

# Coping with diversity in dormitories in a historically white HEI in South Africa

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## **Abstract**

The dormitories of historically white higher education institutions (HEIs) are becoming increasingly diverse in South Africa. We were interested in finding out how white students cope with this increased diversity. We consider diversity and multiculturalism as acculturation issues and were interested in how acculturation conditions impact on the psychological acculturation outcomes of white students. We proposed a dual process model of diversity (DPMD), consisting of facilitating acculturation resources that lead to satisfaction with life and restricting acculturation demands that lead to ill-health symptoms. Scales of acculturation conditions and outcomes were administered to a convenience sample of 227 Afrikaans-speaking students. The hypothesised DPMD was confirmed in a path analysis. Acculturation resources were associated with life satisfaction and acculturation demands with ill-health and a reduction in life satisfaction. The results showed that white, Afrikaans-speaking, female students cope better with diversity compared to their male counterparts. Very negative diversity conditions can erode the benefits of positive acculturation conditions or resources.

**Keywords:** diversity, acculturation, higher learning, South Africa

## **INTRODUCTION**

The student profile of the South African higher education system before 1994 was characterised by imbalances such as the overrepresentation of white males. The period 1990–2000 saw radical shifts in the student enrolments. By 2000, black

students had a 60 per cent share of the total university student enrolment (compared with 32% in 1990). The share which white students had of the total enrolment fell from 54 per cent in 1990 to 28 per cent in 2000. The proportion of white students in the historically white Afrikaans-medium universities fell from 97 per cent in 1990 to 45 per cent in 2000, and in the historically white English-medium universities from 73 per cent to 39 per cent (Bunting 2002). The most important contributing factor to this trend was undoubtedly the dropping of racial barriers to admission at higher education institutions (HEIs) (Cloete 2002).

These trends also indicate that the higher education landscape has become more multicultural, especially in the historically white institutions. We were interested in finding out how white students cope with this increased diversity by examining diversity-related attitudes in the dormitories of a historically white HEI that were previously segregated. We argue that this increasing diversity can be studied as an acculturation issue; hence, we used acculturation models of cross-cultural psychology to examine the impact of contextual factors on attitudinal and behavioural changes in all groups involved (Berry 1997). We were interested in how contextual conditions that are related to diversity impact on health and satisfaction with the life of white students in a historically white HEI. We also drew from other theoretical frameworks and proposed and tested a dual process model of diversity (DPMD). As explained below in more detail, we argue that the health of white students in mixed dormitories (our target sample) is much more influenced by adverse acculturation conditions, such as norms in the own group to remain segregated; positive conditions, such as norms to integrate with other groups can be expected to have more influence on positive diversity outcomes, such as interethnic friendships.

Acculturation refers to processes ensuing when groups of individuals from different cultures come into continuous first-hand contact, with subsequent changes in the original culture patterns of either or both groups (Redfield, Linton and Herskovits 1936). The stress brought about by this adaptive process is referred to as acculturative stress (Berry, Poortinga, Breugelmans, Chasiotis and Sam 2011). Western studies of acculturation usually examine processes accompanying migration of ethnic minority groups to societies with a large, usually white, mainstream group. However, the South African context is different. South Africa has a population of nearly 50 million, and its Constitution recognises 11 official languages, leaving no single ethnic grouping with the exclusive claim to be the dominant. After the 1994 elections, a new South African identity evolved, which is sometimes metaphorically referred to as the 'Rainbow Nation', to emphasise and include all ethnic groups in the country. The present study does not deal with the conventional Western conceptualisation of acculturation as a process involving a mainstream majority and various immigrant minority groups. Rather, in this study acculturation refers to different ethnic South African groupings (minorities), comparable to the immigrant groups in Western acculturation studies, in relation to an evolving national identity (majority or mainstream) in the post-1994 new South Africa. Jansen (2010) cautions against the use of the term 'minority' because South Africans are involved in building

a common identity as citizens of a new country, where skin colour or demographic count is replaced by allegiance to higher values and commitments. He also warns that the term ‘majority’ in the new South Africa should not be mistaken for blacks or Africans, which is in line with our conceptualisation of the acculturation of ethnic groups in relation to the evolving new national identity. The present study examined how white students acculturate in an environment with an increasingly heterogeneous community such as their campus dormitories. We were interested in the impact of facilitating and adverse acculturation conditions on positive and negative psychological outcomes of white students in dormitories of a historically white HEI that have recently become increasingly diverse.

