DEMOGRAPHICAL DIVERSITY INFLUENCE ON ONLINE SHOPPING ORIENTATION AND PROPENSITY TO BUY ONLINE

A Thesis submitted in fulfilment of the requirements for the degree of

MASTER OF SOCIAL SCIENCE

Department of Management

RHODES UNIVERSITY

by

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DECEMBER 2009
ABSTRACT

Online shopping is a growing phenomenon all over the world, and it has thus had an influence on the shopping process for many consumers (Brengman et al., 2005:79; Brown et al., 2003:1667; Kau et al., 2003:139). Consumers are now choosing to shop online due to changes in their lifestyles and demographic diversity (Kau et al., 2003:139).

The purpose of this research was to examine the extent to which demographic diversity influenced online shopping orientation and propensity to buy online. The researcher first conducted an in-depth theoretical study of previous research into demographic diversity, online shopping orientation and propensity to buy online. Next, the researcher conducted an empirical survey questionnaire, in order to assess the opinions of students at the three selected Eastern Cape universities.

Phinney’s (1992:156) multi-group ethnic identity measure was administered in order to identify how respondents feel about their ethnicity and/or how they react to their own ethnic group. Kau et al.,’s (2003) online shopping orientation measure was used to help identify six relevant online shopping factors. The six online shopping factors where then used to describe six online shopping orientation types.

The main findings of this research conducted at three Universities in the Eastern Cape can be summarised as follows:

- Ethnic Identity Profile:
  - Within this research it was found that respondents at all three universities in general had a strong ethnic identity to their specified ethnic group, according to the two ethnic identity factors namely; commitment and exploration.

- Online Shopping Orientation Profile:
  - Within this research it was found that the respondents at all three universities in general could be categorised in one of six online shopping orientation types according to six online shopping factors.
• The extent to which demographic diversity influences types of online shopping orientation:
  o From the research hypotheses it was concluded that a relationship exists between demographic diversity and types of online shopping orientations, whereby the gender, race and ethnicity of respondent is likely to influence the way consumers shop online, namely the consumers’ online shopping orientation.

• The extent to which demographic diversity influences propensity to buy online:
  o From the research hypotheses it was concluded that a relationship exists between demographic diversity and propensity to buy online, whereby the gender of respondents is likely to influence whether consumers buy online in the future.
  o From the research hypotheses it was concluded that no relationship exists between demographic diversity and propensity to buy online, whereby the race and ethnicity of respondents is not likely to influence whether consumers buy online in the future.

• The extent to which types of online shopping orientation influence propensity to buy online:
  o The findings suggest that different online shopping orientations have different propensities to buy online in the future. Hence, marketers should be aware of the online shopping orientations more likely to buy online in the future and focus their marketing programs on them. They should also try new ways to attract the online shopping orientations that may not buy online, in the hopes of changing their opinions and perceptions of the Internet and online shopping.

South Africa, in particular, consists of multi-racial and diverse ethnic origins, which has resulted in a demographically diverse South African nation. Therefore, marketers need to develop a better understanding of consumers’ online shopping orientation (Donthu and Garcia, 1999:57; Jayawardhena and Foley, 2000:19; Kau et al., 2003:140). Understanding consumers’ online shopping orientation will assist marketers in being able to market to
specific consumers and meet the needs of consumers effectively (Kau et al., 2003:140). Since demographic diversity influences the online shopping orientations of consumers, major opportunities for marketers will be provided by accommodating for a demographically diverse South African nation.
ACKNOWLEDGEMENTS

Firstly, I would like to thank my Supervisor, Prof. L. Louw, for her constant support and mentoring throughout the last two years. Without her guidance and patience I surely would not be where I am today. Additionally I would like to thank Prof. R. Elliott, for his constant guidance over my six years at Rhodes, as my lecturer as well as my co-supervisor.

Secondly, I would like to show my appreciation to the following people who made this research possible:

- The Lecturers at Rhodes, Nelson Mandela Metropolitan and Fort Hare Universities, for their assistance in administering the questionnaires to their students;
- Mr M. Jamal, fellow Masters Student, for his help and assistance with the statistical analysis;
- Mrs J. Schäfer, for her assistance in the proof reading of the thesis.

Thirdly, I would like to thank my friends in particular, Shannon Neaves for her support and encouragement that gave me the strength to complete this thesis.

Lastly, and most importantly, I would like to thank my parents, brother and extended family, for believing in my ability to complete this thesis and giving me the strength and support I needed, during the good and bad times, to accomplish this goal.

Megan Jacqueline Tapson
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CHAPTER ONE
INTRODUCTION

1.1 INTRODUCTION AND PROBLEM STATEMENT

The Internet is a dynamic medium which constantly challenges existing marketing and business paradigms and practices (Park and Jun, 2003: 537). The Internet allows businesses to market their goods and services to consumers, irrespective of either party’s physical location (Hwang, Jung and Salvendy, 2006:3). Consequently, businesses are able to reach consumers all around the world due to the internet, thus making it vital for businesses to understand online shoppers.

Recently online shopping has shown an upward trend with a growing number of shoppers patronising online stores (Kau, Tang and Ghose, 2003:139). It has become necessary for marketers to develop an enhanced appreciation for Internet surfers as well as online shoppers (Kau et al., 2003:139). Online shoppers are driven by diverse shopping motivations (Brown, Pope and Voges, 2003:1679), namely hedonic and utilitarian shopping motivations. Hedonic shopping motives reflect the experience and entertainment of shopping whereas utilitarian shopping motives are more goal-oriented and task-related. These motives are discussed in detail in Chapter Three, Section 3.3.

Hedonic and utilitarian shopping motives are aspects of online shopping that need to be highlighted, in that these shopping motives identify the different orientations that online shoppers may have. Online shopping orientation consists of different characteristics compared to how consumers may shop in a physical store (Xu and Paulins, 2005:420). The characteristics of online shopping orientation are regarded as behaviours that are learnt or adopted from societal norms (Brown et al., 2003:1666), and are discussed in detail in Chapter Three, Section 3.2. Consumers’ online shopping orientations have been used to segment consumers into various types of online shoppers, in order to determine what motivates consumers to shop on the Web (Brown et al., 2003:1677; Foucault and Scheufele, 2002:409) so that marketers are able to meet the needs of each of the specific types of online shopping orientations. Through this understanding marketers will be able to develop strategies and tactics to attract online consumers.
The various types of online shopping orientations have been well researched (Allred, Smith and Swinyard, 2006:320; Brengman, Geuens, Weitjers, Smith and Swinyard, 2005: 80; Chang, Cheung and Lai, 2005:545; Kau et al., 2003: 150). However, no previous studies have been conducted in South Africa to examine the types of online shoppers that exist within South Africa. The researcher has adapted and categorised previous research concerning online shopping orientation types together with six online shopping factors and created six online shopping orientation types, illustrated in Table 3.3 in Chapter Three. Six types of online shopping orientations have been identified and used in this research as depicted in Figure 1.1 which includes On-Off Shopper, Comparison Shopper, Traditional Shopper, Dual Shopper, E-Laggard and Information Surfer.

It is crucial for online marketers to research and recognise the above mentioned factors affecting online shopping orientation of consumers as well as consumers’ propensity to buy online in the future (Teo, Wang and Leong, 2004:63), so as to market to consumers effectively. „Propensity to buy online’ is defined as the likelihood a consumer will conduct an online transaction in the future (Chen and Barnes, 2007:25; Pavlou, 2003:110). Measures of propensity to buy online are used to discover the probability that a consumer would buy online in the future (Beck, 2001; Vellido, 2000). In this research, propensity to buy online was measured by determining whether a consumer had previously shopped online and whether this experience was positive or not. Consumers who have shopped online previously are generally more likely to shop online in the future, while their experience with shopping online will determine their likelihood of shopping online in the future.

The potential of online shopping for marketers is often hampered by a lack of understanding of the influence demographic diversity has on online shopping orientation. In order for organisations to compete in global environments it is important that marketers are aware of how demographic diversity may affect an organisation’s Internet marketing decisions (Quelch and Klein, 1996:60). Previous research focused on the implications of demographic diversity on various aspects of Internet marketing, such as the design of Web Sites (Kuroso, 2003, in Ratner, 2002:47). According to Dickson and Sawyer (1990:43) and Sternquist, Byun, and Jin (2004:95), shoppers across different demographics are diverse in
terms of how they shop online. In other words, it is important to understand the impact of demographic diversity in online shopping to enable marketing managers to predict online shopping rates and to evaluate future growth opportunities in respect of diverse market segments (Wu, 2003:37). This approach is supported by the research of Shiu and Dawson (2002:147) who found that the Internet shopping experience is varied between different countries. Shiu and Dawson (2002:162) found that online shopping habits were not significantly different among any of the demographic groups within the countries surveyed. However, no previous studies have focused on the impact of demographic diversity on the online shopping orientation of consumers in the South African context.

It is asserted that demographic diversity affects the way consumers behave (Clark, 1990:68; Craig and Douglas, 2006:322; Hall, 1977:9; Hirschman, 1985:143; Podoshen, 2006:267). The demographic diversity of consumers will influence how consumers behave online in terms of their online shopping orientations and propensity to buy online. As a result, marketers need to know how to successfully respond to different consumers of diverse demographics (Green, 1995:56). In this research, demographic diversity is defined as the degree of heterogeneity with respect to characteristics that describe individuals’ relationships with organisations and positions within society, including visible characteristics namely gender, race and ethnicity (Francesco and Gold, 2005:194; Hellriegel, Jackson, Slocum, Staude, Amos, Klopper, Louw and Oosthuizen, 2004:368; Lawrence, 1997:11; Wallendorf and Arnould, 1988:534; Wu, 2003:39). The demographic diversity characteristics used within this research, namely gender, race and ethnicity will be further explained in Chapter Two.

