NEGATIVE ACCULTURATION CONTEXT VARIABLES AS PREDICTORS OF ACCULTURATION OUTCOMES IN A MINE IN THE NORTH-WEST PROVINCE

Anneke Burckard
11744073

Dissertation submitted in partial fulfilment of the requirements for the degree Master of Arts in Human Resource Management at the Potchefstroom campus of the North West University

Supervisor: Prof. L. T. B. Jackson
Potchefstroom
November 2009
REMARKS

The reader is reminded of the following:

- The editorial style and references used in this dissertation follow the format prescribed by the *Publication Manual (5th edition)* of the American Psychological Association (APA). This practice is in line with the policy of the Programme in Industrial Psychology of the North-West University (Potchefstroom campus) to use APA style in all scientific documents as from January 1999.

- The dissertation is submitted in the form of two research articles.
ACKNOWLEDGEMENTS

I wish to extend my gratitude to various individuals who, at various stages during the writing of this thesis, were prepared to help, guide, and support me in completing this project successfully.

- I am deeply grateful to my Creator, Lord, and Saviour, who gave me the opportunity, strength and determination to complete this project.

- I owe a special debt of gratitude to Prof. L. T. B. Jackson, my mentor, for his persistent and competent guidance, as well as his motivation, insight, and faith in me throughout the writing of this thesis. Thank-you for your never-ending belief in me and this project.

- I owe a special debt of gratitude to my parents, for all their love, support, and continuous prayers during this time. I could not have finished this project without your support.

- I extend a special word of thanks to all employees who completed the questionnaires.

- I extend my grateful appreciation to Sabrina Raaff, for the professional manner in which she conducted the language editing.

- Thank-you to all my work colleagues for all their support and understanding during this time.

- Thank-you to my friends for all their love and support.

The financial assistance of the National Research Foundation (NRF) towards this research is hereby acknowledged.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Remarks</th>
<th>i</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgements</td>
<td>ii</td>
</tr>
<tr>
<td>Table of contents</td>
<td>iii</td>
</tr>
<tr>
<td>List of tables</td>
<td>v</td>
</tr>
<tr>
<td>Abstract</td>
<td>vi</td>
</tr>
<tr>
<td>Opsomming</td>
<td>viii</td>
</tr>
</tbody>
</table>

## CHAPTER 1: INTRODUCTION

1.1 Problem statement
1.2 Research objectives
1.2.1 General objective
1.2.2 Specific objectives
1.3 Research method
1.3.1 Literature review
1.3.2 Empirical study
1.3.2.1 Research design
1.3.2.2 Participants
1.3.2.3 Measuring instruments
1.3.2.4 Statistical analysis
1.4 Division of chapters
1.5 Chapter summary
References

## CHAPTER 2: RESEARCH ARTICLE 1

References

## CHAPTER 3: RESEARCH ARTICLE 2

References
TABLE OF CONTENTS (continued)

<table>
<thead>
<tr>
<th>CHAPTER 4: CONCLUSIONS, LIMITATIONS, AND RECOMMENDATIONS</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1 Conclusions</td>
<td>95</td>
</tr>
<tr>
<td>4.2 Limitations of this research study</td>
<td>97</td>
</tr>
<tr>
<td>4.3 Recommendations</td>
<td>98</td>
</tr>
<tr>
<td>4.3.1 Recommendations for the organisation</td>
<td>99</td>
</tr>
<tr>
<td>4.3.2 Recommendations for future research</td>
<td>99</td>
</tr>
<tr>
<td>References</td>
<td>101</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research article 1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Table 1</td>
<td>Characteristics of the Participants</td>
<td>41</td>
</tr>
<tr>
<td>Table 2</td>
<td>Descriptive Statistics of the Scales used in this Research Study ( (n = 288) )</td>
<td>47</td>
</tr>
<tr>
<td>Table 3</td>
<td>Product–moment Correlation Coefficients of the Acculturation Context, Individual, and Outcomes Variables ( (n = 288) )</td>
<td>48</td>
</tr>
<tr>
<td>Table 4</td>
<td>Beta Weights of Stepwise Multiple Regression Analysis with <em>Psychological ill health</em> and <em>Physical ill health</em> as Dependent Variables</td>
<td>50</td>
</tr>
<tr>
<td>Table 5</td>
<td>Beta Weights of Stepwise Multiple Regression Analysis with <em>Individual Perceived Work Success</em> {Meeting deadlines (IPWS1), Reputation/respect (IPWS2) and Development and training opportunities (IPWS3)} as Dependent Variables</td>
<td>51</td>
</tr>
<tr>
<td><strong>Research article 2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Table 1</td>
<td>Characteristics of the Participants</td>
<td>75</td>
</tr>
<tr>
<td>Table 2</td>
<td>Descriptive Statistics of the Scales used in this Research Study ( (n = 288) )</td>
<td>80</td>
</tr>
<tr>
<td>Table 3</td>
<td>Product–moment Correlation Coefficients of the Acculturation Context, Individual, and Outcomes Variables ( (n = 288) )</td>
<td>81</td>
</tr>
<tr>
<td>Table 4</td>
<td>Beta Weights of Stepwise Multiple Regression Analysis with <em>Psychological ill health</em> and <em>Physical ill health</em> as Dependent Variables</td>
<td>83</td>
</tr>
<tr>
<td>Table 5</td>
<td>Beta Weights of Stepwise Multiple Regression Analysis with <em>Individual Perceived Work Success</em> {Meeting deadlines (IPWS1), Reputation/respect (IPWS2) and Development and training opportunities (IPWS3)} as Dependent Variables</td>
<td>84</td>
</tr>
</tbody>
</table>
ABSTRACT

Title: Negative acculturation context variables as predictors of acculturation outcomes in a mine in the North West Province.

Key terms: Segregation, pressure to conform, racism, discrimination, individual separation strategy, psychological and sociocultural adaptation, physical ill health, psychological ill health and work success.

This research project examines the acculturation process in order to predict the perceived work success and health (psychological and physical) of mineworkers in a mine in the North-West Province. Work success can also be described as that which is achieved when an employee enjoys his career for reasons of psychological experience of success and personal growth and development within both his/her current occupation and working environment. Health is defined as a condition of complete physical, mental and social well-being and not merely the absence of disease or frailty. Health is therefore about completeness, contentment and well-being at a physical, cultural, psychosocial, economic and spiritual level. Employees’ success and health is evaluated from an acculturation perspective, and therefore considered a result of the acculturation process. This proposition was explored by investigating the relationship between the acculturation context and individual intervening factors, mapped into variables, and acculturation outcomes (work success and health).

A convenient sample of participants from the mine examined was taken (n = 288). English questionnaires using a cross-sectional survey design were used to gather the data. Modified measuring instruments and others developed for the project, which follow a five-point Likert format (‘strongly agree’ to ‘strongly disagree’) were used to investigate the mainstream domain (perceived mainstream segregation demands, perceived pressure to conform to management ideologies and practices, perceived racism at work, perceived discrimination at work, and relationships with mainstream members at work), an individual intervening factor (individual separation acculturation strategy practices), the ethnocultural domain (perceived pressure to conform to own culture, ethnic separation demands at work, and relationships

---

1 The research project formed part of a larger project on acculturation in the Industrial Psychology Department of the North-West University.
with co-ethnics at work), psychological acculturation outcomes (health), and sociocultural acculturation outcomes (work success).

The data was captured in a spreadsheet, controlled for errors, and statistically analysed using regression in SPSS. Descriptive statistics, Cronbach alpha coefficients, and Pearson product–moment correlation coefficients were inspected, and effect sizes were used to determine the findings’ practical significance.

The results did indicate practical and statistically significant relationships exist between acculturation context, individual and acculturation outcomes variables. Perceived pressure to conform to management ideologies and practices, perceived racism at work, perceived discrimination at work, and relationships with co-ethnics at work proved to be statistically significant predictors of meeting deadlines at work. Perceived pressure to conform to management ideologies and practices, perceived racism at work, perceived discrimination at work, and relationships with co-ethnics at work was statistically significant predictors of reputation and respect at work. Perceived mainstream segregation demands, perceived pressure to conform to management ideologies and practices, perceived racism at work, and relationships with mainstream members at work were statistically significant predictors of training and development opportunities at work. Individual separation acculturation strategy practices and ethnic separation demands at work were statistically significant predictors of psychological health. Perceived racism at work and ethnic separation demands at work proved to be statistically significant predictors of physical health.

These findings demonstrate that success and health can be viewed from an acculturation perspective, and that the acculturation context and individual intervening factors, can be used to predict psychological and sociocultural acculturation outcomes.
OPSOMMING

Titel: Negatiewe akkulturasie konteks veranderlikes as voorspellers van akkulturasie uitkomste in ‘n myn in die Noordwes Provinsie.

Sleutel terme: Segregasie, druk om te konformeer, rassisme, diskriminasie, individuele afsondering akkulturasie strategie, psigologiese en sosio-kulturele aanpassing, fisiese ongesondheid, psigologiese ongesondheid en werk sukses

Hierdie navorsingsprojek ontleed die akkulturasie proses in ‘n spesifieke konteks, met die doel om waarneembare werksukses en gesondheid (beide sielkundig en fisies) van mynwerkers in ‘n myn in Noordwes-Provinsie te kan voorspel. Werk sukses kan beskryf word as dit wat ‘n werknemer bereik as hy sy werk geniet vir redes van psigologiese ervaring van sukses, persoonlike groei en ontwikkeling binne sy/haar huidige okkupasie en werkomgewing. Gesondheid kan gedefinieer word as ‘n algehele ervaring van fisiese, psigiese en sosiale gesondheid en nie net die afwesigheid van siekte of swakheid nie. Gesondheid kan waargeneem word op ‘n fisiese, kulturele, sosiale en, ekonomiese en spirituele vlak. Werknemers se sukses en gesondheid word oorweg vanuit ‘n akkulturasie perspektief en word dus gesien as ‘n gevolg van die akkulturasie proses. Hierdie proposisie is getoets deur die verhouding tussen die akkulturasie konteks en individuele ingrypingsfaktore (in veranderlikes gekarteer), en akkulturasie uitkomstes (werksukses en gesondheid) te ondersoek.

’n Beskikbaarheidsteekproef van deelnemers van die myn was gebruik (n = 288). Data is versamel deur Engelse vraelyste wat op ‘n dwarsdeursnee-opname ontwerp gebaseer is te gebruik. Die vrae was voorsien deur aangepaste meetinstrumente en ander ontwerp vir hierdie projek, en volg ‘n vyf-punt ‘Likert’ formaat (‘stem heeltemal saam’ tot ‘stem glad nie saam nie’). Vyf maatstawwe is gebruik: die van die hoofstroom gebied (waarneembare hoofstroom afsonderings vereistes, waargenome druk om met bestuursideologieë en praktyke in te stem, waargenome rasisme by die werk, waargenome diskriminasie by die werk, en verhoudings met hoofstroom lede by die werk), ‘n individuele ingrypingsfaktor (individuele afsondering akkulturasie strategie praktyke), die etnies-kulturele gebied (waargenome druk om aan kultuur vereistes wat deur eie groep voorgekeur word te voldoen, etniese afsondering vereistes by die werk, en verhoudings met mede-etniese lede by die werk), om sielkundige
akkulturasie uitkomstes (gesondheid), en sosiokulturele akkulturasie uitkomstes (werksukses) te ondersoek.

Die data is in 'n werkblad formaat opgeneem, foute is reggestel, en dit is toe statisties ontleed deur die gebruik van regressie in SPSS. Beskrywende statistieke, Cronbach alpha koëffisiënte en Pearson produk-moment korrelasie-koëffisiënte is ondersoek, en effek groottes is gebruik om die praktiese betekenis van die bevindinge vas te stel.

Die resultate het aangedui dat praktiese en statistiese beduidende verhoudinge bestaan tussen die akkulturasie konteks, individuele en akkulturasie uitkoms veranderlikes. Waargenome druk om met bestuursideologieë en praktieke in te stem, waargenome rasisme by die werk, waargenome diskriminasie by die werk, en verhoudings met mede-etniese lede by die werk, is gevind om statisties beduidende voorspellers van spertye by die werk te wees. Waargenome druk om met bestuursideologieë en praktieke in te stem, waargenome rasisme by die werk, waargenome diskriminasie by die werk, en verhoudings met mede-etniese lede by die werk was statisties beduidende voorspellers van reputasie en respek by die werk. Waargenome hoofstroom afsonderings vereistes, waargenome druk om met bestuursideologieë en praktieke in te stem, waargenome rasisme by die werk, en verhoudings met hoofstroom lede by die werk, was statisties beduidende voorspellers van opleiding en ontwikkelingsgeleenthede by die werk. Individuele afsondering akkulturasie strategie praktieke en etniese afsondering vereistes by die werk was statisties beduidende voorspellers van sielkundige gesondheid. Waargenome rasisme by die werk en etniese skeidings vereistes by die werk is gevind om statisties beduidende voorspellers van fisiese gesondheid te wees.

Hierdie bevindinge toon dat sukses en gesondheid vanuit 'n akkulturasie perspektief gesien kan word en, gebaseer op die akkulturasie konteks en individuele ingrypingsfaktore, kan hierdie sielkundige en sosiokulturele akkulturasie uitkomstes voorspel word.
CHAPTER 1

INTRODUCTION

This dissertation deals with miners in the North-West Province’s perception of the levels of acculturation, trying to determine the relationship between context, individual and outcome variables in the acculturation process that seeks to underpin the impact of the acculturation context and individual differences on perceived outcomes in the acculturation process.

Chapter 1 presents the problem statement, research objectives, and research method. The chapter begins with a problem statement and is followed by an overview of previous related research on acculturation and the influences of context variables on psychological and sociocultural adaptation, linking it with this research project and its research objectives. A discussion of the research method follows with details regarding the research procedure, participants, measuring instruments, and statistical analysis.

1.1 PROBLEM STATEMENT

Migration is no new subject for South Africa. The discovery of diamonds at Kimberley created a huge demand for unskilled labour (Trimikliniotis, Gordon, & Zondo, 2008). By 1874 there were 10 000 African mineworkers working for three to six months in South African mines. When gold was discovered on the Witwatersrand in 1886 more labour was required. Migrant labour was utilised as it was cheap and ‘controllable’ (Trimikliniotis et al., 2008). By 1896 the South African Chamber of Mines Rand Labour Association was recruiting heavily, both locally and from the protectorates such as Botswana, Lesotho and Swaziland and from today’s Mozambique, Malawi and Zambia (McDonald, Zinyama, Gay, De Vletter, & Mattes, 2000; Trimikliniotis et al., 2008). The most obvious social distinction on the mines was that between whites and Africans. It is likely that all the whites were paid more than all the Africans. Indian workers’ conditions were generally akin to those of Africans (Alexander, 2008). Racial division, which was such a powerful feature of mining life, was rooted in the structure and ideology of colonial domination, migration, the character of the societies from whence the different groups came and legislation (Alexander, 2008). The legislative and executive entrenchment of ‘racial’ discrimination, segregation, and
oppression during Apartheid saw a formalisation of a gradual and progressive process of racial categorisation. Rather than being a distinctive policy with a historically defined beginning (1948) and end (1994), Apartheid was the result of a process of arbitrary classification of South Africans based on a variable definition of the construct of ‘racial’ difference (Franchi, 2003a).

Post-apartheid South Africa has enjoyed about a decade and a half of majority rule on the basis of a constitution which declares, as one of its fundamental principles and goals, the achievement of a non-racial society (Trimikliniotis et al., 2008). One of the primary objectives of the post-1994, ANC-led democratic government was to eradicate discriminatory employment policies and practices based on ‘race’, gender, and disability, and to redress current imbalances through a process framed in the 1996 South African Constitution as “positive discrimination” (Franchi, 2003b). Affirmative action is a means of achieving employment equity [through] a process whereby disadvantages, and particular situations where individuals have been compromised, can be addressed (Mhone, Humber, Gault, & Mokhobo, 1998).

Increasingly, South African organisations are implementing employment equity and affirmative action programmes. Since 1997 there has been substantial growth in this area, and this trend is due to organisations committing themselves to a process of redressing previous imbalances as a result of discriminatory legislation, systems and policies (Employment Equity Bill, 1997). Affirmative action (AA) programmes are aimed at increasing the representation of historically excluded (disadvantaged) groups. Affirmative action continues to generate controversy, and AA opponents seem to be gaining ground in many countries around the world (Konrad & Linnehan, 2003). Opponents of AA label it as reverse discrimination against members of the previously advantaged group (Steeh & Krysan, 1996), and justify their anti-AA views by focusing on the dysfunctional behaviour of the ‘now’ disadvantaged group (such as teenage motherhood or criminality), leading one author to conclude that AA opponents ‘transpose or hopelessly confuse the causes of inequality with the effects of inequality’ (Hudson, 1999, p. 267). Negative attitudes towards AA are linked to racism and sexism (Konrad & Hartmann, 2001).

Global trends and the objectives and strategies employed by the ruling party did significantly contribute to a more diverse South African workforce. It would certainly be easier to move
on, believing that almost without effort, a society torn apart under apartheid and institutionalised racism could within months, be transformed in racial harmony. Despite the many social and political changes that have occurred in South Africa over the past decade, racism and the accompanying social divisions along racial lines continue to be central features of the South African landscape (Smith, Stones, & Naidoo, 2003). Newspaper headlines such as “Miners set to strike over racism” (Maponya, 2004) continuously remind us that this is the case in the mining sector and in other spheres of the South African society: “Ten years after the end of Apartheid, Black and White South Africans are still learning to live together”; “Racism is alive and well in SA”; “Apartheid is gone, but government policies are widening the racial gap more than ever”, “Adults responsible for racism in children”, (Desai, 1998; Mamaila, 2001).

What an individual does when he or she encounters a second culture is assumed to have an effect on his or her sense of emotional well-being (LaFramboise, Coleman, & Gerton, 1993; Padilla, 1980). It has been hypothesised that how individuals cope with that contact will affect such socio-emotional factors as self-esteem (Phinney, 1991), social adjustment, academic performance (Gomez & Fassinger, 1994; Oliver, Rodriguez, & Mickelson, 1985), and mental health (Rogler, Cortes, & Malgady, 1991). Furthermore, Coleman (1995a, 1995b) has hypothesised that the strategies an individual uses to cope with second culture contact will have an effect on that individual’s academic or job performance, sense of social competence, and psychological well-being.

Should the above-mentioned situation prevail in the majority of South African organisations, then the following questions will arise:

- Does prolonged exposure to unfamiliar cultural environments affect the attitudes, behaviour, and well-being of individuals?
- What precisely promotes successful cross-cultural transitions?
- What precisely hinders cross-cultural transitions?

These and similar questions represent the core of what is typically addressed in acculturation research. Acculturation, as defined by Redfield, Linton and Herskovits (1936), is a process of adaptation to a new environment as a result of two or more independent cultures encountering each other. This definition of acculturation implies that dominant and non-dominant cultural groups are influenced by their intercultural contacts and come to change aspects of their
respective cultures as a way of adapting to one another (Barrette, Bourhis, Personnaz, & Personnaz, 2004).

Several researchers note that the process of coping with second culture contact has generally been termed ‘acculturation’ (Berry, Poortinga, Segall & Dasen, 2002; Coleman, 1995b; and LaFramboise et al., 1993). LaFramboise et al. (1993) point out that the term ‘acculturation’ has been used to describe both a particular strategy for coping with second culture contact and the process for coping with second culture contact, and suggest the phrase ‘second culture acquisition’ be used to describe the process of coping with second culture contact and the term ‘acculturation’ be reserved for explaining the process (Coleman, Wampold, & Casali, 1995). The present study addresses the acculturation experience of South Africans at work and taps into the potential assets and liabilities in their acculturation process.

The main contemporary acculturation frameworks (Berry, 1997; Ward, Bochner, & Furnham, 2001) are largely empirically based. According to these frameworks, the acculturation process involves group-level variables (characteristics of the society of origin and the characteristics of the society of settlement) and individual-level variables (moderating factors prior to acculturation and moderating factors during acculturation). These frameworks depict cross-cultural transitions as potentially stressful life events that elicit coping resources to manage them. The coping resources and their outcomes are represented as subjected to the influence of both social factors (mainstream factors, such as public attitudes toward migrants and ethnic acculturation strategies) and psychological and biographical factors (such as age, gender, education, and personality; Ait Ouarasse & Van de Vijver, 2004).