## **THEORETICAL FRAMEWORK**

The current study builds on various theoretical frameworks and models. The traditional approach to studying diversity makes a distinction between diversity categories that are visible (e.g., age, gender and ethnic background) and those that are underlying (e.g., education, technical abilities, functional background and tenure) (Milliken and Martins 1996; Pelled 1996; Pelled, Eisenhardt and Xin 1999). The contact hypothesis proposes that social contact and interaction increases attraction, liking, and understanding between heterogeneous groups of individuals (Pettigrew 1982; Pettigrew and Tropp 2006). Competition theory (Blalock 1957; 1967) argues that people perceive that most situations have a restricted set of available resources. Therefore, increased proportions of minority group members are likely to be perceived as a threat to the majority group’s claim on scarce resources and power. Perceptions of competition and power threats result in rising hostility and discrimination. The theory of social attraction (Newcomb 1961; 1968) predicts that similarity on attributes, such as attitudes, values and beliefs, will facilitate interpersonal attraction and liking. Analogously, people will avoid communicating either with those they dislike or with those who hold opinions or views differing from their own to reduce the strain produced by the disagreement (Rosenbaum 1986).

The DPMD in the workplace, which underlies the present study, has recently been proposed (Jackson and Van de Vijver, in review). The model builds on current acculturation models, notably the model that distinguishes between antecedent, mediating, and outcome variables in the acculturation process (Arends-Tóth and Van de Vijver 2006). The model also draws on the job demands resources (JD-R) model (Demerouti, Bakker, Nachreiner and Schaufeli 2001) and its extension, the comprehensive model for burnout and engagement (COBE) of Schaufeli and Bakker (2004). The DPMD holds that diversity comprises two, fairly independent streams; on the one hand, there is a positive or facilitating stream that impacts on sociocultural adjustment indicators, such as work success and number of interethnic friends; and, on the other hand, there is a negative or restraining stream impacting on ill-health (see Figure 1). Both streams are comprised of unique antecedents, mediators and outcomes. Associations of variables within one stream are stronger than associations

with the other stream. For example, racism (a negative antecedent factor) will have a strong impact on separation (orientation on the own ethnic group) and on ill-health (e.g., depression). This link is stronger than the line from racism to integration (a positive mediating variable) and interethnic friendships. Finally, the model holds that the absence of ill-health is a prerequisite for work success; so, at the level of outcomes we do not expect bidirectional associations but a (negative) link from health to work success.

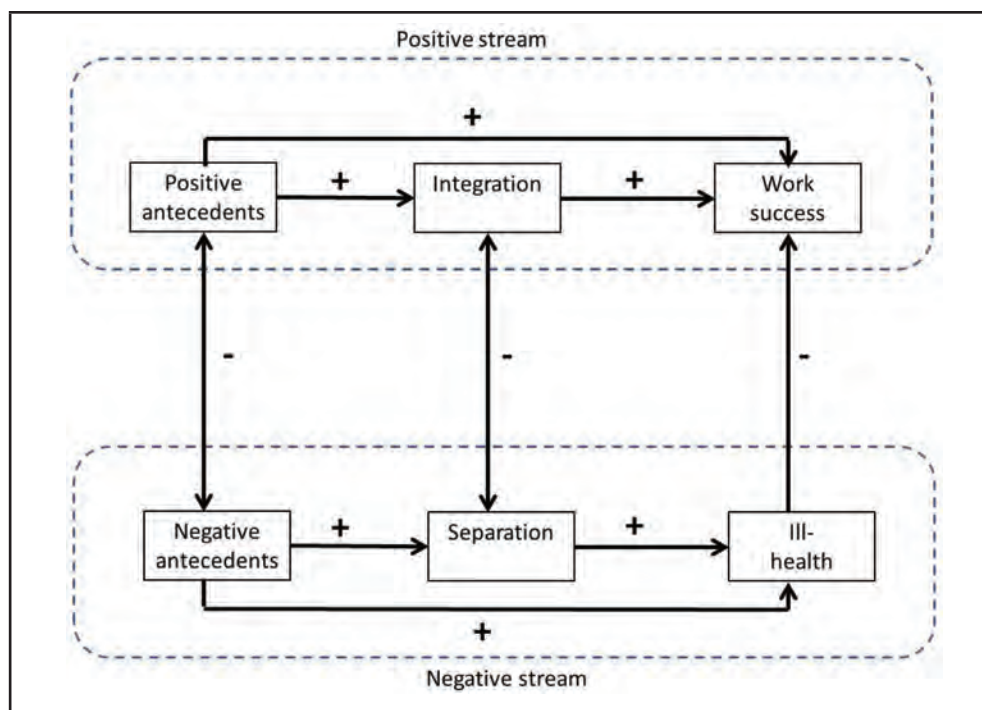


Figure 1: DPMD in the workplace: Constructs and expected associations

The DPMD has been successfully tested in a study among mine employees (Jackson and Van de Vijver, in review); we confirmed the expected positive relations between elements of the negative stream, namely: acculturation demands, a separation acculturation strategy and ill-health. The results also supported the expected positive relations between integration and acculturation context variables, such as multiculturalism and mainstream tolerance, on the one hand, and acculturation outcomes, such as work success, on the other hand (Jackson, Van de Vijver and Ali, in press; Molokoane 2007; Nchabeleng 2008). Ward, Bochner and Furnham (2001) argue that psychological and sociocultural acculturation outcomes may have their own antecedents; similarly, other examples of dual models with different antecedents in both streams are the JD-R model (Demerouti et al. 2001) and the extended JD-R model (Schaufeli and Bakker 2004). In the DPMD we argue that there are indeed two underlying fairly independent processes that influence acculturation psychological