Prior research has shown that gender differences pertaining to online shopping orientations exist, as well as propensity to buy online (Ackerman and Tellis, 2001:75; Chiu, Lin and Tang, 2005:417; Pope, Brown and Forrest, 1999:25). Chiu et al., (2005:421) state that males and females make different consumption choices. Thus, men and women exhibit different online shopping orientations, resulting in the fact that gender can influence consumers’ online shopping orientation (Ackerman and Tellis, 2001:59; Ha and Stoel, 2004:378). This demographic diversity characteristic is further explained in Chapter Two, Section 2.3.1, with reference to the influence gender has on online shopping orientation and propensity to buy online.
The concept „race” is most commonly used to describe demographic diversity differences based on individuals’ physical characteristics (Bekker, 1993). Although race is an important demographic diversity characteristic; it is by no means the only influencing variable (Dalrymple, Robertson and Yoshino, 2001:69; Sexton, 1972:37). This demographic diversity characteristic is further explained in Chapter Two; Section 2.3.2, with reference to the South African population as well as the influence race has on online shopping and propensity to buy online.

Isaacs (1975) states that ethnic group identities are determined by a strong relationship with certain characteristics, namely language and ethical attitudes. The ethnic group identities that exist within South Africa are namely Afrikaans, Coloured, English, Indian, Khoisan, Ndebele, Swazi, Sotho, Tsonga, Tswana, Venda, Xhosa and Zulu (Afolayan, 2004:11). Given this ethnic diversity in South Africa, it would be vital for marketers to understand how ethnicity may impact the way South African consumers shop online as well as their propensity to buy online.

Against this background, the purpose of this research is to assess the impact demographic diversity has on online shopping orientations and the propensity to buy online. The influence of demographic diversity on online shopping orientation and propensity to buy online is discussed in Chapter Three, Section 3.4. Consequently, the problem statement for this research can be stated as: determining the extent to which demographical diversity influences online shopping orientation and propensity to buy online, specifically in the Eastern Cape Province.

1.2 RESEARCH PURPOSE, OBJECTIVES AND HYPOTHESES

From the problem statement, it is evident that the purpose of this research is to assess the extent to which demographic diversity influences online shopping orientation and propensity to buy online. The following objectives are stated below:

- To determine the demographic diversity profile of the respondents.
• To ascertain how strongly respondents’ identify with a particular ethnic group.
• To determine the online shopping orientations profile of the respondents.
• To determine the profile of respondents’ propensity to buy online.
• To assess the extent to which demographic diversity (namely gender, race and ethnicity) influences types of online shopping orientations (namely On-Off Shopper, Comparison Shopper, Traditional Shopper, Dual Shopper, E-Laggard, and Information Surfer).
• To assess the extent to which demographic diversity (namely gender, race and ethnicity) influences propensity to buy online.
• To assess the extent to which types of online shopping orientations influence propensity to buy online.

To facilitate the attainment of these research objectives, three sets of research hypotheses were constructed, and are graphically illustrated in Figure 1.1. Furthermore, the following three sets of hypothesis are stated as follows:

• **First set of hypotheses: The extent to which demographic diversity influences types of online shopping orientations.**

  Ho1.1: There is no significant relationship between gender and types of online shopping orientations.

  Ha1.1: There is a significant relationship between gender and types of online shopping orientations.

  Ho1.2: There is no significant relationship between race and types of online shopping orientations.

  Ha1.2: There is a significant relationship between race and types of online shopping orientations.
Ho1.3: There is no significant relationship between ethnicity and types of online shopping orientations.

Ha1.3: There is a significant relationship between ethnicity and types of online shopping orientations.

- Second set of hypotheses: The extent to which demographic diversity influences propensity to buy online.

Ho2.1: There is no significant relationship between gender and propensity to buy online.

Ha2.1: There is a significant relationship between gender and propensity to buy online.

Ho2.2: There is no significant relationship between race and propensity to buy online.

Ha2.2: There is a significant relationship between race and propensity to buy online.

Ho2.3: There is no significant relationship between ethnicity and propensity to buy online.

Ha2.3: There is a significant relationship between ethnicity and propensity to buy online.

- Third set of hypotheses: The extent to which types of online shopping orientations influence propensity to buy online.

Ho3: There is no significant relationship between types of online shopping orientations and propensity to buy online.

Ha3: There is a significant relationship between types of online shopping orientations and propensity to buy online.
1.3 RESEARCH DESIGN AND METHODOLOGY

Since the research is quantitative in nature, a positivistic research paradigm (Remenyi, 1996:9) has been used with the purpose of determining whether demographic diversity influences online shopping orientations and the propensity to buy online and the extent to which online shopping orientations influence propensity to buy online. Collis and Hussey (2003: 46) define a research paradigm as the development of scientific practice derived from people’s philosophies and assumptions about the world and the nature of knowledge. Additionally, paradigms state how research should be conducted. Furthermore, a positivistic research paradigm searches for the causes or information of social phenomena, with little consideration to the subjective state of the individual (Collis and Hussey, 2003:52). The positivistic research paradigm will further be discussed in Chapter Four, Section 4.3.2.
To facilitate the attainment of the objectives of this research and to test the three sets of hypotheses, the research strategy has been divided into two main components, namely primary and secondary research, which will be discussed in the next Section of this Chapter.

1.3.1 Secondary Sources

Secondary sources are the data that has already been collected by someone other than the researcher and used for a different project to the one currently being undertaken (Struwig and Stead, 2001:40; Zikmund, 2003a:63). Therefore, with this definition in mind, secondary sources from relevant topic disciplines of demographic diversity, online shopping, online shopping orientations and propensity to buy online were first consulted.

International as well as national data searches at the main library of Rhodes University included: Academic Search Premier, Business Source Premier, Emerald Full Text, EBSCO Host, Sage Publications, SABINET, Relevant abstracts and indexes, the Rhodes University catalogue of Rhodes theses, as well as the Internet. From searching these databases, it was established that no similar research has previously been undertaken in South Africa.

International and national data searches revealed that research with regard to demographic diversity and online shopping orientation and the propensity to buy online specifically focused on the following aspects:

- Research articles in journals and books dealing with online shopping orientation and types of online shopping orientation, such as Burroughs and Sabherwal (2001:35); Dawar and Parker (1994:81); Degeratu, Rangaswamy and Wu (2000:55); Douglas and Craig (1992:312); Griffin, Babin, and Modianos (2000:34); Kau et al., (2003:149); Miller (1997:38); Miller, Jackson, Thrift, Holbrook, and Rowlands (1998) and Rangaswamy and Guptu (1999).
• Research articles in journals and books dealing with the demographic diversity of individuals, such as Aaker and Maheswaran (1997:315); Arnould and Wallendorf, (1988); Phinney (1992:156); and Wallendorf and Arnould (1988:544).

• Research articles in journals and books dealing with the demographic diversity that influences aspects of the Internet and online shopping, such as Jacobs, Keown, Worthley, and Ghymn (1991:21); Limayem, Khalifa and Frini (2000: 421); Park and Jun (2003:537); Oumil and Erdem (1997:7); and Slyke (2002:82)

• Research articles in journals and books dealing with online shopping orientations and propensity to buy online, such as Alreck and Settle (2002:26); Brengman et al., (2005:80); Brown et al., (2003:1669); Chen and Barnes (2007:29); Ha and Stoel (2004:380); and Sorce, Perotti and Widrick (2005: 122).

From the above searches, it is evident that previous research pertaining to the influence demographic diversity has on online shopping orientation and propensity to buy online exists within a South African context is lacking. This “gap” in the literature therefore emphasises the importance of this research within the South African context.

1.3.2 Primary Sources

Next, the researcher made use of primary sources to gather the data for this research (Struwig and Stead, 2001:40). Zikmund (2003a:63) defines primary sources as the information collected and assembled specifically for this research. The primary data for this research was collected at three universities within the Eastern Cape. The three universities included Rhodes University, Nelson Mandela Metropolitan University and Fort Hare University. At each university, students ranging from first year to master’s level in different departments were selected by the researcher by first contacting lecturers. Those lecturers who were willing to participate in the research were then used. Self administered questionnaires (Annexure A) were completed in specific lectures at the three selected universities. All of the universities had Internet access on campus, thus students were able to shop online. The purpose of this research was explained to each group of respondents.
The questionnaire was voluntarily administered, in that students were able to decline completing a questionnaire. The questionnaire was administered in English, given that all three universities conduct lectures in English. The sample of students attained at each university was approximately 300 students; therefore the total sample size obtained was 900 students. The overall usable response rate, of 54.3 percent, is explained in Chapter Five, Section 5.2. Population and sample size are explained and discussed in detail in Chapter Four, Section 4.4. A pilot study was administered to a small group of respondents prior to administering to the three selected universities.

The questionnaire was divided into four Sections. Section A included questions regarding respondents’ demographic diversity, as well as 12, five-point Likert style statements which reflect on how strongly individuals identify with a particular ethnic group - previously developed by Phinney (1992:156) and discussed in Chapter Two, Section 2.3.3. In this regard, ethnicity in this research was firstly, measured according to the etic/objective approach, where respondents could identify with in a particular ethnic group, and secondly by the emic/subjective approach to measuring ethnicity by identifying how strong their affiliation is with a particular ethnic group (Minor-Cooley and Brice, 2007:2; Phinney, 1992:156; Stayman and Deshpande, 1989:361). Section B of the questionnaire focussed on online shopping with four questions on Internet access and two on online shopping. Online shopping is further discussed in Chapter Three, Section 3.2. In Section C of the questionnaire respondents were requested to respond to 24, five-point Likert style statements, pertaining to their online shopping orientations. The six types of online shopping orientations, previously developed by Kau et al., (2003) are explained in Chapter Three, Table 3.3. Lastly, in Section D of the questionnaire, the respondents were requested to respond to three, five-point Likert style statements as well as one open-ended question about their propensity to buy online.

The data was captured in Microsoft Excel and then analysed by making use of Statistica, version 8 (Statistics South Africa, 2007c). Firstly, descriptive analysis was used to analyse Sections A and B of the questionnaire. Secondly, reliability and validity tests were conducted on Phinney (1992:156) multi-group ethnic identity measure, in Section B of the questionnaire and Kau et al.,’s (2003) online shopping orientation measure, Section C of the questionnaire. The hypothesised relationships, which were previously mentioned in
Section 1.2 of this Chapter, were tested by means of Pearson’s Chi-Squared, ANOVA as well as cluster analysis. Lastly, Section D of the questionnaire - respondents’ propensity to buy online - was measured according to three, five-point Likert style, statements and an open-ended question.

1.4 STRUCTURE OF THE THESIS

Chapter One provided an introduction as well as the orientation to this research. In this Chapter the problem statement relevant to this research, the research purposes, objectives and hypotheses were stated. Following from this the research design and methodology were introduced along with identifying both secondary and primary sources for this research. Lastly, the structure of the thesis was given.