The acculturation context: Mainstream characteristics

The implementation of the apartheid policy, with the election of the Nationalist Party to office (in 1948) to rule the nation on a platform of apartheid, accelerated the structural entrenchment of ‘racial’ segregation, discrimination, oppression and exploitation of an indigenous majority by an immigrant minority. The impact of acculturation orientation of the mainstream culture has to be considered and is emphasized (Berry, 1974). Research findings (Breugelmans & Van der Vijver, 2004) suggest that the majority of the host culture members do not always favour multiculturalism. Critics of multiculturalism as a general policy, such as the case in South Africa, often claim that it has, as its real motive, the wish “to keep people in their place” by more easily identifying them as different and perhaps of lower value in society. It is indeed possible that culturally distinct people are encouraged by a larger society
to maintain their differences in order to exclude them from day-to-day participation in the economic, political, and educational spheres of the society. Research originally focused on the co-ethnic culture acculturation preferences, but recently it has been pointed out that, members of the host culture also have preferences for members of the co-ethnic group to assimilate, separate or be marginalized (Zagefka, Brown, Broquard, & Martin, 2007).

**Perceived mainstream segregation demands**

The majority group (or host community) will promote segregation when they believe that they are looking after the interests of the community by keeping the minority (or co-ethnic group) separate from the rest of the community (Van Oudenhoven, Ward, & Masgoret, 2006). Segregation refers to the degree to which two or more groups are separated from each other (Echenique & Fryer, 2007). All plural societies consist of both mainstream as well as minority groups (Berry, 2006). Differences between these groups can lead to segregation (Horton & Sykes, 2001). Segregationists accept that minority groups maintain their heritage culture on condition that they keep their distance, as majority host members do not wish for minorities to contaminate their culture (Barrette et al., 2004). Minority groups often feel that their identity and/or beliefs are under threat, and although this is not necessarily always true, the minority group perceives this as a demand from the mainstream group to segregate.

Segregation is also seen as the systematic sorting over units (such as workplaces) by individuals belonging to different groups (such as defined by ethnicity: Aslund & Skans, 2010). Not much is known about the extent (and sources) of segregation in the labour market—that is, the extent to which members of different groups tend to work with co-workers who are more like themselves than would be predicted by random allocation of workers to establishments (Hellerstein & Neumark, 2005). The evidence that does exist points to the existence of segregation in the labour market, at least along the dimensions of skill, race, and ethnicity. There are numerous models suggesting that employers may segregate workers across workplaces by skill, most likely because of complementarities among workers with similar skills (Hellerstein & Neumark, 2005). Race and ethnic segregation in the workplace may be a function of varying forms of discrimination in the labour market that exist along racial or ethnic lines (Hellerstein & Neumark, 2005).
Perceived pressure to conform to management ideologies and practices

Authority is the power to make decisions that guides the actions of others (Brief, Dietz, Cohen, Pugh, & Vaslow, 2000). Authority entails the right to command others. In organisations this ‘right’ signifies the legitimacy stemming from the system of hierarchical role relations (Weber, 1947).

Individuals who endorse social dominance rely on stereotypes that distinguish one societal group (such as Africans) from another societal group (such as Caucasians: Pratto, Sidanius, Stallworth, & Malle, 1994). People in the workplace retain group-based inequality because it legitimises their beliefs, attitudes, and stereotypes of others. Authority figures justify a decision so that, to the people it is directed to, it appears that the decision is plausible and nonprejudiced, regardless of the specific recipient’s racial attitude. The leader will gain influence over followers – and hence gain power through them (Turner, 2005) – precisely to the extent that he or she is capable of defining their shared social identity. Lower level members within the organisation often consider instructions received from management as direct orders that are to be followed, regardless of their own personal values. Similarity may also seem rewarding to the individual in question because it affirms their ideas and attitudes, thus giving them a sense of belonging (Van Oudenhoven & Hofstra, 2006). This may lead to immoral and illegal acts being carried out by the subordinates (Brief et al., 2000). Ideologies develop to legitimate and help maintain these inequalities (Jost & Banaji, 1994). Therefore, if mainstream segregation demands are prevalent in this mine in the North-West Province, then the question of is its prevalence the result of conformation to management principles becomes crucial.

Discrimination

A central concept in the area of acculturation (intercultural relations) is that of prejudice. It is usually considered to have three components: cognitive (stereotypes; shared beliefs about characteristics of groups); affective (attitudes; evaluation of groups); and behavioural (discrimination; actions taken in dealing with groups). Discrimination is therefore, a concrete outcome to various cognitive and evaluative variables and is to be found in plural societies. The Bill of Rights (1996) ensures that no discrimination is allowed on the grounds of race, sex, gender, sexual orientation, ethnic or social origin, colour, age, disability, pregnancy, religion, conscience, belief, language, marital status, birth, or culture.
Discrimination, therefore, is used to refer not only to acts of forceful exclusion (such as in segregation and marginalisation), but also to forceful inclusion (as in assimilation). Only in the integration mode, when a society is open to, and accepting of, the wishes of an individual or group, and where individuals are free to choose their preferred degrees of cultural maintenance and participation in the larger society, can it be considered that there is no discrimination (Berry et al., 2002). The proponents of diversity approaches usually emphasise the advantages to businesses in valuing diversity. They emphasise that prejudice and discrimination within organisations create low morale and disaffection which in turn lead to poor individual and organisational performance (Cornelius, Gooch, & Todd, 2001). Cross-sectional studies in the USA report associations between perceived racial discrimination and hypertension, birth-weight, self-reported health and days of sick. In a recent study in the UK, victims of discrimination were more likely to suffer from respiratory illness, hypertension and long-term limiting illnesses (McKenzie, 2006). Studies have found perceived discrimination to predict different dimensions of immigrants’ psychological well-being or health, such as depression (Noh, Beiser, Kaspar, Hou, & Rummens, 1999), distress and anxiety (Kessler, Mickelson, & Williams, 1999), acculturative stress symptoms (Liebkind & Jasinskaja-Lahti, 2000), life satisfaction (Ying, 1995), behavioural problems (Verkuyten, 1998); and physical health (Finch, Hummer, Kolody, & Vega, 2001).

**Modern racism**

Since the Civil Rights Act (1964), attitudes towards Blacks among White Americans appear to have become more tolerant (Schuman, Steeh, Bobo, & Krysan, 1997). Very few White Americans endorse derogatory statements about Blacks innate intelligence or support the principle of racial segregation (Sniderman & Piazza, 1993). This implies that ‘old-fashioned’ racism, characterised by open bigotry and an emphasis on pre-Civil War beliefs regarding Blacks (Myrdal, 1944), is dying in the United States. Numerous studies, however, suggest that old-fashioned racism has been transmuted to a more subtle, indirect, and rationalisable type of racial bigotry (McConahay, 1983; Sears & Allen, 1984).

According to McConahay (1986), the principal tenets of modern racism are:

- Discrimination is outdated because Blacks now have the freedom to compete in the marketplace and enjoy those things they can afford.
- Blacks are pushing too hard, too fast, and into places where they are not wanted.
• These tactics and demands are unfair.
• Therefore, recent gains are undeserved and the prestige granting institutions of society are giving Blacks more attention and the concomitant status than they deserve.

In addition, McConahay (1986) describes two other tenets of modern racism:
• The first four tenets do not constitute racism because they are empirical facts.
• Racism is bad.

Consequently, those endorsing the ideology of modern racism do not define their own beliefs and attitudes as racist, and they act in ways to protect a non-prejudiced, non-discriminatory image.

For the modern racist to behave consistently with his or her negative racial attitude requires that he or she be embedded in a context in which there is a plausible, non-prejudiced explanation available for what might be considered prejudiced behaviour. This means that a businessperson might reason that the matching of the characteristics of customers and those who serve them to be a sound management practice and not a reflection of racial prejudice (Brief, 1998). Such justifications are often evident in business organisations and other social contexts, especially in cases where the business justification to discriminate came from a legitimate authority figure or management. According to Kelman and Hamilton (1989), subordinates do so because authority entails the right to command others. In organisations, this ‘right’ denotes the legitimacy stemming from the hierarchical role relations (Weber, 1947). Therefore, should modern racism be prevalent in the mine under investigation in the North-West Province, the question of ‘the prevalence thereof as the result of conformation to management principles’ becomes crucial.

**Relationship with mainstreamers at work**

The South African Social Attitudes Survey (2003) showed that there were improvements in perceptions of race relations: A total of 57% of the respondents felt that race relations had improved, 29% felt that they had remained the same, and 14% felt that they had become worse. In the 2003 survey, Coloureds (61%), followed by Africans (59%), Indians (58%) and Whites (42%) reported improved race relations (Policy Coordination and Advisory Services, 2006).
For trust to develop between the different races in South Africa, informal inter-racial socialisation has to occur, yet the progress we are making in this regard is slow. According to information from the Institute for Justice and Reconciliation (2006), informal inter-racial interaction amongst South Africans remains infrequent and largely limited to the higher income categories. The low desire to increase cross-racial contact and communication creates a parallel, as opposed to integrated, coexistence and provides the context within which the fear of the unknown thrives, and in turn creates a breeding ground for negative stereotypes. Given the fact that most racial interaction at this stage occurs within the middle income group, this strengthens the case for the expansion of the South African middle class. The robust growth that the country has experienced in recent years also has the potential to be a catalyst for the normalisation of our society, provided that new wealth is distributed equitably. Educational institutions and government departments have shown improved race relations. Workplaces, however, reveal one of the highest ratios of experiences of racial discrimination. These results raise the question whether racism is being left to fester in the private sector (Policy Coordination and Advisory Services, 2006).

**The acculturation context: Co-ethnic domain**

The elements from the minority context that have been reported to bear on acculturation outcome are ethnic vitality and ethnic support (Adelman, 1988; Ait Ouarasse & Van de Vijver, 2003; Berno & Ward, 2000; Malewska-Peyre, 1982; McDermott, 1974, Ong, 2000). Ethnic group variables covered in this study are Separation demands at work, Pressure to conform to co-ethnic acculturation orientation and Relationships with co-ethnics at work.

**Co-ethnic separation demands at work**

Separatists want to maintain their culture of origin while rejecting the host majority culture. If negative attitudes have a negative effect on ‘own desire for culture maintenance’ and ‘own desire for contact’, it should have a negative effect on ‘own acculturation preference for integration’ and result in the choice to separate (Zagefka et al., 2007).

**Pressure to conform to co-ethnic acculturation orientation**

Bochner's Functional Model of Friendship Networks reflects a culture-learning perspective on intercultural contact (Bochner, McLeod, & Lin, 1977). This model implies that foreigners usually have one of three social networks. The first network consists of the bond with co-nationals; its function is to rehearse, express, and affirm culture-of-origin values, which plays
a vital role in co-ethnics choice of acculturation strategy. The second is the link with host nationals and the third network consists of friendship with other non-compatriot foreign students.

**Relationship with co-ethnics at work**

Oppedal, Roysamb and Sam (2004), cited that interpersonal relationships that make available social support in terms of information, help, and expression of caring promote health by imparting feelings that one is being cared for, beliefs that one is esteemed, and a sense of belonging to a reciprocal network. In acculturating youth, supportive communications within own ethnic and majority network may be of special importance to the development of culture specific competencies (Oppedal et al., 2004). On the other hand, the decrease in family or friend support, associated with reduction in host and ethnic competence, respectively, would yield strong negative effect on mental health. Support is also included as an alleviating factor in models of acculturation (Berry, 1990). The attitudes that individuals within a community have towards another group can influence the well-being of the other group. Positive attitudes towards one’s own community as well as another community will usually result in positive psychological adjustment (Bhadha, Farver, Lieber, Narang, & Xu, 2007).

**Intervening variable**

Individuals enter into the acculturation process with a number of personal characteristics of a demographical, psychological, and social nature (Berry et al., 2002). Berry (1997) distinguished between factors (moderating) prior (age, gender, etc.) to and factors that arise during the acculturation process (acculturation strategies, coping style, etc.). The individual intervening variable that is covered in this study is an individual separation acculturation strategy.

**Individual separation acculturation strategy**

Individual acculturation strategies have been shown to have substantial relationships with positive adaptation: Integration is usually the most successful; marginalization is the least; and assimilation and separation strategies are intermediate. This pattern has been found in virtually every study, and is present for all types of acculturating groups (Berry & Kim, 1988; Berry & Sam, 1997). Why this should be so, however, is not clear. In one interpretation, the integration strategy incorporates many of the other protective factors: a willingness for mutual accommodation (i.e., having two social support systems); and being flexible in
personality. In sharp contrast, marginalization involves rejection by the dominant society, combined with own-culture shedding, and separation involves rejection of the dominant culture (perhaps reciprocated by them) (Berry et al., 2002). Separatism is endorsed by members of minority groups who wish to maintain their culture of origin, prefer contacts with members of their own group while dissociating themselves from the cultural practices of the mainstream host majority (Barrette, Bourhis, Personnaz, & Personnaz, 2004).

**Acculturation outcomes: Psychological and sociocultural**

Facing adjustment to a new culture can lead to extremely high levels of stress and anxiety, which in turn affects physical as well as psychological health (Beck, 1988). Acculturation amongst minority groups has been proved to be a very difficult process with many psychosocial consequences (Padilla, Wagatsuma, & Lindholm, 1985) for example, general life satisfaction and overall well-being (Wong-Rieger & Quintana, 1987; Ying, 1995).

These outcomes indicate the degree of success of the acculturation process, which could be examined by measuring the nature and extent of interaction with host, feelings of acceptance and satisfaction, mood states, the acquisition of culturally appropriate behaviours and skills, academic performance, and job performance and psychological distress (Ait Ouarasse & Van de Vijver, 2004.). Factor analysis has shown that acculturation outcomes can be divided into two major headings namely: psychological and socio-cultural outcomes (Berry, 2003; Ward et al., 2001; Ward & Kennedy, 1999). Psychological and sociocultural adaptation is positively related. The strength of the association is related to the cultural distance as well as the degree of integration of cross cultural travellers in the social milieu (Berry, 2003; Ward & Kennedy, 1999). Larger cultural distance translates to a weaker association between psychological and socio-cultural adaptation, the greater the orientation towards the host society (assimilation and integration), the stronger the association (Ward & Rana-Deuba, 1999).

**Psychological outcomes** have to do with mental health and general satisfaction with life (work) in the host milieu. The question that normally arises in this arena is: does the immigrant feel well in the new society? The socio-cultural outcomes have to do with the successful participation in the host milieu. The question that normally arises in this arena is: does the immigrant do well in the new society? The psychological adaptation is mainly a function of ethnic group variables such as support network.
Psychological health: It has been widely reported that the experience of prejudice and discrimination has a significant negative effect on a person’s well-being (Halpern, 1993; Noh, Beiser, Kaspar, Hou, & Rummens, 1999). In groups experiencing acculturation, this can be an added risk factor. Murphy (1965) has argued that such prejudice is likely to be less prevalent in culturally plural societies, but it is by no means absent (Berry & Kalin, 1995). Indeed, Fernando (1993) has designated racism as the most serious problem and risk factor facing immigrants and their mental health.

Physical health: Health is defined as a state of complete physical, mental and social well-being and not merely the absence of disease. Health is therefore about wholeness, happiness and well-being on a physical, cultural, psychosocial, economic, spiritual and mental level (Biela, 2006). When focusing on psychosocial and health outcomes, it has been shown that integration is usually the best way for an individual of the minority group to achieve the most positive outcome. This result can be explained by the fact that the specific individuals will experience less stress associated with acculturation because they are psychologically better prepared for it (Liebkind & Jasinskaja-Lahti, 2000; Phinney, Chavira, & Williamson, 1992). In contradiction to this, individuals who do not integrate with the host community would more likely show signs of persistent depressive episodes (Parker, Chan, & Tully, 2006).

The socio-cultural outcomes have to do with the successful participation in the host milieu. The question that normally arises in this arena is: does the immigrant do well in the new society? Ward and Kennedy (1999), state that socio-cultural adaptation is mainly a function of contact variables such as education in the host country and length of stay of migrants. Research findings suggest that ethnic group variables were better predictors of school success and mainstream variables were better predictors of work success (Ait Ouarasse & Van de Vijver, 2004). The perceived tolerance of the mainstream society towards the ethnic group was a significant predictor of work success. A study in the SAPS found multicultural practices to be related to perceived efficiency at work and approach coping style was positively related to perceived effectiveness and status at work (Molokoane, 2007).

Based on the above mentioned the following research questions arise.

- What are the psychometric properties of the measuring instruments used in this research study?
What is the relationship between the acculturation context variables (mainstream and co-ethnic group), individual intervening variable (individual separation acculturation strategy), and acculturation outcomes variables (psychological health in terms of physical ill health and psychological ill health; and sociocultural - employees’ perceived work success in terms of meeting deadlines, reputation and respect, and development and training opportunities)?

What is the impact of acculturation context variables (mainstream and co-ethnic group) and individual intervening variable (individual separation acculturation strategy) on the psychological acculturation outcomes variables (employees’ physical and psychological ill health)?

What is the impact of acculturation context variables (mainstream and co-ethnic group) and individual intervening variable (individual separation acculturation strategy) on the sociocultural acculturation outcomes variables (employees’ perceived work success in terms of meeting deadlines, reputation and respect, and development and training opportunities)?

1.2 RESEARCH OBJECTIVES

The research objectives are divided into a general objective and specific objectives.

1.2.1 General objective

The general objective of this research study is to analyse the acculturation process and to determine the impact of acculturation context variables on the acculturation context and individual intervening variable on acculturation outcomes of employees in a mine in the North-West Province.

1.2.2 Specific objectives

The specific objectives are as follows:

● To determine the psychometric properties of the measuring instruments used in this research study.
To determine the relationship between the acculturation context variables (mainstream and co-ethnic group), individual intervening variable (individual separation acculturation strategy), and acculturation outcomes variables (psychological - health in terms of physical ill health and psychological ill health; and sociocultural - employees’ perceived work success in terms of meeting deadlines, reputation and respect, and development and training opportunities).

To determine the impact of acculturation context variables (mainstream and co-ethnic group) and individual intervening variable (individual separation acculturation strategy) on the psychological acculturation outcomes variables (employees’ physical and psychological ill health).

To determine the impact of acculturation context variables (mainstream and co-ethnic group) and individual intervening variable (individual separation acculturation strategy) on the sociocultural acculturation outcomes variables (employees’ perceived work success in terms of meeting deadlines, reputation and respect, and development and training opportunities).

1.3 RESEARCH METHOD

For the purpose of this thesis, the research method consists of a literature review and an empirical study. The results obtained from the research will be presented in article format.

1.3.1 Literature review

The literature review examines previous research on acculturation and the influences of context variables on psychological and sociocultural adaptation.

1.3.2 Empirical study

The empirical study comprises the research design, participants, measuring instruments and statistical analysis.
1.3.2.1 Research design

A survey design is used to achieve the research objectives. The specific design is the cross-sectional design, by means of which a sample is drawn from a population at a particular point in time (Shaughnessy & Zechmeister, 1997). Information collected is used to describe the population at that time. This design is best suited for determining relationships among variables (Shaughnessy & Zechmeister, 1997).

1.3.2.2 Participants

The participants could be defined as an availability sample of employees in a mine in the North-West Province. A total population of 500 employees were targeted. A response rate of 59% was achieved, of which 288 responses (98%) could be utilised. The study population \( (N = 288) \) consisted of mainly male (85,10%) black (59,00%) married (46,20%) miners of which the majority are Afrikaans-speaking (44,10%).

1.3.2.3 Measuring instruments

Instruments used in previous acculturation studies were adapted by replacing Dutch /Netherlands and Moroccan with South African / majority and own ethnic group (Ait Ouarasse & Van de Vijver, 2004) and others developed by the researchers to measure the following: Acculturation context (including the mainstream context – the society of settlement and the ethno-cultural context – the society of origin) and psychological (psychological and physical ill health) and sociocultural (perceived work success in terms of meeting deadlines, reputation and respect, and development and training opportunities) acculturation outcomes. All scales employed a five-point Likert format, with response options ranging from ‘strongly disagree (1)’ to ‘strongly agree (5)’.