and sociocultural adjustment and well-being at work. Jackson and Van de Vijver (in review) found support for the model: on the one hand, they found evidence of a set of restrictive context conditions that link acculturation demands to ill-health via separation; and, on the other hand, facilitating context conditions that link acculturation resources to increased subjective work success via integration. Finally, they found that the (negative) crossover relations between aspects of the positive and negative streams were much weaker than the relations within each of the streams. We now describe the components of the dual process as they are relevant for dealing with diversity by higher education students. In the current study, we chose to focus on context factors; therefore, we did not deal with acculturation orientations.

### **Mainstream acculturation conditions**

Acculturation conditions refer to the background setting of acculturation. These conditions define the limits and demands of the acculturation process involving group and individual characteristics. Researchers have used various acculturation contextual variables (conditions) to explain psychological acculturation outcomes of migrants. From this large set we selected variables that are presumably associated with diversity in student dormitories, namely: multiculturalism; mainstream tolerance and segregation demands; perceived subtle racism; and discrimination.

Multiculturalism, the first *positive mainstream acculturation condition* of the present study, is an ideology designed for dealing with cultural diversity, entailing the quality and positive evaluation of different groups within a society. Multiculturalism can be used to characterise a society with diverse cultures; the term can also refer to an attitude that involves a society's tolerance towards diversity and acceptance of equal societal participation (Liu 2007). The metaphor of the 'Rainbow Nation' projects the image of different racial, ethnic, and cultural groups being united and living in harmony and has become a symbol of unity among the diverse population of South Africa (Bornman 2006). Nation-building strategies in South Africa have, however, been criticised. Degenaar (1994) denounces the use of the term nation-building in a country like South Africa as it encourages an emphasis on uniformity, while diversity and individuality should rather be respected. Various conditions have to be met in order to establish and maintain a multicultural society (Berry and Kalin 1995). There should be contact between the ethnic groups. The society should be tolerant toward immigrant (minority) groups. All cultural groups should have positive attitudes toward each other and feel attached to the larger society, without losing their own cultural background. Not much research has been done that examines support for these conditions in South Africa.

Empirical research has suggested that majority host culture members in Western countries do not always favour multiculturalism and have relatively few contacts with members of other ethnic groups in the private sphere (Breugelmans and Van de Vijver 2004). National surveys also seem to indicate that South Africans hardly have contact with people other than those of their own ethnic background in their private space (Hofmeyr 2006). These observations have serious implications for

students having (forced) contact with members from different ethnical backgrounds in an increasingly diverse context such as the dormitories of an HEI. Recent studies have confirmed that multiculturalism and tolerance are negatively related to adverse acculturation conditions and ill-health and positively related to work success in the South African work context where forced contact between different ethnic groups is a norm rather than an exception (Jackson and Van de Vijver, in review; Jackson, Van de Vijver and Ali 2012).

Segregation demands, the first *negative mainstream acculturation condition* of the present study, reflect a desire of the dominant group to maintain the original cultural boundaries while refusing to acknowledge the need to relate to the new culture (culture of the minority). A new form of racial segregation has emerged in the United States (US) since the 1970s (Goldberg 1997; 1998). The old form of segregation arose through a deliberate plan to produce and protect segregated spaces, while the new form of segregation functions to preserve historical patterns of segregation and is achieved through exercising personal preferences. The new form of segregation also avoids biological constructions of racial inferiority. It is instead class-based, thereby allowing its adherents to claim non-racism, while it reproduces historical patterns of specifically racial segregation. It does this because preferences are shaped by stereotypes of a racial underclass that are stigmatised on non-racial (cultural) grounds (Durheim and Dixon 2000). Goldberg (1998) suggests that the new segregationists argue that because cultural groups differ (naturally) they should be kept apart. Empirical studies have confirmed the positive relation between perceived mainstream segregation demands and negative acculturation conditions, such as discrimination and racism, and a preference for an individual separation orientation as well as its negative association with perceived satisfaction with life, psychological and physical health, perceived development and training opportunities at work (e.g., Ait Ouarasse and Van de Vijver 2004; Jackson et al. 2011; Jackson et al. 2012).