Chapter Two introduces the concept of demographic diversity as well as providing a theoretical overview of demographic diversity in South Africa. Demographic diversity, namely gender, race and ethnicity are identified and discussed. Additionally, both etic/objective and emic/subjective approaches to ethnicity are defined and explained. The relationship between demographic diversity and online shopping orientation and propensity to buy online is discussed.

Chapter Three provides a theoretical overview of online shopping orientation and propensity to buy online. In addition to examining previous research with regards to shopping orientation, the types of online shopping orientation are discussed. Based on Kau et al.,’s (2003) research, six types of online shopping factors as well as six online shopping orientation types are defined. The online shopping orientations were adapted specifically for use in this research. The propensity to buy online is defined and previous research regarding propensity to buy online is discussed. Lastly, this Chapter provides a critical overview of the relationship between online shopping orientation and propensity to buy online.

An overview of the research design and methodology relevant to this research is given in Chapter Four. This Chapter delineates the importance of the research, and two main research paradigms are identified and discussed in detail. The research population, relevant
sampling methods and the data gathering method, namely a questionnaire survey are explained. Thereafter, Phinney’s (1992:156) multi-group ethnic identity measure and Kau et al.,’s (2003) online shopping orientation measure, which were included in Sections A and C respectively, of the questionnaire are discussed. Next, the data collection process, and how the data was captured and analysed is explained. Lastly, ethical considerations, that the researcher ensured were in place, are discussed.

The research findings of the research are discussed in Chapter Five. The research findings are contrasted with previous research as given in Chapters Two and Three. The findings pertaining to the stated hypothesised relationships, identified in Chapter One, are given in this Chapter.

The conclusions, recommendations and limitations of this research are given in Chapter Six. This Chapter also summarises the entire thesis, by commenting on the limitations of this research as well as making recommendations to Internet marketers on how future research should be conducted.
CHAPTER TWO

DEMOGRAPHIC DIVERSITY CONCEPTUALISED

2.1 INTRODUCTION

Kandola (1995:131) defines diversity as a mosaic, in which components such as demographic characteristics, attributes of individuals’ relationships with organisations and individuals’ positions within society all form an image which provides a natural infusion of ideas, products and new approaches. More specifically, demographic diversity is explained as the degree of heterogeneity with respect to demographic characteristics, attributes that describe individuals’ relationships with organisations, and attributes that identify individuals’ positions within society (Hall, 1977:9; Lawrence, 1997:11). Gender, race and ethnicity are visible characteristics of demographic diversity (Francesco and Gold, 2005:194; Hellriegel et al., 2004:368; Wallendorf and Arnould, 1988:534; Wu, 2003:39). Demographic diversity characteristics are particularly important to online marketing, for the reason that consumers are regarded as members of different demographic groups and thus, demographic diversity is an important topic in academic marketing research (Clark, 1990:68; Cox, 1993; Knouse and Dansby, 1999:486; Pelled, Eisenhardt and Xin, 1999:1; Sippola, 2007:254; Thomas and Ely, 1996:80). For the purpose of this research the focus is on the visible characteristics of demographic diversity such as gender, race and ethnicity.

The purpose of this Chapter is to explain demographic diversity in South Africa. The influence of demographic diversity on online shopping orientation and propensity to buy online is discussed. In this Chapter the multicultural background of South Africa is discussed, and demographic diversity namely gender, race and ethnicity are defined within the South African context. As previously mentioned, the relationship between demographic diversity and online shopping orientation is examined and subsequently the relationship between demographic diversity and propensity to buy online is discussed. In the following Section, an overview of biographical diversity statistics in South Africa is provided.
2.2 AN OVERVIEW OF DEMOGRAPHICAL DIVERSITY IN SOUTH AFRICA

South Africa has gone through a political transformation process from a country with a minority government to a true democracy (Du Plessis and Rousseau, 2003:399). Additionally, South Africa can be described as a society in transition and it is seen as a developing country (Du Plessis and Rousseau, 2003:299). The South Africa’s population is characterised by multicultural and demographically diverse ethnic origins. This in turn has produced a cultural tapestry woven from a wide variety of customs and lifestyles. A demographically diverse nation provides opportunities for marketers (Afolayan, 2004:213; Du Plessis et al., 2003:301) because demographic diversity influences the online shopping orientations of consumers as well as their propensity to buy online in the future (Craig and Douglas, 2006:322; Limayem et al., 2000:421; Otnes, McGrath and Lowrey, 1995:108; Podoshen, 2006:267; Slyke, 2002:82; Wang, 1999:3; Wu, 2003:39).

To maximise marketing outcomes and opportunities, demographic diversity needs to be defined and discussed in order to understand the relationship between demographic diversity and online shopping orientation and propensity to buy online (Du Plessis et al., 2003:400).

The following subsections provide a statistical overview of gender, race and ethnicity in South Africa. While the relationship between demographical diversity and online shopping orientations and propensity to buy online is discussed in Section 2.3.

2.2.1 Gender

Gender, although a visible demographic diversity characteristic, can be defined by the socially created behaviours, roles, and characteristics that a particular society considers appropriate for men and women. These socially created behaviours and roles may result in differences between online shopping orientation of men and women (Herring, 2003:207).

According to Statistics South Africa (2007a), approximately 24.3 million (51%) of the South African population are female. The fact that the gender compilation is finely balanced in South Africa also demands that marketers should follow a balanced marketing
communication approach to address the specific gender composition of the population, and the related online shopping orientations. It is thus necessary to understand the differences that exist between male and female shoppers and their online shopping orientations, so as to successfully market to both males and females.

2.2.2 Race

The term race is also defined as a visible demographic diversity characteristic, such as skin colour, shape of nose or hair structure (Bekker, 1993:1). It is most commonly used to describe an individual’s differences based on their physical characteristics (Bekker, 1993:1). Since race is a physical demographic diversity characteristic, affiliation to a particular race is neither freely chosen nor changeable (Mayer, 2008:63). However, other researchers view the membership of a racial group to be based on self-perception and self-classification (Bhorat, 2001:23; Booysen, 2007:2).

According to Statistics South Africa (2007a), the South African population consists of some 47.9 million people. In terms of race, South Africa’s population majority consists of the African race (79.6%); the minority racial group in South Africa is the Indian/Asian race (2.5%). This categorisation of the South African population is depicted in Figure 2.1.

Marketers intending to market products in the South African market should consider the population composition statistics reflected in Figure 2.1 to strategically market their products or services to potential consumers based on race. This is important as the different racial groups for the reason that different racial groups may shop online differently. The fact that the majority of the South African population is African; may substantially influence online shopping orientations of South African consumers in that African consumers may have different online shopping orientations than other races.
2.2.3 Ethnicity

Diverse cultural groups exist within South Africa, namely Afrikaans, Asians, Coloureds, English, Indians, Khoisans, Ndebeles, Sothos, Swazis, Tsongas, Tswanas, Vendas, Xhosas and Zulus (Afolayan, 2004:11). In order to understand this multicultural society, language groupings are viewed as fundamentally the same as ethnic groupings (Byrne, 1996). Since most South Africans consider one of the eleven official languages to be their first language, which is generally acquired as part of an affiliation to a particular ethnic group, it can be said that South Africans represent a rich array of ethnic backgrounds (Byrne, 1996).

According to the South African Census of 2001 (Statistics South Africa, 2007a), the ethnic composition of the South African population is reflected in Figure 2.2. Different ethnic groups may shop online differently (Dalrymple et al., 2001:65); therefore marketers need to be aware of the fact that the majority ethnic groups are Zulu (24%), Xhosa (18%) and Afrikaans (13%).
Phinney’s (1992:156) multi-group ethnic identity measure will be used to measure the ethnicity of respondents via the emic/subjective approach. This measure consists of 12 statements that represent two factors of ethnic identity, namely commitment and exploration (Phinney, 1992:156).

The commitment factor is represented by seven of the 12 statements, whereby the statements reflected affirmation of one’s ethnic group as well as a sense of commitment to one’s own ethnic group (Phinney, 1992:156). Commitment refers to a respondents’ sense of belonging, attachment and personal investment to a particular ethnic group (Ashmore, Deaux and McLaughlin-Volpe, 2004:80; Phinney, 2006:117). The strength of a respondents’ commitment is not necessarily related to the specific attitudes held by the respondent (Cokley, 2005:517). On the contrary, the strength of a respondent’s commitment reflects one’s knowledge and understanding about ethnicity which is based on a process of exploration.

The exploration factor is represented by five statements in Phinney’s (1992:156) multi-group ethnic identity measure. These statements deal with efforts to learn more about one’s ethnic group and the amount of participation in ethnic cultural practices respondents were
involved in (Phinney, 1992:156). Types of activities, such as learning cultural practices and attending cultural events, can be referred to in exploration (Phinney, 2006:117). Without exploration, a respondent’s commitment may be vulnerable and more subject to change with new experiences (Phinney, 2006:117). It has been asserted that the strength of ethnic identity (namely commitment and exploration) influences consumer behaviour (Dalrymple et al., 2001:65).

In the next Section the relationship between demographical diversity and online shopping orientation and the propensity to buy will be discussed.

2.3 THE RELATIONSHIP BETWEEN DEMOGRAPHIC DIVERSITY, ONLINE SHOPPING ORIENTATIONS AND PROPENSITY TO BUY ONLINE

There have been numerous marketing related studies conducted with regard to the influence of demographic diversity on consumer shopping orientation in other countries, as shown in Table 2.1. (Chang et al., 2005: 552; Li et al., 2000:421; Podoshen, 2006:267; Shui and Dawson, 2002; Wu, 2003:39).

