THE ACCULTURATION PROCESS IN HOSTELS OF A HIGHER EDUCATION INSTITUTION

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Mini-Dissertation submitted in fulfilment of the requirements of the degree Magister Commercii in Industrial Psychology at the Potchefstroom Campus of the North-West University.

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REMARKS

The reader is to be reminded of the following:

- The references as well as the editorial style comply with the requirements 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) namely to make use of the APA style in all scientific documents as from January 1999.

- The mini-dissertation is presented as one research article. The name of the study leader and assistant study leader appears on the research article as it will be submitted for publication in a national journal.
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## CHAPTER I: INTRODUCTION

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SUMMARY

**Topic:** The acculturation process in hostels of a higher education institution.

**Key terms:** Diversity management, employment equity, affirmative action, acculturation, acculturation strategies, multiculturalism, integration, social support, physical and psychological health.

South Africa is no longer trapped in an apartheid era and is now perceived as a multinational state, implying that not only the composition of labour forces have changed, but all other institutions have developed into being more representative of all races. Thus whilst the workplace demographics are rapidly changing; more individuals are preparing themselves to enter the workplace. As a result more diverse cultures also prevail within hostels of higher educational institutions.

The objectives of this study were to investigate individual preferences in terms of acculturation strategies as utilised by students in hostels of a higher education institution. Another important objective was to understand the effect of acculturation strategies has on the general well-being and health of individuals. In order to achieve these objectives, Berry’s bi-directional Acculturation Model, as well as the Interactive Acculturation Model was used.

A cross-sectional survey design with an availability sample \( N = 245 \) was used, taken from hostel students of a higher education institution in South Africa. The questionnaire consisted of various items on the acculturation scale, as well as a biographical questionnaire. Descriptive statistics, factor analyses, Cronbach alpha coefficients, MANOVAs, Multiple Regression Analysis, and Pearson product-moment correlation coefficients were used to analyse the data.

The results pointed out that females preferred Separation or Assimilation, while males prefer Integration as acculturation strategy. Female hostels preferred Separation as acculturation strategy and male hostels preferred Integration as acculturation strategy. Acculturation strategies in terms of race showed that White groups preferred Integration and African groups preferred Separation. Regarding the effect that acculturation strategies have on health, males experienced high levels of physical health problems.
Recommendations were made for further research.
OPSOMMING

**Onderwerp:** Die akkulturasieproses in koshuise van ’n hoër opvoedkundige instelling.

**Sleuteltermen:** Diversiteitsbestuur, gelyke geleenthede, regstellende aksie, akkulturasie, akkulturasiestrategieë, multikulturalisme, integrasie, sosiale ondersteuning, fisiese en psigiese gesondheid.

Suid-Afrika is nie meer vasgevang in ‘n era van apartheid nie en word nou gesien as ’n multinasionale staat. Dit impliseer dat nie net die samestelling van werksmagte verander het nie, maar dat alle instansies meer verteenwoordigend van alle rasse geword het. Al hoe meer individue berei hulleself vandag deeglik voor om die werkplek te betree, terwyl die werkplek teen ’n snelgroeiende tempo demografiese veranderinge ondergaan. As gevolg hiervan kom daar ook al hoe meer verskillende kulture voor in die koshuise van hoër opvoedkundige instellings.

Die doelwitte van die studie was die bestudering van individuele voorkeure betreffende akkulturasiestrategieë wat gebruik word deur koshuisstudente van hoër onderwysinstansies. Die ander doelwit was om vas te stel en te verstaan watter effek die verskillende akkulturasiestrategieë op die algemene welstand en gesondheid van individue het. Ten einde hierdie doelwitte te bereik is gebruik gemaak van Berry se bi-direksionele akkulturasiemodel so wel as die Interaktiewe Akkulturasie Model.

’n Dwarsdeursnee-opname ontwerp met ’n beskikbaarheidsteekproef ($N = 245$) is gebruik uit koshuise van ’n hoër onderwysinstansie in Suid-Afrika. Die vraelys het bestaan uit verskeie items op die akkulturasieskaal sowel as ’n biografiese vraelys. Beskrywende statistiek, faktor-analise, Cronbach alfakoëffisiënte, MANOVAs, Meervoudige Regressie-Analise, en Pearson se Produk-Moment-Korrelasieskoëffisiënte is gebruik om die data te analiseer.

Die resultate het getoon dat vrouens oor die algemene Skeiding en Assimilasie verkies, terwyl mans Integrasie as akkulturasiestrategie verkies. Dameskoshuise het die Skeiding as akkulturasiestrategie verkies en manskoshuise het Integrasie as akkulturasiestrategie verkies. Akkulturasiestrategieë in terme van ras het getoon dat Blanke groepie Integrasie verkies en
Afrika-groepe Skeiding verkies het. Met verwysing na die effek wat akkulturasiestrategieë op gesondheid het, het mans hoër vlakke van fisiese gesondheidsprobleme ervaar.

Aanbevelings vir toekomstige navorsing is aan die hand gedoen.
CHAPTER 1

INTRODUCTION

This mini-dissertation focuses on the acculturation processes in hostels of a higher education institution.

Chapter 1 consists of the problem statement, research objectives and research methodology. The chapter starts with a problem statement, followed by an overview of research previously conducted on acculturation and the influence of context variables on this process, linking it with this research project and its research objectives. This is succeeded by performing a discussion of the research method with the emphasis on certain details regarding the empirical study, research design, participants, measuring instruments and statistical analysis. It concludes with a chapter summary giving an overview of the chapters that comprise this mini-dissertation.

1.1 PROBLEM STATEMENT

Many countries have recently been dealing with the issue of multiculturalism as well as with the question of how to effectively manage cultural diversity in a multi-ethnic society (Anon., 2006). Due to a flood of immigrants, traditionally relatively homogenous countries such as France, England and Australia also had to come to terms with multiculturalism (Anon., 2006). Conversely, as evidenced by the riots in France at the end of 2005 as well as similar scenes in Britain (2001) and Sydney (2006), the progress from uni-culturalism to multiculturalism has proven to be difficult and more complex than anticipated (Anon., 2006).

The dismantling of apartheid in the 1990's was a watershed of historic development for South Africa. The world observed the country plotting its course towards the establishment of a democratic, non-racial, non-sexist system of government (Kreimer & Kinicki, 2004). A major consequence of South Africa's first democratic election in April 1994 was a change in the composition of the labour force. This is also evident in higher education institutions. While
always being the minority group. 55% of the students at Unisa consist of females in 2001 (Schreuder & Theron, 2002). This implies that more qualified females are entering the labour force timely. The general trend – on national and international level – is that new entrants to the job market are mostly female. This results in the majority of families either already being dual-career families or are in the process of becoming dual-career families (Schreuder & Theron, 2002). Therefore, South Africa’s workforce currently consists of more women, is more representative of all races, and the number of working couples is increasing (Kreitner & Kinicki, 2004).

South Africa’s transition from an apartheid past to an undetermined future assembled on the vision of ‘non-racial’ democracy and ‘intercultural’ harmony (a rainbow nation), has impacted profoundly on social, political, economical and cultural life (Stevens & Lockhat, 1997). In this regard, the approval of the 1996 Constitution guarantees the liberties of all South Africans. The implementation of affirmative action measures in public and private sectors was aimed to redress past discrimination and promote employment equity (Finchilescu & Nyawose, 1998).

Affirmative action is a reality in South Africa and groups that were previously excluded are increasingly becoming part of the labour force. The implementation of the Employment Equity Act (Act No. 55 of 1998, South Africa, 1998) changed the face of the South African workforce significantly in the years to come (Schreuder & Theron, 2002). The Employment Equity Act was introduced to promote fairness and equality in the workplace (Muchinsky, Kriek, & Schreuder, 2002). Affirmative action, as a requirement under the Employment Equity Act, is a social policy aimed at reducing the effects of prior discrimination. According to Kemp (1992), the main purposes of affirmative action are to eradicate discriminatory practices and to promote the skills and abilities of those who have suffered as a result of discriminatory practices, i.e. redress the imbalances of the past.

With the democratic processes now firmly in place, the emphasis has shifted to economic revitalisation and South Africa has shown steady economic progress. This recovery is a clear indication that South Africa has turned the corner (Kreitner & Kinicki, 2004). The focus can now be on those practices that allow domestic and global excellence. An important step is to get to
know and understand the cultures, values, norms and beliefs held by the different segments of the South African population (Kreitner & Kinicki, 2004).

Unfortunately, this process does not always run so smoothly. Local Newspapers regularly report on issues regarding irregularities between the different cultural groups in South Africa. This is evidential of the fact that sufficient mutual understanding between the different cultural groups in South Africa does not exist yet. These issues include aspects like the rise of Xenophobia (i.e. denoting a phobic attitude towards strangers or of the unknown) (Anon, 2001); the emphasis that racism is still to be alive and well in South Africa (Desai, 1998); and the fact that apartheid has destroyed millions of people’s self-respect and has caused disrespectfulness against others (Boshoff, 2006). The indication is that there is still a long way to go in order to repair self-respect (Boshoff, 2006) and a lot can be gained by multiculturalism experiences, especially at South African universities (Bothma, 2006).

As South Africa is no longer trapped in an apartheid era and is now seen as a multi-national state (a state where more than one nation co-exists within the borders of the state) (Bonman, 2006), it is clear that not only the composition of labour forces have changed, but it can be expected that all other institutions have evolved into being more representative of all races (Schreuder & Theron, 2002). It is also clear that whilst the workplace demographics are rapidly changing; more individuals are preparing themselves in order to enter the workplace. Consequently different cultures prevail within hostels of higher education institutions.

White students were always the dominating culture within traditional Afrikaans universities whilst other cultural groups were in the minority. The assumption can be made that it could have been expected from the minority cultural groups to adapt to the majority group. This process of adaptation to the host culture where one enters into an unfamiliar environment and adjusts to the new environment requires changes. Anxiety, confusion and depression can develop as a result of change (Choi, 1997; Lin & Yi, 1997). These are very difficult and stressful circumstances (Choi, 1997; Mori, 2000; Sandhu & Asrabadi, 1994). The stress brought about by this adaptive process is referred to as *acculturative stress* and the process of coping in the event of contact with the
second culture has generally been called acculturation (Berry, Poortinga, Segall, & Dasen, 1992; LAFramboise, Coleman, & Gerton, 1993).

Acculturation is defined as a process of adaptation to a new environment as a result of two independent cultures coming in contact with each other (Redfield, Linton, & Herskovits, 1936, 1954). There are two levels of acculturation, namely individual and group (Graves, 1976). The individual level is referred to as psychological acculturation or changes that an individual experiences due to being in contact with another culture. Acculturative changes for both cultures at group level include the areas of political, economic, demographic and cultural change.

Several stages are involved in the process of acculturation (Berry, 1986). In the first stage the individual makes contact with the mainstream culture through trade, enslavement or migration. Arising from this contact, the individual encounters conflict due to differences such as food preference, clothing style and language. This places him within the second stage. In the third stage the individual adjusts to the mainstream culture in order to reduce the conflict. These attempts to deal with conflicts are conceptualised as acculturation strategies. Four acculturation strategies are identified, namely assimilation, integration, marginalisation and separation (Berry, 1997, 1998, 1999). The development of the four acculturation strategies is based on two prevailing issues that individuals are the most confronted with in their lives. The first issue is whether to maintain or reject their own cultural values and the second issue is whether to accept or reject the cultural values of the host culture (Berry, 1997, 1998, 1999).

Since empirical studies of majority acculturation orientations are relatively scarce (Ward, 1996), a model of majority acculturation has been largely derived from those of minority acculturation (Pettigrew, 1998; Triandis, Kashima, Shimada, & Villareal, 1986). Two major acculturation models could be identified, namely the uni-dimensional model and the bi-dimensional model. The uni-dimensional model implies a process of culture change along a single dimension, a shift from maintenance of minority culture to full adaptation to the host culture (Gordon, 1964). In this model, the minority of individuals lose their original culture as they acquire a new culture, which implies a negative relationship between cultural maintenance and cultural adaptation (Cuéllar, Harris, & Jasso, 1980; Suinn, Ahuna, & Khoo, 1992).
In the bi-dimensional model, maintenance and adaptation are treated as two independent dimensions (Berry, 1997; Huttnek, 1986; Sanchez & Fernandez, 1993). The most popular bi-dimensional model is that of Berry (1992). In this model the two main aspects of acculturation are combined, constituting four acculturation strategies namely integration, assimilation, separation, and marginalisation. In this study the focus will be on bi-dimensional models as many bi-dimensional models have been utilised to study the adaptation process of various ethnic groups (Kim & Berry, 1985; Pettigrew, 1988; Suinn, Rickard-Figueroa, Llew, & Vigil, 1987).