Racism and racial discrimination have been defining features of South African society for much of its history. Race was often the only factor that determined the level and extent of the benefits, privileges, and rights an individual would enjoy (HSRC 2006). The nature of prejudice itself has changed from the old-fashioned, blatant forms to today's modern, subtle, and rationalisable forms (Swim, Aikin, Hall and Hunter 1995). 'New racism' is an international phenomenon that, as has been suggested, is also present in South Africa (Durrheim and Dixon 2004). Subtle, everyday discrimination may become even more common, as blatant racism becomes less prevalent among dominant group members (Deitch et al. 2003). The primary doctrine of modern racism (Wetherell and Potter 1992), which is closely related to subtle racism, holds that discrimination is a thing of the past because blacks now have the freedom to compete in the marketplace and to enjoy those things they could previously not 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 status than they deserve. Moreover, modern racists are convinced that these ideas are not racist because they are empirical facts and they indeed argue that blatant racism is bad (McConahay 1986). A consistent finding in empirical research is that ethnic discrimination and prejudice play a major role in the adaptation and acculturation process of immigrants (Jasinskaja-Lathi, Liebkind and Perhoniemi 2006). In a recent review, where Gee, Ro, Shariff-Marco and Chae (2009) investigated the role of discrimination in health, it was found that a vast majority of the studies reported associations in the hypothesised direction (discrimination was associated with increased risk of mental and physical health problems).

### Acculturation outcomes

The most frequently studied acculturation outcome is *psychological* adjustment, which refers to the immigrant's wellbeing in the new cultural context. Psychological adjustment is mainly used within the stress and coping perspective and is measured by indicators, such as acculturation stress (Berry 1997), depression, mental health and life satisfaction (Kealey 1989).

*Health*, one of the key determinants of subjective well-being (Diener, Kesebir and Lucas 2008), is defined as a condition of complete physical, mental, and social well-being and not merely the absence of disease or frailty (Bennett and Murphy 1997). Health is, therefore, about completeness, contentment and well-being (Beattie, Gott, Jones and Sidell 1993). It can be presented on a continuum ranging from poor health to complete physical and mental wellness (Du Toit 1986). Tran, Fitzpatrick, Berg and Wright (1996) found that the level of acculturation calls to a significant effect upon the health status of individuals. Murphy (1965) has argued that prejudice is likely to be less prevalent in culturally plural societies, but it is by no means absent (Berry and Kalin 1995), while Fernando (1993) has designated racism as the most serious problem and risk factor facing immigrants and their mental health. Research has confirmed positive relations between negative acculturation conditions, separation and ill-health (Berry et al. 2006; Hein et al., in press). The notion of the prevalence of and the adverse effects of racism, discrimination and segregation demands in culturally plural societies on health was supported by Jackson et al. (2011) in a recent study in South Africa. In the present study we define health as the absence of physical and psychological symptoms.

*Life satisfaction* is an overall assessment of people's feelings and attitudes about their life at a specific point in time ranging from negative to positive. It is one of three major indicators of well-being (Buetell 2006). Neto, Barros and Schmitz (2005) suggest that successfully dealing with problems and having positive interactions with members of the host culture are likely to improve a person's feelings of well-being and satisfaction. The impact of acculturation conditions on satisfaction with life has been addressed in acculturation studies. Swart (2008) reported positive relations between positive acculturation conditions, such as multiculturalism, mainstream tolerance, ethnic integration demands and ethnic social support, and negative relations between satisfaction with life and physical, and psychological, ill-health symptoms.

## **CONTEXT AND HYPOTHESES OF THE PRESENT STUDY**

The present study is the first to address the acculturation process (impact of the acculturation condition and orientation) of white students in the dormitories of a historically white HEI. After the abolishment of apartheid in 1994, the number of black students attending universities increased. Few studies of intergroup contact in HEIs have been conducted. Yet, our everyday observations suggest that little intercultural contact takes place; groups mainly have contact with members of their own ethnicity, both on campus and in their spare time. This is also evident in roommate patterns, where roommates almost always have the same cultural background. Whites are still the majority in these residences. Although the HEI where the research was conducted was also affected by the national transformation agenda, the staff and student profile still reflected a 24 per cent versus 76 per cent and 23 per cent versus 77 per cent composition for blacks versus whites, respectively. About 12 per cent of the nearly 5 000 beds available in the HEI's dormitories are occupied by blacks. A recent Ministerial Task Team report (Department of Education 2008) noted that traditions in these dormitories tend to alienate black students and it was recommended that the institution must inculcate a more inclusive institutional culture. The present study aimed to examine factors that either foster or hinder an inclusive culture in the dormitories. We tested the DPMD, which postulates that multiculturalism can be seen as a combination of diversity-promoting and diversity-impeding aspects, in these dormitories. We were particularly interested in the relationship of these factors with students' well-being (measured by their physical and psychological ill-health and satisfaction with life). The DPMD holds that the negative conditions are more predictive of the psychological outcomes than would be the positive antecedents. More specifically, the following hypotheses were tested:

1. Negative mainstream acculturation conditions predict ill-health symptoms.
2. Negative mainstream acculturation conditions are better predictors of ill-health outcomes than are positive conditions.
3. Negative acculturation conditions are better predictors of satisfaction with life than are positive acculturation conditions.