TABLE 2.1: Influence of Demographic diversity on Online Shopping Orientation:

<table>
<thead>
<tr>
<th>Author</th>
<th>Research Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chang et al., (2005:552)</td>
<td>Demographic diversity has a positive relationship with online shopping orientation.</td>
</tr>
<tr>
<td>Li et al., (1999:1)</td>
<td>Found that males tend to buy more online than females.</td>
</tr>
<tr>
<td>Podoshen (2006:266)</td>
<td>Established no significant difference between American Jewish consumers and American non-Jewish.</td>
</tr>
<tr>
<td>Shui and Dawson (2002:147)</td>
<td>Found that online shopping orientation is significantly different between countries (Britain vs. Taiwan), yet not different among any demographic groups.</td>
</tr>
<tr>
<td>Wu (2003:39)</td>
<td>Demographic diversity characteristics have a significant relationship concerning the consumer’s attitude toward online shopping.</td>
</tr>
</tbody>
</table>

Source: Researcher’s own construction
Table 2.1 is based on theoretical frameworks developed and tested within cultures, such as the United States of America, United Kingdom and Taiwan. Relatively little is known about the cross-cultural generalisability of such frameworks to a South African context (Aaker and Maheswaran, 1997:315) which would contribute towards determining whether demographic diversity in South Africa influences online shopping orientations. There have been no previous studies researching the influence of demographic diversity (namely gender, race and ethnicity) on consumers’ online shopping orientation within a South Africa context, highlighting the importance of this research.

Demographic diversity, namely gender, race and ethnicity and ethnic identity may influence and guide an individual’s propensity to buy online (Bellman, Lohse and Johnson, 1999:32–38; Choi and Lee, 2003:50; Podoshen, 2006:266). With regards to the relationship between demographic diversity and propensity to buy online, Armstrong and Kotler (2000:153) state that an individual’s buying choices are dependent on four main psychological influences, namely motivation, perception, learning, beliefs and attitude. Bellman et al., (1999:32–38) found that demographic diversity does not influence propensity to buy online. Contrastingly, Wells and Prensky (1996:45) and Wu (2003:38-39) state that consumer shopping attitudes can be determined by demographic diversity, therefore a consumer’s gender, race and/or ethnicity can impact their propensity to buy online. Thus, South African marketers should take demographic diversity into account in their marketing campaigns to maximise consumers’ online purchases in future (Armstrong and Kotler, 2000:153).

The relationship between gender and online shopping orientation as well as propensity to buy online will subsequently be discussed.

### 2.3.1 Gender: Online Shopping Orientation and the Propensity to Buy Online

In-store shopping is generally regarded as an activity predominantly done by women, as it has been asserted that shopping is categorised as a “female typed” task (Dholakia, 1999:154). The importance of this finding is that individuals with stronger feminine or masculine identities make different consumption choices (Chiu et al., 2005:421).
Research has shown that gender differences exist pertaining to male versus female online shopping orientations as well as male versus female propensity to buy online (Ackerman and Tellis, 2001:75; Chiu et al., 2005:417; Pope et al., 1999:25). Historically, Internet use has been considered as being male dominated (Liff and Shepherd, 2004:1). Heimrath and Goulding (2001:119) state that there is evidence of a gender imbalance in the use of the Internet; the ratio between male and female users remaining fairly constant at about 60:40. This tendency has been confirmed in a recent survey on the spending plans of online consumers. It was concluded that men are more comfortable shopping online than women and men have a greater propensity to buy online in future (Internet Retailer, 2008). Gender differences therefore exist among Internet users (Jayawardhena, Wright and Dennis, 2007:518; Li et al., 1999:1). Ha and Stoel, (2004:378) found that men and women exhibit different online shopping orientations. Although male consumers are known as early adopters of Internet shopping, as online shopping becomes more common, the amount of women shopping online shows a parallel increase (Asch, 2001:121; Heimrath and Goulding, 2001:119; Kim and Kim, 2004:886; Li et al., 1999:2). Ackerman and Tellis (2001:59) suggest that gender could have an impact on the behaviour of consumers that would lead to differences in shopping orientation.

To successfully attract consumers to shop online, marketers must understand consumer attitudes towards propensity to buy online. In response to propensity to buy online, several studies emphasise the importance of clarifying individual intentions to buy online based on Internet usage (Salisbury, Pearson, Pearson and Miller, 2001:165; Chiu et al., 2005:417; Citrin, Sprott, Silverman and Stem, 2000:294; Goldsmith, 2002:22; Bobbit and Dabholkar, 2001:423). According to Chiu et al., (2005:417) it remains unknown the role of gender in relation to propensity to buy online, therefore, an understanding of gender differences on propensity to buy online is not well researched and could be valuable information to marketers.

### 2.3.2 Race: Online Shopping Orientation and the Propensity to Buy Online

The South African population is composed of different racial groups. Race can either be viewed as a visible demographic diversity characteristic; alternatively, membership of a racial group is based on self-perception and self-classification (Bhorat, 2001:23; Booysen,
It is for this reason that respondents were requested to describe themselves in terms of race.

Prior research has focused on consumption behaviour displayed by racial groups (Akers, 1968:283; Dalrymple et al., 2001:65; Sexton, 1972:39). More specifically, Akers’ (1968:283) research concerning race and shopping orientation, related differences in ethnic consumption patterns to social or cultural factors, and it was found that differences do exist among racial market segments. Akers (1968:283) suggest that ethnic consumers are more brand conscious than White consumers. However additional research is needed to help explain the variation in consumption behaviour.

Sexton (1972:37) conducted a study that examined race and the differences between African and White consumers in the United States of America, looking at the role of income in determining buyer behaviour. The assumption of Sexton’s (1972:37) research is that income differences explain the differences in the propensity to buy between Africans and Whites. The results of this research showed that the African market is diverse and needs to be researched to enable marketers to successfully market products to specific racial groups (Sexton, 1972:39).

Following from Sexton’s (1972) research, Dalrymple et al.,’s (2001:65) research determined whether special marketing programs are needed to appeal to ethnic market segments. Dalrymple et al., (2001:69) note that previous studies conducted in the USA have generally focused on a comparison of demographic characteristics of racial subcultures in the USA with those of White Americans (Dalrymple et al., 2001:65). However, the aim of Dalrymple et al.,’s (2001:66) research was to test some of the research findings reported by other researchers as well as to support prior research with regards to identifying the differences that exist in consumers’ shopping orientation between racial groups. Based on the research results of Dalrymple et al., (2001:65), differences do exist among racial groups and their shopping orientation.

Although race and gender are important demographic diversity characteristics, they are by no means the only influencing variables (Dalrymple et al., 2001:69; Sexton, 1972:37). Ethnicity is another demographic diversity characteristic that will now be discussed.
2.3.3 Ethnicity: Online Shopping Orientation and the Propensity to Buy Online

Ethnicity can be defined in many different ways, and according to Minor-Cooley and Brice (2007:2) there is no widely agreed upon definition because contrasting definitions of ethnicity can be due to the different underlying theoretical approaches that have been focused on by particular researchers (Cheung, 1993:1210). For example, Afolayan (2004:213) defined ethnicity as a demographic diversity characteristic that describes the national or geographic origin of an individual. Additionally, Stayman and Deshpande (1989:361) examined ethnicity as an inter-individual, group membership characteristic, in which ethnicity was viewed as a demographic classification. Horowitz (2000:18) defined an individual’s ethnicity as a mosaic of beliefs, religions, collective memory, emotions, mythologies and language, corresponding to their common “ethnic culture”. An essential characteristic of ethnicity is determined by a group’s common language (Fisher, 1998:19ff; Mayer, 2000).

In the past, studies have focussed on respondent’s surnames so as to measure ethnicity (Stayman and Deshpande, 1989:361; Saegert, Hoover and Hilger, 1985:105). Other researchers such as Novak (1974:18); Berry (1992:69); Keefe and Padilla (1987); Minor-Cooley and Brice (2007:2); and Webster (1994:321) viewed the term ethnicity as more objective, whereby ethnicity encompasses the traits from language, customs, values, nationality and religion. The more objectively related research on ethnicity is characterised as being descriptive in nature, and Barth (1969:10); Davidowicz (1977); and Glazer and Moynihan (1975:7) cautioned that objective ethnicity may lack the adequate controls with reference to the degree to which an individual identifies with a particular ethnic group. Objective ethnicity can be said to follow an etic approach to ethnicity, whereby the researcher ignores the respondents’ perceptions of their own ethnicity and formulates a view of ethnicity based on respondents’ last names or languages spoken at home (Stayman and Deshpande, 1989:361).

In subjective terms, ethnicity is based on an individual’s feelings of belongingness, how one feels in a particular situation, and one’s thinking and behaviours based on that group membership - an emic approach to ethnicity. As a result, ethnicity is not just who an individual is, but also how an individual feels (Mcguire, Mcguire, Child, and Fujioka, 1978:515; Yancey, Ericksen, and Juliani, 1976:392).

Ethnic identity is defined as an individual’s association with their ethnic background and how an individual affiliates with his or her own ethnic group (Deshpande and Stayman, 1994:57; Forehand and Deshpande, 2001:336). It has been suggested that ethnic identity and behaviour is at least partly determined by situation (Minor-Cooley and Brice, 2007:3). Okamura (1981:452) concurred that ethnicity is not just who an individual is (i.e. objective), but how that individual feels (i.e. subjective) with reference to a particular situation. As a result, many market researchers adopted a more subjective definition of ethnicity (Cohen 1978:379), by focusing on a consumer's internal perceptions, interpretations, and responses (Stayman and Deshpande, 1989:362). A subjective definition of ethnicity focuses on an emic measure of ethnicity, where respondents’ describe their own ethnicity and this will therefore lead to the most accurate classification of respondents (Podoshen, 2006:272).

According to Hirschman (1980:7), Hirschman and Holbrook (1982:93), Holbrook (1980:106), Hudson and Ozanne (1988:509), Kakkar and Lutz (1981:205), Levy (1980), and Rubinstein (1981:170), there is much to be gained from examining the subjective aspects of consumption via the emic approach to measuring ethnicity. In this regard, ethnicity in this research will be measured according to the etic/objective approach, where respondents will identify with a particular ethnic group, as well as the emic/subjective approach to measuring ethnicity by identifying how strong their affiliation is with a particular ethnic group (Minor-Cooley and Brice, 2007:2; Phinney, 1992:156; Stayman and Deshpande, 1989:361).