The Interactive Acculturation Model (Bourhis, Moïse, Perreault, & Senécal, 1997) integrates the acculturation strategies (from the bi-dimensional model) of the mainstream and those used by the minority culture. The conjunction of the acculturating strategies of both parties leads to an acculturation situation. This situation can be either conflicting (mainstream favours assimilations and the ethnic group favours integration) or consensual (where both mainstream and ethnic culture favour assimilation) and it can be accepted to have an impact on the acculturation outcomes (Zagefka & Brown, 2002). This study uses the abovementioned framework and conceptualises the acculturation process as consisting of background individual-level factors (mainstream and ethnic), intervening factors (personality, coping, acculturation strategies, etc.) and outcome factors (socio-cultural and psychological adaptation).

Integration, the first acculturation strategy, is used when individuals of the minority group accepts both their own cultural values as well as the cultural values of the host. However, when this process is determined by the larger society it is called multiculturalism (Berry 2001). The second strategy is assimilation. Individuals who utilise this strategy reject their own cultural values and identity and accept the cultural values of the host. In the event where this process is determined by the larger society, it is called melting pot (Berry 2001).

Separation is the third strategy. This occurs when the minority of individuals accepts their own cultural values and identity and rejects the cultures values of the host. When this strategy is accepted by the larger society, it is called segregation (Berry, 2001). The fourth and last acculturation strategy is marginalisation, which refers to individuals who reject both cultures'
values and identities – when this process is chosen by the larger society it is called exclusion (Berry 2001).

Within this study the main focus will be on integration as an acculturation strategy. Results obtained using the different acculturation models indicated migrants generally prefer integration, which is a combination of adaptation and cultural maintenance (Berry, Kim, Power, Young, & Bujaki, 1989). As a broad term, integration can refer to any (positive) combination of adaptation and cultural maintenance, meaning that migrants could have accepted some aspects of both cultures. Integration can also refer to the merging of cultures or to creating a “new culture” from the old ones (Coleman, 1995).

According to Berry, (2003) and Ward and Kennedy (1999), factor analyses have shown that the multitude of acculturation outcomes can be divided under two main headings – psychological and socio-cultural outcomes. Psychological has to do with mental health and general satisfaction with life in the host milieu and socio-cultural has to do with successful participation in the host milieu. Psychological and socio-cultural adaptation is positively related (Berry, 2003; Ward & Kennedy, 1999) and the strength of the association is related to the cultural distance and the degree of integration of cross-cultural travellers in the social milieu. The larger the cultural distance the weaker the association between psychological and socio-cultural adaptation, and the more the orientation towards the host society (assimilation or integration) the stronger the association (Ward & Rana-Deuba 1999). Another important focus point in this research study will be the psychological outcomes such as psychosomatic complaints, physical and psychological health.

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). Health is therefore about wholeness, happiness and well-being (Beattie, Gott, Jones, & Sidell, 1993) on a physical, cultural, psychosocial, economic, and spiritual level (Marks, Murray, Evans, & Willig, 2000). It can be presented on a continuum, ranging from poor health to complete physical and mental wellness (Du Toit, 1986).
There is a contradictory pattern of evidence as to the effects of acculturation on health. In a study in a Hispanic community, for example, risky health behaviours, stress levels, and medical risks all seemed to increase with greater acculturation and decreases in social support (Zambrana, Scrimshaw, Collins, & Dunkel-Schetter, 1997). Tran, Fitzpatrick, Berg, and Wright (1996) found that the level of acculturation had a significant effect upon the health status of individuals. The finding revealed less acculturated respondents to experience higher rates of self-reported health problems than those with higher levels of acculturation. Fewer language skills and low education levels are mentioned as aspects influencing adequate health care and reinforced a tendency to perceive oneself as subject to certain health related problems (Tran, et al, 1996).

In South Africa, despite the abovementioned studies, no studies focusing on the acculturation process among a sample of university hostel residents and the effect is has on health, could be found. It is possible that a better understanding of this process and the related constructs within an education environment, will contribute to a better understanding of different cultural groups in general.

This research study will contribute to the subject of Industrial Psychology and the practice thereof in organisations in the following ways:

- It will be of assistance in order to determine the factors that promote and prevent successful cross-cultural transitions in hostels at a higher education institution.
- It will help to determine whether or not the exposure to an unfamiliar cultural environment has an effect on the health of individuals.
- It will assist in determining the extent to which an integration acculturation strategy prevails in hostels at a higher education institution.
- It will help to determine if the acculturation orientation of the host culture (the university hostels) supports multiculturalism.
1.2 RESEARCH OBJECTIVES

The research objectives are divided into general and specific objectives.

1.2.1 General objective

The general objective of this research study is to determine the acculturation process in hostels at a higher education institution.

1.2.2 Specific objectives

The specific research objectives of this research study are as follows:

- To conceptualise acculturation, acculturation process, acculturation strategies and psychosomatic, physical and psychological health from the literature.
- To determine the different acculturation strategies in a sample of students in hostels at a higher education institution.
- To determine the effect of different acculturation strategies on the health of students in hostels at a higher education institution.
- To determine the extent to which an integration acculturation strategy prevails in South African university hostels.
- To determine whether the acculturation orientation of the host culture (the university hostels) supports multiculturalism.
- To make recommendations for future research studies.

1.3 PARADIGM PERSPECTIVE OF THE RESEARCH

A certain paradigm perspective directed this research study, including the intellectual climate and the market of intellectual resources. The purpose of the paradigm perspective concerning the research study is to define the research within the structure of the relevant research context (Mouton & Marais, 1992). The paradigm perspective will be discussed in terms of the
intellectual climate, market of intellectual resources, disciplinary framework and the relevant models and theories.

1.3.1 Intellectual climate

According to Mouton and Marais (1992), the intellectual climate refers to the variety of non-epistemological value systems or beliefs that are endorsed in any particular period in a discipline. The intellectual climate generally originates in a non-epistemological context developing in a collection of beliefs, values and assumptions that do not directly deal with the epistemological views of the scientific research practice.

This research study falls within the margins of the behavioural sciences and more specifically Industrial Psychology, which is the scientific study of people within their working environment. This implies scientific observation, evaluation, optimal utilisation and influencing of normal and to a lesser degree, deviant behaviour during interaction with the environment (physical, psychological, social and organisational) as manifested in the work-place (Muchinsky, et al., 2002).

1.3.2 Discipline

Organisation Psychology and Cross-cultural Psychology are subordinate disciplines of Industrial Psychology. These two subordinate disciplines will be discussed in this research study. Organisational Psychology comprises the concern about the organisation as a system involving individuals and groups, as well as the structure and dynamics of the organisation. The basic aims are fostering worker adjustment, satisfaction and productivity, as well as organisational efficiency (Bergh & Theron, 1999). Cross-cultural Psychology studies the similarities and differences in individual, psychological and social functioning of various cultures and ethnic groups (Kagitcibasi & Berry, 1989).
1.3.3 Meta-theoretical assumptions

Five paradigms are relevant to this research study. Firstly, the literature review is done within the humanistic paradigm and systems theory, and secondly the empirical study is done within the behaviouristic, positivistic and functionalistic paradigm.

1.3.3.1 Literature review

The humanistic paradigm is a school of thought with the emphasis on people as free agents with the ability to make choices. They are intentional and aware of their actions. According to this paradigm, people can be affected by their relationships with others and are worth more than just the sum of their parts. This is considered to be an essential criterion to ensure psychological health (De Carvalho, 1991).

Mc Geoch (1933) defines a system as the coherent and inclusive, yet flexible, organisation and interpretation of the facts and special theories of the subject. Lundin (1996) defines a system as a set of objects together with relationships between the objects and between their attributes. Systems theory is one of the most powerful conceptual tools available for understanding the dynamics of organisations and organisational change (Lundin, 1996). Therefore, for the purpose of this particular research study, the object will be to determine the impact of individual acculturations strategies along with the pressure to conform to hostel ideals and practices. The impact on an individual’s health condition regarding the pressure to conform to preferred acculturation strategies by the own cultural group will also be a point of discussion.

1.3.3.2 Empirical study

According to Meyer, Moore, and Viljoen (1997), the behaviourist paradigm depart from the stance that observable behaviour is psychology’s exclusive object of study and that unobservable phenomena, such as thoughts, feelings and values, are regarded as unattainable to scientific study. Behaviourists indicate that learning takes place through stimuli and responses, which are combined through learning experiences. The prediction of human behaviour is regarded as the
goal of scientific endeavour. Thus the behaviouristic paradigm as explained by Skinner (1948), is based on the assumption that behaviour is determined by experiences, contingencies and reinforcements within the environment and not by instinct or inherited traits.

For the purpose of this research study the behaviouristic paradigm will determine whether different acculturation strategies have an impact on the health of the study population.

The **positivistic paradigm** is based on the assumption that, during research, only observable and measurable data should be taken into account (Winberg, 1997). Traditional social science, with random samples, as well as operationally defined variables and statistical analysis are positivistic. Positivist attempts to exclusively make use of data obtained through direct observation in order to research “positive” facts. This paradigm is based on the assumption that one can scientifically discover the rules governing social life. Positivist ontology is defined as “to be perceived” and the relative epistemology is the correspondence theory of truth. That is, the criterion for judging a scientific theory is whether or not our knowledge claims *correspond* to what lends itself to our senses (Ardebili, 2001).

Acculturation strategies, pressure to conform to preferred acculturation strategies of the own culture, pressure to conform to hostel ideologies and practices and health are, regarding this study, the variables that stand in different realities to each other.

According to Babbie (1979), the **functionalistic paradigm** being a quantitative approach, is concerned with the understanding of society (organisations) and in such a way that useful empirical knowledge can be produced (this paradigm is primarily regulative and pragmatic). According to this approach society has a concrete, real existence, a systematic character and it encourages a social theory-approach that focuses upon understanding the role of human beings in society. Plug, Louw, Gouws, and Meyer (1997) states that functionalism makes the assumption that certain units of psychological phenomena can be explained in terms of relationships and that these explanations serve to enhance human adaptation and survival.
Acculturation strategies, pressure to conform to preferred acculturation strategies of the own culture and pressure to conform to hostel ideologies and practices (human behaviour) will be emphasised.

1.3.4 Market of intellectual resources

The market of intellectual resources refers to the collection of beliefs that have to do with the epistemic value of scientific statements. A distinction is made between theoretical and methodological beliefs regarding the nature and structure of the research phenomena and process respectively (Mouton & Marais, 1990).

1.3.4.1 Theoretical beliefs

Theoretical beliefs are considered to be any statements about the descriptive and interpretive aspects of human behaviour, which would include hypotheses, typologies, models and theories (Mouton & Marais, 1990). Theoretical assumptions provide an outline to fundamental theoretical statements (Botes, 1995).

A. Conceptual definitions

The relevant conceptual definitions are given below:

Acculturation is defined as a process of adaptation to a new environment as a result of two independent cultures coming in contact with each other (Redfield, et al., 1936, 1954).

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). Health is therefore about wholeness, happiness and well-being (Beattie, et al., 1993) on a physical, cultural, psychosocial, economical, and spiritual level (Marks, et al., 2000). It can thus be presented on a continuum ranging from poor health to complete physical and mental wellness (Du Toit, 1986).
B. Models and theories

The bi-dimensional model postulates that ethnic and host cultures constitute two independent dimensions and that adherence to the one may not affect adherence possibilities to the other (Berry, 1997). The Interactive Acculturation Model (IAM) seeks to integrate the components of immigrant and host majority relations in multicultural and multilingual settings within a common theoretical framework (Bourhis, 2001; Bourhis, et al., 1997)

1.3.4.2 Methodological Beliefs

Mouton and Marais (1992), defines methodological beliefs as beliefs that can make pronunciations regarding the nature and structure of science and scientific research.

The empirical research study is presented within the positivistic and functionalistic frameworks. The root assumption of the positivistic framework is that it is a point of departure (Neuman 1997). Neuman (1997) further states that positivism regards social science as an organised method for combining deductive logic with precise empirical observations of individual behaviour in an attempt to discover and confirm a set of probabilistic contributory laws. These laws can be used to predict general patterns of human activity.

1.4 RESEARCH METHOD

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

1.4.1 Literature review

The literature review will focus on the acculturation process in hostels in a higher education institution.
1.4.2 Empirical study

In the empirical study, the focus will be on the research design, the participants, the measuring battery and the statistical analysis.

1.4.2.1 Research design

A cross-sectional survey design together with a sample drawn from a population at one time will be used to obtain the desired research objectives. A cross-sectional design is relevant when the research is conducted over a short period, such as one day or a few weeks (Du Plooy, 2001). One group of people is observed at one point of time. A sample is drawn from a population at a specific time. This design is also used to assess interrelationships among variables within a population. Schaufeli and Enzmann (1998) criticise the use of cross-sectional designs in research and recommend 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.