Mainstream domain instruments

- **Perceived mainstream segregation demands** (Ait Ouarasse & Van de Vijver, 2004). This is a twelve-item measure of the participants’ perception of their co-workers attitudes toward keeping members from different ethnic backgrounds separate and preventing interaction between ethnic groups within the organisation. Segregation is the desire of the mainstream members to keep minority members separate and is aimed at preventing
intercultural contact. The scale contains items such as “I think most of my co-workers avoid contact with people from other cultures”, “I think that most of my co-workers want to deal only with people from their own culture”, and “I think that most of my co-workers believe that all employees should come from the same cultural group”. A Cronbach alpha coefficient of 0.91 was obtained in a study of the acculturation context of Moroccans in the Netherlands (Ait Ouarasse & Van de Vijver, 2004).

- Perceived pressure to conform to management ideologies and practices (Ait Ouarasse & Van de Vijver, 2004). This is a six-item measure of the participants’ perception of their co-workers attitudes toward having to conform to what is being prescribed by management within the organisation. Four of the items are positively phrased and two negatively phrased. The scale contains items such as “I think that my co-workers would avoid me if I broke rules of the organisation”, “I think that most of my co-workers work according to the rules of our organisation without questioning these” and “Sticking to the ideas and practises of management is very important in our organisation”. A Cronbach alpha coefficient of 0.75 was obtained in a study of the acculturation context of Moroccans in the Netherlands (Ait Ouarasse & Van de Vijver, 2004).

- Perceived racism at work (Duckitt’s Subtle Racism Scale, 1991). This is a twelve-item measure of the participants’ experiences of being handled differently because of cultural or ethnic differences. Racism refers to experiences of the lack of equality and freedom. Modern racists rationalise their opposition to minorities by emphasising support for values of freedom and equality (Augoustinos, Tuffin, & Rapley, 1999). The scale contains items like “Race is the basis used when deciding to promote or not in our organisation”, “Jokes made by my co-workers from other cultures upset me”, and “Training opportunities are only provided for other cultural groups in our organisation”. A Cronbach alpha coefficient of 0.87 was obtained in a study of acculturation in the Tlokwe Municipality (Jackson, 2008).

- Perceived discrimination at work (developed for the research study by the researchers involved) is a ten-item measure used to determine experiences and perceptions of deprivation relative to other cultural or ethnic groups in the organisation. Discrimination refers to behavioural bias toward an individual based on that individual’s group identity. Discrimination can be positive or negative in its beliefs and emotions. The scale contains
items such as “My co-workers do not like my cultural habits and customs”, “When my home culture is mentioned at work, it is almost always negatively mentioned”, and “I experience discrimination at work”. A Cronbach alpha coefficient of 0.90 was obtained in a study of acculturation in the Tlokwe Municipality (Jackson, 2008).

- **Relationship with mainstream members at work** (Ait Ouarasse & Van de Vijver, 2004). This is a thirteen-item measure of how well and easily participants get along with members from other cultural groups in the organisation, and how well and easily they cope in situations involving other cultural groups in the organisation. The scale contains items like “I attend activities organised by members of other cultural groups” and “I participate in activities organised by members of other cultural groups”. A Cronbach alpha coefficient of 0.88 was obtained in a study of the acculturation context of Moroccans in the Netherlands (Ait Ouarasse & Van de Vijver, 2004). Molokoane (2007) obtained a Cronbach alpha coefficient of 0.72 in a study of acculturation outcomes among members of the South African police in Gauteng.

**Co-ethnic domain instruments**

- **Perceived co-ethnic separation demands** (Ait Ouarasse & Van de Vijver, 2004) is a four-item measure of the extent to which participants think their own community wants them to keep away from the majority culture. Separation is a strategy that is aimed at the prevention of mainstream influence on minority ways. All of the items are negatively phrased. The scale contains items like “My cultural group members warns its members against the dangers of other cultural groups” and “My cultural group members do not want me to make contact with members from other cultural groups”. Cronbach alpha coefficients will be determined.

- **Perceived pressures to conform to preferred acculturation strategy by own cultural group** (developed for the research study by the researchers involved) is a six-item measure which measures the extent to which participants feel that they have to conform to preferred acculturation strategies as supported by their own cultural group. The scale contains items like “I think that members of my own cultural group expect from us to stick to our cultural practices” and “Sticking to the ideas and practices of the elderly are very important in our culture”. A Cronbach alpha coefficient of 0.78 was obtained in a
study of the acculturation process in hostels of a higher education institution (Biela, 2006).

- **Relationship with co-ethnic members at work** (Ait Ouarasse & Van de Vijver, 2004). This is a fourteen-item measure of how well and easily participants get along with members of the ethnic minority (majority) community, and how well and easily they cope in situations involving South African community members. In the study from which this scale was derived, a Cronbach alpha coefficient of 0.79 was obtained in a study of the acculturation context of Moroccans in the Netherlands (Ait Ouarasse & Van de Vijver, 2004). Molokoane (2007) obtained a Cronbach alpha coefficient of 0.74 in his study of acculturation outcomes amongst members of the South African police in Gauteng.

**Individual intervening variable**

- **Individual separation acculturation strategy** (developed for the research study by the researchers involved) is a three-item measure of the participants’ perception of his or her preference in avoiding contact with members from other cultural groups in the organisation. Separation is an acculturation orientation aimed at the prevention of mainstream influence on ethnic culture. The scale contains items such as “I prefer social contact with only members of my own ethnic group” and “I actually avoid contact with members from other cultures”.

**Psychological acculturation outcomes**

- **Acculturative stress: Physical and Psychological ill health** will be measured with the Physical Symptoms Inventory (PSI) from Spector and Jex, 1998. The PSI is a self-report measure in which respondents are asked to indicate whether they had suffered any of the mentioned symptoms in the past three months. Some examples of symptoms included on the scale are headache, backache, fatigue, eyestrain, and trouble sleeping. Cronbach alpha coefficients of 0.95 for physical ill health and 0.91 for psychological ill health were obtained for two factors extracted by exploratory and confirmatory factor analysis in a study of the acculturation outcomes of police members in the Gauteng Province of South Africa (Molokoane, 2007).

**Sociocultural acculturation outcomes**
• **Work success** (Ait Ouarasse & Van de Vijver, 2004). This is a fourteen-item measure of participants’ success at work. All of the items are positively phrased. It contains items pertaining to task completion, punctuality, status, and recognition at work, relationships with supervisors, and relationships with fellow workers. The scale contains items like “I am always on time for my work”, “I do my work exactly as instructed by my supervisor” and “I have a good reputation among my co-workers”. A Cronbach alpha coefficient of 0.81 was obtained for one factor extracted by exploratory and confirmatory factor analysis in a study of the acculturation context of Moroccans in the Netherlands, upon which this scale is based (Ait Ouarasse & Van de Vijver, 2004). In a study on the acculturation outcomes of members of the South African police in Gauteng (Molokoane, 2007), two factors were extracted by exploratory and confirmatory factor analysis obtaining Cronbach alpha coefficients of 0.83 and 0.84 respectively.

A *Biographical questionnaire* is included in order to be able to describe the population. It includes basic biographical questions like age, sex, race, etc.

### 1.3.2.4 Statistical analysis

The statistical analysis is carried out with assistance of the SPSS-programme (SPSS Inc, 2003). Descriptive statistics (means, standard deviations, skewness, and kurtosis) were used to analyse the data. Cronbach alpha coefficients are used to determine the internal consistency, homogeneity, and unidimensionality of the measuring instruments (Clark & Watson, 1995). The alpha coefficient contains important information regarding the proportion of variance of the items of a scale in terms of the total variance explained by that particular scale.

Pearson product–moment correlation coefficients are used to specify the relationship between the variables. Effect sizes (Steyn, 1999) are used to decide on the practical significance of the findings. A cut-off point of 0.30 (medium effect; Cohen, 1988) was set for the practical significance of correlation coefficients. In terms of statistical significance, the value was set at a 95% confidence interval level ($p\leq0.05$).
Regression analysis is used to model relationships between variables and determine the magnitude of those relationships, upon which predictions can be made (Field, 2005). There are two types of regressions: simple and multiple linear regressions. Both are related statistical methods for modelling the relationship between two or more random variables using a linear equation. Simple linear regression refers to a regression on two variables, while multiple regressions refer to a regression on more than two variables. Linear regression assumes that the best estimate of the response is a linear function of some parameters (though not necessarily linear on the predictors).

The next section presents an overview of the division of chapters for this thesis.

1.4 DIVISION OF CHAPTERS

The chapters in the thesis are presented as follows:

Chapter 1: Introduction
Chapter 2: Research article 1
Chapter 3: Research article 2
Chapter 4: Conclusions, limitations, and recommendations

The last section concludes the chapter.

1.5 CHAPTER SUMMARY

This chapter discussed the background to this study and the problem statement. This was followed by a broad conceptualisation of the study in terms of relevant theoretical concepts whereupon the general and specific research objectives were explained. Following this, the research method including the research design, participants, measuring instruments, method of data analysis in this research was explained. The chapter concludes with a brief overview of chapters represented in this study.
REFERENCES


CHAPTER 2

RESEARCH ARTICLE 1
ABSTRACT

This article reports on the results of a project investigating the acculturation process within a mainstream context, in order to predict the ill health and perceived work success of mineworkers in a mine in the North-West Province. This proposition was explored by investigating the relationship between the acculturation context and individual intervening factors, mapped into variables, and acculturation outcomes (ill health and work success). A cross-sectional survey design was used to gather the data from a convenience sample of participants from the mine examined \( n = 288 \), utilizing adapted and self-developed measuring instruments to investigate the mainstream cultural domain, an individual separation acculturation strategy, psychological acculturation outcomes, and sociocultural acculturation outcomes. The findings demonstrate that statistical significant relations exist between investigated variables, that ill health and work success can be viewed from an acculturation perspective, and that the acculturation context and individual intervening factors, can be used to predict psychological and sociocultural acculturation outcomes. Limitations of the study and recommendations for future research and the organisation are provided.

OPSOMMING

Hierdie artikel doen verslag oor die bevindinge van ‘n projek wat die akkulturasie proses binne ‘n hoofstroom konteks ondersoek ten einde die swak gesondheid en waargenome werk sukses van werkers in ‘n myn in die Noordwes Provisnie te bepaal. Hierdie aanname is getoets deur die verhouding tussen die akkulturasie hoofstroom konteks, individuele afsondering en akkulturasie uitkomste (swak gesondheid en werk sukses) te bepaal. ‘n Dwarsdeursnee-opname ontwerp met ‘n beskikbaarheidsteekproef \( n = 288 \) is gebruik. Aangepaste en self ontwikkelde meetinstrumente is gebruik om die hoofstroom konteks, individuele afsondering akkulturasie strategie en psigologiese en sosiokulturele akkulturasie uitkomste te ondersoek. Daar is gevind dat statistiese beduidende verwantskappe tussen die konstruktue bestaan, en dat swak gesondheid en werk sukses vanuit ‘n akkulturasie konteks gesien kan word. Die akkulturasie konteks en individuele afsondering veranderlikes kan gebruik word om psigologiese en sosiokulturele uitkomste te voorspel. Beperkinge van die studie en aanbevelings vir toekomstige navorsing en die organisasie word aan die hand gedoen.

\(^1\) The research project formed part of a larger project on acculturation by the Industrial Psychology Department of the North-West University.
In 1950, the Population Registration Act decreed that all South Africans would henceforth be categorised on the basis of their supposed membership of one of four official ‘racial’ groups, namely ‘White’, ‘Bantu’ (‘Black’ people of native African origin), ‘Coloured’ (people of ‘mixed races’ or ‘mixed descent’), and later ‘Asian’ (people of Indian, Pakistani, and Chinese origin; Franchi, 2003a). The implementation of the Apartheid policy, with the election of the Nationalist Party to office (in 1948) to rule the nation on a platform of Apartheid, accelerated the structural entrenchment of ‘racial’ segregation, discrimination, oppression, and exploitation of an indigenous majority by an immigrant minority.

Most societies around the world, including South Africa, are, or are rapidly becoming multicultural (Verkuyten & Thijs, 2002). The idea of a multicultural society with a multicultural identity is the ideal of integrating all ethnic groups, while preserving their own cultural identities at the same time (Van der Veer, 2003). One of the primary objectives of the post-1994, ANC-led democratic government was to eradicate discriminatory employment policies and practices based on ‘race’, gender, and disability, and to redress current imbalances through a process framed in the 1996 South African Constitution as “positive discrimination” (Franchi, 2003b).

Increasingly, South African organisations are implementing employment equity and affirmative action programmes. Since 1997, there has been substantial growth in this area, and this trend is due to organisations committing themselves to a process of redressing previous imbalances as a result of discriminatory legislation, systems and policies (Employment Equity Bill, 1997).

It would certainly be easier to move on, believing that almost without effort, a society torn apart under Apartheid and institutionalised racism could within months, be transformed into one of racial harmony. Despite the many social and political changes that have occurred in South Africa over the past decade, racism and the accompanying social divisions along racial lines continue to be central features of the South African landscape (Smith, Stones, & Naidoo, 2003). Newspaper headlines such as “Miners set to strike over racism” (Maponya, 2004) continuously remind us that this is the case in the mining sector and in other spheres of the South African society: “Ten years after the end of Apartheid, Black and White South Africans are still learning to live together”; “Racism is alive and well in SA”; “Apartheid is
gone, but government policies are widening the racial gap more than ever”, “Adults responsible for racism in children” (Desai, 1998; Mamaila, 2001).

What an individual does when he or she encounters a second culture is assumed to have an effect on his or her sense of emotional well-being (LaFramboise, Coleman, & Gerton, 1993; Padilla, 1980). It has been hypothesised that how individuals cope with that contact will affect such socio-emotional factors as self-esteem (Phinney, 1991), social adjustment, academic performance (Gomez & Fassinger, 1994; Oliver, Rodriguez, & Mickelson, 1985), and mental health (Rogler, Cortes, & Malgady, 1991). Furthermore, Coleman (1995a, 1995b) has hypothesised that the strategies an individual uses to cope with second culture contact will have an effect on that individual’s academic or job performance, sense of social competence, and psychological well-being.

Should the above-mentioned situation prevail in the majority of South African organisations, then the following questions will arise:

- Does prolonged exposure to unfamiliar cultural environments affect the attitudes, behaviour, and well-being of individuals?
- What precisely promotes successful cross-cultural transitions?
- What precisely hinders cross-cultural transitions?

These and similar questions represent the core of what is typically addressed in acculturation research. Berry, Poortinga, Segall and Dasen (2002), Coleman (1995b), and LaFramboise et al. (1993) noted that the process of coping with second culture contact has generally been termed ‘acculturation’. LaFramboise et al. (1993) point out that the term ‘acculturation’ has been used to describe both a particular strategy for coping with second culture contact and the process for coping with second culture contact, and suggest the phrase ‘second culture acquisition’ be used to describe the process of coping with second culture contact and the term ‘acculturation’ be reserved for explaining the process (Coleman, Wampold, & Casali, 1995). The present study addresses the acculturation experience of South Africans at work and taps into the potential assets and liabilities in their acculturation process.

The main contemporary acculturation frameworks (Berry, 1997; Ward, Bochner, & Furnham, 2001) are largely empirically based. According to these frameworks, the acculturation process involves group-level variables (characteristics of the society of origin and the characteristics of the society of settlement) and individual-level variables (moderating factors
prior to acculturation and moderating factors during acculturation). These frameworks depict cross-cultural transitions as potentially stressful life events that elicit coping resources to manage them (Ait Ouarasse & Van de Vijver, 2004).

The acculturation context: Mainstream domain
Research on acculturation should include both the perceptions of the majority and minority group (Bourhis, Moïse, Pereault, & Senécal, 1977). The Interactive Acculturation Model based on Berry’s model of acculturation assumes that minorities’ choice of strategy depends on how the majority perceives the minority group. The model further argues that the views of the dominant group on minorities are also influenced by how the minority group perceive the majority. Attitudes of both groups should be considered; for the minority attitude refers to preferred and actual ways of adjustment while majority to which strategies minorities may or should choose.

Various elements of the mainstream domain are known to influence acculturation preferences and outcomes of migrant workers. Societies with populations and laws that support multiculturalism would trigger other adaptation strategies both at group and individual level than assimilationist societies. Assimilationist societies provide fewer opportunities for immigrants (Berry, 1997), and put more constraints on social identity and acculturation possibilities (Triandis, 1997). Bourhis et al. (1997) stressed the importance of the acculturation strategies preferred by the majority as determinants of acculturation outcomes. Although minority individuals have often reported feelings of discrimination (Berno & Ward, 2000; Jasinskaja, Liebkind, Horenczyk, & Schmitz, 2003), the extent of this discrimination varies across individuals and groups. Young Arabs in France have reported to be seriously affected by discriminatory practices (Malewska-Peyre, 1982). Young Moroccans in the Netherlands who adopt integrationist strategies have been reported to be less well treated than their co-ethnics who opted for assimilationist strategies (Van Oudenhoven & Eisses, 1998).

Perceived mainstream segregation demands
The majority group will promote segregation when they believe that they are looking after the interests of the community by keeping the minority (or co-ethnic group) separate from the rest of the community (Van Oudenhoven, Ward, & Masgoret, 2006). Segregation refers to the degree to which two or more groups are separated from each other (Echenique & Fryer, 2007). All plural societies consist of both mainstream and minority groups (Berry, 2006).
Differences between these groups can lead to segregation (Horton & Sykes, 2001). Segregationists accept that minority groups maintain their heritage culture on condition that they keep their distance, as majority host members try to prevent contamination of their culture by minorities (Barrette, Bourhis, Personnaz, & Personnaz, 2004). Minority groups often feel that their identity and/or beliefs are under threat, and although this is not necessarily always true, the minority group perceives this as a demand from the mainstream group to segregate. Race and ethnic segregation in the workplace may be a function of varying forms of discrimination in the labour market that exist along racial or ethnic lines (Hellerstein & Neumark, 2005).

**Perceived pressure to conform to management ideologies and practices**

Authority entails the right to command others. In organisations this ‘right’ signifies the legitimacy stemming from the system of hierarchical role relations (Weber, 1947).

Individuals who endorse social dominance rely on stereotypes that distinguish one societal group (such as Africans) from another societal group (such as Caucasians; Pratto, Sidanius, Stallworth, & Malle, 1994). People in the workplace retain group-based inequality because it legitimises their beliefs, attitudes, and stereotypes of others. Lower-level members within the organisation often consider instructions from management as direct orders that are to be followed, regardless of their own personal values. Similarity may also seem rewarding to the individual in question because it affirms their ideas and attitudes, thus giving them a sense of belonging (Van Oudenhoven & Hofstra, 2006). This may lead to immoral and illegal acts being carried out by the subordinates (Brief, Dietz, Cohen, Pugh, & Vaslow, 2000). Ideologies develop to legitimate and help maintain these inequalities (Jost & Banaji, 1994). Therefore, if mainstream segregation demands are prevalent in this mine in the North-West Province, then the question of ‘is it’s prevalence the result of conformation to management principles becomes crucial.

**Discrimination**

Discrimination based on immigrant status is recognisable by immigrant adolescents (Sellers, Copeland-Linder, Martin, & Lewis, 2006). It can be prevalent and persistent in even in a liberal or tolerant society (Cheung & Leung, 2009). Discrimination can have an effect on the immigrants’ acculturative success. Discrimination refers to the immigrants’ experience of
unfair and undesirable treatment due to immigration status. Stone and Han (2005) pointed out that discrimination weakens the immigrants’ social integration with the host society. Social integration was found to contribute positively towards acculturative stress and community participation to impact on school achievement. Further effects of discrimination tend to involve emotional stress (Cheung & Leung, 2009). Accordingly, emotional stress or the feeling of unfairness concomitant with discrimination (Sellars et al., 2006), would undermine the immigrants motivation and effort to achieve (Liebkind, Jasinskaja-Lahti, & Solheim, 2004). Discrimination is stressful only when perceived as stressful or as falling beyond one’s coping ability (Cassidy, O’Connor, Howe, & Warden, 2004). Studies however have shown support from parents and friends, identification with a social group, income and acculturation act as a buffer to the effect of discrimination by neutralizing the stressful effect of discrimination.