Phinney’s (1992:156) multi-group ethnic identity measure will be used to measure the ethnicity of respondents via the emic/subjective approach. This measure consists of 12 statements that represent two factors of ethnic identity, namely commitment and exploration (Phinney, 1992:156), which was explained in Section 2.2.3.
Marketing programs are thus needed to appeal to specific ethnic market segments (Dalrymple et al., 2001:65). Based on research done by Dalrymple et al., (2001:65); and Stayman and Deshpande (1989:362), differences exist among some ethnic market segments and additional research is needed to explain the variation in consumption behaviour. Some research has provided ethnographic records of shopping in diverse cultures (Miller, 1997:38; Miller et al., 1998). Erickson, Johansson and Chao (1984:694), Triandis (1989:507), and Tse, Belk and Zhou (1988:457), confirm the importance and dynamics of ethnicity on consumer behaviour. Differences in ethnicity are recognised as important in developing advertising and promotional strategies (Helming, 1983:8; O’Guinn and Meyer, 1984:11). Contrastingly, other studies such as Anderson and Engledow (1977:185) and Douglas and Craig (1992:312), found no differences amongst consumers from different ethnic backgrounds. Park and Jun (2003:537) found that similarities as well as differences in online shopping behaviours exist among individuals from different ethnic backgrounds, which support the previous findings of Aaker and Maheswaran (1997:315), Henry (1976:121), and Tse et al., (1988:82), that ethnicity does matter.

2.4 SUMMARY AND CONCLUSION

In this Chapter, definitions of demographic diversity, namely gender, race and ethnicity were outlined. South Africa’s population is multicultural and diverse, and, therefore, understanding the demographic diversity of South Africa may provide opportunities for marketers in that demographic diversity impacts the way individual South African consumers shop online as well as their propensity to buy online. Additionally, the importance of both etic/objective and emic/subjective approaches to ethnicity were discussed. Ethnic identity and the purpose of Phinney’s multi-group ethnic identity factors, namely commitment and exploration, were explained and discussed.

From the discussion in this Chapter it can be inferred, based on previous research, that demographic diversity characteristics influence online shopping orientation and propensity to buy online. In Chapter three, online shopping orientation is discussed in conjunction with different types of online shopping orientations.
CHAPTER THREE
ONLINE SHOPPING ORIENTATION AND THE PROPENSITY TO BUY ONLINE

3.1 INTRODUCTION

Online shopping orientation is a general predisposition toward acts of shopping and can be defined as the way in which consumers shop online (Chang et al., 2005:552; McKinney, 2004:408). Online shopping orientation is regarded as a behaviour that is learnt or adopted from societal norms and has many of the same characteristics as in-store shopping orientation (Ackerman and Tellis, 2001:59; Lohse and Spiller, 1998:81). Jayawardhena, Wright and Materson (2003: 63) added that online consumers follow the same patterns of orientation as their offline counterparts. However, online consumers do it faster and more thoroughly. Online shopping, as an alternative to physical shopping, offers more convenience to consumers because they can save time and effort in searching for product information (Bhatnagar, Misra, and Rao, 2000: 98; Teo et al., 2004:65). In addition, Xu and Paulins (2005:423) stated that consumers view the Internet as a way to shop efficiently because the Internet is accessible and therefore merchandise is widely available; and further added that consumers’ demographic diversity is likely to affect their attitudes towards online shopping. In addition, online shopping orientation has very different characteristics from in-store shopping orientation (Xu and Paulins, 2005:423). Online shopping characteristics such as convenience, time saving, and quality of information may contribute to consumers’ propensity to buy online, while other characteristics such as transaction costs, security issues and privacy issues may cause consumers to avoid shopping online (Xu and Paulins, 2005:423).

With the growing number of shoppers patronising online stores, it is necessary for marketers to develop an enhanced appreciation for online shoppers (Kau et al., 2003:139). Through this understanding, marketers will be able to develop strategies and tactics to attract and maintain these online consumers. In this Chapter, an overview of online shopping orientations is provided and discussed in Section 3.2, and the types of online shopping orientations, based on online shopping factors are identified in Section 3.2.1, so as to enable marketing managers to predict consumers’ propensity to buy (Wu, 2003:37). In...
Section 3.3, the relationship between online shopping orientation and propensity to buy online will be discussed.

3.2 OVERVIEW OF ONLINE SHOPPING ORIENTATION

Online shopping is a growing phenomenon all over the world, with the use of the Internet for retail shopping increasing in recent years. As a result it has had a profound influence on the shopping process for many consumers (Brengman et al., 2005:79; Brown et al., 2003:1667; Choi and Lee, 2003:50; Jarvenpaa, Tractinsky and Saarinen, 1999; Kau et al., 2003:139; Quelch et al., 1996:60). Consumers are now choosing to shop online due to changes in their lifestyles and demographic diversity (Kau et al., 2003:139). Chang et al., (2005:552) found a positive relationship between demographic diversity and online shopping, in that demographic diversity influenced the likelihood of shopping online. Similarly, Wu (2003:42) found that consumer demographic diversity has a significant relationship with attitude toward online shopping. It is expected that more consumers are prepared to shop online as high-speed Internet access becomes more available and the number of cybermalls continues to increase (Choi and Lee, 2003:51). With the growing trends of online shopping, an ever-increasing number of organisations are finding it beneficial to offer their consumers the convenience of shopping online (Kau et al., 2003:139). For some consumers, the convenience of the Internet has resulted in shopping and buying online becoming part of their everyday lives, whereas others are still sceptical of the Internet and may only consider shopping online without actually buying online (Li et al., 1999:1).

Marketers need to develop a better understanding of consumers’ online shopping orientation (Dholakia, 1999:164; Donthu and Garcia, 1999:57; Fram and Grady, 1995:65; Hoffman and Novak, 1996:56; Jayawardhana and Foley, 2000:19; Kau, et al., 2003:140; Lohse and Spiller, 1998:82; and Novak, Hoffman and Yung, 2000:23). Online shopping orientation can be defined as the different characteristics or behaviours inherent in consumers, which in turn affects how consumers may shop online differently to shopping in a physical store (Xu and Paulins, 2005:420). Understanding consumers’ online shopping orientation will assist marketers in being able to market to specific consumers and meet the needs of consumers effectively (Kau et al., 2003:140).
Earlier research on online shopping orientation focused on predicting the type of consumer who is likely to use the Internet to search for and buy products (Kau et al., 2003:139). In recent studies the focus has shifted to investigating consumers’ propensity to buy online with no clear identification of what type of consumer shops online. (Jayawardhena, Wright, and Dennis, 2007:516; Wang, Chen, Chang and Yang, 2007:296). The contribution and findings of previous research conducted with regards to online shopping orientation is listed in Table 3.1.

**TABLE 3.1: Online Shopping Orientation: Previous Research Findings**

<table>
<thead>
<tr>
<th>Author</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alreck and Settle (2002:34)</td>
<td>Found that Internet shopping was viewed as saving more time than traditional modes of shopping.</td>
</tr>
<tr>
<td>Jarvenpaa and Todd (1977:59)</td>
<td>Surveyed consumer reactions to Web-based stores, and found that convenience is the key motivation behind consumers making Internet purchases.</td>
</tr>
<tr>
<td>Jayawardhena et al., (2003:60)</td>
<td>Conducted a study of how consumers behave online, which resulted in no conclusive evidence of a radical difference between men and women who shop online.</td>
</tr>
<tr>
<td>Kau et al., (2003:140)</td>
<td>Identified that it is crucial to better comprehend consumers’ attitudes, patterns of information acquisition and purchase decision-making process.</td>
</tr>
<tr>
<td>Sorce et al., (2005:124)</td>
<td>Found that online shopping is positively influenced by the perception of convenience and receiving accurate information.</td>
</tr>
<tr>
<td>Wang et al., (2007:297)</td>
<td>Attempted to understand and explain consumers’ online shopping intentions from the viewpoint of social psychology. Found that consumer attitudes towards online shopping influence their intentions to shop online.</td>
</tr>
</tbody>
</table>

Source: Researcher’s own construction

Despite the identified influence consumers behaviours and attitudes have on online shopping as highlighted in Table 3.1 and as previously mentioned, there are no previous studies that have examined the online shopping orientation in a South African context, hence the contribution of this research.
In order to understand the concept of online shopping orientation, it is important to understand the motives of online shoppers. According to Foucault and Scheufele (2002:409), previous research is limited in terms of what motivates consumers to shop on the Web. Online consumer motivation can be explained in terms of hedonic and utilitarian motives (Wolfinbarger and Gilly, 2001:35; Babin Darden and Griffin, 1994:654). Hedonic shopping orientation reflects shopping's potential entertainment and emotional worth, and reflects the worth found in the shopping experience itself, aside from any task-related aim (Babin and Attaway, 2000:92; Babin et al., 1994:646; Beatty and Ferrell, 1998:172; Bellenger, Steinberg, and Stanton 1976:17; Hirschman, 1982:228). Therefore, hedonic consumers shop for fun (Sorce et al., 2005: 123). Conversely, utilitarian shopping orientation has been described as goal-oriented, task-related and rational (Babin and Attaway, 2000:92; Babin et al., 1994:646; Batra and Ahtola 1991:159; Engel et al., 1993). Thus, utilitarian shoppers are transaction-oriented, and desire to purchase what they want quickly and without distraction. Thus they shop with a goal in mind (Sorce et al., 2005: 123; Wolfinbarger and Gilly, 2001:35). Hedonic and utilitarian motives associated with shopping have been used to help explain consumer phenomena such as browsing, compulsive shopping, consumer loyalty and impulse buying (Babin et al., 1994:644; Babin, Griffin and Boles, 1997:251; Beatty et al., 1998:169; Eroglu and Machleit, 1999; Chebat, Gomboa, and Michon, 1999).