1.4.2.2 Participants

The participants could be defined as an availability sample of students in hostels at a higher education institution. A total population of 500 students were targeted. A response rate of 51% was achieved, of which 246 responses (98%) could be utilised. The study population ($n = 246$) consisted of mainly white (90.60%) female students (68.60%) between 17 and 19 years of age (54.30%). The majority of the participants speak Afrikaans as first language (92.70%) and are studying in Economic Sciences (40.80%).

1.4.2.3 Measuring Battery

Instruments were adapted (Ait Ouarasse & Van de Vijver, in press) and others developed by the researchers to measure the following: Acculturation context (including the mainstream-society of settlement and ethno-cultural context - the society origin) and psychological acculturation
outcomes (physical and psychological health). All scales follow a five-point Likert- format ranging from strongly disagree (1) to strongly agree (5). All scales are uni-factorial.

Perceived pressure to conform to preferred acculturation strategies by own cultural group (PCAS). This is a six-item measure developed by the researchers of this study, which measures the extent to which participants feel that they have to conform to preferred acculturation strategies as supported by their own cultural groups. 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 is very important in our culture”. Cronbach alpha coefficients will be determined.

Perceived pressure to conform to management practices and ideologies (PCMI) (Ait Ouarasse & Van de Vijver, in press). This is a six-item measure, which measures the extent to which participants feel that they have to conform to management’s ideologies and practices. Four of the items were positively phrased and two negatively phrased. The scale contains items like “I think that management expects from us to stick to our organisational rules” and “I think that my coworkers would avoid me if I broke rules in our organisation.” Cronbach alpha coefficient of 0.75 were obtained in a study of the acculturation context of Moroccans in the Netherlands (Ait Ouarasse & Van de Vijver, in press).

Individual Acculturation Strategy (IAS). This is a ten-item measure, which was developed by the researchers of this study. When using this measure, the students are being questioned to which extent they prefer certain acculturation strategies. Where three items represented each acculturation strategy namely, Integration, Separation and Assimilation, with only one item representing Marginalisation. The scale contains items like “I prefer social contact and interaction with only members of my own ethnic groups”, “I prefer social contact and interaction with members of all South Africa irrespective of race or ethnicity as well as with members of my own ethnic group” and “I think that things would be better for me if I forget about my own culture and adopt the dominant culture of the New South Africa” as well as “I do not want contact with members of my own ethnic group nor with members from other cultures”. Cronbach alpha coefficients will be determined.
Acculturative stress: Physical and Psychological Health. This measure is an adaptation of the Physical Symptoms Inventory (Spector & Jex, 1998). When using this measure, the students are being questioned whether they experienced a range of specific physical health symptoms as well as specific psychological health symptoms in the past three months. The inventory mentioned 21 possible physical health symptoms that could cause discomfort, such as chest pain, headache, fever, trouble sleeping. Symptoms like high blood pressure, which is not a direct experience of discomfort, wasn’t incorporated. The inventory also mentioned 9 possible psychological health symptoms such as anxiety attacks/panicking constant irritability, mood swings and having difficulty concentrating. Cronbach alpha coefficients of 0.95 for physical health and 0.91 for psychological health were obtained in studies on acculturation processes in the South African Police Service (Kolokoane, & Jackson, in press).

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

1.4.2.4 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 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) Coefficient alpha 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.

Exploratory factor analyses were carried out to determine the construct validity of the measuring instruments. The following procedure was followed:

Firstly, a simple principal components analysis was conducted on the constructs which form part of the measurement model, including a) Pressure to conform to management ideals and practices (PCMI); b) Perceived pressure to conform to preferred acculturation strategies by own cultural
group (PCAS); c) Individual acculturation strategies (IAC); d) Acculturative stress: physical health (ASPh) e) Acculturative stress: psychological health (ASPs). In order to determine the number of factors, the eigenvalues and scree plot was studied. Secondly, a principal axis factoring analysis with a direct oblimin rotation was conducted if factors were related ($r > 0.30$) (Tabachnick & Fidell, 2001).

Pearson product-moment correlation coefficients were used to specify the relationship between the variables. In terms of statistical significance, it was decided to set the value 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. Pearson product-moment correlation coefficients were used to specify the relationship between the variables. A cut-off point of 0.30 (medium effect, Cohen, 1988) were set for the practical significance of correlation coefficients.

A stepwise multiple regression analysis was conducted to determine the percentage of the variance in the dependent variables that is predicted by the independent variables. The effect size (which indicates practical significance) in the case of multiple regression, was given by the following formula (Steyn, 1999):

$$f^2 = R^2 / 1 - R^2$$

A cut-off point of 0.35 (large effect, Steyn, 1999) is set for the practical significance of $f^2$.

Multivariate analysis of variance (MANOVA) was used to determine the significance of differences between demographic groups. MANOVA tests whether mean differences among groups on a combination of dependent variables are likely to have occurred by chance (Tabachnick & Fidell, 2001). In MANOVA a new dependent variable is created from the set of dependent variables. This maximises group differences. WILK'S LAMBDA was used to test the significance of the effects. WILK'S LAMBDA is a likelihood ratio statistic that tests the likelihood of the data under the assumption of equal population mean vectors for all groups against the likelihood under the assumption that the population mean vectors are identical to those of the sample mean vectors for the different groups. In the case where an effect was
significant in MANOVA, one-way analysis of variance (ANOVA) was used to discover which dependent variables were affected.

1.5. DIVISION OF CHAPTERS

The chapters in the mini-dissertation will be presented as follows:

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

1.6 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 and research procedure in this research was explained. The chapter concludes with a brief overview of chapters represented in this study.
References


CHAPTER 2

RESEARCH ARTICLE
THE ACCULTURATION PROCESS IN HOSTELS OF A HIGHER EDUCATION INSTITUTION

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ABSTRACT

The objective of this study was to determine the preference acculturation strategies of students in hostels of a higher education institution in South Africa, as well as the impact of these acculturation strategies on the health of the students. A cross-sectional survey design with an availability sample (N = 246) was used. An Acculturation Scale was used to measure the preferences in terms of acculturation strategies as well as the effect these strategies have on health. The outcome of the results showed that females prefer Separation or Assimilation as acculturation strategy, while males prefer Integration as acculturation strategy. Female hostels preferred Separation as acculturation strategy and male hostels preferred Integration as acculturation strategy. Acculturation strategies in terms of race proved that White groups preferred Integration and African groups preferred Separation. Males experienced higher levels of physical health problems regarding the effect of acculturation strategies on health.

OPSOMMING

Die doel van hierdie studie was om die voorkeur akkulturasiestrategieë van koshuisstudente van 'n hoër onderwys instansie in Suid-Afrika te bepaal, sowel as die impak wat hierdie akkulturasiestrategieë op die gesondheid van die studente het. 'n Dwarsdoorsnee-ontpume ontwerp met in beskikbaarheidsteekproef (N = 246) is gebruik. 'n Akkulturasiesskaal was gebruik om voorkeur akkulturasiestrategieë sowel as die effek wat hierdie strategieë op gesondheid het, te meet. Die resultate het getoon dat dames Skielding en Assimilasie as akkulturasiestrategie verdeel terwyl mans Integrasie as akkulturasiestrategie verkies. Danekosmiese het Skielding as akkulturasiestrategie verkies en manskosmiese het Integrasie as akkulturasiestrategie verkies. Akkulturasiestrategieë in terme van ras het getoon dat Blanke groepie voorkeur gee aan Integrasie en Afrika-groepie Skielding; verkies het. Met verwysing na die effek van akkulturasiestrategieë op die algemene welstand van persone, toon mans hoër vlakke van fisiese gesondheidsprobleme.
As a direct consequence of the 1984-constitution of the Republic of South Africa, higher education institutions were designated as being for the exclusive use of certain racial groups (Bunting, 2000). Institutions established in the early part of the twentieth century (i.e. Fort Hare, University of Cape Town, and University of the Witwatersrand) were also incorporated into a system which was subsequently shaped, enlarged and fragmented with a view to serve the goals and strategies of a successive apartheid government (Bunting, 2000). As a result, higher education was skewed.

The situation didn’t look much better towards 1994. Out of a total of 36 higher education institutions, ten universities and seven technikons were historically *disadvantaged*. These were being designated for the use of African, Coloured and Indian South Africans. On the other hand there were ten historically *advantaged* universities and seven historically *advantaged* technikons, designated for the exclusive development of white South Africans (Bunting, 2000).

Conversely by 1994 there have been substantial amounts of resistance with regard to the apartheid’s regime in the historically black and some of the historically white institutions. The racial profile of student enrolments in some of the institutions had also departed considerably from apartheid’s intentions (Bunting, 2000).

However, after the first democratic election in April 1994, new democratic structures were and are still only weakly founded (Anon, 1996). Higher education in the new South Africa appears to be very much in the process of development, particularly in terms of socialising black and white into peaceful co-existence (Cloete, 2000). The government’s commitment to the improvement of the education system is noticeable in the yearly expenditure for educational purposes. In 1995, for example, 20% of public expenditure was used for educational purposes; in comparison to the 12% spend in Denmark in the same year (Anon, 1996). The importance of improvement regarding the education system is clear, as all higher education institutions are vital in the development process, namely to lead South Africa away from apartheid towards modern democracy and industrialisation (Anon, 1996).
South Africa has experienced a 'revolution' on an individual level regarding the proportion increase of black students in higher education (Cooper & Subotzky, 2001). The proportion of black students enrolling at universities increased from 32% in 1990 to 60% in 2000 and from 32% to 72% in technikons (Cloete, 2000 & Bunting, 2000). The participation of female students also increased three times faster than that of men (from 42% in 1990 to 53% in 2000). This astounding equity improvement however only reflects the changing demographics of the population and was not mainly brought about by policy instruments (Bunting, 2000).

A profound study on these figures none the less reveals a very big racial imbalance in terms of students attending higher education institutions (Anon, 1996). Out of the 40 million citizens in South Africa, three quarters are black and the last 10 million comprise three other ethnic groups. Approximately 5 million of them consist of white people. This is less than 12 percent of the total population. However, nearly 50% of all students at higher education institutions are white (Anon. 1996).

It is clear that education in South Africa was always segregated along racial lines, and the apartheid system of social engineering ensured non-whites not to have equal access to white institutions and therefore to equal quality education (Norris, 2000). It is of vital importance to correct the imbalances caused by education systems during apartheid. Although most higher education institutions have changed their admission and recruitment policies, they still do not reflect the demographics of the South African society (Norris, 2000).

Higher education institutions in South Africa are currently in a stage of transformation and will, for the foreseeable future, remain under pressure to provide equal access and quality education to all South African citizens (Norris, 2000). In order to succeed in this transformation process the difference between the concepts “affirmative action” and “diversity” must be clearly understood (Norris, 2000).

**Affirmative Action** is defined as the process of creating equal opportunity (Blumrosen, 1985; Human, 1993). It is not merely a process of recruiting greater numbers of historically disadvantaged employees or students. It is part and parcel of a holistic system of human resource
management and development and has an impact on all the processes, policies and procedures of organisations (Human 1996).

In comparison to affirmative action, diversity starts with a realisation of diverse interests. As a result, the essence of an organisation and its culture must be re-negotiated and re-conceptualised from a perspective other than the dominant culture (Havenga, 1993). Diversity is a celebration of difference and an appreciation of the bonds that unite people (Loomis & Sharpe, 1990). Experiencing diversity is a common element of quality educational experiences and the achievement of excellence is also necessary in order to attain diversity (Loomis & Sharpe, 1990). However, the managing of diversity created by affirmative action, for whatever reason, is one of the biggest challenges higher education institutions are facing (Havenga, 1993).

South Africa can therefore no longer function as a mono-cultural country where either implicit or explicit exclusion of racial minorities or women occurs. Instead, South Africa is now in a non-discriminatory process where there is a sincere desire to eliminate the past imbalances and the unfair advantages of several groups (Norris, 2000). Along with the non-discriminatory process, South Africa is slowly moving towards being part of a multicultural process. This process involves becoming diverse in the most visionay sense, reflecting the contributions and interests of the diverse cultural and social groups. A desire to eliminate all forms of social discrimination along with sharing power and influence is essential to ensure no group to be subjected to an exploitive advantage (Norris, 2000).