South Africa's post-apartheid, democratic government strongly promotes affirmative action programmes in order to redress past inequalities by giving preferential treatment to previously disadvantaged and designated groups, which include blacks, Coloureds, Indians, the disabled and all women (including white women). However, many previously advantaged groups (white males) perceive affirmative action, which is aimed at enhancing the position of previously disadvantaged groups, as reverse discrimination (Herman 2000). Despite white males' perception of reversed discrimination, they still occupy the majority of top positions in the workplace and information received from employers shows that they are more likely to recruit and promote males than females. Employers are also more likely to employ white females and Indians from the designated groups when compared to the African and Coloured population groups at nearly all occupational levels (Department of Labour 2011).

In theory, the new South Africa, therefore, seems to provide more opportunities for white females compared to white males. However, in practice, white males still seem to benefit the most in the labour market. This contrasting state of affairs for white males and females as well as the previously advantaged group's perception of reversed discrimination led to the fourth hypothesis:

4. White females are less likely to perceive and experience negative acculturation conditions, such as discrimination, racism and segregation, and show better psychological acculturation outcomes compared to white males.

## **METHOD**

### **Design, procedure and participants**

A cross-sectional survey design was employed to obtain the desired research objectives. This design is appropriate for determining relationships among variables. We recruited a convenience sample of students in dormitories at a South African HEI, after permission was granted to conduct the research. Participation was voluntary and anonymous. A total of 500 students were targeted. A response rate of 51 per cent was found, of which 227 responses were utilised. The sample consisted of white, Afrikaans-speaking (100%), female (68%) students between 17 and 19 years of age (54%). The largest group of the participants were studying Economic Sciences (41%).

### **Instruments**

Some instruments with well-established psychometric properties used in other cultural contexts were adapted (Ait Ouarasse and Van de Vijver 2004; Diener, Emmons, Larson, and Griffin 1985; Jackson et al., in press; Spector and Jex 1998). Adaptations involved replacing the references to the ethnic cultures of the original (Dutch and Moroccan) groups with South African and own ethnic groups respectively, co-workers with co-students as well as workplace with dormitories. All acculturation scales followed a five-point Likert format ranging from 'Strongly agree' (1) to 'Strongly disagree' (5) and item scores were reversed before the analyses so that higher scores reflected more endorsement of the underlying attitude.

Measures of positive mainstream acculturation conditions involved:

- *Multicultural norms* (an adaptation of Jackson et al., in press). This is a 13-item measure of the participants' multiculturalism attitudes and the prevalence of multiculturalism values within organisation. The scale contains items like 'I think that most of my fellow residents do not recognise that we are a hostel that consists of groups from different cultural backgrounds' (reverse scored). An exploratory factor analysis suggested the unifactorial nature of the scale; the same was found for all other scales in the study.

- *Tolerance by the mainstream* (an adaptation of Ait Ouarasse and Van de Vijver 2004). This is an eight-item measure of the extent to which participants think that mainstream members take an open stance toward the ethnic minority in their dormitory. Tolerance is the desire on the part of the mainstream to see the minority members actively involved in public life without necessarily dropping their original culture. The scale contains items like 'I think that most of my fellow residents from other cultures are most welcoming people'.
- *Multicultural practices* (an adaptation of Jackson et al. in press). This is a 13-item measure of the participants' actual multiculturalism behaviour and the prevalence of multiculturalism practices within their dormitory. The scale contains items like 'My fellow residents generally show respect for other cultures in our hostel'.

Measures of negative mainstream acculturation conditions involved:

- *Mainstream segregation demands* (an adaptation of Ait Ouarasse and Van de Vijver 2004). This is a 12-item measure of the extent to which participants think that mainstream members hold segregationist attitudes towards minority members within their dormitory. An example item is 'I think that most of my fellow residents would be happy to have people from other cultures than their own to be thrown out of our hostel'.
- *Perceived discrimination* (an adaptation of Ait Ouarasse and Van de Vijver 2004). This scale is an 11-item measure of the extent to which participants think the situation in the dormitory discriminates, and requires them to drop their cultural characteristics. All items are negatively phrased. Discrimination is defined as pressures exerted on the minorities to apply fully to the regulations and the general atmosphere regardless of whether these regulations encroach on minority sensitivities. The scale contains items like 'I experience discrimination in the dormitory'.
- *Perceived (Modern) racism* (an adaptation of the Subtle Racism Scale of Duckitt 1991). This is a 10-item (four of this items were filter items and were not used in the final analysis) measure of the extent to which fellow residents hold subtle racist attitudes. Sample items from this measure include 'Some groups in South Africa are getting too demanding in pushing for equal rights'.