The proponents of diversity approaches emphasise that prejudice and discrimination within organisations create low morale and disaffection which in turn lead to poor individual and organisational performance (Cornelius, Gooch, & Todd, 2001). Negative effects have been observed when studying their experiences of discrimination in every-day life as well as their perceptions of discrimination in the work environment (Liebkind & Jasinskaja-Lahti, 2000). The subjective interpretation of events as discriminatory, i.e., perceiving oneself as a victim of discrimination by members of a dominant group is one of the major acculturation strains that clearly associates with psychological symptomatology and decreased well-being among immigrants (Berry, 1997). Different coping-styles have been viewed as influencing the impact of perceived discrimination. A growing body of acculturation research has recognised the relevance of the stress and coping paradigm (Furnham & Bochner, 1990).

**Modern racism**

Racism stems from the belief that it is reasonable to treat people different because of their physical appearance. An oppressive system of race relations is set up whereby one group benefits from dominating another. Racism is not just discrimination, it is discrimination plus power. Racism has many forms and works at many levels. For instance, at an individual level, how people see themselves and the world may be affected by subtle racism in the education system. In the interpersonal domain, racial abuse and harassment at work are commonplace. And in the wider social environment, much has been made of institutional racism in the provision of housing and other social benefits, in the delivery of healthcare and
in the prison justice systems. To add to the complexity, at any of these levels racism may be perceived or not perceived, it may be intentional or not intentional, and it may have acute or chronic impacts (McKenzie, 2006).

People from ethnic and minority groups may encounter increased social stress (McKenzie, 2006). The reasons for this depend in part on the reasons for migration and their stage post migration, but the social, cultural and economic environment is key: this environment is dependent on the tenor of race relations within a country. A social stress is associated with the development of mental illness and discrimination regulates some of the social stress that is encountered, racism is considered a possible specific risk factor for mental illness in ethnic minority groups (McKenzie, 2006). Jablensky (1977) found that racism negatively affected the health of black children by denying them essential experiences such as sense of security and warmth, freedom for personal growth and identification with a community of equals (Pillay, 2004). Consequently, those endorsing the ideology of modern racism do not define their own beliefs and attitudes as racist and they act in ways to protect a non-prejudiced, non-discriminatory image.

For the modern racist to behave consistently with his or her negative racial attitude requires that he or she be embedded in a context in which there is a plausible, non-prejudiced explanation available for what might be considered prejudiced behaviour. This means that a businessperson might reason that the matching of the characteristics of customers and those who serve them to be a sound management practice and not a reflection of racial prejudice (Brief, 1998). Such justifications are often evident in business organisations and other social contexts, especially in cases where the business justification to discriminate came from a legitimate authority figure or management. According to Kelman and Hamilton (1989), subordinates do so because authority entails the right to command others. In organisations, this ‘right’ denotes the legitimacy stemming from the hierarchical role relations (Weber, 1947).

**Relationship with mainstreamers at work**

Research on intergroup contact shows that contact between individuals of differing ethnic and cultural backgrounds alone is insufficient for disconfirming negative stereotypes or increasing acceptance (Allport, 1954). Contact with members of an unfamiliar outgroup is favourable for the formation of a common group identity and the reduction of prejudice,
negative stereotypes, and covert racism if members work together in the pursuit of common goals, have equal status and if there are equal social norms for cross-cultural interaction (Gaertner, Dovidio, & Bachman, 1996). Friendships between members of differing ethnic background can foster more positive cross-ethnic attitudes (Mak & Buckingham, 2007).

In today’s racially and ethnically diverse society, cross-race friendships are particularly critical to the positive development of adolescents (Chan & Birman, 2009). Friendship with other racial/ethnic group members provide opportunities for personal and meaningful interactions and can therefore help to reduce stereotypes and promote more positive racial attitudes (Damicò, Bell-Nathaniel, & Green, 1981). Developing cross-race friendships may be challenging. Friendships with different racial/ethnic groups, especially with the majority racial group may help immigrant members to adjust to the host culture. A significant body of evidence exists in support of the positive effect of relationships with host nationals, but also with compatriots, on the adjustment of immigrants (Ward et al., 2001).

**Intervening variable**

Individuals enter into the acculturation process with a number of personal characteristics of a demographical, psychological, and social nature (Berry et al., 2002). Berry (1997) distinguished between factors (moderating) prior (age, gender, etc.) to and factors that arise during the acculturation process (acculturation strategies, coping style, etc.). The individual intervening variable that is covered in this study is an individual separation acculturation strategy to assess the impact of individual differences on outcomes in the acculturation process.

**Individual separation acculturation strategy**

Acculturation strategies refer to ways in which immigrants deal with the cultures involved (Ward et al., 2001). The model involved is that of Berry (1992) which sees identification with the host country and country of origin as two independent dimensions, which constitute four acculturation strategies: integration, assimilation, separation (segregation), and marginalisation. Integration refers to a preference to maintain the original culture while also adopting the new culture. Assimilation refers to a loss of the original culture and a complete absorption in the new culture. Separation reflects a desire to maintain key features of the original culture while rejecting the new culture. Marginalisation relates to the rejection of both cultures.
Acculturation strategies have been shown to have substantial relationships with positive adaptation: integration is usually the most successful; marginalisation is the least successful; and assimilation and separation strategies are intermediately successful. This pattern has been found in virtually every study, and is present for all types of acculturating groups (Berry & Kim, 1988; Berry & Sam, 1997).

**Acculturation outcomes: Psychological and sociocultural**

The extent to which events causes stress depends on the characteristics of both the individual and the dominant society. A curvilinear relationship may exist between these two variables were moderate acculturated individuals retain bonds with their ethnic group yet gain access to resources in the dominant culture (Rogler et al., 1991). Distress result if high acculturation leads to estrangement from one’s ethnic group, social support, and a positive sense of self. Thus, a higher level of acculturation may lead to increased distress when an individual experiences discrimination or is prevented from gaining social status (Kaplan & Marks, 1990). It has been widely reported that the experience of prejudice and discrimination has a significant negative effect on a person’s well-being (Halpern, 1993; Noh, Beiser, Kaspar, Hou, & Rummens, 1999). A study by Sodowsky, Lai and Plake (1991) found that perceived prejudice in social, educational, and occupational contexts was a significant concern for both Hispanic and Asian American students across generational status. The differences are likely a result of the contemporary sociopolitical climate of the respondents’ host areas and long standing prejudices and stereotypes. The notion that immigrants and minority group members are extra susceptible to mental disorders and psychological maladaptation has contributed to more efforts being channeled to identify circumstances that increase the risk of ill health than to focus on what the adaptive personal and contextual factors are. Discrimination – especially when experienced at school (Clark, Anderson, Clark, & Williams, 1999) and sociocultural marginalization (Berry & Sam, 1995) are among the issues that have been established to be detrimental to psychological adaptation.

**The socio-cultural outcomes** have to do with the successful participation in the host milieu. The question that normally arises in this arena is: does the immigrant do well in the new society? Ward and Kennedy (1999), state that socio-cultural adaptation is mainly a function of contact variables such as education in the host country and length of stay of migrants. Friendships with local students have been found to improve access to local knowledge and
create greater opportunities for practicing the host language. These aspects have been found to positively influence sociocultural adaptation. On the other hand, local students can also reap personal and career rewards from friendships with international students, including a better understanding and tolerance of other cultures and the opportunities for building professional networks and paving the way for later overseas travel and work. Research findings suggest that ethnic group variables were better predictors of school success and mainstream variables were better predictors of work success. Perceived tolerance of the mainstream society towards the ethnic group was also a significant predictor of work success (Ait Ouarasse & Van de Vijver, 2004).

**RESEARCH OBJECTIVES**

The primary objective of this research article is to analyse the acculturation process and to determine the impact of acculturation mainstream context variables and individual intervening variable on acculturation outcomes of mineworkers in the North-West Province. The secondary objectives of this project were:

- to determine the psychometric properties of the measuring instruments used in this research article;
- to determine the relationship between mainstream negative context variables (perceived mainstream segregation demands, perceived pressure to conform to management ideologies and practices, perceived discrimination at work, perceived racism at work and relationship with mainstreamers at work), individual intervening variable (individual separation acculturation strategy), and acculturation outcomes variables [psychological in terms of physical and psychological ill health; and sociocultural in terms of employees’ perceived work success (meeting deadlines, reputation and respect, development and training opportunities)];
- to determine the impact of mainstream negative context variables (perceived mainstream segregation demands, perceived pressure to conform to management ideologies and practices, perceived discrimination at work, perceived racism at work and relationship with mainstreamers at work) and individual intervening variable (individual separation acculturation strategy) on the psychological acculturation outcome variables (employees’ physical and psychological ill health); and
to determine the impact of mainstream negative context variables (perceived mainstream segregation demands, perceived pressure to conform to management ideologies and practices, perceived discrimination at work, perceived racism at work and relationship with mainstreamers at work) and individual intervening variable (individual separation acculturation strategy) on the sociocultural acculturation outcome variables (employees’ perceived work success in terms of meeting deadlines, reputation and respect, and development and training opportunities).

RESEARCH METHOD

Research design
A cross-sectional survey design whereby a sample is drawn from a population at one time was used to obtain the desired research objectives. Cross-sectional designs are appropriate where groups of subjects at various stages of development are studied simultaneously, whereas the survey technique of data collection gathers information from the target population by means of questionnaires (Burns & Grove, 1993). This design is used to assess interrelationships among variables within the population. Schaufeli and Enzmann (1998) criticised the use of cross-sectional designs in research, and recommended that experiments and longitudinal studies should be used when possible. However, a cross-sectional design is the most appropriate design for determining relationships among variables.

Research procedure
The research project, which formed part of a larger project on acculturation by the Industrial Psychology Department of the North-West University, was initiated during 2005 after discussions with the Human Resource Department of a major gold mine in the North-West Province of South Africa. The project was planned and questionnaires were duplicated and administered with funding that was obtained from the National Research Foundation, after permission was granted by mine management.

English questionnaires that were used in previous studies to measure acculturation context, and personal, psychological, and sociocultural acculturation outcomes were administered. The data from the 288 completed questionnaires were captured on an Excel spreadsheet, controlled for errors, and statistically analysed with the SPSS-programme (SPSS Inc., 2003).
Participants
The participants could be defined as an availability sample of employees in a mine in the North-West Province. A total population of 500 employees were targeted. A response rate of 59% was achieved, of which 288 responses (98%) could be utilised. Descriptive information of the sample is given in Table 1.

Table 1
Characteristics of the Participants

<table>
<thead>
<tr>
<th>Item</th>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>85,10</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>14,60</td>
</tr>
<tr>
<td>Marital status</td>
<td>Single/widow/widower</td>
<td>21,20</td>
</tr>
<tr>
<td></td>
<td>Engaged/in a relationship</td>
<td>04,50</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>46,20</td>
</tr>
<tr>
<td></td>
<td>Divorced</td>
<td>03,10</td>
</tr>
<tr>
<td></td>
<td>Separated</td>
<td>00,70</td>
</tr>
<tr>
<td>Race</td>
<td>Black</td>
<td>59,00</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>24,70</td>
</tr>
<tr>
<td></td>
<td>Indian</td>
<td>12,80</td>
</tr>
<tr>
<td></td>
<td>Coloured</td>
<td>02,40</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>00,30</td>
</tr>
<tr>
<td>Language</td>
<td>Afrikaans</td>
<td>44,10</td>
</tr>
<tr>
<td></td>
<td>English</td>
<td>04,50</td>
</tr>
<tr>
<td></td>
<td>SePedi</td>
<td>00,70</td>
</tr>
<tr>
<td></td>
<td>SeSotho</td>
<td>17,70</td>
</tr>
<tr>
<td></td>
<td>SeTswana</td>
<td>11,80</td>
</tr>
<tr>
<td></td>
<td>SiSwati</td>
<td>03,50</td>
</tr>
<tr>
<td></td>
<td>Tshivenda</td>
<td>00,30</td>
</tr>
<tr>
<td></td>
<td>IsiZulu</td>
<td>03,50</td>
</tr>
<tr>
<td></td>
<td>IsiXhosa</td>
<td>10,80</td>
</tr>
<tr>
<td></td>
<td>XiTsonga</td>
<td>01,70</td>
</tr>
</tbody>
</table>

Table 1 shows that 85,10% of the sample consisted of males. The sample was mostly made up of Black (59%) employees. The majority of the sample is Afrikaans-speaking (44,10%). Married employees constituted nearly half the sample (46,20%).
Measuring instruments

Instruments were adapted (Ait Ouarasse & Van de Vijver, 2004) and others developed by the researchers to measure the following: Acculturation context (mainstream context – the society of settlement) and psychological (psychological and physical ill health) and sociocultural (perceived work success in terms of meeting deadlines, reputation and respect, and development and training opportunities) acculturation outcomes. All scales employed a five-point Likert format, with response options ranging from ‘strongly disagree (1)’ to ‘strongly agree (5)’.

Mainstream domain instruments

- **Perceived mainstream segregation demands** (Ait Ouarasse & Van de Vijver, 2004) was used to measure participants’ perception of their co-workers attitudes toward keeping members from different ethnic backgrounds separate and preventing interaction between ethnic groups within the organisation. Segregation is the desire of the mainstream members to keep minority members separate and is aimed at preventing intercultural contact. The scale contains items such as “I think most of my co-workers avoid contact with people from other cultures”, “I think that most of my co-workers want to deal only with people from their own culture”, and “I think that most of my co-workers believe that all employees should come from the same cultural group”. A Cronbach alpha coefficient of 0.91 was obtained in a study of the acculturation context of Moroccans in the Netherlands (Ait Ouarasse & Van de Vijver, 2004).

- **Perceived pressure to conform to management ideologies and practices** (Ait Ouarasse & Van de Vijver, 2004) was used to measure participants’ perception of their co-workers attitudes toward having to conform to what is being prescribed by management within the organisation. Four of the items are positively phrased and two negatively phrased. The scale contains items such as “I think that my co-workers would avoid me if I broke rules of the organisation”, “I think that most of my co-workers work according to the rules of our organisation without questioning these” and “Sticking to the ideas and practises of management is very important in our organisation”. A Cronbach alpha coefficient of 0.75 was obtained in a study of the acculturation context of Moroccans in the Netherlands (Ait Ouarasse & Van de Vijver, 2004).
**Perceived racism at work** (Duckitt’s Subtle Racism Scale, 1991). This twelve-item measure was used to determine participants’ experiences of being handled differently because of cultural or ethnic differences. Racism refers to experiences of the lack of equality and freedom. Modern racists rationalise their opposition to minorities by emphasising support for values of freedom and equality (Augoustinos, Tuffin, & Rapley, 1999). The scale contains items like “Race is the basis used when deciding to promote or not in our organisation”, “Jokes made by my co-workers from other cultures upset me”, and “Training opportunities are only provided for other cultural groups in our organisation”. A Cronbach alpha coefficient of 0.87 was obtained in a study of acculturation in the Tlokwe Municipality (Jackson, 2008).

**Perceived discrimination at work** (developed for the research study by the researchers involved) is a ten-item measure used to determine experiences and perceptions of deprivation relative to other cultural or ethnic groups in the organisation. Discrimination refers to behavioural bias toward an individual based on that individual’s group identity. Discrimination can be positive or negative in its beliefs and emotions. The scale contains items such as “My co-workers do not like my cultural habits and customs”, “When my home culture is mentioned at work, it is almost always negatively mentioned”, and “I experience discrimination at work”. A study of acculturation in the Tlokwe Municipality obtained a Cronbach alpha coefficient of 0.90 (Jackson, 2008).

**Relationship with mainstream members at work** (Ait Ouarasse & Van de Vijver, 2004). This is a thirteen-item measure of how well and easily participants get along with members from other cultural groups in the organisation, and how well and easily they cope in situations involving other cultural groups in the organisation. The scale contains items like “I attend activities organised by members of other cultural groups” and “I participate in activities organised by members of other cultural groups”. A Cronbach alpha coefficient of 0.88 was obtained in a study of the acculturation context of Moroccans in the Netherlands (Ait Ouarasse & Van de Vijver, 2004). Molokoane (2007) obtained a Cronbach alpha coefficient of 0.72 in a study of acculturation outcomes among members of the South African police in Gauteng.
Individual intervening variable

- *Individual separation acculturation strategy* (developed for the research study by the researchers involved) is a three-item measure of the participants’ perception of his or her preference in avoiding contact with members from other cultural groups in the organisation. Separation is an acculturation orientation aimed at the prevention of mainstream influence on ethnic culture. The scale contains items such as “I prefer social contact with only members of my own ethnic group” and “I actually avoid contact with members from other cultures”. A Cronbach alpha coefficient of 0.71 was obtained in study on the acculturation process in hostels of a higher education institution (Biela, 2006).

Psychological acculturation outcomes

- *Acculturative stress: Physical and Psychological ill health* were measured with the Physical Symptoms Inventory (PSI) from Spector and Jex, 1998. The PSI is a self-report measure in which respondents are asked to indicate whether they had suffered any of the mentioned symptoms in the past three months. Some examples of symptoms included on the scale are headache, backache, fatigue, eyestrain, and trouble sleeping. Cronbach alpha coefficients of 0.95 for physical ill health and 0.91 for psychological ill health were obtained for two factors extracted by exploratory and confirmatory factor analysis in a study of the acculturation outcomes of police members in the Gauteng Province of South Africa (Molokoane, 2007).

Sociocultural acculturation outcomes

- *Work success* (Ait Ouarasse & Van de Vijver, 2004). This is a fourteen-item measure of participants’ success at work. All of the items are positively phrased. It contains items pertaining to task completion, punctuality, status, and recognition at work, relationships with supervisors, and relationships with fellow workers. The scale contains items like “I am always on time for my work”, “I do my work exactly as instructed by my supervisor” and “I have a good reputation among my co-workers”. A Cronbach alpha coefficient of 0.81 was obtained for one factor extracted by exploratory and confirmatory factor analysis in a study of the acculturation context of Moroccans in the Netherlands, upon which this scale is based (Ait Ouarasse & Van de Vijver, 2004). In a study on the acculturation outcomes of members of the South African police in Gauteng, two factors
were extracted by exploratory and confirmatory factor analysis obtaining Cronbach alpha coefficients of 0.83 and 0.84 respectively (Molokoane, 2007).

A Biographical questionnaire is included in order to be able to describe the population. It includes basic biographical questions like age, sex, race, etc.

**Statistical analysis**

The statistical analysis was carried out with assistance of the SPSS-programme (SPSS Inc., 2003). Descriptive statistics (means, standard deviations, skewness, and kurtosis) were used to organise, summarise and describe the data (Howell, 1999). Cronbach alpha coefficients were used to determine the internal consistency, homogeneity, and unidimensionality of the measuring instruments (Clark & Watson, 1995). The alpha coefficient contains important information regarding the proportion of variance of the items of a scale in terms of the total variance explained by that particular scale.

Pearson product–moment correlation coefficients were used to specify the relationship between the variables. In terms of statistical significance, the value was set at a 95% confidence interval level ($p \leq 0.05$). Effect sizes (Steyn, 1999) were used to decide on the practical significance of the findings. A cut-off point of 0.30 (medium effect; Cohen, 1988) was set for the practical significance of correlation coefficients.

Regression analysis was used to model relationships between variables and determine the magnitude of those relationships, upon which predictions can be made (Field, 2005). There are two types of regressions: simple and multiple linear regressions. Both are related statistical methods for modelling the relationship between two or more random variables using a linear equation. Simple linear regression refers to a regression on two variables, while multiple regressions refer to a regression on more than two variables. Linear regression assumes that the best estimate of the response is a linear function of some parameters (though not necessarily linear on the predictors).
RESULTS

The results section has two parts. The first part presents the descriptive measures and psychometric characteristics of the measures, while the relations of the variables are examined in the second part.