Multiculturalism refers to the acceptance of different cultures in a society and also to the active support for these culture differences by both the majority and minority group members (Berry & Kalin 1995). According to Berry and Kalin (1995) there are four main prerequisites for maintaining a multicultural society. Firstly, cultural maintenance of the majority group(s) should be supported generally and intercultural contact and societal participation by all groups is a necessity. Secondly, no discrimination, low levels of prejudice or intolerance in the population should be accepted. Thirdly, the various ethno-cultural groups should have positive attitudes towards each other. Lastly, a degree of attachment to the larger society should exist, but this should not result in derogation of its constituent ethno-cultural groups.
This multicultural ideology addresses both issues of acculturation and inter-group relations (Berry, 2001). With reference to acculturation, cultural diversity is good for society and its individual members. This implies that cultural maintenance is highly valued. With reference to inter-group relations, multiculturalism implies that diversity should be shared and accommodated in an equitable manner, involving strong inter-group contact and participation (Berry, 2001). A bipolar uni-dimensional scale with positive evaluation of cultural diversity and support of multiculturalism at one pole, and negative evaluation of diversity, segregation, assimilation, and exclusion at the other has been used to assess multicultural ideology (Berry, 1984).

The result of this process is clearly visible in research. Church (1982) indicated that international students attending higher education institutions in other countries than their own encounter many problems such as language difficulties, homesickness, adjusting to social customs and norms, and even racial discrimination. Lin and Yi (1997) found academic problems to be common among international students. This is due to many factors such as the English language, different educational systems, financial pressures, psychosocial stresses as a result of new customs and social norms, changes in one's support system as well as intra-personal and interpersonal problems caused by the process of acculturation and adjustment. Studies also suggested that adaptation to the host culture (new culture) is very difficult and stressful (Choi, 1997; Mori, 2000; Sandhu & Asrabadi, 1994). Accordingly when going through the acculturation process, individuals face challenges regarding the use of language, perceptual and cognitive style, identity, attitudes and most importantly, the experience of acculturative stress (Lee, Koeske, & Sales, 2004).

The process of coping with second culture contact has generally been called acculturation (Berry, Poortinga, Segall, & Dasen, 1992; LaFramboise, Coleman, & Gerton, 1993). Coleman, Wampold, and Casali, (1995) suggested the phrase, "second culture acquisition", to be used in order to describe the process of coping with second culture contact and to reserve the term "acculturation" to explain the process.
Acculturation

Acculturation has traditionally been regarded as a progressive adaptation where people distance themselves from their group (culture) of origin to join the dominant host society (Sabatier & Berry, 1996). According to this perspective, orientation towards the group of origin and towards the host society, are at opposite ends of the same continuum (Sabatier & Berry, 1996). Acculturation describes the process of all changes taking place when individuals of different ethno-cultural groups come into prolonged contact with one another (Berry, 1992). Although acculturation processes involve both the migrant and the dominant population, the changes are most significant for the migrant group members (Berry, 1992). Acculturation research has therefore investigated mainly the experiences and attitudes of the migrant group.

The process of acculturation occurs in several stages (Berry, 1986). First the acculturating individual establishes contact with the mainstream culture through trade, enslavement, or migration. Secondly he believes that the individual encounters conflict from this contact, due to such differences as food preferences, clothing style and language. Lastly, in order to reduce the conflict caused by these differences, the individual makes adjustments to the mainstream culture. These attempts to deal with conflicts are conceptualised as acculturation strategies (Berry 1986).

According to Berry (1997), acculturation attitudes refer to two fundamental issues faced by immigrants. The one issue involves the decision to maintain one’s culture of origin and the other refers to the extent to which the immigrant wishes to have contact with the mainstream and participate in activities. These two issues are independent attitudinal dimensions - the first being whether to maintain or reject the own cultural values, also referred to as cultural maintenance and the second being whether to accept or reject the host cultural values also known as cultural adaptation (Bourhis, Moïse, Perreault, & Senécal, 1997).

Various models have been developed to measure the relationships between the two different acculturation attitudes (Berry 1997), namely the uni-dimensional model and the bi-dimensional model.
Acculturation Models

Uni-dimensional model of acculturation

According to Harris and Pham (2001), acculturation has formerly been viewed as a uni-dimensional process, which assumed that the acculturating individual would eventually, over a period of time, adopt the customs and values of the host culture. For example, the ‘melting pot’ view assumed that the optimal adaptation process for the acculturating individual is to assimilate to the host culture. Consequently, if refugees do not assimilate, they will experience alienation, anxiety, and stress (Beiser, 1988; Gordon, 1978; Roberts & Starr, 1989). Mendoza (1984) stated that uni-dimensional models tend to make use of a single index or dimension (e.g. items measuring only the individual’s ability to speak, read and write in English) for assessing the level at which the acculturating individual adapts to the host culture. However, it occurs that some uni-dimensional models made use of multidimensional measures to assess the above mentioned level (Mendoza, 1984). Such multidimensional measures include questions that may address the individual’s ability to communicate in the host’s culture as well as questions that may address the individual’s ability to participate in the host’ culture in areas such as food, religion, and dress preference (Olmedo, Martinez, & Martinez, 1978; Padilla, 1980).

Bi-dimensional model of acculturation

Uni-dimensional models of acculturation have the tendency not to assess the acculturating individuals’ own cultural values as well as the culture’s influence on their adjustment to the new environment (Kim & Berry, 1985; Mendoza, 1984; Sodowsky, Lai, & Plake, 1991). Considering that acculturation is a multifaceted phenomenon, researchers recommend using a model that would include multidimensional measures to assess the acculturating individual’s adjustment to the host culture based on the influence of both cultures (Ramirez, 1984; Rogler, Cortes, & Malgady 1991). Bi-dimensional models (assessing the acculturating individual’s degree of adaptation to the host culture and the degree of retention of their culture independently) would provide a more accurate measure of the individual’s adaptation to their new environment (Rogler, et al., 1991). Various bi-dimensional models (Kim & Berry, 1985; Pettigrew, 1988) have
been used to study the adaptation process of a variety of ethnic groups. Currently the most popular bi-dimensional model is that of Berry (1992, 1997, 1998).

In Berry’s acculturation model (1997, 1998, 2003) four modes of acculturation is described, namely assimilation, integration, separation and marginalisation. The developing of the four different acculturation strategies are based on the prevailing issues individuals are confronted with in their daily lives. Acculturation strategies have been shown to have substantial relationships with positive adaptation. Integration is usually the most successful; marginalisation is the least; and assimilation and separation strategies are intermediate (Van Oudenhoven & Eisses, 1998).

The first strategy, known as assimilation, implies moving into the host society and giving up cultural identity (Berry & Kim, 1988). Minority members choose the assimilation strategy, possibly because they find maintenance of their culture and identity unimportant and they wish to join the dominant society (Van Oudenhoven & Eisses, 1998). This phenomenon, when one prefers to loose one’s culture of origin and to have relationships with other groups if they are chosen by the larger society, is called melting pot (Berry, 2001). Melting pot is a metaphor for the way homogeneous societies develop, where the ingredients in the pot (people of different cultures and religions) are combined. They lose their discrete identities and yield a final product of uniform consistency and flavour, which is quite different from the original inputs (Millet, 2006). The view of the melting pot entails a single mainstream society, with a variety of ‘minority’ groups on the borders (Berry, 1998). The general assumption is that these groups should be absorbed into the mainstream in such a way that they ultimately disappear, having ‘one people, one culture, one nation’ as a result.

The second strategy namely separation is the strategy of minority members who wish to maintain their ethnic identity while having minimum contact with the dominant group (Van Oudenhoven & Eisses, 1998). The preference for maintaining culture of origin and identity as well as having minimal relationships with other groups – if chosen by the larger society – is called segregation (Berry, 2001). Segregation entails high valuation of the minority culture and low valuation of the majority culture. Segregation of the minority is often a symbiotic
relationship, where the minority and the majority each have economic roles (Smith, 1982). According to Bochner (1982), segregation, whether enforced or self-imposed, is unhealthy and unlikely to endure, because it entails hostility and sieges mentality. Montreuil and Bourhis (2001) add that segregationists tend to have insecure social identities, low self-esteem, and high authoritarianism and ethnocentrism. They feel threatened by immigrant out-groups and prefer minorities not to mix with them.

Marginalisation refers to groups or individuals refraining from having cultural and psychological contact with neither their traditional culture nor the dominant society. This is done either by exclusion or withdrawal (Van Oudenhoven & Eisses, 1998). If the larger society shows a preference for loss of culture of origin and for minimal relationships with other groups it is called exclusion (Berry 2001). Exclusion is imitated by members of the host community when depriving certain individuals from their right to adopt features of the majority host culture. Exclusionists also deny certain individuals the choice to maintain their heritage culture or religion and believe that some individuals have customs and values that can never be incorporated within the host majority (Barrette, Bourhis, Personnaz, & Personnaz, 2004).

Integration implies the movement of joining the host society by maintaining cultural identity (Berry & Kim, 1988). Integration is the strategy used by individuals who wish to maintain their ethnic identity, but who also consider contact with the dominant society valuable. This strategy is viewed as the most desirable strategy in a multicultural society (Berry & Kim, 1988). It must be kept in mind that integration can only be pursued in societies where certain psychological preconditions are already established and consequent on that, the society can be seen as explicitly multicultural (Van Oudenhoven & Eisses, 1998). In the event where there is a widespread acceptance of the value of a cultural diversity society or relative low levels of prejudice and positive mutual attitudes among ethno-cultural groups, a sense of attachment to, or identification with, the larger society will be experienced by all individuals and groups (Van Oudenhoven & Eisses, 1998).

Preference for maintaining one’s culture of origin and identity – if chosen by the larger society – is termed multiculturalism. According to Rudmin and Ahmadzadeh (2001), multiculturalism
describes the situation where the minority has a preference for cultural practices that are neither from the minority culture nor from the dominant culture. An example of this would be the preferences for a sub-culture, or a third culture, or for freedom from cultural constraints and labels. Berry (1998) elaborates by stating that multiculturalism entails a variety of ethno-cultural groups participating in a social framework that consists of the sharing of norms on how to live together, while they still maintain a sense of their own individual cultural identities.

Within this research study the focus will be on integration and on the acculturation strategy to a lesser degree. Results obtained by using the different acculturation models showed that migrants generally tend to prefer integration (Berry, Kim, Power, Young, & Bujaki, 1989). Integration as a broad term can refer to any (positive) combination of adaptation and cultural maintenance, meaning that migrants have some aspects of both cultures. Integration can also refer to merging cultures or creating a 'new culture' from the old ones (Coleman, 1995).

If there is a consensual relational outcome between majorities and minorities, a multicultural ideology could develop, implying that both groups hold an integration strategy (Bourhis, et al., 1997). Both integration and tolerance are however still needed to ensure healthy and lasting relationships between mainstream and minority cultural groups (Ait Ouarrasse & Van de Vijver, 2005). Tolerance can be described as a desire on the part of the mainstream to see the active public involvement of the minority members, without necessarily neglecting their original culture (Ait Ouarrasse & Van de Vijver, in press).

Research on acculturation should include both the perceptions of the majority and minority groups (Bourhis, et al., 1997). Based on Berry’s model, Bourhis, et al. (1997) developed the Interactive Acculturation Model. The Interactive Acculturation Model assumes (as did Berry (1974) in his original model), that minorities’ choice of a strategy depends on how the majority perceives the minority groups. The Interactive Acculturation Model also argues that the way minority groups perceived the majority, may influence the views of the dominant group on minorities. According to the Interactive Acculturation Model acculturation attitudes of both the minority and majority groups should be considered. The combination of acculturation strategies used by both groups results into three interpersonal and inter-group relational outcomes, namely;
consensual, problematic and conflictual (Zagefka & Brown, 2002). The term “consensual” is used when the orientation of both groups corresponds completely; “problematic” is when the orientations of both groups correspond only partly; and conflictual is when the orientations of both groups are completely incompatible (Zagefka & Brown, 2002).

The process of acculturation has certain outcomes. According to Berry (2003), Ward, Bochner, and Furnham (2001) and Ward and Kennedy (1999), factor analyses have shown that the multitude of acculturation outcomes can be divided under two main headings namely, psychological and sociocultural outcomes. Psychological outcomes have to do with mental health and general satisfaction with life in the host milieu and sociocultural outcomes has to do with successful participation in the host milieu. Psychological and sociocultural adaptation is positively related (Berry, 2003; Ward & Kennedy, 1999), and 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. The larger the cultural distance the weaker the association between psychological and sociocultural adaptation, and the more the orientation towards the host society (assimilation or integration) the stronger the association (Ward & Rana-Deuba 1999). The degree of cultural proximity and of integration in the social host milieu is positively related to the strength of the association between psychological and sociocultural adaptation (Ward, 1999; Ward & Rana-Deuba, 1999).

Within this research study the main focus is on psychological outcomes such as psychosomatic complaints, physical and psychological health.