Acculturation outcomes measures used were:

- *Health*: This is an adapted version of the 18 physical health symptoms of the PSI of Spector and Jex (1998), complemented with a list of 9 common psychological complaints based on a slightly modified version of the World Health Organization Cross-National Survey of Psychological and Somatic Symptoms (1988). The scale employs a frequency format that ranges from 'Never' (1) to 'Every day' (5). The self-report measure asks respondents to indicate whether or not in the past three months they have suffered any of

the mentioned symptoms. Some examples of symptoms included in the scale are headaches, backache, fatigue, eyestrain and trouble sleeping, concentrating and constant anxiety or panic attacks.

- *Satisfaction with life scale*: This adaptation of Diener, Emmons, Larson and Griffin's (1985) five-item scale (sample item: 'I am satisfied with my life') was complemented with two additional items ('Life is worth living' and 'All in all, I am satisfied with my life these days'). The scale primarily addresses the cognitive components of satisfaction with life. Literature reviews confirm that this scale is one of most widely-used measures of general well-being (Goetz, Ehret, Jullien and Hall 2006).

Finally, a *biographical questionnaire* was included, assessing participants' age, ethnicity and gender.

## **STATISTICAL ANALYSIS**

The statistical analysis was carried out using the SPSS programme and the AMOS 18 programme (Arbuckle 2010). Descriptive statistics were used to analyse the data. Exploratory factor analyses and Cronbach's alpha coefficients were used to determine the internal consistency, homogeneity and unidimensionality of the measuring instruments (Clark and Watson 1995). To investigate the impact of positive and negative antecedent mainstream conditions on participant's satisfaction with life and ill-health respectively, structural equation modelling (SEM) was performed. A multivariate analysis of variance (MANOVA) was carried out with gender (two levels: males and females) as independent variable and the mean scores of the scales as dependent variables. Effect sizes (Cohen 1988) were used in addition to statistical significance to determine the salience of relationships.

## **RESULTS**

### **Exploratory factor analyses, descriptive statistics and correlations**

The results obtained from exploratory factor analyses and inspections of the scree plots (sharp drop after the first eigenvalue) indicated that the mainstream context and acculturation outcome scales used were unifactorial (see Table 1). Factor analyses of the scale means were conducted for multiculturalism and mainstream tolerance for the positive conditions and segregation demands, discrimination and subtle racism for the negative conditions factors separately. The psychometric properties, descriptive statistics and the correlation matrix of all the scales used in the study are presented in Table 1. As can be seen in Table 1, Cronbach's alpha coefficients were well above the acceptance level of .70 (Cicchetti 1994) for all scales. These findings imply that all scales measured a single factor and showed an adequate internal consistency.

Figure 1: Descriptive statistics and the product moment correlation coefficients of the constructs

Variables	<i>α</i>	M	SD	First two Eigenvalues	Variance explained	1.	2.	3.	4.	5.	6.	7.
1. Multiculturalism	.92	3.48	.80	4.60 .72	66	–						
2. Mainstream tolerance	.85	3.27	.60	3.89 1.08	49	.68**	–					
3. Segregation demands	.92	2.50	.73	6.39 1.24	53	–.35**	–.30**	–				
4. Discrimination	.86	2.42	.62	4.69 1.07	52	–.31**	–.25**	.58**	–			
5. Subtle racism	.90	2.06	.75	5.67 1.39	59	–.41**	–.26**	.34** <sup>a</sup>	.60**	–		
6. Physical ill-health	.93	2.09	.67	4.41 .87	49	–.23**	–.12	.27**	.37**	.26**	–	
7. Psychological ill-health	.87	2.27	.71	8.49 2.09	40	–.16*	–.05	.20**	.36**	.21**	.66**	–
8. Life satisfaction	.87	3.65	.69	4.06 .87	58	.32**	.20**	–.17**	–.30**	–.27**	–.47**	–.50**