Descriptive and psychometric characteristics

The results obtained from exploratory factor analysis, using a direct oblimin rotation to confirm the factor structure and considering the scree plot, the rotated component matrix, and descriptive statistics indicate that most of the sub-scales used in this research project are unifactorial, explaining 48,06% of the variance in Perceived mainstream segregation demands, 33,48% of the variance in Perceived pressure to conform to management ideologies and practices, 43,19% of the variance in Perceived racism at work, 41,87% of the variance in Perceived discrimination at work, 44,76% of the variance in Relationship with mainstreamers at work, and 58,19% of the variance in Individual separation acculturation strategy.

One factor was extracted with a exploratory and confirmatory factor analysis (as indicated by the scree plot and the rotated component matrix) from the twenty-one-item sub-scale measuring Physical health, explaining 46,56% of the variance of Physical ill health, and one factor was extracted from a exploratory and confirmatory factor analysis conducted (as indicated by the scree plot and the rotated component matrix) on the nine-item sub-scale measuring Psychological ill health, explaining 49,22% of the construct.

Three factors were extracted from the fourteen-item Perceived Work Success Scale, which explains 57,85% of the variance. The factors are labelled Meeting deadlines at work, Perceived reputation and respect, and Opportunities for development and training at work. The Meeting deadlines at work factor deals with aspects of punctuality, meeting deadlines, following instructions, and successfully completing work (well enough to be complimented on it by supervisors). The Perceived reputation and respect at work factor contained items regarding a good reputation among co-workers for the work, effective handling of problems, success with the handling of problems, respect shown by co-workers for work done and being proud about work. The Opportunities for development and training at work factor is
comprised of items referring to the experience of personal and professional growth and development in the organisation, as well as productivity.

The descriptive statistics and internal consistency of the measuring instruments used in this research project are reported in Table 2.

Table 2

Descriptive Statistics of the Scales used in this Research Study (n = 288)

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Perceived mainstream segregation demands</td>
<td>2.80</td>
<td>0.85</td>
<td>0.15</td>
<td>-0.94</td>
<td>0.87</td>
</tr>
<tr>
<td>2. Perceived pressure to conform to management ideologies and practices</td>
<td>3.58</td>
<td>0.63</td>
<td>-0.47</td>
<td>0.28</td>
<td>0.61</td>
</tr>
<tr>
<td>3. Perceived discrimination at work</td>
<td>3.31</td>
<td>0.78</td>
<td>0.16</td>
<td>-0.45</td>
<td>0.87</td>
</tr>
<tr>
<td>4. Perceived racism at work</td>
<td>3.17</td>
<td>0.78</td>
<td>0.06</td>
<td>-0.83</td>
<td>0.87</td>
</tr>
<tr>
<td>5. Relationship with mainstreamers at work</td>
<td>3.32</td>
<td>0.69</td>
<td>-0.42</td>
<td>0.17</td>
<td>0.75</td>
</tr>
<tr>
<td>6. Individual separation acculturation strategy</td>
<td>2.73</td>
<td>0.84</td>
<td>0.15</td>
<td>-0.31</td>
<td>0.64</td>
</tr>
<tr>
<td>7. Physical ill health</td>
<td>1.98</td>
<td>0.80</td>
<td>1.13*</td>
<td>0.91</td>
<td>0.94</td>
</tr>
<tr>
<td>8. Psychological ill health</td>
<td>1.97</td>
<td>0.85</td>
<td>0.92</td>
<td>0.06</td>
<td>0.87</td>
</tr>
<tr>
<td>9. Meeting deadlines at work (IPWS1)</td>
<td>3.89</td>
<td>0.81</td>
<td>-1.11*</td>
<td>1.89*</td>
<td>0.77</td>
</tr>
<tr>
<td>10. Perceived reputation and respect at work (IPWS2)</td>
<td>3.87</td>
<td>0.68</td>
<td>-0.86</td>
<td>0.85</td>
<td>0.82</td>
</tr>
<tr>
<td>11. Opportunities for development and training at work (IPWS3)</td>
<td>3.57</td>
<td>0.85</td>
<td>-0.70</td>
<td>0.33</td>
<td>0.74</td>
</tr>
</tbody>
</table>

* High skewness and kurtosis

Table 2 shows that the Cronbach alpha coefficients of all the measuring instruments (except for Perceived pressure to conform to management ideologies and practices and Individual separation acculturation strategy) are considered to be acceptable compared to the guideline of $\alpha \geq 0.70$ (Nunnally & Bernstein, 1994). Apart from Physical ill health and Meeting deadlines at work (IPWS1) all skewness statistics are well within the range of -1 to +1, as deemed acceptable by George and Mallery (1999).

Relationships between the variables

On the next page, the product moment correlations coefficients between the different constructs used in this research study are provided in Table 3.
Table 3

Product–moment Correlation Coefficients of the Acculturation Mainstream Context, Individual, and Outcomes Variables (n = 288)

<table>
<thead>
<tr>
<th>Scale</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Perceived mainstream segregation demands</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Perceived pressure to conform to management ideologies and practices</td>
<td>0.22*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Perceived discrimination at work</td>
<td>0.52***</td>
<td>0.17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Perceived racism at work</td>
<td>0.48***</td>
<td>0.13</td>
<td>0.71***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Relationship with mainstreamers at work</td>
<td>-0.10</td>
<td>0.27*</td>
<td>-0.08</td>
<td>-0.13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Physical ill health</td>
<td>0.23*</td>
<td>0.02</td>
<td>0.21*</td>
<td>0.30**</td>
<td>0.07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Psychological ill health</td>
<td>0.24*</td>
<td>0.12</td>
<td>0.27*</td>
<td>0.26*</td>
<td>0.08</td>
<td>0.74***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Individual separation acculturation strategy</td>
<td>0.40**</td>
<td>0.12</td>
<td>0.30**</td>
<td>0.26*</td>
<td>0.02</td>
<td>0.18*</td>
<td>0.35**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Meeting deadlines at work (IPWS1)</td>
<td>-0.05</td>
<td>0.20*</td>
<td>0.09</td>
<td>-0.09</td>
<td>0.10</td>
<td>-0.11</td>
<td>-0.06</td>
<td>-0.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Perceived reputation and respect at work (IPWS2)</td>
<td>-0.04</td>
<td>0.25*</td>
<td>0.06</td>
<td>-0.09</td>
<td>0.15</td>
<td>-0.15</td>
<td>-0.21*</td>
<td>-0.03</td>
<td>0.52***</td>
<td></td>
</tr>
<tr>
<td>11. Opportunities for development and training at work (IPWS3)</td>
<td>0.14</td>
<td>0.28*</td>
<td>-0.01</td>
<td>-0.10</td>
<td>0.28*</td>
<td>-0.05</td>
<td>-0.07</td>
<td>0.13</td>
<td>0.19*</td>
<td>0.49**</td>
</tr>
</tbody>
</table>

*p ≤ 0.05 is statistically significant;
*r ≥ 0.30 is practically significant (medium effect);
**r ≥ 0.50 is practically significant (large effect).
Table 3 shows statistically significant positive correlations between Perceived mainstream segregation demands and Pressure to conform to management ideologies and practices, Physical ill health and Psychological ill health. Perceived mainstream segregation demands show statistically significant positive correlations (practically significant, medium effect) with Racism at work and Individual separation acculturation strategy and a statistically significant positive correlation (practically significant, large effect) with Discrimination at work. Pressure to conform to management ideologies and practices shows statistically significant positive correlations with Relationship with mainstreamers at work, Individual perceived work success - Meeting deadlines at work (IPWS1), Reputation and respect at work (IPWS2) and Opportunities for development and training at work (IPWS3). Discrimination at work shows statistically significant positive correlations with Physical ill health and Psychological ill health. Discrimination at work shows a statistically significant positive correlation (practically significant, medium effect) with Individual separation acculturation strategy and a statistically significant positive correlation (practically significant, large effect) with Racism at work. Racism at work shows statistically significant positive correlations with Psychological ill health and Individual separation acculturation strategy. Racism at work shows a statistically significant positive correlation (practically significant, medium effect) with Physical ill. Relationship with mainstreamers at work shows a statistically significant positive correlation with Individual perceived work success - Opportunities for development and training at work (IPWS3).

Physical ill health shows a statistically significant correlation with Individual separation acculturation strategy. Physical ill health shows a statistically significant correlation (practically significant, large effect) with Psychological ill health. Psychological ill health shows a statistically significant negative correlation with Individual perceived work success – Reputation and respect at work (IPWS2) and a statistically significant positive correlation (practically significant, medium effect) with Individual separation acculturation strategy. Individual perceived work success – Meeting deadlines at work (IPWS1) shows a statistically significant positive correlation with Individual perceived work success - Opportunities for development and training at work (IPWS3). Individual perceived work success – Meeting deadlines (IPWS1) show a statistically significant positive correlation (practically significant, large effect) with Individual perceived work success – Reputation and respect at work (IPWS2). Individual perceived work success – Reputation and respect at work (IPWS2) show a statistically significant positive correlation (practically significant, medium effect) with
Individual perceived work success - Opportunities for development and training at work (IPWS3).

The results of the multiple regression analysis with Physical and Psychological ill health as dependent variables and the acculturation mainstream context variables and individual intervening variable as predictors or independent variables is given in Table 4.

Table 4
Beta Weights of Stepwise Multiple Regression Analysis with Physical Ill Health and Psychological Ill Health as Dependent Variables

<table>
<thead>
<tr>
<th>Psychological adjustment</th>
<th>Ill health</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Physical ill health</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Context</strong></td>
</tr>
<tr>
<td><strong>First step (acculturation mainstream context variables)</strong></td>
<td></td>
</tr>
<tr>
<td>1.1 Perceived mainstream segregation demands</td>
<td>0,14*</td>
</tr>
<tr>
<td>1.2 Perceived pressure to conform to management ideologies and practices</td>
<td>-0,07</td>
</tr>
<tr>
<td>1.3 Perceived racism at work</td>
<td>0,24*</td>
</tr>
<tr>
<td>1.4 Perceived discrimination at work</td>
<td>-0,02</td>
</tr>
<tr>
<td>1.5 Relationship with mainstreamers at work</td>
<td>0,12*</td>
</tr>
<tr>
<td><strong>Second step (acculturation mainstream context and individual intervening variable—All)</strong></td>
<td></td>
</tr>
<tr>
<td>1.6 Individual separation acculturation strategy</td>
<td></td>
</tr>
<tr>
<td>ΔR²</td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td><strong>0,09</strong>*</td>
</tr>
</tbody>
</table>

* p<0,05 indicates statistical significance

Table 4 reports that 9% of the variance of Physical ill health is predicted by the acculturation mainstream context variables with Perceived mainstream segregation demands, Perceived racism at work, and Relationship with mainstreamers at work the only statistically significant predictors of Physical ill health. However, with the inclusion of Individual separation acculturation strategy, a further 1% (totalling 10%) of the variance of Physical ill health is explained, with Perceived racism at work (β = 0.23; t = 2.97) the only statistically significant predictor of Physical ill health.
Ten percent of the variance of *Psychological ill health* is predicted by the independent variables in the model \( F = 5.93; p \leq 0.00 \), with none of the mainstream context variables statistically significant predictors. However, with the inclusion of *Individual separation acculturation strategy*, a further 4\% (totalling 14\%) of the variance of *Psychological ill health* is explained. More specifically, *Individual separation acculturation strategy* \( (\beta = 0.21; t = 3.65) \) is the only statistically significant predictor of *Psychological ill health*.

The results of the multiple regression analysis with *Individual perceived work success* as dependent variable and the *acculturation mainstream context variables* and *individual intervening variable* as predictors or independent variables are reported in Table 5.

Table 5

*Beta Weights of Stepwise Multiple Regression Analysis with Individual Perceived Work Success [Meeting Deadlines (IPWS1), Perceived Reputation/respect (IPWS2) and Development and Training Opportunities (IPWS3)] as Dependent Variables*

<table>
<thead>
<tr>
<th>Sociocultural adjustment</th>
<th>Meeting deadlines (IPWS1)</th>
<th>Perceived reputation and respect (IPWS2)</th>
<th>Opportunities for development and training (IPWS3)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Context</td>
<td>All</td>
<td>Context</td>
</tr>
<tr>
<td>First step (acculturation mainstream context variables)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 Perceived mainstream segregation demands</td>
<td>-0.12</td>
<td>-0.11</td>
<td>-0.08</td>
</tr>
<tr>
<td>1.2 Perceived pressure to conform to management ideologies and practices</td>
<td>0.19*</td>
<td>0.19*</td>
<td>0.23*</td>
</tr>
<tr>
<td>1.3 Perceived racism at work</td>
<td>-0.24*</td>
<td>-0.24*</td>
<td>-0.21*</td>
</tr>
<tr>
<td>1.4 Perceived discrimination at work</td>
<td>0.28*</td>
<td>0.29*</td>
<td>0.20*</td>
</tr>
<tr>
<td>1.5 Relationship with mainstreamers at work</td>
<td>0.03</td>
<td>0.03</td>
<td>0.07</td>
</tr>
<tr>
<td>Second step (acculturation mainstream context and individual intervening variables—all)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 Individual separation acculturation strategy</td>
<td>-0.05</td>
<td>-0.03</td>
<td></td>
</tr>
<tr>
<td>( \Delta R^2 )</td>
<td>0.00*</td>
<td>0.00*</td>
<td></td>
</tr>
<tr>
<td>( R^2 )</td>
<td>0.09*</td>
<td>0.09*</td>
<td>0.10*</td>
</tr>
</tbody>
</table>

* \( p \leq 0.05 \) indicates statistical significance
Table 5 reports that 9% of the variance in Meeting deadlines at work (IPWS1) is explained by the model including acculturation mainstream context variables. No meaningful increase in the variance of the Meeting deadlines at work (IPWS1) was realised, after the inclusion of Individual separation acculturation strategy, leaving the mainstream context and individual variables only explaining 9% of the variance of this sociocultural acculturation outcome, with Perceived pressure to conform to management ideologies and practices ($\beta = 0.19; t = 3.18$), Perceived racism at work ($\beta = -0.24; t = -3.06$), and Perceived discrimination at work ($\beta = 0.29; t = 3.55$) statistically significant predictors of Meeting deadlines at work (IPWS1) in the first and second step.

Ten percent of the variance in Perceived reputation and respect at work (IPWS2) is explained by the model including acculturation mainstream context variables. No meaningful increase in the variance of the Perceived reputation and respect at work (IPWS2) was realised, after the inclusion of Individual separation acculturation strategy, leaving the mainstream context and individual variables explaining only 10% of the variance of this sociocultural acculturation outcome, with Perceived pressure to conform to management ideologies and practices ($\beta = 0.23; t = 3.86$), Perceived racism at work ($\beta = -0.21; t = -2.66$), and Perceived discrimination at work ($\beta = 0.21; t = 2.55$) statistically significant predictors of Perceived reputation and respect at work (IPWS2) in the first and second regression model.

Sixteen percent of the variance in Opportunities for development and training at work (IPWS3) is explained by the context variables in the regression model. A further 1% of the variance of the sociocultural outcome was realised with the inclusion of the Individual separation acculturation strategy, totalling 17%, with Perceived mainstream segregation demands ($\beta = 0.18; t = 2.75$), Perceived pressure to conform to management ideologies and practices ($\beta = 0.19; t = 3.31$), Perceived racism at work ($\beta = -0.19; t = -2.51$), and Relationship with mainstreamers at work ($\beta = 0.22; t = 3.85$) statistically significant predictors of Opportunities for development and training at work (IPWS3) in the first and second step.

DISCUSSION

The primary objective of this research study was to determine the feasibility of the acculturation approach and to evaluate the impact of acculturation context and individual
intervening variable on the acculturation outcomes of mineworkers in the North-West Province. The first secondary objective of this study was to determine the psychometric properties of the instruments used in this study. The results from factor analysis, using a direct oblimin rotation to confirm the factor structure and considering the scree plot, the rotated component matrix, and descriptive statistics indicate that most of the sub-scales used in this research study are unifactorial.

As far as the measures for the acculturation outcomes are concerned, one factor was extracted with an exploratory and confirmatory factor analysis from the twenty-one-item sub-scale measuring Physical ill health, explaining 46.56% of the variance of Physical ill health and one factor was extracted from an exploratory and confirmatory factor analysis conducted on the nine-item sub-scale measuring Psychological ill health explaining 49.22% of the variance of Psychological ill health. Three factors were extracted from the fourteen-item Individual perceived work success scale, which explains 57.85% of the variance. The factors were labelled Meeting deadlines at work, Perceived reputation and respect at work, and Opportunities for development and training at work.

Cronbach alpha coefficients varying from 0.61 to 0.94 were obtained. These alpha coefficients compare well with the guideline of 0.70 (Nunnally & Bernstein, 1994), demonstrating that the dimensions (internal consistency of the dimensions) explained a large portion of the variance except for Perceived pressure to conform to management ideologies and practices and Individual separation acculturation strategy. Most of the measuring instruments scales have relatively normal distributions with low skewness and kurtosis.

A Pearson product-moment correlation was conducted to determine the relationship between the variables. The results indicated that Perceived mainstream segregation demands correlated positively with Discrimination at work, Racism at work and Individual separation acculturation strategy. Implications are that an increase in Perceived mainstream segregation demands is likely to lead to an increase in the perceived experiences of discrimination and racism and an individual separation acculturation orientation. Several studies have found that group identification was associated with less favourable attitudes to outgroups when relations between the groups were characterised by perceived threat (Duckitt, Callaghan, & Wagner, 2004).
Perceived pressure to conform to management ideologies and practices correlated positively with Relationship with mainstreamers at work, Meeting deadlines at work (IPWS1), Reputation and respect at work (IPWS2), and Opportunities for development and training at work (IPWS3). One way for a minority group to deal with low status would be to conform to management acculturation choices and practices for its own choices and practices so as to enhance its influence. Implications of these findings are that conforming to management prescriptions without question is likely to improve relations with mainstreamers at work, increasing the likelihood of experiencing perceived success at work—creating the impression of an organisation culture characterised as “do as I tell you … and you will survive” and “you are paid to follow instruction, and not to question”, as commonly experienced by low-level workers, where very little initiative is required.

Perceived discrimination at work correlated positively with Physical ill health and Psychological ill health, implying that an increase in one is likely to lead to an increase in the other. These results are in line with numerous previous findings indicating that perceived discrimination predicts psychological well-being (Finch, Hummer, Kolody, & Vega, 2001; Liebkind & Jasinskaja-Lahti, 2000) and health status (Krieger, 2000). Perceived discrimination at work correlated positively with Racism at work and Individual separation acculturation strategy. Racism at work correlated positively with Psychological ill health, Individual separation acculturation strategy and Physical ill health implying that employees who experience discrimination and racism at work are likely to suffer from physical and psychological ill health and follow a separation acculturation strategy. Furnham et al. (1993) reported that in the United Kingdom, the psychological distress of Asian immigrants was positively related to experiences of racial prejudice. In the United States, Jackson et al. (1997) found a positive association between recent experiences of discrimination, self-reported physical symptoms, and diagnosed depression.

Psychological ill health correlated negatively with Perceived reputation and respect at work and positively with Individual separation acculturation strategy. It can therefore be deduced that employees who are not respected and have a negative reputation at work will experience poor psychological health and show a preference for separation as acculturation strategy. Meeting deadlines at work (IPWS1) correlated positively with Reputation and respect at work (IPWS2). Reputation and respect at work (IPWS2) correlated positively with Opportunities for development and training at work (IPWS3). Employees performing better and meeting
deadlines at work will earn the respect of their colleagues and enhance their opportunity for development and training within the organisation. A previous study found a consistent finding: The study involving SAPS members in Gauteng found effectiveness at work to improve the overall status of employees within the organisation (Molokoane, 2007).