**Health**

Health is defined as a state of complete physical, mental and social well-being (Bennett & Murphy, 1997). Health is therefore about wholeness, happiness and well-being (Beattie, Gott, Jones, & Sidell, 1993) on a physical, cultural, psychosocial, economic, spiritual and mental level (Du Toit, 1986; Marks, Murray, Evans, & Willig, 2000).
The literature states many contradicting findings on the influence of acculturation on health for there are complex interactions between the variables under study. A study done by Zambrana, Scrinshaw, Collins, and Dunkel-Schetter (1997) on Mexican American women undergoing the process of immersion in the mainstream culture, found that acculturation was harmful to health. These women experience a decrease in culture-specific protective factors that are integrally related to the quality of the community environment in which they live (Zambrana, et al., 1997). According to Zambrana, et al., (1997), risky health behaviours, stress levels, and medical risks all seem to increase with greater acculturation and decreases when receiving social support of the Hispanic community. Montgomery (1992) found that Mexican oriented students were more likely to report themselves as being in better general health and as being more pleased with their physical appearance than Anglo-oriented or culturally blended groups. Acculturation is therefore conceptualised as a potential stressor.

In terms of the contradictory pattern of evidence to the effects of acculturation on health, Tran, Fitzpatrick, Berg and Wright (1996) found that the level of acculturation had a significant effect on health status. Respondents less involved in acculturation processes, experience higher rates of self-reported health problems than those more involved in the process of acculturation. Language skills and lower education were indicated as factors avoiding health care and a tendency to see themselves as susceptible to certain problems related to health (Tran, et al., 1996).

It is clear that health cannot be studied on a physical level only, but the effects of acculturation should be considered on all different elements of health (Bennett & Murphy, 1997). Many studies have indicated that certain changes are required when entering into an unfamiliar environment as well as when adjusting to a new environment. This can lead to anxiety, confusion and depression (Choi, 1997; Lin & Yi, 1997). Berry (1997) claims, that those students who adopt a strategy of integration have a more positive outlook on mental health than those who attempt to assimilate or those who isolate themselves. Those who choose isolation are also more at risk than those who choose to assimilate.

Mallinckrodt and Leong (1992) studied eight factors of social support among international students and found most of them related to depression, anxiety and physical symptoms. Numerous studies conducted in the last 20 years have also found evidence for the direct effects
of social support on a range of outcomes, including somatic and mental health symptoms (e.g., Cohen & Syme, 1985; Veiel & Baumann, 1992). According to Allen and Cole (1987) as well as Lin & Yi (1997) suffering from respiratory disorders, headaches, low energy levels, gastrointestinal problems, lack or loss of appetite, sleep difficulties and fatigue are all symptoms commonly found among Asian international students.

Despite the abovementioned literature studies of acculturation, no studies focusing on the acculturation process among a sample of university hostel residents and the effect acculturation has on their health, could be found in South Africa. It is possible that a better understanding of this process and the related constructs within an education environment, will contribute to a better understanding of different cultural groups and the process of acculturation.

Based on the above discussion, the following hypotheses are formulated:

H1: Separation, assimilation and marginalisation as acculturation strategies will result in health problems and illness in general.

H2: Pressure to conform to the acculturation strategy of the hostel and therefore to hostel-ideologies will result in integration as an acculturation strategy.

H3: Hostel residents in a higher education institution displayed higher levels of integration as an acculturation strategy than assimilation, separation and marginalisation.

H4: Hostel residents in a higher education institution displayed lower levels of psychological, physical and psychosomatic health problems.
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 design means when the research is conducted in a short period, such as one day or a few weeks (Du Plooy, 2001). One group of people is observed at one point of time. A sample is drawn from a population at a specific time. This design is also used to assess interrelationships among variables within a population. Schaufeli and Enzmann (1998) criticise the use of cross-sectional designs in research, and recommend that experiments and longitudinal studies should rather be used when possible. However, a cross-sectional design is the most appropriate design for determining relationships among variables.

Participants

The participants could be defined as an availability sample of students in hostels at a higher education institution. A total population of 500 students were targeted. A response rate of 51% was achieved, of which 246 responses (98%) could be utilised.

Descriptive information of the sample is given in Table 1.
Table 1

*Characteristics of participants*

<table>
<thead>
<tr>
<th>Item</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>77</td>
<td>31.40</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>168</td>
<td>68.60</td>
</tr>
<tr>
<td>Race</td>
<td>White</td>
<td>222</td>
<td>90.60</td>
</tr>
<tr>
<td></td>
<td>African</td>
<td>23</td>
<td>9.40</td>
</tr>
<tr>
<td>Language</td>
<td>Afrikaans</td>
<td>227</td>
<td>92.70</td>
</tr>
<tr>
<td></td>
<td>English</td>
<td>9</td>
<td>3.70</td>
</tr>
<tr>
<td></td>
<td>African Languages</td>
<td>9</td>
<td>3.60</td>
</tr>
<tr>
<td>Age</td>
<td>17 - 19 years</td>
<td>143</td>
<td>54.30</td>
</tr>
<tr>
<td></td>
<td>20 - 22 years</td>
<td>101</td>
<td>41.10</td>
</tr>
<tr>
<td></td>
<td>23 years and older</td>
<td>5</td>
<td>2.00</td>
</tr>
<tr>
<td>Marital Status</td>
<td>Single</td>
<td>132</td>
<td>74.30</td>
</tr>
<tr>
<td></td>
<td>Engaged in a relationship</td>
<td>62</td>
<td>25.30</td>
</tr>
<tr>
<td>Hostel</td>
<td>Male</td>
<td>75</td>
<td>30.70</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>159</td>
<td>68.90</td>
</tr>
<tr>
<td>Faculty</td>
<td>Economic Sciences</td>
<td>130</td>
<td>40.80</td>
</tr>
<tr>
<td></td>
<td>Humanities</td>
<td>27</td>
<td>11.00</td>
</tr>
<tr>
<td></td>
<td>Nature Sciences</td>
<td>71</td>
<td>8.60</td>
</tr>
<tr>
<td></td>
<td>Engineering</td>
<td>24</td>
<td>9.80</td>
</tr>
<tr>
<td></td>
<td>Health Sciences</td>
<td>28</td>
<td>11.40</td>
</tr>
<tr>
<td></td>
<td>Teaching</td>
<td>8</td>
<td>3.30</td>
</tr>
<tr>
<td></td>
<td>Law</td>
<td>4</td>
<td>4.50</td>
</tr>
<tr>
<td></td>
<td>Theology</td>
<td>1</td>
<td>0.40</td>
</tr>
</tbody>
</table>

The study population (n = 246) consisted of mainly white (90.60%) female students (68.60%) between 17 and 19 years of age (54.30%). The majority of the participants speak Afrikaans as first language (92.70%) and are studying in Economic Sciences (40.80%).
Measuring battery

Instruments were adapted (Ait Ouarasse & Van de Vijver, in press) and others developed by the researchers to measure the following: Acculturation context (Including the mainstream-society of settlement and ethno-cultural context – the society origin) and socio-cultural acculturation outcomes (physical and psychological health). All scales follow a five-point Likert-scale ranging from strongly disagree (1) to strongly agree (5). All scales are uni-factorial.

Perceived pressure to conform to preferred acculturation strategies by own cultural group (PCAS). This 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 groups. 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 is very important in our culture”. Cronbach alpha coefficients will be determined.

Perceived pressure to conform to management practices and ideologies (PCMI) (Ait Ouarasse & Van de Vijver, in press). This is a six-item measure developed by the researchers, which measures the extent to which participants feel that they have to conform to management’s ideologies and practices. Four of the items were positively phrased and two negatively phrased. The scale contains items like “I think that management expects from us to stick to our organisational rules” and “I think that my co-workers would avoid me if I broke rules in our organisation.” Cronbach alpha coefficient of 0.75 were obtained in a study of the acculturation context of Moroccans in the Netherlands (Ait Ouarasse & Van de Vijver, in press).

Individual Acculturation Strategy (IAS)

This is a ten-item measure, which was developed by the researchers of this study. When using this measure, the students are being questioned to what extent they prefer certain acculturation strategies. Three items represented each acculturation strategy namely, Integration, Separation and Assimilation, with one item representing Marginalisation. The scale contains items like “I prefer social contact and interaction with only members of my own ethnic groups”, “I prefer social contact and interaction with members of all South Africa irrespective of race or ethnicity
as well as with members of my own ethnic group” and “I think that things would be better for me if I forget about my own culture and adopt the dominant culture of the New South Africa” as well as “I do not want contact with members of my own ethnic group nor with members from other cultures”. Cronbach alpha coefficients will be determined.

Acculturative stress: Physical (ASPh) and Psychological Health (ASPs). This measure is an adaptation of the Physical Symptoms Inventory (Spector & Jex, 1998). When using this measure, the students are being questioned whether they experienced a range of specific physical health symptoms as well as specific psychological health symptoms in the past three months. The inventory mentioned 21 possible physical health symptoms that could cause discomfort, such as chest pain, headache, fever, trouble sleeping. Symptoms like high blood pressure, which is not a direct experience of discomfort, wasn’t incorporated. The inventory also mentioned nine possible psychological health symptoms such as anxiety attacks/panicking constant irritability, mood swings and having difficulty concentrating. Cronbach alpha coefficients of 0.95 for physical health and 0.91 for psychological health were obtained in studies on acculturation processes in the South African Police Service (Kolokoane, & Jackson, in press).

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

Statistical analysis

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

Exploratory factor analyses were carried out to determine the construct validity of the measuring instruments. The following procedure was followed: Firstly, a simple principal component
analysis was conducted on the measuring instruments. The eigenvalues and scree plot was
studied to determine the number of factors. Secondly, a principal axis factoring analysis with a
direct oblimin rotation was conducted ($r > 0.30$) (Tabachnick & Fidell, 2001).

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

A stepwise multiple regression analysis was conducted to determine the percentage of the
variance in the dependent variables that is predicted by the independent variables. The effect size
(which indicates practical significance) in the case of multiple regressions are given by the
following formula (Steyn, 1999):

$$f^2 = \frac{R^2}{1 - R^2}$$

A cut-off point of 0.35 (large effect, Steyn, 1999) was set for the practical significance.

Multivariate Analysis of Variance (MANOVA) was used to determine the significance of
differences between demographic groups. MANOVA tests whether mean differences among
groups on a combination of dependent variables are likely to have occurred by chance
(Tabachnick & Fidell, 2001). In MANOVA a new dependent variable that maximises group
differences is created from the set of dependent variables. Wilk's lambda was used to test the
significance of the effects. Wilk's lambda is a likelihood ratio statistic that tests the likelihood of
the data under the assumption of equal population mean vectors for all groups against the
likelihood under the assumption that the population mean vectors are identical to those of the
sample mean vectors for the different groups. When an effect was significant in MANOVA, one-
way Analysis of Variance (ANOVA) was used to discover which dependent variables were
affected.
RESULTS

A simple principle axis factoring analysis was conducted on the 6 items of the PCMI on the total sample of students. Analysis of the eigenvalues (larger than 1) and the scree plot indicated that one factor could be extracted, explaining 52.41% of the total variance. This factor was labelled Hostel Ideologies. A simple principle axis factoring analysis was conducted on the 6 items of the PCAS on the total sample of students. Analysis of the eigenvalues (larger than 1) and the scree plot indicated that one factor could be extracted, explaining 47.94% of the total variance. This factor was labelled Acculturation Pressure.

A simple principle axis factoring analysis was conducted on the 21 items of the ASPh on the total sample of students. Analysis of the eigenvalues (larger than 1) and the scree plot indicated that two factors could be extracted, explaining 50.40% of the total variance. Next, a principle axis factoring analysis was followed using a direct oblimin rotation to carry out further factor analysis. These two factors were labelled Physical Health and Psychosomatic Health. A simple principle axis factoring analysis was conducted on the 9 items of the ASPs on the total sample of students. Analysis of the eigenvalues (larger than 1) and the scree plot indicated that one factor could be extracted, explaining 48.94% of the total variance. This factor was labelled Psychological Health.

A simple principle axis factoring analysis was conducted on the 10 items of the IAS on the total sample of students. Analysis of the eigenvalues (larger than 1) and the scree plot indicated that three factors could be extracted, explaining 68.95% of the total variance. Next, a principle axis factoring analysis was followed using a direct oblimin rotation to carry out further factor analysis.