By acknowledging that various types of online shoppers are driven by diverse shopping motivations, marketers can initiate strategies that meet the needs of each of these specific consumer groups (Brown et al., 2003:1679). Hoffman and Novak (1996:51) suggest that the Internet online environment is a very different medium to an in-store shopping environment, thus requiring new means of classification. Based on research by Kau et al., (2003:144) six online shopping factors, termed by the researcher, were identified to help identify consumers’ online shopping orientation. Online shopping factors are the characteristics that different types of online shopping orientations possess. One type of online shopping orientation may possess a combination of online shopping factors. In Table 3.2 six online shopping factors are defined.
### TABLE 3.2: Six Online Shopping Factors Defined

<table>
<thead>
<tr>
<th>Factor</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand Comparison</td>
<td>Tendency to collect a large amount of information with which to compare product features, prices and brands, both online and offline.</td>
</tr>
<tr>
<td>Online Shopping</td>
<td>Inclination to prefer online shopping, go for online auctions and engage in impulse purchases.</td>
</tr>
<tr>
<td>Deal Proneness</td>
<td>Predisposition that favours sales promotions, being very price sensitive and preference to buy well known brands online.</td>
</tr>
<tr>
<td>Information Seeking</td>
<td>Likely to navigate for information and heavy use of search engines and bookmarks to access Websites.</td>
</tr>
<tr>
<td>Ad Orientation</td>
<td>Show of propensity to click on a banner ad and pay more attention to the banner ad.</td>
</tr>
<tr>
<td>Offline Shopping</td>
<td>Fondness of browsing for information online but make purchases offline for high ticket items such as computers and automobiles.</td>
</tr>
</tbody>
</table>

Source: Adapted from Kau et al., (2003:144)

The six online shopping factors in Table 3.2 characterise the qualities the types of shoppers have. Cluster analysis was conducted in order to identify six types of online shopping orientation, which are presented in Table 3.3. The online shopping factors, as defined in Table 3.2, together with Kau et al.’s (2003:149-150) online shopping orientation statements were adapted and categorised for the purpose of this research, to categorise respondents according to online shopping orientation types. Consumers may be categorised into various types of shoppers according to their online shopping orientation (Brown et al., 2003:1677). In the next Section, types of online shopping orientations are discussed.

#### 3.2.1 Types of Online Shopping Orientation

Research by Allred et al., (2006:320), Brengman et al., (2005:79), Chang et al., (2005:552), Hamilton (2000), Kau et al., (2003:142), and Siu, Wang, Chang and Hui (2001:29) found that different groups of shoppers differ significantly in their online shopping attitudes. Hamilton (2000) suggested that there are different online shopping orientation types, and that these types are likely to demonstrate particular characteristics. Additionally, online marketers should identify the relevant online shopping orientation types that exist within
their specific target market, and then satisfy specific consumer needs (Hamilton; 2000). Siu et al., (2001:29) identified nine types of online shopping orientations namely: the store-loyal shopper, the economic shopper, the impulse shopper, the recreational shopper, the price-oriented shopper, the brand-loyal shopper, the name-conscious shopper, the convenience shopper and the quality brand conscious shopper. Kau et al., (2003:142) attempted to provide a holistic view of online shoppers in terms of their culture, ethnicity, race, language and gender as well as their shopping orientation and their propensity to buy online. Chang et al., (2005:552) endeavoured to link types of online shopping orientation of customers to intentions to shop online. Brengman et al., (2005:79) identified online shopping segments (tentative shoppers, suspicious learners, shopping lovers, and business users) as well as online non-shopping segments (fearful browsers, positive technology muddlers, negative technology muddlers, and adventurous browsers) which were identified according to their Internet usage, Internet attitudes, and demographic characteristics. Allred et al., (2006:308) classified internet users into shopper and non-shopper segments. Allred’s et al., (2006:308) research identified three shopper types who resist online shopping and three shopper types who actively engage in online shopping.

Although previous research on types of online shopping orientations exists, no previous studies have been conducted in South Africa to examine the types of online shoppers that exist in South Africa. Hence, the previous research outcomes discussed above is summarised in Table 3.3. This forms the basis of online shopping orientation within this dissertation.

**TABLE 3.3: Types of Online Shopping Orientations**

<table>
<thead>
<tr>
<th>Author</th>
<th>Characteristics</th>
<th>Online Shopping Factors</th>
<th>Type of Online Shopping Orientations</th>
</tr>
</thead>
</table>
| Chang et al., (2005:545); Hamilton (2000); Kau et al., (2003:149) | • Deal prone  
• Frequent online auction sites  
• Compares product features, prices and brands | • Brand Comparison  
• Deal Proneness  
• Information Seeking  
• Offline Shopping | **Comparison Shopper** |
<table>
<thead>
<tr>
<th>Author</th>
<th>Characteristics</th>
<th>Online Shopping Factors</th>
<th>Type of Online Shopping Orientations</th>
</tr>
</thead>
</table>
| Brengman et al., (2005:80); Kau et al., (2003:150) | • Competent computer user  
• Compares brands and features  
• Information gathering, not deal prone. | • Brand Comparison  
• Information Seeking  
• Offline Shopping | Dual Shopper |
| Allred et al., (2006:320); Brengman et al., (2005:80); Kau et al., (2003:150) | • Not very computer literate  
• Suspicious of shopping online | • Offline Shopping | E-Laggard |
| Allred et al., (2006:320); Hamilton (2000); Kau et al., (2003:150) | • Highly computer competent and good navigation expertise  
• Searches for information, deals, clicks banner ads  
• Positive online purchase experience | • Brand Comparison  
• Deal Proneness  
• Information Seeking  
• Ad Orientation | Information Surfer |
| Allred et al., (2006:320); Brengman et al., (2005:80); Kau et al., (2003:149) | • Active online or offline spender  
• Internet window shopping, looks at ads, uses bookmarks  
• Best deals online and offline | • Brand Comparison  
• Online Shopping  
• Deal Proneness  
• Information Seeking  
• Ad Orientation  
• Offline Shopping | On-Off Shopper |
| Allred et al., (2006:320); Kau et al., (2003:149) | • Limited computer literacy, has online insecurity  
• Prefers to buy from brick and mortar store | • Offline Shopping  
• Information Seeking | Traditional Store Shopper |

Source: Researcher’s own construction
From Table 3.3, six online shopping orientations have been identified:

The Comparison Shopper possesses the following online shopping factors; namely brand comparison, deal proneness, information seeking and offline shopping (Chang et al., 2005:545; Hamilton, 2000; Kau et al., 2003:149). This type of online shopping orientation is a shopper who actively looks out for promotional offers, frequents online auction sites and compares product features, prices and brands before making purchase decision (Chang et al., 2005:545; Hamilton, 2000; Kau et al., 2003:149).

The Dual Shopper possesses the following online shopping factors, namely brand comparison, information seeking and offline shopping (Brengman et al., 2005:80; Kau et al., 2003:150). This type of online shopping orientation is a shopper who is a competent computer user and often compares brands and features of products (Brengman et al., 2005:80; Kau et al., 2003:150). Dual shoppers rely on the Internet for information gathering, however they are not deal prone (Brengman et al., 2005:80; Kau et al., 2003:150).

The E-Laggard possesses only one online shopping factor namely, offline shopping (Allred et al., 2006:320; Brengman et al., 2005:80; Kau et al., 2003:150). This type of online shopping orientation is a shopper who is not very computer literate and who is suspicious of shopping online (Allred et al., 2006:320; Brengman et al., 2005:80; Kau et al., 2003:150). Therefore e-laggards have a low interest in seeking information from the Internet as well as a low level of navigation expertise (Allred et al., 2006:320; Brengman et al., 2005:80; Kau et al., 2003:150).

The Information Surfer displays the following online shopping factors: brand comparison, deal proneness, information seeking and ad orientation (Allred et al., 2006:320; Hamilton, 2000; Kau et al., 2003:150). The information surfer is highly competent with computers and possesses good navigation expertise (Allred et al., 2006:320; Hamilton, 2000; Kau et al., 2003:150). Information surfers search for information on the Internet, seek for promotional offers, and love clicking on banner ads often (Allred et al., 2006:320; Hamilton, 2000; Kau et al., 2003:150). Additionally, information surfers have positive online purchase experiences (Allred et al., 2006:320; Hamilton, 2000; Kau et al., 2003:150).
The On-Off Shopper possesses the following online shopping factors: brand comparison, online shopping, deal proneness, information seeking, ad orientation and offline shopping (Allred, et al., 2006:320; Brengman et al., 2005:80; Kau et al., 2003:149). This type of online shopping orientation is a shopper who likes to surf the Internet and collect online information and is an active online or offline spender (Allred et al., 2006:320; Brengman et al., 2005:80; Kau et al., 2003:149). On-off shoppers enjoy Internet window shopping, looking for advertisements, and are deal prone. This type of online shopping orientation is a frequent user of bookmarks and search engines (Allred et al., 2006:320; Brengman et al., 2005:80; Kau et al., 2003:149).

The Traditional Shopper possesses the following online shopping factors: offline shopping and information seeking (Allred et al., 2006:320; Kau et al., 2003:149). The traditional shopper possesses limited computer literacy, has online insecurity and prefers to buy from brick and mortar stores (Allred et al., 2006:320; Kau et al., 2003:149). Hence, the traditional shopper does not surf the Internet for comparative information, nor seek for bargains on the Internet (Allred et al., 2006:320; Kau et al., 2003:149).

In the next Section propensity to buy online is defined and previous research is examined with regards to propensity to buy online.

3.3 AN OVERVIEW OF PROPENSITY TO BUY ONLINE

Propensity to buy online is characterised by the likelihood that a consumer would conduct online transactions in the future (Chen and Barnes, 2007:25; Pavlou, 2003:110). Although there is a lack of research into consumer propensity to buy online (Brown et al., 2003:1666; Donthu and Garcia, 1999:52; Hagel and Armstrong, 1997; Korgaonkar and Wolin, 1999:53), propensity to buy online measures have been used to discover the likelihoods of buying specific products online (Beck, 2001; Vellido, 2000; Whitlark, Geurts and Swenson, 1993:18). Prior research regarding propensity to buy online is reflected below in Table 3.3.
### TABLE 3.4: Previous Research Findings: Propensity to Buy Online

<table>
<thead>
<tr>
<th>Author</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alba, Lynch, Weitz and Janiszewski (1997:38)</td>
<td>• Certain products are more likely to be bought online than others.</td>
</tr>
</tbody>
</table>
| Bellman et al., (1999:37) | • Web consumers shop online or use online services to save time.  
• Value the Web's time savings over its cost savings. |
| Bhatnagar et al., (2000:98) | • Propensity to buy online is positively related to the perceived convenience of shopping on the Internet. |
| Brown et al., (2003:1669) | • Online shopping orientation influences propensity to buy online.  
• Probable that consumer’s online purchase-intention will fluctuate for different products. |
| Joines, Scherer and Scheufele (2003:93) | • Online purchasing can be predicted by Web usage motivations. |
| Kim et al., (2003:33) | • Higher intentions to purchase clothing via the Internet in the future occur among consumers who have more favourable attitudes toward online shopping.  
• An individual’s cultural background is a significant predictor of future purchase intentions. |
| Sorce et al., (2005:124) | • Online shoppers are using the Internet as one of many sources of information in their pre-purchase search activities.  
• Four motives are significant predictors for frequency of online purchasing which are: information motivation, interactive control, economic motivation and transaction-based security concerns. |
| Watchravesringkan and Shim (2003:1) | • Individuals are likely to purchase online when they actually attempt to search for apparel information online. |

Source: Researcher’s own construction

It is evident from Table 3.4 that propensity to buy online is dependent on online shopping orientations as well as consumers’ previous online experiences (discussed in Section D of the questionnaire). The relationship between online shopping orientation and propensity to buy online is discussed in the next Section. The discussion will illustrate how a consumer’s online shopping orientation influences a consumer’s propensity to buy online.
3.4 THE RELATIONSHIP BETWEEN ONLINE SHOPPING ORIENTATION AND PROPENSITY TO BUY ONLINE

The propensity to buy online measures possesses predictive usefulness (So, Wong and Sculli, 2005:1225; Van der Heijden, 2003:41). A predictor can be defined as a variable whose value can be used to state something in advance of its occurrence by means of special knowledge or inference (Oxford Dictionary, 2008). The two predictors this research focuses on are: online shopping orientation and previous online experiences.