The third objective of this study was to determine the impact of acculturation mainstream context variables and intervening variable on the psychological acculturation outcome variables of mineworkers in the North-West Province. The results of a multiple regression analyses with Physical ill health as the dependent variable and Perceived mainstream segregation demands, Perceived pressure to conform to management ideologies and practices, Perceived racism at work, Perceived discrimination at work and Relationship with mainstreamers at work as the independent variables indicated that Perceived mainstream segregation demands, Perceived racism at work and Relationship with mainstreamers at work are statistically significant predictors of Physical ill health. Researchers have noted that the oppressive nature of Apartheid in South Africa had pervasive negative consequences for mental health (Charasse-Pouélé & Fournier, 2006). Perceived discrimination has been found to impact negatively on immigrants’ physical health (Finch et al., 2000). Because discrimination experiences are often chronic and reflect a stable perception of a prejudiced environment, their negative impact on the well-being of immigrants has been found to be very long lasting (Allison, 1998). A number of studies have found relationships between self-reported experiences of racial discrimination and poor health outcomes (Din-Dzietham, Nembhard, Collins, & Davis, 2004; Karlsen & Nazroo, 2002; Krieger, 2000). In addition, some studies have further demonstrated associations between measures of institutional discrimination (such as segregation and perceptions of institutional discrimination) and poor health outcomes (Karlsen & Nazroo, 2002; Krieger, 2000).

The results of a multiple regression analysis with Psychological ill health as dependent variable and Perceived mainstream segregation demands, Perceived pressure to conform to management ideologies and practices, Perceived racism at work, Perceived discrimination at work and Relationship with mainstreamers at work as the independent variables indicated that none of the acculturation context variables were significant predictors of Psychological ill health. However, with the inclusion of Individual separation acculturation strategy as individual intervening variable only Individual separation acculturation strategy was a significant predictor of Psychological ill health. Contrary to this finding, a study of 570
adolescent ethnic repatriates to Israel, Germany and Finland found that “immigrants who preferred the separation option reported less stress symptoms than those who preferred the assimilation or integration options” (Jasinskaja-Lahti et al., 2003, p. 90).

The fourth objective of this study was to determine the impact of the acculturation context variables and individual intervening variable on the sociocultural acculturation outcome variables [employees’ perceived work success in terms of meeting deadlines (IPWS1), reputation and respect (IPWS2), and development and training opportunities (IPWS3)] of mineworkers in the North-West Province. The results of a multiple regression analysis with Meeting deadlines at work (IPWS1) as dependent variable indicated that Perceived pressure to conform to management ideologies and practices, Perceived racism at work, and Perceived discrimination at work are statistically significant predictors of Meeting deadlines at work (IPWS1). This finding is contrary to that of previous South African studies where these variables were not significant predictors of Meeting deadlines (Jackson, 2008).

The multiple regression analysis with Reputation and respect at work (IPWS2) as dependent variable indicate Perceived pressure to conform to management ideologies and practices, Perceived racism at work, and Perceived discrimination at work as statistically significant predictors of Reputation and respect at work. Perceived mainstream segregation demands, Perceived pressure to conform to management ideologies and practices, Racism at work and Relationship with mainstreamers at work was shown to be significant predictors of Opportunities for development and training at work (IPWS3) in a multiple regression analysis with Opportunities for development and training at work as dependent variable. The results partially confirm the significant predictive value of perceived racism with regards to developmental opportunities at work (Jackson, 2008).

LIMITATIONS

This study had several limitations. Firstly, a cross-sectional design was used. As a result, no causal inferences could be drawn. Therefore, the causal relationships between variables were interpreted rather than established. Another limitation is that the data was collected from mines falling within one mining group’s unique organisational characteristics; such an organisational climate may have affected the findings. This limitation has implications for the generalisation of these results to other sectors.
RECOMMENDATIONS

Employees who experience racism and demands from the mainstream group to segregate at the workplace are likely to suffer from physical ill health. Negative relationships with co-workers have also been found to have a negative impact on their physical ill health. Separation as an acculturation strategy acts as a buffer against the negative effects on their physical health but in turn has a detrimental effect on their psychological ill health. This can be due to the fact that separation is not a conscious decision but rather made because they feel they have no other choice. Diversity in the workforce is rapidly increasing. Employees now reflect a diversity of cultural perspectives, ethnic backgrounds, ages, genders, physical abilities, and levels of education. Multiculturalism is here to stay and a reality that cannot be ignored. Multiculturalism needs to be addressed in order to uphold the well-being and success of businesses. This idea not only promotes the coming together of different cultures, but also helps eradicate discrimination against different races, and people from all walks of life. Managers need to create an environment in which employees from different backgrounds learn to accept each other for what we are, and overlook any issues of racism, grudges, or hatred we may hold against each other. This will have a beneficial effect on employees’ physical and psychological ill health and promote the overall work success of employees and the success of the organisation. Understanding the different types of cultures and backgrounds people may have will not only helps to overcome ignorance, but also promotes tolerance, and respect for humanity. Managing and valuing diversity is a key component of effective people management, which can improve workplace productivity.

The most important recommendation for future research is the use of longitudinal designs. With longitudinal designs, the hypothesised causalities of the relationships can be further validated. It is also recommended that other mining groups be explored in terms of their acculturation processes, as each mine is unique and has different demographic variables in terms of race, gender, and language compositions. This would result in a better indication of acculturation strategy preferences amongst mineworkers in South Africa. It will also assist in developing a comprehensive conceptual model that can be applied to a variety of mines and mineworkers in terms of acculturation strategies.
REFERENCES


CHAPTER 3

RESEARCH ARTICLE 2
CO-ETHNIC CONTEXT VARIABLES AND A SEPARATION ACCULTURATION STRATEGY AS PREDICTORS OF ACCULTURATION OUTCOMES

A. BURCKARD

ABSTRACT

This article reports on the results of a project investigating the acculturation process within a co-ethnic context, in order to predict the ill health and perceived work success of mineworkers in a mine in the North-West Province. This proposition was explored by investigating the relationship between the acculturation context and individual intervening factors, mapped into variables, and acculturation outcomes (ill health and work success). A cross-sectional survey design was used to gather the data from a convenience sample of participants from the mine examined (n = 288), utilizing adapted and self-developed measuring instruments to investigate the ethno cultural domain, an individual separation acculturation strategy, psychological acculturation outcomes, and sociocultural acculturation outcomes. The findings demonstrate that statistical significant relations exist between investigated variables, that ill health and work success can be viewed from an acculturation perspective, and that the acculturation context and individual intervening factors, can be used to predict psychological and sociocultural acculturation outcomes. Limitations of the study and recommendation for future research and the organisation are provided.

OPSOMMING

Hierdie artikel doen verslag oor die bevindinge van ‘n projek wat die akkulturasie proses binne ‘n etniese konteks onderzoek ten einde die swak gesondheid en waargenome werk sukses van werkers in ‘n myn in die Noordwes Provincie te bepaal. Hierdie aanname is getoets deur die verhouding tussen die akkulturasie hoofstroom konteks, individuele afsondering en akkulturasie uitkomste (swak gesondheid en werk sukses) te bepaal. ‘n Dwarsdeursnee-opname ontwerp met ‘n beskikbaarheidsteekproef (n = 288) is gebruik. Aangepaste en self ontwikkelde meetinstrumente is gebruik om die etniese konteks, individuele afsondering strategie en psigologiese en sosiokulturele akkulturasie uitkomste te onderzoek. Daar is gevind dat statistiese beduidende verwantskappe tussen die konstrukte bestaan, en dat swak gesondheid en werk sukses vanuit ‘n akkulturasie konteks gesien kan word. Die akkulturasie konteks en individuele afsondering veranderlikes kan gebruik word om psigologiese en sosiokulturele uitkomste te voorspel. Beperkinge van die studie en aanbevelings vir toekomstige navorsing en die organisasie word aan die hand gedoen.

2 The research project formed part of a larger project on acculturation by the Industrial Psychology Department of the North-West University.
The migration of people from one country or region to another is not a new phenomenon, but dates back thousands of years (Griffiths & Nesdale, 2006). Migration occurs for a number of reasons. The discovery of diamonds and gold created a need for cheap labour, which in turn led to the influx of non-white African immigrants (Klotz, 2000; Griffiths & Nesdale, 2006). The election of the Nationalist Party in 1948 brought with it the implementation of an apartheid policy. Apartheid accelerated the structural entrenchment of racial segregation, discrimination, oppression and exploitation of an indigenous majority by an immigrant minority (Simms, 2000). One of the consequences of migration for immigrants is that they face the task of adapting to living in a new (host) culture (Nesdale, Rooney, & Smith, 1997).

Acculturation occurs when two different cultural groups of individuals encounter each other and subsequently one or both parties are influenced by it (Redfield, Linton & Herskovits, 1936, p. 149). An important component of this is the increased contact between immigrants and members of the host country. As members of the host and immigrant group come in contact with one another, attitudes are formed by both groups toward the other (Griffiths & Nesdale, 2006).

The original anthropological definition of acculturation clearly established that both groups in contact would become acculturated (Redfield et al., 1936). Concerns about the role that the dominant group played in the emergence of acculturation strategies led to concepts that reflect the views of the dominant society (Berry, 1974). Assimilation of non-dominant groups when sought by the dominant group is termed the Melting Pot. When separation is forced by the dominant group it is Segregation. Marginalisation when forced by the dominant group is Exclusion and finally for Integration, when cultural diversity is a feature of the society as a whole, including all ethnocultural groups it is called Multiculturalism (Berry, 2006). This framework is important for comparisons to be made between individuals and their cultural groups, and between individuals and the larger society within which they are acculturating. The ideologies and policies of the dominant group constitute important elements of ethnic relations research, while the preferences of non-dominant groups are a core feature in acculturation research (Berry, Kim, Power, Young, & Bujaki, 1989).

Most studies concerning psychological acculturation focus on the attitudes of both the host, and the co-ethnic (or minority) group towards acculturation. This attitude (from the co-ethnic point of view) includes the ideal of maintaining their own identity, while at the same time
trying to interact and relate to the host community (Berry, 2006). Another way of looking at psychological acculturation is by focusing on observed behavioural changes, or by focusing on acculturative stress, which includes the amount of stress experienced by the co-ethnic group when faced with convergence with the host society (Navas, Rojas, García, & Pumares, 2007). Many researchers, however, state that acculturation can also be observed at an individual level, where affected individuals show signs of changes in their normal way of life, for example changes in values, attitude, and identity (Graves, 1967; Sabatier & Berry, 1996; Van Oudenhoven, Ward, & Masgoret, 2006). Social psychologists are required to investigate which factors influence the negative attitudes against minority groups (in this case the co-ethnic group), as well as the consequences experienced by the co-ethnic group associated with such attitudes (Zagefka, Brown, Broquard, & Martin, 2007). This article focuses on co-ethnic separation demands at work, perceived pressures to conform to preferred acculturation strategy by own cultural group and relationship with co-ethnics at work.

Bochner et al. (1977) argued that for minority students, there are usually two friendship networks. A primary network, consisting mainly of co-ethnics whose function is the enactment and celebration of the culture of origin. The secondary network consists of host nationals and its main function is merely instrumental, which is to help in the academic and professional tasks of the minority student. Minority students, it has been demonstrated, rate relationships with co-ethnics as the most salient, without denying the fact that relationship with host nationals play a positive role in school success (Wiseman, 1997). The elements from the minority context that have been reported to bear on acculturation outcome are ethnic vitality and ethnic support (Adelman, 1988; Ait Ouarasse & Van de Vijver, 2004; Berno & Ward, 2000; Malewska-Peyre, 1982; McDermott, 1974, Ong, 2000). Ethnic group variables covered in this study are Separation demands at work, Pressure to conform to co-ethnic acculturation orientation and Relationships with co-ethnics at work.

The acculturation context: Co-ethnic domain

The minority context is important in acculturation processes and outcomes as it is within this context that the primary socialization and enculturation take place. McDermott (1974) found mother tongue and other basic culture-specific skills whose provision depends on the vitality of the ethnic minority to be very important within the larger co-ethnic context. Without these skills, the minority individual’s relationships with members of their own community may be seriously affected and their acculturation options restricted. A minority individual with little
or no ties with his/her own ethnic group, and whose ethnic group is low on the ethnic hierarchy is particularly prone to marginalization. Stress and coping research highlights the effects of social support in alleviating or coming to terms with the difficulties associated with minority status. Minority networks are often mentioned as an important source of support (e.g., Bochner, McLeod, & Lin, 1977; Ong, 2000). Being psychologically close to each other and undergoing more or less the same difficulties, members of the same minority are very likely to be a valuable source of information and support for one another (Adelman, 1988). Ethnic gatherings have the potential to provide a source for help but they also tend to dissociate minority members from engagement in the mainstream context and impede integration (e.g., Richardson, 1974). Research has often shown that integration is the strategy most favoured by minority members (e.g., Pham & Harris, 2001; Zagefka & Brown, 2002). However, they may shift to separation if the mainstream reacts negatively to their integration (Ward, 2001).

**Co-ethnic separation demands at work**

Multicultural societies will function more smoothly when groups treat each other more equally (Schalk-Soekar, Van de Vijver, & Hoogsteder, 2004). According to social Dominance Theory (Sidanius & Pratto, 1999), however, people have a basic predisposition to form and maintain hierarchical and group-based systems of social groups. The social power, prestige, and privilege that an individual holds are a result of their membership in a particular, socially constructed group (such as race and religion). A study by Brewer and Campbell (1976) of 30 different groups in East Africa found that this group-based social hierarchy is influenced by mutual similarities, social distance, and relative intergroup status. Their study found that individuals felt closest to groups that were physically closer, better known, and culturally more like their own group. From the Interactive Acculturation model of Bourhis (Bourhis, Moïse, Pereault & Senécal, 1997) it can be expected that the ethnic hierarchy is associated with the experiences of immigrants in the larger society. Members of stigmatised groups are often aware that they are discriminated against or that other groups have negative feelings toward them (Schalk-Soekar et al., 2004). So, ethnic members with a low position in the ethnic hierarchy (to which more social distance is felt by the host) can have more negative feelings toward the larger society than ethnic groups with a higher position (to which less social distance is felt by the hosts). Several studies have found that immigrants normally indicate integration as their most preferred strategy and marginalisation as the least preferred strategy (Berry, 1997). Results from a study of the effect of perceived
discrimination, acculturation attitudes and stress among young ethnic repatriates in Finland, Israel and Germany found that all immigrants who showed more separation attitudes perceived more discrimination than the immigrants who preferred the integration or assimilation options, and those who preferred integration perceived more discrimination than those who preferred assimilation. Separatism is endorsed by members of minority groups who wish to maintain their culture of origin and prefer contact with members of their own group, while dissociating themselves from the cultural practices of the mainstream host majority (Barrette, Bourhis, Personnaz, & Personnaz, 2004).

**Perceived pressures to conform to preferred acculturation strategy by own cultural group**

Bochner’s Functional Model of Friendship Networks reflects a culture-learning perspective on intercultural contact (Bochner, McLeod, & Lin, 1977). This model implies that foreigners usually have one of three social networks. The first network consists of the bond with co-nationals; its function is to rehearse, express, and affirm culture-of-origin values, which plays a vital role in co-ethnics choice of acculturation strategy. The second is the link with host nationals and the third network consists of friendship with other non-compatriot foreign students. On the other hand, functionalist approaches to intergroup relations such as image theory (Alexander, Brewer, & Hermann, 1999) and emotions theory (Mackie, Devos, & Smith, 2000) argue that the association between group identification and outgroup attitudes depend on the kind of functional interdependence between the in-group and particular outgroups. Thus, when outgroups are negatively interdependent or competitive with the in-group (“enemies” or “rivals”), then stronger in-group identification will be associated with more negative outgroup attitudes. On the other hand, when outgroups are positively interdependent or cooperative with the in-group (“allies” or “friendly”), then stronger in-group identification will be associated with more positive outgroup attitudes. According to Duckitt, Callaghan and Wagner (2004) these functionalist perspectives would explain the reciprocal ethnocentrism (in-group attitudes negatively related to outgroup attitudes) between Afrikaner and African in terms of the long history of conflict between these two groups over Apartheid (Thompson, 1995). Ongoing tensions over social, cultural, and economic dominance in South Africa (Johnson, 1994), make it likely that members of these groups, and particularly highly identified members, would see the other group as antagonistic or an enemy (Duckitt et al., 2004). A host society that does not permit cultural diversity is not likely to favour integration. Such societies tend to favour minority assimilation to integration.
Relationship with co-ethnics at work

Oppdal, Roysamb and Sam (2004), cited that interpersonal relationships that make available social support in terms of information, help, and expression of caring promote health by imparting feelings that one is being cared for, beliefs that one is esteemed, and a sense of belonging to a reciprocal network. In acculturating youth, supportive communications within own ethnic and majority network may be of special importance to the development of culture specific competencies (Oppdal et al., 2004). On the other hand, the decrease in family or friend support, associated with reduction in host and ethnic competence, respectively, would yield strong negative effect on mental health. Support is also included as an alleviating factor in models of acculturation (Berry, 1990). The attitudes that individuals within a community have towards another group can influence the well-being of the other group. Positive attitudes towards an individual’s own community and another community will usually result in positive psychological adjustment (Bhadha, Farver, Lieber, Narang, & Xu, 2007). Ethnic groups have different attitudes toward cultural maintenance and toward having contact with the host society. Individuals are assumed to strive to have a positive identity that is represented by the group to which they belong (Taylor & Moghaddam, 1984). Separatists want to maintain their culture of origin, while rejecting the host majority culture. Should negative attitudes have a negative effect on own desire for culture maintenance and own desire for contact, it would have a negative effect on own acculturation preference for integration and result in the choice to separate (Zagefka, Brown, Broquard, & Martin, 2007).

Intervening variable: Individual separation acculturation strategy

Acculturation strategies have been derived from two basic issues facing all acculturating people: attitudes and behaviours of immigrants towards their culture of origin (i.e., cultural maintenance), on the one hand, and towards the host society (host relationship) on the other hand. When these two dimensions are considered as orthogonal, four strategies (i.e. assimilation, integration, separation and marginalization) can be identified (Berry, Kim, Minde, & Mok, 1987). From the viewpoint of the non-dominant group, assimilation is defined when individuals do not wish to maintain their cultural identity and seek daily interaction with other cultures. Separation on the other hand is when individuals place a value on holding on to their original culture, and at the same time wish to avoid interaction with other cultures (Berry, 2006). Studies done in the Netherlands have however found separation to be preferred above assimilation (Arends-Toth & Van de Vijver, 2002; Verkuyten & Thijs, 2002). Where people fail to maintain their original cultural traditions as well as fail to adopt
the traditions and cultures of the larger host society, it means that they have opted for the marginalisation strategy. In situations where people maintain the culture traditions of their society of origin, as well as those of the larger host society, the strategy is referred to as integration. Several studies have found integration to be the most preferred strategy and marginalisation the least (Berry, 1997). Taylor and Moghaddam (1984) made the assumption that disadvantaged groups will adopt an assimilation strategy attempting to be similar to the members of the dominant (positively regarded) group. Those with separatist attitudes are more likely to resist and even retaliate against host community persecutions (Bourhis, Moïse, Pereault, & Senécal, 1997). Segregated individuals were found to highly value their cultural characteristics and consider it important to maintain relationships only with their ethnic group (Berry, 1990).

Psychological and sociocultural outcomes
Acculturation generally refers to psychological changes that occur in individuals of a cultural minority who get into continuous first-hand contact with representatives of a cultural majority (Berry & Sam, 1997). Psychological and sociocultural adaptation has been conceptualised as a major dimension of intercultural adjustment (Searle & Ward, 1990; Ward, Bochner & Furnham, 2001; Ward & Kennedy, 1999). While psychological adaptation refers mainly to affective well-being and mental health in general, sociocultural adaptation consists predominantly of behavioural and cognitive components of cultural learning for performing effectively in a new milieu (Ward, et al., 2001). Factors affecting psychological and sociocultural adaptation are the quality and quantity of relations with hosts. Contact with mainstream members provides for cultural learning and culture-specific skills acquisition (Zlobina, Basabe, Paez, & Furnham, 2006). Immigration and acculturation are stressful experiences that may increase the risk of ill health (Berry, Kim, Minde, & Mok, 1987). Psychological distress can be a natural consequence of an individual’s real or self perceived inability to cope with specific demands (Lazarus & Folkman, 1984). Health is defined as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity (Bennett, & Murphy, 1997). Minority group members low in acculturation may be more likely to be distressed since they have limited access to resources for assistance in the dominant culture (Gallagher-Thompson, Tazeau, Basilio, Hansen, Polich, Menendez, & Villa, 1997). Minority group members who retain their culture when faced with a new culture may experience more mental health problems (Griffin, 1983; Kaplan & Marks, 1990; Scapoznik, Kurtines, & Fernandez, 1980). A study by Rodriguez, Wyers,
Morris, and Cordoza (2000) found that ethnic minority and immigrating students faced additional, unique stress because of their minority status. Previous research came to the assumption that relocation and acculturation disrupt social ties and the supportive functions of own ethnic networks (Contreras, Lopez, Rivera-Mosquera, Raymond-Smith, & Rothstein, 1999).