The results of the factor analysis on the IAS are shown in Table 2. Loading of variables on factors, communalities and percentage of variance are shown. Variables are ordered and grouped by size of loading in order to facilitate interpretation. Labels for each factor are suggested in a footnote.
Table 2

Factor Loadings, Communalities (h²), and Percentage Variance for Principal Factors Extraction and Direct Oblimin Rotation on IAS Items

<table>
<thead>
<tr>
<th>Item</th>
<th>F₁</th>
<th>F₂</th>
<th>F₃</th>
<th>h²</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 I want to adopt the new culture of the “Rainbow Nation” and do not want to maintain my own culture</td>
<td>0.84</td>
<td>0.00</td>
<td>0.00</td>
<td>0.70</td>
</tr>
<tr>
<td>6 I would prefer that all ethnic groups of South Africa adopt the new culture of the “Rainbow Nation” and forget about their own cultures.</td>
<td>0.84</td>
<td>0.00</td>
<td>0.00</td>
<td>0.69</td>
</tr>
<tr>
<td>7 I think it would be better for me if I forget about my own culture and adopt the dominant culture of the “New South Africa”</td>
<td>0.74</td>
<td>0.00</td>
<td>0.00</td>
<td>0.54</td>
</tr>
<tr>
<td>8 I do not want contact with members of my own ethnic group, or with members from other cultures</td>
<td>0.58</td>
<td>0.00</td>
<td>0.00</td>
<td>0.58</td>
</tr>
<tr>
<td>9 I acknowledge, accept and respect the existence of other cultures in the workplace</td>
<td>0.00</td>
<td>0.77</td>
<td>0.00</td>
<td>0.57</td>
</tr>
<tr>
<td>10 I want to maintain my own culture as well as seek contact and participate in the mainstream culture</td>
<td>0.00</td>
<td>0.62</td>
<td>0.00</td>
<td>0.42</td>
</tr>
<tr>
<td>11 I prefer social contact and interaction with members of ALL South Africans irrespective of race or ethnicity as well as with members of my own ethnic group.</td>
<td>0.00</td>
<td>0.59</td>
<td>0.00</td>
<td>0.44</td>
</tr>
<tr>
<td>12 I want to maintain my own culture and really do not seek contact or participation with the mainstream culture.</td>
<td>0.00</td>
<td>0.00</td>
<td>0.73</td>
<td>0.50</td>
</tr>
<tr>
<td>13 I prefer social contact and interaction ONLY with members of my ethnic group.</td>
<td>0.00</td>
<td>0.00</td>
<td>0.69</td>
<td>0.55</td>
</tr>
<tr>
<td>14 I actually avoid contact with members from other cultures</td>
<td>0.00</td>
<td>0.00</td>
<td>0.42</td>
<td>0.57</td>
</tr>
<tr>
<td>Percentage Variance Explained</td>
<td>34.19</td>
<td>21.73</td>
<td>13.03</td>
<td></td>
</tr>
</tbody>
</table>

Factor labels: F₁: Assimilation, F₂: Integration, F₃: Separation

Table 2 shows that the principal analysis with an oblimen rotation resulted in three factors. Items loading on the first factor related to Assimilation (e.g., I want to adopt the new culture of the Rainbow Nation and do not want to maintain my own culture; I think it would be better for me if I forget about my own culture and adopt the dominant culture of the New South Africa). The second factor addresses Integration (e.g., I want to maintain my own culture as well as seek contact and participate in the mainstream culture; I acknowledge, accept and respect the existence of other cultures in the workplace). The third factor addresses Separation (e.g., I prefer...
social contact and interaction only with members of my ethnic group; I want to maintain my own culture and really do not seek contact or participation with the mainstream culture).

The descriptive statistics and alpha coefficients of the one factor of the PCMI, PCAS, ASPs, the two factors of the ASPh and the three factors of the IAS are given in Table 3.

Table 3

*Descriptive Statistics and Alpha Coefficients of the PCMI, PCAS, ASPs, ASPh and the IAS*

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hostel Ideologies</td>
<td>14.19</td>
<td>4.39</td>
<td>0.56</td>
<td>0.47</td>
<td>0.81</td>
</tr>
<tr>
<td>Acculturation Pressure</td>
<td>16.77</td>
<td>4.27</td>
<td>0.21</td>
<td>0.31</td>
<td>0.78</td>
</tr>
<tr>
<td>Psychological Health</td>
<td>20.30</td>
<td>6.36</td>
<td>0.44</td>
<td>-0.27</td>
<td>0.87</td>
</tr>
<tr>
<td>Psychosomatic Health</td>
<td>23.96</td>
<td>7.43</td>
<td>0.22</td>
<td>-0.33</td>
<td>0.87</td>
</tr>
<tr>
<td>Physical Health</td>
<td>19.74</td>
<td>8.04</td>
<td>1.11</td>
<td>0.41</td>
<td>0.90</td>
</tr>
<tr>
<td>Separation</td>
<td>9.72</td>
<td>2.36</td>
<td>0.06</td>
<td>-0.09</td>
<td>0.71</td>
</tr>
<tr>
<td>Integration</td>
<td>7.74</td>
<td>2.16</td>
<td>0.07</td>
<td>0.27</td>
<td>0.68</td>
</tr>
<tr>
<td>Assimilation</td>
<td>14.22</td>
<td>3.32</td>
<td>-0.14</td>
<td>-0.13</td>
<td>0.84</td>
</tr>
</tbody>
</table>

Table 3 shows that acceptable Cronbach alpha coefficients varying from 0.68 to 0.90 were obtained. These alpha coefficients compare well with the guideline of 0.70 (0.55 in basic research), which demonstrates that a large portion of the variance is explained by the dimensions (internal consistency of the dimensions) (Nunnally & Bernstein, 1994), except for Integration (α = 0.68). It is evident from Table 3 that most of the measuring instrument-scales have relatively normal distributions, with low skewness and kurtosis.

The product-moment correlation coefficients between Hostel ideologies, acculturation pressure, psychological health, physical health, psychosomatic health, integration, separation and assimilation are given in Table 4.
Table 4

Product-Moment Correlation Coefficients between the PCMI, PCAS, ASPs, ASPh and the IAS

<table>
<thead>
<tr>
<th>Item</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Hostel Ideologies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Acculturation Pressure</td>
<td>0.48*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Psychological Health</td>
<td>0.05</td>
<td>0.19*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Physical Health</td>
<td>0.06</td>
<td>0.27</td>
<td>0.58**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Psychosomatic Health</td>
<td>-0.05</td>
<td>0.05</td>
<td>0.64***</td>
<td>0.63***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Integration</td>
<td>0.16*</td>
<td>0.36***</td>
<td>0.10</td>
<td>0.26*</td>
<td>0.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Separation</td>
<td>0.13*</td>
<td>0.05</td>
<td>-0.02</td>
<td>-0.16*</td>
<td>-0.03</td>
<td>-0.31***</td>
<td></td>
</tr>
<tr>
<td>8. Assimilation</td>
<td>-0.12</td>
<td>-0.16</td>
<td>-0.17*</td>
<td>-0.25*</td>
<td>-0.09</td>
<td>-0.06</td>
<td>0.38*</td>
</tr>
</tbody>
</table>

* $p \leq 0.05$ – statistically significant
+ $r > 0.30$ – practically significant (medium effect)
+++ $r > 0.50$ – practically significant (large effect)

Table 4 shows a statistically significant positive correlation (practically significant, medium effect) between Hostel Ideologies and Acculturation Pressure. Acculturation Pressure is statistically significant positive correlated (practically significant, medium effect) with Integration. Psychological health is statistically significant positive correlated (practically significant, large effect) with Physical and Psychosomatic Health. Physical Health is statistically significant positive correlated (practically significant, large effect) with Psychosomatic Health. Integration is statistically significant negative correlated (practically significant, medium effect) with Separation. Separation is statistically positive correlated (practically significant, medium effect) with Assimilation.

The results of a multiple regression analysis with Psychological Health as dependent variable and Integration, Separation and Assimilation as independent variables are reported in Table 5.
Table 5

Multiple Regression Analyses with Psychological Health as Dependent Variable

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>t</th>
<th>p</th>
<th>F</th>
<th>R</th>
<th>R²</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>Beta</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>20.66</td>
<td>1.74</td>
<td></td>
<td>14.87</td>
<td>0.00</td>
<td>0.05</td>
<td>0.01</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>-0.04</td>
<td>0.17</td>
<td>-0.01</td>
<td>-0.22</td>
<td>0.83</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>17.41</td>
<td>2.72</td>
<td></td>
<td>6.40</td>
<td>0.00</td>
<td>2.12</td>
<td>0.10</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>0.59</td>
<td>0.18</td>
<td>0.12</td>
<td>0.27</td>
<td>0.79</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.31</td>
<td>0.20</td>
<td>0.11</td>
<td>1.56</td>
<td>0.12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>20.51</td>
<td>2.88</td>
<td></td>
<td>7.13</td>
<td>0.00</td>
<td>8.58</td>
<td>0.21</td>
<td>0.04</td>
</tr>
<tr>
<td></td>
<td>0.27</td>
<td>0.19</td>
<td>0.19</td>
<td>1.57</td>
<td>0.17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.35</td>
<td>0.20i</td>
<td>0.12</td>
<td>1.77</td>
<td>0.08</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-0.39</td>
<td>0.15</td>
<td>-0.20</td>
<td>-2.93</td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < 0.05

Table 5 shows that 4 percent of the variance explained in Psychological health are predicted by separation, integration and assimilation (F = 8.58, p<0.05). Separation did not make a contribution to the variance explained. By adding Integration the statistical significance of the $R^2$ was slightly increased ($ΔR^2 = 0.01$) and when Assimilation is added into the multiple regression analysis the statistical significance of $R^2$ increases ($ΔR^2 = 0.04$). Assimilation is the only statistical significant predictor of psychological health.

The results of a multiple regression analysis with Physical Health as dependent variable and Integration, Separation and Assimilation as independent variables are reported in Table 6.
Table 6

Multiple Regression Analyses with Physical Health as Dependent Variable

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>t</th>
<th>p</th>
<th>F</th>
<th>R</th>
<th>R²</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Constant)</td>
<td>24.61</td>
<td>2.14</td>
<td>11.48</td>
<td>0.09</td>
<td>5.64</td>
<td>0.15</td>
<td>0.02</td>
</tr>
<tr>
<td></td>
<td>Separation</td>
<td>-0.51</td>
<td>0.21</td>
<td>-0.15</td>
<td>-2.38</td>
<td>0.20</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Constant)</td>
<td>15.62</td>
<td>3.28</td>
<td>4.76</td>
<td>0.90</td>
<td>12.65</td>
<td>0.07</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td>Separation</td>
<td>-0.26</td>
<td>0.32</td>
<td>-0.08</td>
<td>-1.20</td>
<td>0.23</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Integration</td>
<td>0.85</td>
<td>0.24</td>
<td>0.23</td>
<td>3.56</td>
<td>0.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Constant)</td>
<td>19.96</td>
<td>3.45</td>
<td>5.78</td>
<td>0.00</td>
<td>11.67</td>
<td>0.12</td>
<td>0.04</td>
</tr>
<tr>
<td></td>
<td>Separation</td>
<td>0.04</td>
<td>0.23</td>
<td>0.01</td>
<td>0.16</td>
<td>0.87</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Integration</td>
<td>0.91</td>
<td>0.24</td>
<td>0.25</td>
<td>3.86</td>
<td>0.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Assimilation</td>
<td>-0.54</td>
<td>0.16</td>
<td>-0.23</td>
<td>-3.42</td>
<td>0.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<0.05

Table 6 shows that 7 percent of the variance explained in Physical health are predicted by Separation and Integration ($F = 12.65, p<0.05$). Separation made a contribution to the statistical significance of the $R^2$, but when Integration was added into the multiple regression the statistical significance of $R^2$ increased ($ΔR^2 = 0.05$). Integration is the only statistical significant predictor of physical health.

The results of a multiple regression analysis with Psychosomatic Health as dependent variable and Integration, Separation and Assimilation as independent variables are reported in Table 7.
Table 7

Multiple Regression Analyses with Psychosomatic Health as Dependent Variable

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>F</th>
<th>p</th>
<th>F</th>
<th>R</th>
<th>R²</th>
<th>AR²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>Beta</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>24.78</td>
<td>2.03</td>
<td>12.24</td>
<td>0.00</td>
<td>0.20</td>
<td>0.03</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Separation</td>
<td>-0.09</td>
<td>0.20</td>
<td>-0.03</td>
<td>-0.44</td>
<td>0.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>(Constant)</td>
<td>23.94</td>
<td>3.18</td>
<td>7.53</td>
<td>0.00</td>
<td>0.12</td>
<td>0.04</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Separation</td>
<td>-0.07</td>
<td>0.21</td>
<td>-0.02</td>
<td>-0.31</td>
<td>0.76</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Integration</td>
<td>0.08</td>
<td>0.23</td>
<td>0.02</td>
<td>0.34</td>
<td>0.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>(Constant)</td>
<td>25.37</td>
<td>3.42</td>
<td>7.43</td>
<td>0.00</td>
<td>4.29</td>
<td>0.08</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>Separation</td>
<td>0.03</td>
<td>0.23</td>
<td>0.01</td>
<td>0.15</td>
<td>0.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Integration</td>
<td>0.10</td>
<td>0.23</td>
<td>0.03</td>
<td>0.42</td>
<td>0.68</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Assimilation</td>
<td>-0.18</td>
<td>0.16</td>
<td>-0.08</td>
<td>-4.14</td>
<td>0.26</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p<0.05

Table 7 shows that 1 percent of the variance explained in psychosomatic health is predicted by Separation, Integration and Assimilation (F = 4.29, p<0.05). Separation, integration and assimilation did not make significant contributions to the variance explained.