The first predictor of a consumer is propensity to buy online is the consumer’s online shopping orientation, thus indicating that online shopping orientation has the potential to influence consumers’ likelihood of purchasing online in the future (Bergadaa, Faure and Perrien, 2001:18; Breitenbach and Van Doren, 1998:559; Kim and Kim, 2004:886; Shim, Eastlick and Lotz., 2000:7; Supphellen and Nysveen, 2001:343; Szymanski and Hise, 2000:309).

The second predictor of consumers’ propensity to online is their previous online experiences that do not only affect their decisions to purchase items online but also the amount of money that they intend spending online (Johnson, Lennon, Jasper, Damhorst and Lakner, 2003:187). Research by Biehal and Chakravarti (1982:434); Chen and Barnes (2007:25); Pope et al., (1999:25); Shim and Drake (1990:22); Shim, Eastlick, Lotz and Warrington (2001:397) concluded that prior e-purchases of products positively relates to purchase intentions in the future. It was further concluded that previous online purchase experiences decreased online consumers’ uncertainties. This increased the likelihood that consumers would buy online in the future.

As stated previously, consumers’ shopping orientation largely influences their propensity to buy online. Web usage motivations (Hedonic or Utilitarian motives) attitudes towards online shopping, demographic diversity and specific types of online shoppers, influence propensity to buy online (Choi and Lee, 2003:60). Therefore, there is a positive relationship between online shopping orientation and propensity to buy. It is imperative that marketers research and recognise the factors affecting the online shopping orientation of consumers as well as the online purchasing intentions (Teo et al., 2004:63).
3.5 SUMMARY AND CONCLUSION

In this Chapter, the term ‘online shopping orientation’ was conceptualised and discussed in conjunction with previous research studies on types of online shopping orientations. Furthermore, six online shopping factors were identified and discussed. The researcher has adapted and categorised these into six main online shopping orientation types for the purpose of this research. Additionally, this chapter defined propensity to buy online and referred to the conclusions of previous research that two predictors (consumers’ online shopping orientations and consumers’ previous online experiences) would influence propensity to buy online. Lastly, the relationship between online shopping orientation and an individual’s propensity to buy online was highlighted and discussed.

In Chapter four, the relevant research design and methodology is discussed in detail.
CHAPTER FOUR
RESEARCH DESIGN AND METHODOLOGY

4.1 INTRODUCTION

The aim of this Chapter is to discuss the research design and methodology relevant to this research, in order to solve the research problem, the research objectives and hypotheses, as stated in Chapter One. Research can be defined as the objective and empirically-based method of gathering, recording and analyzing information in order to scrutinize a problem that requires a solution (Sekaran, 1992:4; Zikmund, 2003a:6). The research methodology used in this research is explained by answering the following research questions, as identified by Collis and Hussey (2003:55):

- Why is certain data collected?
- Where is the data collected?
- How is the data collected?
- What data is collected?
- How is the data analysed?

An explanation of the importance of this research, addressing the question “why certain data is collected”, is discussed in Section 4.2. Section 4.3 examine and compare two research paradigms (Phenomenological and Positivist paradigms), with the intention to identify the appropriate research paradigm for this research. Next, the research population as well as the sampling method used within the research, is described in Section 4.4, answering the question “where the data is collected”. Subsequently, Section 4.5 identifies and explains the research method, addressing the question of “how data is collected”. Section 4.6 describes the research measuring instruments. Phinney’s (1992:156) multi-group ethnic identity measure and Kau et al.,’s (2003) online shopping orientation measure are utilised to collect the necessary data. The reliability and validity of these two measures are also considered. In Section 4.7, “what data is collected” and “how the data is analysed” describes the data collection, capturing and analysis utilised in this research. The focus of Section 4.8 shifts to “how the data is analysed” through descriptive statistical analysis.
Additionally, the research data is also analysed through inferential statistical analysis - namely reliability, validity (including factor analysis), Pearson’s chi-squared test, analysis of variance and cluster analysis. These inferential statistical measures are explained in subsections of Section 4.9. Ethical considerations are emphasised and described in Section 4.10. Lastly, Section 4.11 summarises the important aspects of this Chapter.

4.2 IMPORTANCE OF THIS RESEARCH

In this Section the research methodology question pertaining to “Why data is collected” is discussed, highlighting the importance of this research.

In Chapter One, the problem statement of this research is stated as: „determining the extent to which demographic diversity influences online shopping orientation and propensity to buy online“. In order to solve this problem, in addition to demonstrating the linkage to knowledge creation, the objectives of this research include the following:

- To determine the demographic diversity profile of the respondents.
- To ascertain how strongly respondents identify with a particular ethnic group.
- To determine the online shopping orientations profile of the respondents.
- To determine the profile of respondents’ propensity to buy online.
- To assess the extent to which demographic diversity (namely gender, race and ethnicity) influences types of online shopping orientations (namely On-Off Shopper, Comparison Shopper, Traditional Shopper, Dual Shopper, E-Laggard, and Information Surfer).
- To assess the extent to which demographic diversity (namely gender, race and ethnicity) influences propensity to buy online.
- To assess the extent to which types of online shopping orientations influence propensity to buy online.

From these research objectives, research hypotheses are constructed, and three sets of hypotheses for this research are stated and graphically illustrated in Section 1.2., Figure 1.1. The following three sets of research hypotheses are stated, namely:
First set of hypotheses: The extent to which demographic diversity influences types of online shopping orientations.

Second set of hypotheses: The extent to which demographic diversity influences propensity to buy online.

Third set of hypotheses: The extent to which types of online shopping orientations influence propensity to buy online.

4.3 RESEARCH PARADIGM

As stated previously, an appropriate paradigm is needed to facilitate the choice of methodology to successfully accomplish the research objectives. The term „paradigm’ is defined by Collis and Hussey (2003:46) as the development of systematic method derived from an individual’s beliefs and theories about how research should be accomplished. Additionally, Morgan (1979:138) suggests that paradigms could be used to specify the methods and techniques which ideally should be adopted when conducting research. Moreover, paradigms are central to research design because they influence the nature of the research question in addition to the way the question is to be studied (Terre Blanche and Durrheim, 2004:36). In essence, paradigms are a critical point of reference to theory and research, a whole system of thinking including basic assumptions, the important questions to be answered, and the research techniques to be used (Neuman, 2003:70).

Positivistic and phenomenological research paradigms are two main research paradigms that were identified by Collis and Hussey (2003: 47), and each of these paradigms are discussed in the following sub-sections.
4.3.1 Phenomenological Paradigm

As stated by Collis and Hussey (2003:53) the phenomenological paradigm refers to an understanding of an individual’s behaviour from the individual’s own context. This paradigm focuses on individual aspects of human activity by highlighting the implication instead of the quantity of social experiences (Collis and Hussey, 2003:53).

Research methods under this approach endeavour to interpret, illustrate and focus on tackling the meaning and not the regularity of any comparative phenomena that exist in the social world through the use of a selection of interpretative methods (Van Maanen, 1983:9). A phenomenon is a reality or incident that is either apparent or emerges (Allen, 1990:893). With regards to the phenomenological approach, there may be no significant existing theory, or else a researcher may carry out research with the intention of constructing an original theory in order to elucidate the phenomena or to describe different patterns which emerge in the data (Collis and Hussey, 2003:56). Leedy and Ormrod (1985:101) state that this type of research paradigm is typically used to answer questions regarding the multifaceted nature of particular phenomena with the intention of explaining and appreciating the phenomena from the participant’s point of view.

4.3.2 Positivist Paradigm

In contrast to the phenomenological paradigm, the positivism paradigm attempts to find proof or origins of social phenomena, with little regard to the personal situation of an individual (Collis and Hussey, 2003:52). Similarly, this research paradigm applies logical reasoning in order for precision, objectivity and rigour to be present (Neuman, 2003:71).

According to Collis and Hussey (2003:196), the positivistic paradigm follows a process whereby the researcher first examines previous research to establish a suitable theory and then constructs a hypothesis. Furthermore, Remenyi (1996:8) states that the positivistic researcher is an objective analyst and interpreter of a tangible social reality. In this research paradigm, data is collected about social facts in an objective and disconnected approach with the use of quantitative indicators (Neuman, 2003:71; Terre Blanche and Durrheim, 2004:482) and as a result statistical analysis of this data is needed (Collis and Hussey,
The quantitative data consists of numerical values which symbolise the total number of observations or frequencies for the variables that are researched (Collis and Hussey, 2003:196).

Additionally, positivistic research answers questions about relationships among considered variables with the intention of explaining, forecasting and controlling particular social phenomena. (Leedy and Ormrod, 1985:101; Neuman, 2003:71). Moreover, Bryman, (2001:12) and Neuman (2003:71) state that positivism is a structured technique that merges deductive reasoning with exact empirical observations of individual behaviour with the aim of ascertaining and substantiating a set of probabilistic fundamental laws which can in turn be used to calculate a blueprint of human activity.