The sociocultural outcomes have to do with the successful participation in the host milieu. The question that normally arises in this arena is: does the immigrant do well in the new society? Ward and Kennedy (1999), state that socio-cultural adaptation is mainly a function of contact variables such as education in the host country and length of stay of migrants. Research findings suggest that ethnic group variables were better predictors of school success and mainstream variables were better predictors of work success (Ait Ouarasse & Van de Vijver, 2004). The perceived tolerance of the mainstream society towards the ethnic group was a significant predictor of work success. A study on acculturation in the SAPS found multicultural practices to improve perceived efficiency at work and an approach-coping style to enhance perceived effectiveness and status at work (Molokoane, 2007).

**RESEARCH OBJECTIVES**

The primary objective of this research article is to analyse the acculturation process and to determine the impact of acculturation co-ethnic context variables and individual intervening variable on acculturation outcomes of mineworkers in the North-West Province. The secondary objectives of this project were:

- to determine the psychometric properties of the measuring instruments used in this research article;
- to determine the relationship between co-ethnic negative context variables (perceived pressures to conform to preferred acculturation strategy by own cultural group, ethnic separation demands at work and relationship with co-ethnics at work), individual intervening variable (individual separation acculturation strategy), and acculturation outcomes variables [psychological in terms of physical and psychological ill health; and sociocultural in terms of employees’ perceived work success (meeting deadlines, reputation and respect, development and training opportunities)];
to determine the impact of co-ethnic negative context variables (perceived pressures to conform to preferred acculturation strategy by own cultural group, ethnic separation demands at work and relationship with co-ethnics at work) and individual intervening variable (individual separation acculturation strategy) on the psychological acculturation outcome variables (employees’ physical and psychological ill health); and

- to determine the impact of co-ethnic negative context variables (perceived pressures to conform to preferred acculturation strategy by own cultural group, ethnic separation demands at work and relationship with co-ethnics at work) and individual intervening variable (individual separation acculturation strategy) on the sociocultural acculturation outcome variables (employees’ perceived work success in terms of meeting deadlines, reputation and respect, and development and training opportunities).

**RESEARCH METHOD**

**Research design**

A cross-sectional survey design was used to achieve the objectives of this research. This design is suitable for the development and validation of questionnaires (Shaughnessy & Zechmeister, 1997). This design allows for the description of the population at a specific point in time, whereas the survey technique of data collection gathers information from the target population by means of questionnaires (Burns & Grove, 1993).

**Research procedure**

The research project, which formed part of a larger project on acculturation by the Industrial Psychology Department of the North-West University, was initiated during 2005 after discussions with the Human Resource Department of a major gold mine in the North-West Province of South Africa. The project was planned and questionnaires were duplicated and administered with funding that was obtained from the National Research Foundation, after permission was granted by mine management.

English questionnaires that were used in previous studies to measure acculturation context, as well as personal, psychological, and sociocultural acculturation outcomes were administered. The data from the 288 completed questionnaires were captured on an Excel spreadsheet, controlled for errors, and statistically analysed with the SPSS-programme (SPSS Inc., 2003).
Participants
The participants could be defined as an availability sample of employees in a mine in the North-West Province. A total population of 500 employees were targeted. A response rate of 59% was achieved, of which 288 responses (98%) could be utilised. Descriptive information of the sample appears in Table 1.

Table 1
Characteristics of the Participants

<table>
<thead>
<tr>
<th>Item</th>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>85,10</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>14,60</td>
</tr>
<tr>
<td>Marital status</td>
<td>Single/widow/widower</td>
<td>21,20</td>
</tr>
<tr>
<td></td>
<td>Engaged/in a relationship</td>
<td>04,50</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>46,20</td>
</tr>
<tr>
<td></td>
<td>Divorced</td>
<td>03,10</td>
</tr>
<tr>
<td></td>
<td>Separated</td>
<td>00,70</td>
</tr>
<tr>
<td>Race</td>
<td>Black</td>
<td>59,00</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>24,70</td>
</tr>
<tr>
<td></td>
<td>Indian</td>
<td>12,80</td>
</tr>
<tr>
<td></td>
<td>Coloured</td>
<td>02,40</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>00,30</td>
</tr>
<tr>
<td>Language</td>
<td>Afrikaans</td>
<td>44,10</td>
</tr>
<tr>
<td></td>
<td>English</td>
<td>04,50</td>
</tr>
<tr>
<td></td>
<td>SePedi</td>
<td>00,70</td>
</tr>
<tr>
<td></td>
<td>SeSotho</td>
<td>17,70</td>
</tr>
<tr>
<td></td>
<td>SeTswana</td>
<td>11,80</td>
</tr>
<tr>
<td></td>
<td>SiSwati</td>
<td>03,50</td>
</tr>
<tr>
<td></td>
<td>Tshivenda</td>
<td>00,30</td>
</tr>
<tr>
<td></td>
<td>IsiZulu</td>
<td>03,50</td>
</tr>
<tr>
<td></td>
<td>IsiXhosa</td>
<td>10,80</td>
</tr>
<tr>
<td></td>
<td>XiTsonga</td>
<td>01,70</td>
</tr>
</tbody>
</table>

Table 1 shows that nearly half the sample was made up of married (46,20%), Afrikaans-speaking (44,10%) employees. The sample is predominantly made up of males (85,10%), and most employees are black (59%).
Measuring instruments

Instruments were adapted (Ait Ouarasse & Van de Vijver, 2004) and others developed by the researchers to measure the following: Acculturation context (ethno-cultural context – the society of origin) and psychological (psychological and physical ill health) and sociocultural (perceived work success in terms of meeting deadlines, reputation and respect, and development and training opportunities) acculturation outcomes. All scales employed a five-point Likert format, with response options ranging from ‘strongly disagree (1)’ to ‘strongly agree (5)’.

Co-ethnic domain instruments

- **Perceived co-ethnic separation demands** (Ait Ouarasse & Van de Vijver, 2004) is a four-item measure of the extent to which participants think their own community wants them to keep away from the majority culture. Separation is a strategy that is aimed at the prevention of mainstream influence on minority ways. All of the items are negatively phrased. The scale contains items like “My cultural group members warns its members against the dangers of other cultural groups” and “My cultural group members do not want me to make contact with members from other cultural groups”. Cronbach alpha coefficients will be determined.

- **Perceived pressures to conform to preferred acculturation strategy by own cultural group** (developed for the research study by the researchers involved) is a six-item measure which was used to measure the extent to which participants feel that they have to conform to preferred acculturation strategies as supported by their own cultural group. The scale contains items like “I think that members of my own cultural group expect from us to stick to our cultural practices” and “Sticking to the ideas and practices of the elderly are very important in our culture”. A Cronbach alpha coefficient of 0.78 was obtained in a study of the acculturation process in hostels of a higher education institution (Biela, 2006).

- **Relationship with co-ethnic members at work** (Ait Ouarasse & Van de Vijver, 2004) was used to measure how well and easily participants get along with members of the ethnic minority (majority) community, and how well and easily they cope in situations involving South African community members. In the study from which this scale was derived, a
Cronbach alpha coefficient of 0,79 was obtained in a study of the acculturation context of Moroccans in the Netherlands (Ait Ouarasse & Van de Vijver, 2004). Molokoane (2007) obtained a Cronbach alpha coefficient of 0,74 in his study of acculturation outcomes amongst members of the South African police in Gauteng.

**Individual intervening variable**
- *Individual separation acculturation strategy* (developed for the research study by the researchers involved) is a three-item measure of the participants’ perception of his or her preference in avoiding contact with members from other cultural groups in the organisation. Separation is an acculturation orientation aimed at the prevention of mainstream influence on ethnic culture. The scale contains items such as “I prefer social contact with only members of my own ethnic group” and “I actually avoid contact with members from other cultures”. A Cronbach alpha coefficient of 0,71 was obtained in a study on the acculturation process in hostels of a higher education institution (Biela, 2006).

**Psychological acculturation outcomes**
- *Acculturative stress: Physical and Psychological ill health* were measured with the Physical Symptoms Inventory (PSI) from Spector and Jex (1998). The PSI is a self-report measure in which respondents are asked to indicate whether they had suffered any of the mentioned symptoms in the past three months. Some examples of symptoms included on the scale are headache, backache, fatigue, eyestrain, and trouble sleeping. Cronbach alpha coefficients of 0,95 for physical ill health and 0,91 for psychological ill health were obtained for two factors extracted by exploratory and confirmatory factor analysis in a study of the acculturation outcomes of police members in the Gauteng Province of South Africa (Molokoane, 2007).

**Sociocultural acculturation outcomes**
- *Work success* (Ait Ouarasse & Van de Vijver, 2004). This is a fourteen-item measure of participants’ success at work. All of the items are positively phrased. It contains items pertaining to task completion, punctuality, status, and recognition at work, relationships with supervisors, and relationships with fellow workers. The scale contains items like “I am always on time for my work”, “I do my work exactly as instructed by my supervisor” and “I have a good reputation among my co-workers”. A Cronbach’s alpha
coefficient of 0,81 was obtained for one factor extracted by exploratory and confirmatory factor analysis in a study of the acculturation context of Moroccans in the Netherlands, upon which this scale is based (Ait Ouarasse & Van de Vijver, 2004). In a study on the acculturation outcomes of members of the South African police in Gauteng, two factors were extracted by exploratory and confirmatory factor analysis obtaining Cronbach alpha coefficients of 0,83 and 0,84 respectively (Molokoane, 2007).

A Biographical questionnaire is included in order to be able to describe the population. It includes basic biographical questions like age, sex, race, etc.

Statistical analysis
The statistical analysis was carried out with assistance of the SPSS-programme (SPSS Inc., 2003). Descriptive statistics (namely the means, standard deviations, skewness, and kurtosis) were used to analyse the data. Cronbach alpha coefficients were used to determine the internal consistency, homogeneity, and unidimensionality of the measuring instruments (Clark & Watson, 1995). The alpha coefficient contains important information regarding the proportion of variance of the items of a scale in terms of the total variance explained by that particular scale.

Pearson product–moment correlation coefficients were used to specify the relationship between the variables. Effect sizes (Steyn, 1999) were used to decide on the practical significance of the findings. A cut-off point of 0,30 (medium effect; Cohen, 1988) was set for the practical significance of correlation coefficients. In terms of statistical significance, the value was set at a 95% confidence interval level ($p\leq0,05$). Regression analysis was used to model relationships between variables and determine the magnitude of those relationships, upon which predictions can be made (Field, 2005).

RESULTS

The results section has two parts. The first part presents the descriptive measures and psychometric characteristics of the measures, while the relations of the variables are examined in the second part.
Descriptive and psychometric characteristics

The results obtained from exploratory factor analysis, using a direct oblimin rotation to confirm the factor structure and considering the scree plot, the rotated component matrix, and descriptive statistics indicates that most of the sub-scales used in this research project are unifactorial, explaining 47.78% of the variance in Perceived pressures to conform to preferred acculturation strategy by own cultural group, 39.50% of the variance in Ethnic separation demands at work, 26.60% of the variance in Relationship with co-ethnics at work, and 58.19% of the variance in Individual separation acculturation strategy. A factor was extracted from an exploratory and confirmatory factor analysis conducted (as indicated by the scree plot and the rotated component matrix) on the nine-item sub-scale measuring Psychological ill health explaining 49.22% of the variance. One factor was extracted with an exploratory and confirmatory factor analysis (as indicated by the scree plot and the rotated component matrix) from the twenty-item sub-scale measuring Physical health, explaining 46.56% of the variance of Physical ill health.

Three factors were extracted from the fourteen-item Perceived Work Success Scale, which explains 57.85% of the variance. The factors are labelled Meeting deadlines at work, Perceived reputation and respect at work, and Opportunities for development and training at work. The Meeting deadlines at work factor deals with aspects of punctuality, meeting deadlines, following instructions, and successfully completing work (well enough to be complimented on it by supervisors). The Perceived reputation and respect at work factor contained items regarding a good reputation among co-workers for the work, effective handling of problems, success with the handling of problems, respect shown by co-workers for work done and being proud about work. The Opportunities for development and training at work factor is comprised of items referring to the experience of personal and professional growth and development in the organisation, as well as productivity. The descriptive statistics and internal consistency of the measuring instruments used in this research project are reported in Table 2 on the next page.
Table 2

Descriptive Statistics of the Scales used in this Research Study (n = 288)

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Perceived pressures to conform to preferred acculturation strategy by own cultural group</td>
<td>3.58</td>
<td>0.83</td>
<td>-0.49</td>
<td>-0.43</td>
<td>0.79</td>
</tr>
<tr>
<td>2. Ethnic separation demands at work</td>
<td>2.90</td>
<td>0.69</td>
<td>0.36</td>
<td>0.50</td>
<td>0.72</td>
</tr>
<tr>
<td>3. Relationship with co-ethnics at work</td>
<td>3.29</td>
<td>0.45</td>
<td>0.11</td>
<td>0.77</td>
<td>0.60</td>
</tr>
<tr>
<td>4. Physical ill health</td>
<td>1.98</td>
<td>0.80</td>
<td>1.13*</td>
<td>0.91</td>
<td>0.94</td>
</tr>
<tr>
<td>5. Psychological ill health</td>
<td>1.97</td>
<td>0.85</td>
<td>0.92</td>
<td>0.06</td>
<td>0.87</td>
</tr>
<tr>
<td>6. Individual separation acculturation strategy</td>
<td>2.73</td>
<td>0.84</td>
<td>0.15</td>
<td>-0.31</td>
<td>0.64</td>
</tr>
<tr>
<td>7. Meeting deadlines at work (IPWS1)</td>
<td>3.89</td>
<td>0.81</td>
<td>-1.11*</td>
<td>1.89*</td>
<td>0.77</td>
</tr>
<tr>
<td>8. Perceived reputation and respect at work (IPWS2)</td>
<td>3.87</td>
<td>0.68</td>
<td>-0.86</td>
<td>0.85</td>
<td>0.82</td>
</tr>
<tr>
<td>9. Opportunities for development and training at work (IPWS3)</td>
<td>3.57</td>
<td>0.85</td>
<td>-0.70</td>
<td>0.33</td>
<td>0.74</td>
</tr>
</tbody>
</table>

* High skewness and kurtosis

Table 2 shows that acceptable Cronbach alpha coefficients (α ≥ 0.70) were obtained for most of the sub scales used. Relationship with co-ethnics at work and Individual separation acculturation strategy scored below the accepted α ≥ 0.70 guideline. Most of the scores of the items were relatively normally distributed with low skewness and kurtosis. However, Physical ill health and Meeting deadlines at work (IPWS1) show high skewness and kurtosis.

Relationships between the variables

On the next page, the product moment correlations coefficients between the different constructs used in this research study are provided in Table 3.
Table 3

*Product–moment Correlation Coefficients of the Acculturation Context, Individual, and Outcomes Variables (n = 288)*

<table>
<thead>
<tr>
<th>Scale</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Perceived pressures to conform to preferred acculturation strategy of own cultural group</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2. Ethnic separation demands at work</td>
<td>0.25*</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3. Relationship with co-ethnics at work</td>
<td>0.27* 0.33**</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4. Physical ill health</td>
<td>0.13   0.28* 0.28*</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5. Psychological ill health</td>
<td>0.18* 0.32** 0.28* 0.74***</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6. Individual separation acculturation strategy</td>
<td>0.35** 0.44** 0.35** 0.18* 0.35**</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7. Meeting deadlines at work (IPWS1)</td>
<td>0.12   -0.16 0.24* -0.11 -0.06 -0.06</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>8. Perceived reputation and respect at work (IPWS2)</td>
<td>0.14   -0.10 0.32** -0.15 -0.21* -0.03 0.52***</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>9. Opportunities for development and training at work (IPWS3)</td>
<td>0.06   0.13 0.07 -0.05 -0.07 0.13 0.19* 0.49**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p ≤ 0.05 is statistically significant;
*r > 0.30 is practically significant (medium effect);
**r > 0.50 is practically significant (large effect).*
Table 3 shows statistically significant positive correlations between *Perceived pressures to conform to preferred acculturation strategy by own cultural group* and *Ethnic separation demands at work, Relationship with co-ethnics at work and Psychological ill health*. *Perceived pressures to conform to preferred acculturation strategy by own cultural group* shows a statistically significant positive correlation (practically significant, medium effect) with *Individual separation acculturation strategy*. *Ethnic separation demands at work* shows a statistically significant positive correlation with *Physical ill health*. *Ethnic separation demands at work* shows statistically significant positive correlations (practically significant, medium effect) with *Relationship with co-ethnics at work, Psychological ill health and Individual separation acculturation strategy*. *Relationship with co-ethnics at work* shows a statistically significant positive correlation with *Physical ill health, Psychological ill health and Individual perceived work success – Meeting deadlines at work (IPWS1)*. *Relationship with co-ethnics at work* shows statistically significant positive correlations (practically significant, medium effect) with *Individual separation acculturation strategy and Individual perceived work success – Reputation and respect at work (IPWS2)*.

*Physical ill health* shows a statistically significant positive correlation with *Individual separation acculturation strategy*. *Physical ill health* shows a statistically significant positive correlation (practically significant, large effect) with *Psychological ill health*. *Psychological ill health* shows a statistically significant negative correlation with *Individual perceived work success – Reputation and respect at work (IPWS2)*. *Psychological ill health* shows a statistically significant positive correlation (practically significant, medium effect) with *Individual perceived work success – Meeting deadlines at work (IPWS1)* shows a statistically significant positive correlation with *Individual perceived work success – Opportunities for development and training at work (IPWS3)* and statistically significant positive correlation (practically significant, large effect) with *Individual perceived work success – Reputation and respect at work (IPWS2)*. *Individual perceived work success – Reputation and respect at work (IPWS2)* shows a statistically significant positive correlation (practically significant, medium effect) with *Individual perceived work success - Opportunities for development and training at work (IPWS3)*.
The multiple regression analysis with Physical and Psychological ill health as dependent variables and the acculturation co-ethnic context variables and individual intervening variable as predictors or independent variables is shown in Table 4.

Table 4

*Beta Weights of Stepwise Multiple Regression Analysis with Physical Ill Health and Psychological Ill Health as Dependent Variables*

<table>
<thead>
<tr>
<th>Psychological adjustment</th>
<th>Ill health</th>
<th>Physical ill health</th>
<th>Psychological ill health</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Context</td>
<td>All</td>
<td>Context</td>
</tr>
<tr>
<td><strong>First step (acculturation co-ethnic context variables)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>1.1 Ethnic separation demands at work</strong></td>
<td>0.24*</td>
<td>0.22*</td>
<td>0.28*</td>
</tr>
<tr>
<td><strong>1.2 Perceived pressure to conform to preferred acculturation strategy by own cultural group</strong></td>
<td>0.06</td>
<td>0.04</td>
<td>0.12</td>
</tr>
<tr>
<td><strong>1.3 Relationship with co-ethnics at work</strong></td>
<td>0.01</td>
<td>0.01</td>
<td>-0.08</td>
</tr>
<tr>
<td><strong>Second step (acculturation co-ethnic context and individual intervening variable—All)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2.1 Individual separation acculturation strategy</strong></td>
<td>0.08</td>
<td></td>
<td>0.19*</td>
</tr>
<tr>
<td><strong>ΔR²</strong></td>
<td>0.00*</td>
<td></td>
<td>0.03*</td>
</tr>
<tr>
<td><strong>R²</strong></td>
<td>0.07*</td>
<td>0.07*</td>
<td>0.11*</td>
</tr>
</tbody>
</table>

* p ≤0.05 indicates statistical significance

Inspection of table 4 shows that acculturation co-ethnic context variables explain 7% of the variance of Physical ill health with Ethnic separation demands at work (β = 0.22; t = 0.00) the only statistically significant predictor of Physical ill health. No meaningful increase in the variance of Physical ill health was realised after the inclusion of Individual separation acculturation strategy, leaving the co-ethnic context and individual variables explaining 7% of the variance of this psychological acculturation outcome.