Based on the above results, Hypothesis 1 is only partially accepted.

The results of a multiple regression analysis with Integration as dependent variable and Hostel Ideologies and Acculturation Pressure as independent variables are reported in Table 8.
Table 8

Multiple Regression Analyses with Integration as Dependent Variable

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>$r$</th>
<th>$F$</th>
<th>$R$</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Constant)</td>
<td>0.42</td>
<td>0.56</td>
<td>11.51</td>
<td>0.00</td>
<td>5.93</td>
<td>0.16</td>
<td>0.02</td>
</tr>
<tr>
<td>Acculturation</td>
<td>0.08</td>
<td>0.03</td>
<td>2.44</td>
<td>0.02</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pressure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 (Constant)</td>
<td>5.32</td>
<td>0.56</td>
<td>9.43</td>
<td>0.00</td>
<td>30.58</td>
<td>0.37</td>
<td>0.14</td>
</tr>
<tr>
<td>Acculturation</td>
<td>-0.01</td>
<td>0.04</td>
<td>-0.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hostel</td>
<td>0.10</td>
<td>0.03</td>
<td>0.38</td>
<td></td>
<td></td>
<td></td>
<td>0.10</td>
</tr>
<tr>
<td>Ideologies</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* $p<0.05$

Table 8 shows that Acculturation Pressure and Hostel Ideologies predicted 14 percent of the variance explained in Integration ($F = 30.58$, $p<0.05$). Acculturation Pressure made a contribution to the statistical significance of $R^2$, however adding Hostel Ideologies into the multiple regression analysis the statistical significance of $R^2$ increased even more ($\Delta R^2 = 0.14$). Hostel Ideologies is the only significant predictor of Integration.

The results of a multiple regression analysis with Separation as dependent variable and Hostel Ideologies and Acculturation Pressure as independent variables are reported in Table 9.
Table 9

*Multiple Regression Analyses with Separation as Dependent Variable*

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>t</th>
<th>p</th>
<th>F</th>
<th>R</th>
<th>R²</th>
<th>Adj R²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>Beta</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>8.49</td>
<td>0.64</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acculturation Pressure</td>
<td>0.67</td>
<td>0.13</td>
<td>13.97</td>
<td>0.00</td>
<td>4.27</td>
<td>0.13</td>
<td>0.02</td>
</tr>
<tr>
<td>2</td>
<td>(Constant)</td>
<td>8.57</td>
<td>0.65</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acculturation Pressure</td>
<td>0.68</td>
<td>0.14</td>
<td>13.63</td>
<td>0.00</td>
<td>4.09</td>
<td>0.10</td>
<td>0.02</td>
</tr>
</tbody>
</table>

* p<0.05

Table 9 shows that Acculturation Pressure predicted two percent of the variance explained in Separation (F = 4.27, p<0.05). Acculturation Pressure made a statistical significance to the contribution of the R² (ΔR² = 0.02) and is the only significant predictor of separation.

The results of a multiple regression analysis with Assimilation as dependent variable and Hostel Ideologies and Acculturation Pressure as independent variables are reported in Table 10.

Table 10

*Multiple Regression Analyses with Assimilation as Dependent Variable*

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>t</th>
<th>p</th>
<th>F</th>
<th>R</th>
<th>R²</th>
<th>Adj R²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>Beta</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>15.87</td>
<td>0.87</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acculturation</td>
<td>-0.10</td>
<td>0.02</td>
<td>-0.12</td>
<td></td>
<td>-1.93</td>
<td>0.06</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pressure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>(Constant)</td>
<td>16.47</td>
<td>0.92</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Acculturation</td>
<td>-0.05</td>
<td>0.06</td>
<td>-0.06</td>
<td></td>
<td>-0.54</td>
<td>0.60</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pressure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hostel Ideologies</td>
<td>-0.10</td>
<td>0.06</td>
<td>-0.13</td>
<td></td>
<td>1.89</td>
<td>0.06</td>
<td></td>
</tr>
</tbody>
</table>

* p<0.05
Table 10 shows that Acculturation Pressure predicted two percent of the variance explained in Assimilation (F = 3.72, p < 0.05). No significant predictors for Assimilation were found. Based on the above results, Hypothesis 2 is only partially accepted.

MANOVA analyses were used to determine the relationship between Acculturation Strategies and the different demographic characteristics, namely gender, race, and hostel. Demographic characteristics were first analysed for statistical significance using Wilk’s Lambda statistics. The results of the comparisons are given in Table 11.

Table 11

**MANOVAs - Differences in Acculturation Strategies of Demographic Groups**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
<th>F</th>
<th>Df</th>
<th>P</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>0.92</td>
<td>6.67</td>
<td>3.00</td>
<td>0.00*</td>
<td>0.08</td>
</tr>
<tr>
<td>Race</td>
<td>0.87</td>
<td>11.83</td>
<td>3.00</td>
<td>0.00*</td>
<td>0.13</td>
</tr>
<tr>
<td>Hostel</td>
<td>0.93</td>
<td>6.18</td>
<td>3.00</td>
<td>0.00*</td>
<td>0.07</td>
</tr>
</tbody>
</table>

* Statistically significant difference p < 0.05

Table 11 shows that there was a significant effect of gender on the combined dependent variables namely, Separation, Integration and Assimilation (F(3,240) = 6.67, p < 0.05; Wilks’ Lambda = 0.92; partial eta squared = 0.08). This effect was large (Cohen, 1988), where 8% of the variance is explained. An analysis of each individual dependent variable, using a Bonferroni adjusted alpha level of 0.017 showed that there were significant differences between the levels of Separation (F(1,240) = 15.00, p = 0.00) where females proved to have higher levels of Separation. Differences between the levels of Integration (F(1,240) = 7.78, p = 0.01) were also significant where males showed higher levels of integration. There were also significant differences between the levels of Assimilation (F(1,240) = 6.67, p = 0.01) where females again, showed higher levels of Assimilation.

The table furthermore shows that there was a significant effect of race on the combined dependent variables, Separation, Integration and Assimilation (F(3,240) = 11.83, p < 0.05; Wilks’
Lastly he shows that there is a significant effect of the type of hostel on the dependent variables, Separation, Integration and Assimilation ($F_{(1,239)} = 22.38, p = 0.00$), where the African group showed higher levels of Separation. There were also significant differences between the levels of Integration ($F_{(1,208)} = 18.52, p = 0.00$), where the White group showed the highest level of Integration.

Lastly the table shows that there was a significant effect of the type of hostel on the combined dependent variables, Separation, Integration and Assimilation ($F_{(3,239)} = 6.18, p < 0.05$; Wilks’ Lambda = 0.93; partial eta squared = 0.07). This effect was large, (Cohen, 1988), seeing that 7% of the variance is explained. An analysis of each individual dependent variable, using a Bonferroni adjusted alpha level of 0.017 showed that there were significant differences between Separation ($F_{(1,208)} = 13.48, p = 0.00$) where female hostels showed higher levels of Separation than male hostels. There were also significant differences between Integration ($F_{(1,208)} = 8.22, p = 0.05$) where male hostels showed higher levels of Integration than female hostels.

Based on the above findings, Hypothesis 3 is partially accepted.

MANOVA analyses were used to determine the relationship between Health and the different demographic characteristics namely gender, race, and hostel. Demographic characteristics where first analysed for statistical significance using Wilk’s Lambda statistics. The results of the comparisons are given in Table 12.

Table 12

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
<th>$F$</th>
<th>$DF$</th>
<th>$p$</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>0.76</td>
<td>25.17</td>
<td>3.00</td>
<td>0.00$^*$</td>
<td>0.24</td>
</tr>
<tr>
<td>Race</td>
<td>0.97</td>
<td>2.32</td>
<td>3.00</td>
<td>0.08</td>
<td>0.28</td>
</tr>
<tr>
<td>Hostel</td>
<td>0.77</td>
<td>23.95</td>
<td>3.00</td>
<td>0.00$^*$</td>
<td>0.23</td>
</tr>
</tbody>
</table>

Lambda = 0.87; partial eta squared = 0.13. This effect was large (Cohen, 1988), where 13% of the variance is explained. Analysis of each individual dependent variable, using a Bonferroni adjusted alpha level of 0.017 showed that there were significant differences between the levels of Separation ($F_{(1,208)} = 22.38, p = 0.00$), where the African group showed higher levels of Separation. There were also significant differences between the levels of Integration ($F_{(1,208)} = 18.52, p = 0.00$), where the White group showed the highest level of Integration.
Table 12 shows that there was a significant effect of Gender on the combined dependent variables, Psychological, Physical and Psychosomatic health ($F_{13:240} = 25.17, p < 0.05$; Wilks’ Lambda = 0.76; partial eta squared = 0.24). This was a large effect (Cohen, 1988), where 24% of the variance is explained. Analysis of each individual dependent variable, using a Bonferroni adjusted alpha level of 0.017 showed that there were significant differences between the levels of Physical Health ($F_{11:000} = 45.90, p = 0.00$), where males showed higher levels of Physical Health problems.

The table furthermore shows that there was a significant effect of the type of hostel on the combined dependent variables, Psychological, Physical and Psychosomatic health ($F_{13:239} = 25.17, p < 0.05$; Wilks’ Lambda = 0.76; partial eta squared = 0.24). This was a large effect (Cohen, 1988), where 24% of the variance is explained. Analysis of each individual dependent variable, using a Bonferroni adjusted alpha level of 0.017 showed that there were significant differences between the experience of Physical Health ($F_{11:000} = 43.15, p = 0.00$) where the male hostels showed higher levels of Physical Health.

Based on the above findings, Hypothesis 4 is only partially accepted.

**DISCUSSION**

The objective of this research study was to determine the acculturation process as well as the impact it has on health among students in hostels at a higher education institution. The factor structures of the measuring instruments were determined via principle axis factoring. A direct oblimen rotation was used in the event when there was more than one factor and when the factors correlated. One factor was extracted from the PCMI, explaining 52.41% of the total variance. This factor was labelled Hostel Ideologies. One factor was extracted from the PCAS explaining 47.94% of the total variance. This factor was labelled Acculturation Pressure.

Two factors were extracted from the ASPh explaining 50.40% of the total variance. Next, a principle axis factoring analysis was followed using a direct oblimin rotation to carry out further
factor analysis. These two factors were labelled Physical Health and Psychosomatic Health. One factor was extracted from the ASPs explaining 48.94% of the total variance. This factor was labelled Psychological Health.

Three factors were extracted from the IAS, explaining 68.95% of the total variance. Next, a principle axis factoring analysis was followed using a direct oblimin rotation to carry out further factor analysis. These three factors were labelled Assimilation, Integration and Separation.

Cronbach alpha coefficients varying from 0.68 to 0.90 were obtained. These alpha coefficients compare well with the guideline of 0.70 (0.55 in basic research), demonstrating that the dimensions (internal consistency of the dimensions) explained a large portion of the variance (Nunnally & Bernstein, 1994), except for Integration. 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 Hostel Ideologies correlated positively with Acculturation Pressure, implying that these two factors have a mutual influence on one another. Acculturation Pressure correlated positively with Integration, implying that the pressure to conform to the acculturation strategy of the own cultural group may result in higher levels of integration as an acculturation strategy. Psychological health correlated positively with Physical and Psychosomatic Health and Physical Health correlated positively with Psychosomatic Health, implying that illness and health problems in terms of psychological aspects may result in higher physical and psychosomatic health problems and vice versa. Integration correlated negatively with Separation, implying that the more integration becomes the preferred acculturations strategy, the less separation will be the preferred acculturation strategy. Separation correlated positively with Assimilation, implying that higher levels of Separation may result in higher levels of Assimilation as acculturation strategy.

The results of multiple regression analyses with Psychological, Physical and Psychosomatic Health as the dependent variables and Assimilation, Integration and Separation as the independent variables indicated that Assimilation is the only significant predictor of
Psychological Health, with Psychological Health as dependent variable. Integration is the only statistical significant predictor of physical health. None of the acculturation strategies were significant predictors of Psychosomatic Health. This resulted in Hypothesis 1 being only partially accepted.

