUS:

| Managing the situation (understanding, voicing my opinion, adaptation) causes me to Feel overwhelmed (when I don’t understand) |
| Feeling overwhelmed (when I don’t understand) causes me to Manage the situation (understanding, voicing my opinion, adaptation) |
| Managing the situation (understanding, voicing my opinion, adaptation) and Feeling overwhelmed (when I don’t understand) have no influence on each other |

22. ACCORDING TO MY EXPERIENCE, AS A MINORITY GROUP INDIAN STUDENT ON THIS CAMPUS:
Managing the situation (understanding, voicing my opinion, adaptation) causes me to Be tolerant (doing nothing / letting it go)

<table>
<thead>
<tr>
<th>Managing the situation (understanding, voicing my opinion, adaptation)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Being tolerant (doing nothing / letting it go) causes me to Manage the situation (understanding, voicing my opinion, adaptation)</td>
<td></td>
</tr>
<tr>
<td>Managing the situation (understanding, voicing my opinion, adaptation) and Being tolerant (doing nothing / letting it go) have no influence on each other</td>
<td></td>
</tr>
</tbody>
</table>

23. ACCORDING TO MY EXPERIENCE, AS A MINORITY GROUP INDIAN STUDENT ON THIS CAMPUS:

<table>
<thead>
<tr>
<th>Making friends with people from other races causes me Being judged for being different</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Being judged for being different causes me to Make friends with people from other races</td>
<td></td>
</tr>
<tr>
<td>Making friends with people from other races and Being judged for being different have no influence on each other</td>
<td></td>
</tr>
</tbody>
</table>

24. ACCORDING TO MY EXPERIENCE, AS A MINORITY GROUP INDIAN STUDENT ON THIS CAMPUS:

<table>
<thead>
<tr>
<th>Making friends with people from other races causes me to Feel overwhelmed (when I don’t understand)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Feeling overwhelmed (when I don’t understand) causes me to Make friends with people from other races</td>
<td></td>
</tr>
<tr>
<td>Making friends with people from other races and Feeling overwhelmed (when I don’t understand) have no influence on each other</td>
<td></td>
</tr>
</tbody>
</table>
25. ACCORDING TO MY EXPERIENCE, AS A MINORITY GROUP INDIAN STUDENT ON THIS CAMPUS:

| Making friends with people from other races causes me to Be tolerant (doing nothing / letting it go) |  |
| Being tolerant (doing nothing / letting it go) causes me to Make friends with people from other races |  |
| Making friends with people from other races and Being tolerant (doing nothing / letting it go) have no influence on each other |  |

26. ACCORDING TO MY EXPERIENCE, AS A MINORITY GROUP INDIAN STUDENT ON THIS CAMPUS:

| Being judged for being different causes Feeling overwhelmed (when I don’t understand) |  |
| Feeling overwhelmed (when I don’t understand) causes Being judged for being different |  |
| Being judged for being different and Feeling overwhelmed (when I don’t understand) have no influence on each other |  |

27. ACCORDING TO MY EXPERIENCE, AS A MINORITY GROUP INDIAN STUDENT ON THIS CAMPUS:

| Being judged for being different causes me to Be tolerant (doing nothing / letting it go) |  |
| Being tolerant (doing nothing / letting it go) causes me Being judged for being different |  |
| Being judged for being different and Being tolerant (doing nothing / letting it go) have no influence on each other |  |

28. ACCORDING TO MY EXPERIENCE, AS A MINORITY GROUP INDIAN STUDENT ON THIS CAMPUS:

| Feeling overwhelmed (when I don’t understand) causes me to Be tolerant (doing nothing / letting it go) |  |
| Being tolerant (doing nothing / letting it go) causes me to Feel overwhelmed (when I don’t understand) |  |
| Feeling overwhelmed (when I don’t understand) and Being tolerant (doing nothing / letting it go) have no influence on each other |  |
APPENDIX B

Declaration of Language Editing

DECLARATION OF LANGUAGE EDITING

I, Christina Maria Etrecia Terblanche, hereby declare that I edited the research study with the title:

**The behavioural self-regulation strategies of Indian South African students as minority group on a university campus**

for **JJP le Grange** for the purpose of submission as a research study for examination. Changes were suggested in track changes and implementation was left up to the author.

Regards,

CME Terblanche
Cum Laude Language Practitioners (CC)
SATI accreditation nr: 1001066
Full member of PEG