Eleven percent of the variance of Psychological ill health is predicted by the independent variables in the model (F = 5.93; p =≤0.00), with Ethnic separation demands at work (β = 0.22; t = 3.65) the only statistically significant predictor of Psychological ill health. With the inclusion of Individual separation acculturation strategy, a further 3% (totalling 14%) of the variance of Psychological ill health is explained with Ethnic separation demands at work and Individual separation acculturation strategy significant predictors of Psychological ill health.
Table 5 gives the results of a multiple regression analysis with Individual perceived work success as dependent variable and the acculturation co-ethnic context variables and individual intervening variable as predictors or independent variables.

Table 5
Beta Weights of Stepwise Multiple Regression Analysis with Individual Perceived Work Success [Meeting Deadlines (IPWS1), Perceived Reputation/respect (IPWS2) and Development and Training Opportunities (IPWS3)] as Dependent Variables

<table>
<thead>
<tr>
<th>Sociocultural adjustment</th>
<th>Meeting deadlines (IPWS1)</th>
<th>Perceived work success</th>
<th>Opportunities for development and training (IPWS3)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Context</td>
<td>All</td>
<td>Context</td>
</tr>
<tr>
<td>First step (acculturation co-ethnic context variables)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 Ethnic separation demands at work</td>
<td>-0,17 *</td>
<td>-0,16</td>
<td>-0,11</td>
</tr>
<tr>
<td>1.2 Perceived pressure to conform to your own</td>
<td>0,11</td>
<td>0,12</td>
<td>0,09</td>
</tr>
<tr>
<td>1.3 Relationship with co-ethnics at work</td>
<td>0,20 *</td>
<td>0,20 *</td>
<td>0,29 *</td>
</tr>
<tr>
<td>Second step (acculturation co-ethnic context and individual intervening variables—All)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 Individual separation acculturation strategy</td>
<td>-0,04</td>
<td>-0,04</td>
<td></td>
</tr>
<tr>
<td>$\Delta R^2$</td>
<td>0,01 *</td>
<td></td>
<td>0,00 *</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0,08 *</td>
<td>0,09 *</td>
<td>0,11 *</td>
</tr>
</tbody>
</table>

*p<0.05 indicates statistical significance

Inspection of Table 5 revealed that the acculturation co-ethnic context variables explain 8% of the variance of Meeting deadlines at work (IPWS1), with Ethnic separation demands at work and Relationship with co-ethnics at work ($\beta = 0,20; \ t = 3,65$) statistically significant predictors of Meeting deadlines at work (IPWS1). With the inclusion of Individual separation acculturation strategy, a further 1% (totalling 9%) of the variance of Meeting deadlines at work (IPWS1) is explained with only Relationship with co-ethnics at work a statistically significant predictor of Meeting deadlines at work (IPWS1).
The results indicated that 11% of the variance in Perceived reputation and respect at work (IPWS2) is explained with the model including acculturation co-ethnic context variables. No meaningful increase in the variance of the Perceived reputation and respect at work (IPWS2) was realised after the inclusion of Individual separation acculturation strategy, leaving the co-ethnic context and individual variables explaining 11% of the variance in this sociocultural acculturation outcome. Relationship with co-ethnics at work ($\beta = 0.29; t = 0.00$) is the only statistically significant predictor of Perceived reputation and respect at work (IPWS2).

The results explained 2% of the variance in Opportunities for development and training at work (IPWS3). No meaningful increase in the variance of the Opportunities for Development and training at work (IPWS3) was realised after the inclusion of Individual separation acculturation strategy, leaving the co-ethnic context and individual variables explaining 2% of the variance in this sociocultural acculturation outcome. However, no predictors were statistically significant.

**DISCUSSION**

The primary objective of this research study was to determine the feasibility of the acculturation approach and to evaluate the impact of acculturation context and individual intervening variable on the acculturation outcomes of mineworkers in a mine in the North-West Province. The first secondary objective of this study was to determine the psychometric properties of the instruments used in this study. The results from factor analysis, using a direct oblimin rotation to confirm the factor structure and considering the scree plot, the rotated component matrix, and descriptive statistics indicate that most of the sub-scales used in this research project are unifactorial.

As far as the measures for the acculturation outcomes are concerned, one factor was extracted with a confirmatory factor analysis from the twenty-one-item sub-scale measuring Physical ill health and one factor was extracted from a confirmatory factor analysis conducted on the nine-item sub-scale measuring Psychological ill health. Three factors were extracted from the fourteen-item Individual perceived work success scale. The factors are labelled Meeting deadlines at work, Perceived reputation and respect, and Opportunities for development and training at work.
Cronbach alpha coefficients varying from 0.60 to 0.94 were obtained. These alpha coefficients compare well with guideline of 0.70 demonstrating that the dimensions (internal consistency of the dimensions) explained a large portion of the variance (Nunnally & Bernstein, 1994), except for Relationship with co-ethnics at work and Individual separation acculturation strategy. Most of the measuring instruments’ scales have relatively normal distributions, with low skewness and kurtosis.

The second objective of this study was to determine the relationship between the acculturation context, individual intervening variable, and outcomes variables of mineworkers in the North-West Province. The results indicated that Perceived pressures to conform to preferred acculturation strategy by own cultural group correlated positively with Individual separation acculturation strategy. This finding indicates that perceived pressure from one’s own cultural group to conform to their preferred acculturation strategy will enhance individuals’ choice to separate as acculturation strategy in order for them to fit in with their cultural group. Ethnic separation demands at work correlated positively with Relationship with co-ethnics at work, Psychological ill health and Individual separation acculturation strategy. The implication of this finding is that when individuals adhere to pressure from their co-ethnic group to separate within the organisation it will improve their relations with members of the co-ethnic group. This pressure however will have a detrimental effect on their psychological health because they might feel that they have no choice in the matter. Contrary to this finding, a study among immigrants in Finland, Israel and Germany found immigrants who preferred the separation option to report less stress symptoms (Jasinskaja-Lahti, Liebkind, Horenczyk, & Schmitz, 2003). Relationship with co-ethnics at work correlated positively with Individual separation acculturation strategy and Individual perceived work success: Reputation and respect at work. When individuals choose to separate it will positively impact their relations with co-ethnic members at work and increase their status within the organisation. In support of this, several studies have found that group identification was associated with less favourable attitudes to outgroups when relations between the groups are characterised by perceived threat. This is consistent with research showing that groups that experience discrimination and prejudice – and this has clearly been the case for Africans and Indians in South Africa – can frequently show higher levels of group identification and cohesion (Twenge & Crocker, 2002). A study on immigrant youth found adolescents who showed a clear orientation toward their own ethnic group, with high ethnic identity and ethnic peer contacts (Berry, Phinney, Sam, & Vedder, 2006).
Psychological ill health correlated negatively with Perceived reputation and respect at work and positively with Individual separation acculturation strategy. It can therefore be deduced that employees who are not respected and have a negative reputation at work will experience poor psychological health and show a preference for separation as acculturation strategy. Meeting deadlines at work (IPWS1) correlated positively with Reputation and respect at work (IPWS2). Reputation and respect at work (IPWS2) correlated positively with Opportunities for development and training at work (IPWS3). Employees performing better and meeting deadlines at work will earn the respect of their colleagues and enhance their opportunity for development and training within the organisation. This finding is contrary to that of previous South African studies where a study by Jackson (2008) found none of the variables to be significant predictors of Meeting deadlines.

The third objective of this project was to determine the impact of the acculturation co-ethnic context and individual intervening variable on the psychological acculturation outcomes variables (employees’ physical and psychological ill health) of mineworkers in the North-West Province. The results of a multiple regression analysis with Physical ill health as the dependent variable and Ethnic separation demands at work, Perceived pressure to conform to preferred acculturation strategy by own cultural group and Relationship with co-ethnics at work as the independent variables indicated that Individual separation acculturation strategy is the only statistically significant predictor of Physical ill health. When individuals adhere to pressure from their own ethnic group to separate, it will negatively impact their physical health because they might feel that they have no choice in the matter and that to separate is what is expected of them. The multiple regression analysis with Psychological ill health as dependent variable indicated that Ethnic separation demands at work and Individual separation acculturation strategy was the only statistically significant predictor of Psychological ill health even after the inclusion of Individual separation acculturation strategy as individual moderating variable. A study by Berry et al. (2006) suggests than an orientation toward one’s own group is important for psychological well-being.

The fourth objective of this project was to determine the impact of the acculturation co-ethnic context and individual intervening variable on the sociocultural acculturation outcomes variables (employees’ perceived work success in terms of meeting deadlines, reputation and respect, and training and development opportunities) of mineworkers in the North-West
Province. The results of the multiple regression analysis with Meeting deadlines (IPWS1) as the independent variable showed Ethnic separation acculturation strategy and Relationship with co-ethnics to be statistically significant predictors of Meeting deadlines (IPWS1). After the inclusion of Individual separation acculturation strategy as individual intervening variable only Relationship with co-ethnics at work remained a statistically significant predictor of Meeting deadlines (IPWS1).

With Reputation and respect at work only Relationship with co-ethnics at work was found to be a statistically significant predictor of Reputation and respect at work. The results remained unchanged after the inclusion of Individual separation acculturation strategy as individual intervening variable. The multiple regression analysis with Opportunities for development and training (IPWS3) found none of the acculturation context variables and individual intervening variable to be statistically significant predictors of Opportunities for development and training at work.

LIMITATIONS

This study had several limitations. Firstly, the questionnaire was only administered in English. The level of English skills as a second, third, or even fourth language could have influenced the results.

The size of the sample can be seen as a limitation. Within the sample, distinctions between cultural groups could not be made due to low representation of some cultural groups. The length of the questionnaire could also have resulted in participants not being attentive in answering the questions or perhaps not completing the questionnaire.

RECOMMENDATIONS

The questionnaire needs to be translated into languages other than English, in order to ensure no misreporting due to language inefficiencies. A larger heterogeneous sample also needs to be used. A further recommendation would be to shorten the questionnaire used in this research project, as this may result in better response rates by the mineworkers. This will prevent unnecessary expenditure in terms of re-administering more questionnaires due to inefficient sample sizes.
Organisations can benefit from having employees capable of accepting different acculturation strategies, that best correspond to achieving the goals of the company. People that face a new culture can either fully accept or totally reject the new culture and thus become assimilated or separated, or manage to internalize both cultures and develop an integrated behaviour. Pressure from members of your own ethnic group has been found to negatively affect physical and psychological ill health. Employees following a separation acculturation strategy also experience negative psychological ill health. As with the mainstream context it has been found that even though employees choose to separate it still has a negative impact on their psychological ill health which means that separation is not the strategy of choice but rather a decision that they feel they have no choice in. Diverse individual characteristics together with stressful, unjust, exclusionary and non-supportive organizational climate negatively influence individual wellbeing and lead to lack of job satisfaction and organizational commitment. Social networks and social support have been found to have a positive effect on health. The organisation should promote strong relationships with members of your-own ethnic group as well as with members of the mainstream group. Social support from members of your own ethnic group help employees fair better at work and enhance their feelings of respect amongst their colleagues but the pressure to separate from the mainstream group affects their health negatively. Social integration between employees of all different backgrounds should be encouraged at organisations This can promote better self-worth, greater purpose and a positive identity that induces health promoting responses.. People with an increased number of social relationships have a greater social connectedness to co-workers from different cultural backgrounds. Effective communication within the organisation will also result in better relationships amongst employees from different cultural backgrounds.
REFERENCES


93


CHAPTER 4

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

The purpose of this chapter is to provide conclusions regarding the results of the empirical study. Conclusions are drawn with regard to the research objectives. Furthermore, limitations of the research project are discussed. Finally, recommendations for the organisation are made and recommendations for future research based on this research project are suggested.

4.1 CONCLUSIONS

The general objective of this research project was to analyse the acculturation process and determine the impact of the acculturation context variables (mainstream as well as co-ethnic group) on the acculturation and individual intervening variables on acculturation outcomes (health in terms of psychological health and physical health; and employees’ perceived work success in terms of meeting deadlines, reputation and respect, training and development opportunities) in a mine in the North-West Province. Based on the results of the empirical study as evidence in the two research articles, the following conclusions are made in relation to the specific objectives of the research project.

The first objective of this research project was to determine the psychometric properties of the measuring instruments used in this research project. The results obtained show that the Cronbach alpha coefficients of all the measuring instruments (except for Perceived pressure to conform to management ideologies and practices, Relationship with co-ethnics at work and Individual separation acculturation strategy) are considered to be acceptable compared to the 0.70 guideline (Nunnally & Bernstein, 1994), which means that the measuring instruments were reliable to use in this study.

The second objective was to determine the relationship between the acculturation context variables, individual intervening variable, and the acculturation outcomes variables (health in terms of physical ill health and psychological ill health; and employees’ perceived work success in terms of meeting deadlines, reputation and respect, development and training opportunities).
Mainstream group: *Perceived mainstream segregation demands* shows positive correlations with *Perceived discrimination at work*, *Perceived racism at work* and *Individual separation acculturation strategy*. Social identity theory (Blascovich, Wyer, Swart, & Kibler, 1997) lends support to the idea that members of groups who experience more prejudice than others are more motivated to maintain the distinction between their own group and other groups. All these constructs showed statistically significant positive correlations with *Physical and Psychological ill health*. *Physical ill health* shows a statistically significant positive correlation with *Psychological ill health*. Research by Jablensky (1997) found that racism affected the mental health of black children by denying them essential experiences such as a sense of security, freedom for personal growth and identification with a community of equals. *Meeting deadlines (IPWS1)* shows a statistically significant positive correlation with *Reputation and respect (IPWS2)*. *Reputation and respect (IPWS2)* shows a statistically significant positive correlation with *Opportunities for development and training (IPWS3)*.

Co-ethnic group: *Perceived pressures to conform to preferred acculturation strategy by own cultural group* shows a positive correlation with *Individual separation acculturation strategy*. *Ethnic separation demands at work* shows positive correlations with *Physical ill health* and *Individual separation acculturation strategy*. *Psychological ill health* shows a positive correlation with *Physical health*, which in turn shows a positive correlation with *Individual separation acculturation strategy*. A study by Griffiths and Nesdale (2006) show that ethnic majority children hold more favourable attitudes towards their ethnic in-group than they hold for ethnic out-groups, supporting our finding that pressure from your own group will result in individuals choosing to separate. Co-ethnic group members who endorsed separation experienced the most social difficulties (Berry & Sam, 1997).

The third objective was to determine the impact of the acculturation context and individual intervening variables on the psychological acculturation outcomes variables (employees’ physical and psychological ill health).

Mainstream group: *Individual separation acculturation strategy* is the only statistically significant predictor of *Psychological ill health*. *Perceived mainstream segregation demands*, *Perceived racism at work*, and *Relationship with mainstreamers at work* are statistically significant predictors of *Physical ill health*. However, with the inclusion of *Individual
separation acculturation strategy, the only statistically significant predictor of Physical ill health is Perceived racism at work.

**Co-ethnic group:** Ethnic separation demands at work are the only statistically significant predictor of both Physical ill health and Psychological ill health. With the inclusion of Individual separation acculturation strategy both Individual separation acculturation strategy and Ethnic separation demands at work are statistically significant predictors of Psychological ill health.

The fourth objective was to determine the impact of acculturation context and individual intervening variables on the sociocultural acculturation outcomes variables (employees’ perceived work success in terms of meeting deadlines, reputation and respect, and training and development opportunities).

**Mainstream group:** Perceived pressure to conform to management ideologies and practices, Perceived racism at work, and Perceived discrimination at work are statistically significant predictors of Meeting deadlines (IPWS1) and Reputation and respect (IPWS2). Perceived mainstream segregation demands, Perceived pressure to conform to management ideologies and practices, Perceived racism at work, and Relationship with mainstreamers at work are statistically significant predictors of Opportunities for training and development (IPWS3).

**Co-ethnic group:** Relationship with co-ethnics at work was the only statistically significant predictor of Meeting deadlines (IPWS1) and Reputation and respect (IPWS2).

The next section will discuss the limitations of this project.

**4.2 LIMITATIONS OF THIS RESEARCH STUDY**

The first limitation of this research project is the cross-sectional design. As a result, no causal inference could be drawn. Therefore, the causal relationships between variables were interpreted rather than established. In order to deal with the limitation of the use of a cross-sectional design, prospective longitudinal and quasi-experimental research designs are needed to validate the hypothesised causal relationships within the research project.
The second limitation is that the data was collected from mines falling within one mining group’s unique organisational characteristics; such an organisational climate may have affected the findings. Also, because of the average levels of education within the mining sector, the study population was limited to participants who could read and write. The array of language and cultural groups included in the research project could have resulted in vastly different interpretations of the questions.

The third limitation is the size of the sample. Within the sample, distinctions between cultural groups could not be made due to low representation of some cultural groups.

The fourth limitation is that the questionnaire was only administered in English. The level of English skills as a second, third, or even fourth language could have influenced the results.

The fifth limitation is the length of the questionnaire, which could have resulted in participants not being attentive in answering the questions or perhaps not completing the questionnaire.

The sixth limitation is the use of self-report measures. This may lead to a problem commonly referred to as “method variance” or “nuisance” (Schaufeli & Enzmann, 1998). Several authors have however argued that this phenomenon is not a major threat, should interactions be found (Dollard & Winefield, 1998; Wall, Jackson, Mullarkey, & Parker, 1996). Another aspect to consider is that few alternative methodologies are suggested to deal with self-report measures.

The final limitation is that it is possible that participants might not have trusted the confidentiality statement that accompanied the questionnaire which could have impacted the results.

**4.3 RECOMMENDATIONS**

Recommendations pertaining to the specific organisation used in this research project, as well as recommendations for further research, are made in this section.
4.3.1 Recommendations for the organisation

The current research project has important implications for the organisation. Recommendations are made to the organisation concerning the effect of acculturation and the individual acculturation strategy on overall health.

- The organisation should conduct annual diversity audits as set out in the Employment Equity Act. Diversity implies differences in people based on their identifications with different groups. Literature defines diversity as a process of acknowledging differences through action (Carnevale & Stone, 1994). “Sameness” is not what diversity is supposed to be. The goal of diversity should be to treat people as individuals.
- Diversity training should form part of the organisation’s skills development program. The workforce of the twenty-first century may be characterised by increased numbers of women, minorities, ethnic backgrounds, intergenerational workers, and those who have different lifestyles. Organisations should thus realise that the extent to which these demographic workforce changes are effectively and efficiently managed will influence organisational functioning and competitiveness (Harvey, 1999; Kuczynski, 1999).
- The organisation should promote teamwork among various ethnic groups. In a paper done on diversity and inclusion, Roberson (2004) found cross-cultural teams to be more creative in problem solving.
- The organisation should organise functions where co-ethnic relations are encouraged.
- Management should set an example that enforces a multicultural environment.
- Management should create an environment in which employees are encouraged to report incidents of racism and discrimination.
- Management should be consistent in handling all acts of racism and discrimination, establishing a work setting in which it is clear that such behaviour would not be tolerated.

4.3.2 Recommendations for future research

The most important recommendation for future research is the use of longitudinal designs. With longitudinal designs, the hypothesised causalities of the relationships can be further validated. It is also recommended that other mining groups be explored in terms of their acculturation processes, as each mine is unique and has different demographic variables in
terms of race, gender, and language compositions. This would result in a better indication of acculturation strategy preferences amongst mineworkers in South Africa. It will also assist in developing a comprehensive conceptual model that can be applied to a variety of mines and mineworkers in terms of acculturation strategies. The questionnaire also needs to be translated into languages other than English, in order to ensure no misreporting due to language inefficiencies. A larger heterogeneous sample also needs to be used. A further recommendation would be to shorten the questionnaire used in this research project, as this may result in better response rates by the mineworkers. This will prevent unnecessary expenditure in terms of re-administering more questionnaires due to inefficient sample sizes.

A further recommendation is to interview mineworkers, as many of these workers were excluded because they cannot read or write. The interviews could be used to explore further the reasons individuals choose to separate.
REFERENCES