The results of a multiple regression analysis with Assimilation, Integration and Separation as dependent variables and Hostel Ideologies and Acculturation Pressure as independent variables indicated that Hostel Ideologies is the only significant predictor of Integration. Acculturation Pressure is the only significant predictor of separation. No significant predictors for Assimilation were found. Hypothesis 2 was therefore only partially accepted.

MANOVA analyses were used to determine the relationship between Health and the three acculturation strategies and the different demographic characteristics namely gender, race, and hostel. Demographic characteristics where first analysed for statistical significance using Wilk’s Lambda statistics. The results indicated that female students showed more interest in Separation or Assimilation as an acculturation strategy while male students indicated Integration to be an acculturation strategy. African groups also tend to show higher levels of Separation, while White groups tend to show higher levels of Integration. Female hostels showed higher levels of Separation, while male hostels showed higher levels of Integration. Hypothesis 3 was therefore only partially accepted as only male students experienced higher levels of integration.

MANOVA analyses were also used to determine the relationship between Health and the different demographic characteristics namely gender, race, and hostel. Demographic characteristics where first analysed for statistical significance using Wilk’s Lambda statistics. Male students showed higher levels of Physical Health than female students. Male hostels also showed higher levels of Physical Health. No differences were found in terms of racial groups. Hypothesis 4 was therefore only partially accepted.

RECOMMENDATIONS

The process of adaptation to an unfamiliar environment can be very difficult and stressful (Choi, 1997; Mori, 2000; Sandhu & Asraradi, 1994), and the process of coping with the new culture in
the new environment has generally been called ‘acculturation’ (Berry, et al., 1992; LAFramboise, et al., 1993). Due to the fact that the level of acculturation has a significant effect upon the health status of individuals (Tran, et al., 1996), it is advised that Acculturation Strategies amongst South African individuals should be further investigated.

The experience of integration as an acculturation strategy among male students and male hostels, whilst still experiencing higher levels of physical health problems is in contradiction to previous research. Berry (1997) suggests that those students who adopt a strategy of integration have a more positive outlook on health than those who attempt to assimilate or those who isolate themselves. Further investigation on this result is therefore recommended. Social support was found to decrease health problems (Zambrana, et. al., 1997; Tran, et al., 1996). The possibility may exist that male students may experience more physical health problems due to the fact that they partake in more contact sports such as rugby.

The experience of separation as acculturation strategy in female hostels as well as the experience of separation and assimilation as acculturation strategy in female hostels needs to be further investigated. Results indicated that separation and assimilation might result in more health problems (Berry, 1997). However within this study marginal health problems were found among the female students. The assumption can be made that female students have effective measures in place to assist with their acculturation process, such as social support. Female students also don’t participate in aggressive contacts sports as male students.

African groups also revealed higher levels of separation, thus implying that different racial groups should perhaps be provided with more social support due to the small amounts of contact they get to have with their own culture groups and should thus be assisted with the process of acculturation. Although the African group was a small percentage of the sample within this study (9,40%), it is recommended that hostels aid the African group in the acculturation process to facilitate higher levels of integration as an acculturation strategy in order to prevent health problems as associated with separation.
The size of the sample and the fact that it was homogenous, consisting of individuals from a specific university and some related hostels, can be seen as a limitation. It is important to take note of the fact that each hostel most likely has their own unique culture, which may have influenced the participant’s responses.

Additional research in terms of acculturation strategies as well as their effect on health needs to be further investigated in South African universities and organisations. This is important in order to be able to generalise the results in terms of the broader population of South African university students, or other South African employees.

The research design used in this study was a limitation. A cross-sectional design was used and a result of this was that no causal influences could be drawn. Future research can benefit more by using longitudinal studies or quasi-experimental research designs in order to deal with the limitations of a cross-sectional design.
REFERENCES


CHAPTER 3

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

The purpose of this chapter is to provide conclusions regarding the results of the empirical studies of the research article. Conclusions are drawn with regard to the research objectives and limitations of the study are discussed. Finally, recommendations are made for the organisation and research opportunities that emanate from this research study are presented.

3.1 CONCLUSIONS

The general objective of this study was to determine the acculturation process in hostels at a higher education institution.

The first objective was to conceptualise acculturation, acculturation process, acculturation strategies and psychological, physical and psychosomatic health from the literature. Acculturation is defined as a process of adaptation to a new environment as a result of two independent cultures coming in contact with each other (Redfield, Linton, & Herskovits, 1936, 1954).

The Interactive Acculturation Model (Bourhis, Moïse, Perreault, & Senécal, 1997) integrates the acculturation strategies (from the bi-dimensional model) of the mainstream and those used by the minority culture. The main aspects of acculturation are combined in the bi-dimensional model, constituting of four acculturation strategies namely integration, assimilation, separation, and marginalisation (Berry, 1992).

The first acculturation strategy, integration, means when individuals of the minority group accepts both their own cultural values as well as the cultural values of the host, however when this process is determined by the larger society it is termed multiculturalism (Berry 2001). The second strategy is assimilation. Individuals utilise this strategy, reject their own cultural values and identity and accept the host cultural values. If this process is determined by the larger society
it is called *melting pot* (Berry 2001). *Separation* is the third strategy and this occurs when the minority individuals accepts their own cultural values and identity and rejects the host cultures’ values. However if this is employed by the larger society it is called *segregation* (Berry, 2001). The last acculturation strategy is *marginalisation*, which refers to individuals who reject both cultures’ values and identities and when this process is chosen by the larger society it is called *exclusion* (Berry 2001). Within this research study the main focus was on psychological outcomes such as psychosomatic complaints, physical and psychological health. Health is defined as a state of complete physical, mental and social well-being (Bennett & Murphy, 1997).

The second objective was to determine the different acculturation strategies in a sample of students in hostels at a higher education institution. Results obtained by using the different acculturation models showed that migrants in general tend to prefer integration, a combination of adaptation and cultural maintenance (Berry, Kim, Power, Young, & Bujaki, 1989). Integration is usually the most successful; marginalisation the least and assimilation and separation strategies are intermediate (Van Oudenhoven & Eisses, 1998).

MANOVAS done with Acculturation Strategies variables as the dependent revealed that, in terms of gender, females showed higher levels of Separation and Assimilation and males showed higher levels of Integration. Female hostels revealed higher levels of Separation and male hostels showed higher levels of Integration. The African group revealed higher levels of Separation, and the White group showed higher levels of Integration.

The third objective was to determine the effect of different acculturation strategies on the health of students in hostels at a higher education institution. Many studies have indicated that entering into an unfamiliar environment and adjusting to the new environment requires changes, which can lead to anxiety, confusion and depression (Choi, 1997; Lin & Yi, 1997). Berry (1997) suggests that the mental health outlook is more positive for those students who adopt a strategy of integration than for those who attempt to assimilate or who isolate themselves. Those who isolate are also more at risk than those who choose to assimilate. MANOVAs, done with Health as dependent variables, revealed that males in general and male hostels showed higher levels of Physical Health.
It would have been expected that females and female hostels showed higher levels of health problems, with separation and/or assimilation as acculturation strategy. However this result could not be obtained within this research study.

Research indicated that there are contradictory findings in terms of the influence of acculturation on health. According to studies done by Montgomery (1992), Tran, Fitzpatrick, Berg, and Wright (1996) and Zambrana, Scrimshaw, Collins, and Dunkel-Schetter (1997), it can also be due to the fact that male students may feel that they do not receive as much social support in terms of acculturating or that female students receive more social support than male students. Mallinekrodt and Leong (1992) studied eight factors of social support among international students and found most of them related to depression, anxiety, and physical symptoms and medical risks all seemed to increase with greater acculturation and decreases when receiving social support (Tran, et al., 1996; Zambrana, et, al., 1997). Social support may therefore have an influence on the health problems possibly experienced as a result of the acculturation process.

The fourth objective was to determine the extent to which an integration acculturation strategy prevails in South African university hostels. Results obtained using the different acculturation models showed that migrants in general tend to prefer integration (Berry, et al., 1989). In terms of a study on 348 students of indigenous African descent attending South African technikons in the Cape, Pretoria and the Vaal Triangle, there was a clear indication of a preference for the integrated mode of acculturation on Berry's measure.

MANOVAS done with Acculturation Strategies as the dependent variables revealed that female hostels experience higher levels of Separation and male hostels experience higher levels of Integration. Integration acculturation strategy prevails therefore only within male hostels within this sample.

The fifth objective was to determine whether the university hostels support multiculturalism. According to the literature, integration becomes multiculturalism when chosen by the host culture, (Berry, 2001), with multiculturalism entailing the preference for maintaining one's
culture of origin and identity. As mentioned above, only male hostels prefer Integration as acculturation strategy. Multiculturalism seems therefore only to be supported by male hostels.

Berry (1998) states that, multiculturalism entails a variety of ethno-cultural groups who all participate in a social framework consisting of shared norms about how to live together, whilst maintaining a sense of their own individual cultural identities. Thus it seems clear that male hostels and male students prefer multiculturalism where there are shared norms within the hostel and other social frameworks. This can possibly be due to the fact that male hostels are generally still stricter than female hostels in terms of enforced rules and norms. It can also be a possible indication that female hostels and their female residents receive more freedom from rules and support each other in terms of any acculturation strategy.

3.2 LIMITATIONS

Although the research study showed some very promising results, nothing goes without limitations. The first and most obvious limitation of this study was the use of a cross-sectional survey design, which implies that no causal relationship inferences could be drawn. More complex forms of non-recursive linkages could not be examined. To deal with the limitation of the use of a cross-sectional design, prospective longitudinal and quasi-experimental research designs are needed to further validate the hypothesised causal relationships within the study.

Another limitation was the size of the sample, specifically in terms of the distribution of language and racial groups. The sample did not include sufficient non-white respondents, implying that the full impact on different racial groups could not be validated. The sample consisted mainly of white Afrikaans-speaking students. The fact that the sample was homogenous, only consisting of one university and a few random hostels, can be seen as a limitation. It is also important to take note of the fact that each hostel most likely has their own unique culture, which may have influenced the participant’s responses.

The results were obtained solely by self-report measures. This may lead to a problem known as “method variance” or “nuisance”. However, several arguments exist on the fact that this
phenomenon is not a major threat if there is interaction (Dollard & Winefield, 1998). The research design used in this study was a limitation. A cross-sectional design was used; as a result, no causal influences could be drawn.

Another limitation was the fact that the questionnaire was only available in English. The possibility exists that respondents’ level of English language skills (with English as a second, or third language) could have influenced the results.

3.3 RECOMMENDATIONS

Recommendations pertaining to the specific organisations used in this study, as well as recommendations for further research, are made in this section.

3.3.1 Recommendations for the university or similar organisations

Not overlooking these limitations, the current research study has important implications for Universities and organisations in general. Recommendations can be made to the organisations and universities regarding the effect of acculturation strategies on the health of individuals. Organisations need to focus on developing consensual relational outcomes between majority and minorities as to develop a multicultural ideology, implying that both the minority and majority group should hold an integration strategy (Bourhis, et al., 1997). However not only integration, but also tolerance is needed for healthy and lasting relationships between mainstream and minority cultural groups (Ait Ouarasse & Van de Vijver, 2005). Tolerance is the mainstream’s desire to see the minority members actively involved in public life without necessarily rejecting their original culture (Ait Ouarasse & Van de Vijver, in press). Integration as a broad term, can refer to any (positive) combination of adaptation and cultural maintenance, meaning that migrants have some aspects of both cultures.

Results obtained using the different acculturation models showed that migrants in general tend to prefer integration, a combination of adaptation and cultural maintenance (Berry, et al., 1989). However within this study it was evident that White students prefer integration strategies (males
more than females) and all other groups – excluding whites – seem to prefer separation strategies. It is therefore of great importance to do further investigations on the acculturation strategy preferences amongst different individuals – especially in terms of different races as well as different gender groups. This is vital as literature indicated that acculturation strategies have an effect on health, implying that they should be managed and controlled. Further investigations should be done on the role of social support on the acculturation process and health.

3.3.2. Recommendations for future research

The most important recommendation for future research will be the use of longitudinal designs. With longitudinal designs the hypothesised causalities of the relationships can be further validated. It is also recommended that other universities should be explored in terms of their acculturation processes as each university is unique and has different demographic variables in terms of race, gender, and language compositions. This would assist us with a better indication of acculturation strategy preferences amongst university students in South Africa. It will also assist in developing a comprehensive conceptual model that can be applicable to a variety of universities and individuals 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 study as this may result in better response rates by the students. This will prevent unnecessary extra expenditure in terms of re-administrating more questionnaires due to inefficient sample sizes.
REFERENCES