\*p < .05

\*\*p < .01

## Structural Equation Model (SEM) testing

To investigate the impact of positive and negative antecedent mainstream conditions on participants' satisfaction with life and ill-health, respectively, a SEM analysis was performed (see Table 1 for the correlations). The use of SEM testing was appropriate in the present situation, where it was possible to hypothesise relationships between a number of variables based on previous research and theory. The hypothesised model components included predictors (i.e., multiculturalism, perceived mainstream tolerance and segregation demands, discrimination, and subtle racism) and outcomes (satisfaction with life and physical and psychological health). Following the DPMD (Jackson and Van de Vijver, in review), we hypothesised that positive mainstream acculturation conditions would predict satisfaction with life, whereas negative mainstream acculturation conditions would predict ill-health symptoms. In addition, we expected that negative acculturation conditions would be better predictors of ill-health outcomes than positive conditions and that negative acculturation conditions would also be better predictors of satisfaction with life. In the hypothesised model (see Figure 2), the regression coefficients of the positive and negative mainstream antecedent acculturation conditions and factor loadings on satisfaction with life and ill-health fitted the empirical data reasonably well:  $\chi^2(2, N = 227) = 2.38, p < 0.25$ ;  $\chi^2/df = 1.39$  (recommended value in small samples:  $\leq 3.00$ ); the adjusted goodness of fit index (AGFI) was .92 (recommended:  $\geq .90$ ), the Tucker Lewis index (TLI) was .94 (recommended:  $\geq .90$ ), the comparative fit index (CFI) was .96 (recommended:  $\geq .90$ ), and the root mean square error of approximation (RMSEA) was 0.08 (recommended:  $\leq .05$ ).

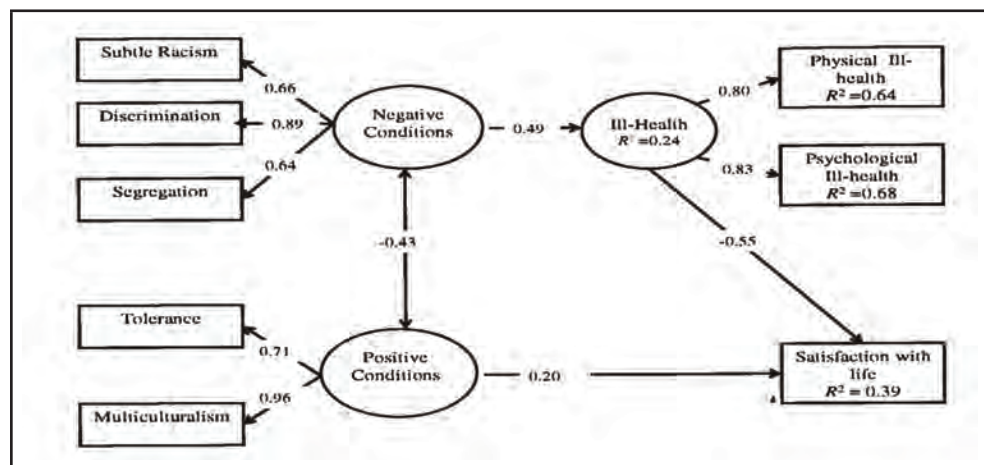


Figure 2: The results of the SEM analysis (all depicted parameters were significant)

The parameters of the model are presented in Figure 2 from which it is clear that the standardised regression weights in the hypothesised model were significant and showed the expected signs (as did the correlation coefficients of Table 1). The

negative stream was more predictive of psychological outcomes (both ill-health and satisfaction with life) than the positive stream.

### Comparisons of male and female students

In order to examine differences in the male and female groups' experience of mainstream antecedent conditions and psychological acculturation outcomes, a multivariate analysis of variance (MANOVA) was carried out with gender (two levels: male and female) as the independent variable and the mean scores of the scales as dependent variables. The mean scores of the scales per gender group are presented in Table 2. The multivariate effect of gender was significant (Wilks' Lambda = .84;  $F(8, 218) = 5.27, p < .01, \eta^2 = .16$ ), with all variables except for psychological ill-health symptoms showing statistically significant gender differences. White female students experienced more multiculturalism, mainstream tolerance and satisfaction with life and also experienced lower segregation demands, discrimination, subtle racism and ill-health symptoms compared to white male students. Small to medium effect sizes were observed. As expected, compared to their male counterparts, white females showed scores that indicated that they evaluated the changes in South Africa vis-à-vis multiculturalism and acculturation more positively.

Table 2: Mean scores and standard deviations per scale for the male and female groups and the effect size of their difference

	Males		Females		Cohen's d
	M	SD	M	SD	
Multiculturalism	3.27	0.62	3.58	0.80	-0.50**
Mainstream tolerance	3.13	0.50	3.33	0.63	-0.40*
Segregation demands	2.74	0.61	2.39	0.76	0.57**
Discrimination	2.59	0.63	2.35	0.60	0.40**
Subtle racism	2.36	0.83	1.91	0.67	0.67**
Physical ill-health	2.33	0.82	1.98	0.56	0.63**
Psychological ill-health	2.31	0.83	2.25	0.64	0.09
Life satisfaction	3.47	0.74	3.73	0.65	-0.40**

\* $p < .05$

\*\* $p < .01$

### DISCUSSION

Historically white HEIs in South Africa are becoming increasingly diverse as a result of socio-political changes following the first democratic national elections of 1994 and increased political pressure to redress past imbalances. In spite of these changes, national surveys indicate that in their private space South Africans from various ethnic groups hardly have any contact with members from ethnic backgrounds other than their own (Hofmeyr 2006). We were, therefore, interested in how white male and

female students experience and cope with the changing diversity in their dormitories where the frequency of forced contact with members from other ethnic groups is on the increase. The aim of the study was to test a model using acculturation conditions as predictors of psychological acculturation outcomes, such as satisfaction with life and physical and psychological ill-health.

The hypothesised DPMD was confirmed. More multiculturalism and mainstream tolerance were associated with higher satisfaction with life. In addition, mainstream segregation demands, discrimination, and subtle racism were associated with the experience of higher physical and psychological ill-health and reduction in the experiences of satisfaction with life. This result supports the positive relations found between positive or facilitating acculturation conditions or resources, on the one hand, and satisfaction with life, on the other hand (Jackson et al., in press; Jackson and Van de Vijver, in review) as well as the negative impact of negative acculturation conditions and ill-health (Berry et al. 2006; Gee et al. 2009; Hein et al. in press; Jackson et al. 2011).

Thus, the current study points to the importance of taking mainstream conditions into consideration in acculturation studies as argued in the Integrated Acculturation Model (Bourhis, Moïse, Perreault and Senécal 1997). In addition, these results provide support for the DPMD (Jackson and Van de Vijver, in review) in that it confirms that the acculturation context comprises facilitating or positive acculturation conditions or *resources* or a motivational path that leads to satisfaction with life. Also, this positive stream is rather independent of a negative stream comprising ill-health as outcome and restricting or negative acculturation conditions or *demands* as antecedents. Furthermore, the findings demonstrated that both streams comprise their own antecedents and outcomes; correlational and path analyses confirmed that associations of variables within one stream are much stronger than associations with the other stream. As was expected, a stronger (negative) relation was observed between negative conditions and satisfaction with life compared to the somewhat weaker (positive) relation between positive conditions and satisfaction with life. Moreover, negative conditions were in general much better predictors of psychological acculturation outcomes than positive conditions. It, therefore, seems likely that a dormitory culture that is characterised by mainstream segregation demands, discrimination, and subtle racism contributes to white students' experience of higher levels of ill-health symptoms and lower levels of satisfaction with life.

We were also interested in whether white males and female students experience the acculturation condition and outcomes differently. As was expected, white female students experience higher multiculturalism, mainstream tolerance and satisfaction with life while also experiencing lower segregation demands, discrimination, subtle racism and ill-health symptoms compared to white male students in the dormitories of a historically white HEI. This result also seems to concur with the widely held notion of the historically advantaged group (white males) that they are the victims of recent reverse discrimination (Herman 2000). Interestingly, this perception is contrary to the figures published by the Employment Equity Commission in the

recent Employment Equity report of 2010/2011 (Department of Labour 2011), which indicate that white males seem to still dominate the upper echelons of the South African workforce.

In the light of the damaging impact of negative conditions or acculturation demands, it is recommended that student and university management pay special attention to behaviour that is related to segregation, discrimination, and racism in (especially male) dormitories and publicly sanction such behaviour in order to discourage it. Yet, they should also launch special events to celebrate and embrace cultural differences in order to create greater awareness, tolerance of and appreciation for diversity. These initiatives should foster contact between students from diverse backgrounds as this practice is seldom observed at home or in the private space. Rooms could be shared by roommates from different ethnic backgrounds in order to reduce opposition and hostility (Pettigrew 1982) toward diversity and nation building efforts on a societal level based on the Contact Hypothesis, which proposes that social contact and interaction increase attraction, liking, and understanding between heterogeneous individuals. Cultural days and diversity management workshops which aim to expose students to other national ethnic cultures could also be considered in this regard as these programmes seem to reduce prejudice (Naidoo 2008). The hypothesised DPMD would suggest that diversity management should aim at reducing negative conditions, such as discrimination, which will probably increase students' well-being, as well as at promoting factors that stimulate diversity, such as promoting diversity tolerance and norms, which will probably increase intercultural contacts.

The study, like any other, is certainly not without limitations. The sample size and sampling method could be enhanced by including students from other ethnic backgrounds, such as Coloureds and Indians, and foreigners including those who do not stay in the dormitories. It would be beneficial to tap into their experiences on campus as a whole because intercultural contact is greater in the cafeteria, at university social events and in the lecture halls. Although statistical prediction in a model such as this one as well as the DPMD does not definitively demonstrate causality, it can indicate a sequential order and the sequential predictive ability of the model has also been demonstrated. Nonetheless, longitudinal studies could also be considered to investigate and establish cause and effect in the acculturation process. Future research could also benefit the field by exploring the role of the ethno-cultural context and adding possible individual mediating or moderating variables to the investigations.

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