In a positivistic study the methodology section identifies the precise steps that will be followed so as to address the identified hypotheses and/or research questions (Collis and Hussey, 2003:295; Rudestam and Newton, 1992:60). The main features of both positivistic and phenomenological paradigms are identified in Table 4.1

<table>
<thead>
<tr>
<th>Positivistic Paradigm</th>
<th>Phenomenological Paradigm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uses hypothesis testing</td>
<td>Generates theories</td>
</tr>
<tr>
<td>Generalises from sample to population</td>
<td>Generalises from one setting to another</td>
</tr>
<tr>
<td>Uses large samples</td>
<td>Uses small samples</td>
</tr>
<tr>
<td>Information obtained is highly specific and precise</td>
<td>Information is rich and subjective</td>
</tr>
<tr>
<td>Tends to produce quantitative data</td>
<td>Tends to produce qualitative data</td>
</tr>
<tr>
<td>Simulated location</td>
<td>Natural location</td>
</tr>
<tr>
<td>Reliability is high</td>
<td>Reliability is low</td>
</tr>
<tr>
<td>Validity is low</td>
<td>Validity is high</td>
</tr>
</tbody>
</table>

Source: Adapted from Collis and Hussey (2003:55)

As depicted in Table 4.1, the positivistic paradigm is more relevant when data is quantitative in nature and when hypotheses are tested, using large samples in order to make generalisations about the population, based on the data obtained from the sample. Due to the quantitative nature of this research, the positivistic research paradigm is most
appropriate. For the purpose of this research, three sets of hypotheses were stated in Chapter One, Section 1.2. Additionally, statistical analysis is utilised within this research paradigm.

4.4 RESEARCH POPULATION AND SAMPLE

In this Section the population and sample relevant to this research are discussed, answering the question, “where the data is collected”. A population is defined as the total group of individuals, events or things of interest that the researcher wishes to investigate so as to make some inferences and from which a sample is to be selected (Cooper and Schindler, 2006:402; Riley, Wood, Clark and Wilkie, 2000:147). For the purpose of this research, three universities in the Eastern Cape were selected. The three universities include Rhodes University, Nelson Mandela Metropolitan University and the University of Fort Hare. These three universities were selected for convenience purposes, for the reason that the researcher was based in Grahamstown, in the Eastern Cape. The population comprised of students ranging from first year to master’s level.

Bryman (2001:85) defines a sample as the section of the population that is selected for research. It is a subset of the population and should represent the core interest of the research (Collis and Hussey, 2003:56). The rationale for obtaining a sample rather than gathering data from the whole population is relatively understandable (Sekaran, 1992:227). When populations are large it becomes a lengthy and costly process to collect data about every member of that particular population and therefore only a sample is selected (Collis and Hussey, 2001: 55). As stated by Terre Blanche and Durrheim (2004:274) sampling is a very important aspect of research because the conclusions that can be drawn from the research are dependent upon what types of respondents are targeted. Samples of students were selected from within different departments from each of the three universities in the Eastern Cape. The research sample included university students ranging from first year to masters’ level. The departments were selected simply due to convenience as lecturers were emailed and those who were able to participate in the research process were utilised. In addition, when following a positivistic approach, researchers often use larger sample sizes so as to conduct statistical analyses; moreover, the use of a large sample allows researchers
to obtain more accurate results that can be taken to be true for the entire population (Riley, et al., 2000:75). The sample was composed as follows:

- Rhodes University - 600 respondents
- Nelson Mandela Metropolitan University - 600 respondents
- Fort Hare University - 500 Respondents

Respondents were targeted and after discarding incomplete questionnaires, these resulted in: 323 respondents at Rhodes University; 300 respondents at Fort Hare University and 300 respondents at Nelson Mandela Metropolitan University. The response rate for each of these universities is discussed in Chapter Five, Section 5.2. For the purpose of this research, a combination of convenience sampling and purposive sampling was used. Both of these sampling approaches are discussed next.

Both convenience sampling and purposive sampling are types of non-probability sampling. Riley et al., (2000:85) recognized that a major attribute of non-probability sampling is that items are purposively selected for a sample and not haphazardly chosen. However, the probability that specific items will be included in a non-probability sample is not precise (Welman, Kruger, and Mitchell, 2005: 67). Additionally Leedy et al., (1985:218) declare that in some instances, the researcher has no way of predicting that each element of the population will be represented in the sample.

With regards to convenience sampling, this method involves collecting information from people or other units that are readily available to provide this information, and the sample selected aims to meet the general parameter of a study’s objectives (Davies, 2007:56; Welman et al., 2005:69). This sample selection process is continued until researchers obtain the required sample size, and it is generally used to obtain a large number of completed questionnaires quickly and economically (Bryman, 2001:97). Consequently, the response rate will be high for the reason that researchers are likely to receive all or almost all of the questionnaires back (Bryman, 2001:97). Bryman (ibid) further adds that with large numbers of respondents, the results may prove quite interesting, however with convenience sampling it is impossible to generalise these results, as the sample may not be
representative of the entire population. Additionally, for the reason that no control is exercised over the types of respondents that make up the sample, researchers implementing this type of sampling method have no way of knowing to what extent the information obtained or the opinions that are expressed reflect the total population (Davies, 2007:56).

Additionally, purposive sampling is regarded as the most important type of non-probability sampling (Welman et al., 2005:69). Researchers rely on their experience, ingenuity and/or previous research findings to deliberately obtain units of analysis in such a manner that the sample they obtain may be regarded as being representative of the relevant population (ibid). The purposive sampling approach involves identifying and targeting representative individuals of the population being studied for a particular purpose. (Davies, 2007:57; Leedy and Ormrod, 1985:219). Conversely to convenience sampling, purposive sampling seeks to obtain information from specific targets – that is, specific types of people who will be able to provide the desired information, either because they are the only ones who can give the needed information, or because they conform to some criteria set by the researcher (Sekaran, 1992:235). Therefore this type of sampling approach may be suitable for particular research problems; nonetheless researchers should always provide justifications for why a particular sample of participants is chosen (Leedy and Ormrod, 1985:219).

Within the context of purposive sampling, the researcher applied convenience sampling methods. The researcher specifically targeted university students (purposive sampling) whereby respondents were able to volunteer their participation in this research study, since lecturers at each university allowed the researcher into lecture venues, where students were readily available to complete the questionnaire (convenience sampling).

4.5 RESEARCH METHOD

Welman et al., (2005:52) define a research method as a technique involving a specific instrument (such as a self-completed questionnaire or survey) administered to research participants in order to collect data. Thus a research method offers an explanation as to “how the data is collected”. Following from this, the research method used for a specified research problem must always take into account the nature of the data that will be collected (Leedy and Ormrod, 1985:100). Earlier in this Chapter, the positivistic research approach
was deemed suitable for this research, and together with the identified research objectives which are stated in Chapter One, a survey is the most suitable research method for this research (Collis and Hussey, 2003:173).

The survey method is the most common tool used for data collection (Terre Blanche and Durrheim, 2004:293). Surveys allow the researcher to gather large quantities of data (Oppenheim, 1966). Different alternatives regarding surveys exist. Surveys can be administered through face-to-face interviews, by the mail, via the Internet, over the telephone, or self-administered questionnaires (Leedy and Ormrod, 1985:196). For the purpose of this research a self-administered questionnaire was used (Annexure A).

A questionnaire survey could be comprised of a set of questions that can be either fixed alternatives and/or of the open-ended variety as well as attitude-opinion statements. These are all designed to elicit responses which are converted into measures of the variables under examination (Sekaran, 1992:200). Fixed alternative questions can be defined as questions where respondents are limited to stated alternatives (Franklin and Osborne, 1971:338). On the other hand, open-ended questions may also be used - this allows respondents to reply with no structure to limit their response (ibid).

Rensis Likert developed rating scales termed “Likert Scales” that are used to assess respondent’s attitudes (Leedy and Ormrod, 1985:197). This is the most frequently used variation of a summated rating scale. Summated rating scales consist of statements that express either a favourable or an unfavourable attitude toward the object of interest, and are sometimes referred to as attitude-opinion statements (Cooper and Schindler, 2006:339). Likert scales are more useful when behaviour, attitude or other phenomena of interest need to be evaluated on a continuum ranging from “strongly disagree” to “strongly agree”. Although still debated, Trochim (2006a) found that the most accurate midpoint exists with a five-point Likert scale. Smaller scales allow for fewer options, resulting in little detail, and the larger scales offer too many options, resulting in a less concentrated detail (Gwinner, 2006). It is for this reason that the five-point Likert scale has been selected for this research.
Since respondents completed the questionnaire on their own, the researcher’s data is limited to the written responses to a series of pre-arranged questions. Therefore, it is important that a great deal of time is focused on matters such as question wording and ordering of items within the questionnaire (Franklin and Osborne, 1971:338). It is crucial that the researcher states the questions as clearly as possible whilst avoiding the use of leading questions or ordering questions in a leading fashion (Franklin and Osborne, 1971:338). One way to avoid the negative effects of questionnaires is the use of a pilot survey. Zikmund (2003a:229) stated that pilot surveys are trial runs used to detect problems in a questionnaire’s instructions or design, prior to administering the questionnaire to the entire sample. Consequently a pilot survey was administered to a small group of respondents (n=24) in order to ensure that ambiguous questions and potential misunderstandings were eliminated, as well as to ensure that the questions were interpreted similarly by all respondents (ibid). In conducting a pilot survey prior to the actual administering of the survey to the entire sample, the researcher began to address the issue of reliability, which will be further explained in Section 4.9.1.

In the next Section a detailed explanation of the research measuring instruments used in this research is given.

4.6 RESEARCH MEASURING INSTRUMENT

The questionnaire used in this research is divided into four sections and was accompanied by a covering letter. As previously mentioned, the data was collected by means of a self-administered questionnaire which is attached as Annexure A. The questionnaire consisted of the following sections:

- Section A: Demographical Information
- Section B: Online Shopping
- Section C: Online Shopping Orientation
- Section D: Propensity to Buy On-line
The covering letter introduced the purpose of this research in order to solve the research problem identified, and also provided clear instructions on how to complete the questionnaire.

Section A of the questionnaire, pertaining to demographic information, consists of fixed alternative questions as well as five-point Likert style statements. The fixed alternative questions refer to physical demographical information about the respondent, such as gender, race, nationality, ethnicity and year of study. With regards to these questions, respondents were requested to indicate the option that best related to them, by making a cross in the relevant space provided. Additionally the second half of Section A consists of 12 five-point Likert style statements that specifically focus on the individual’s ethnic identity. Respondents were requested to indicate to what extent they agreed or disagreed with each of the 12 statements (1 = Strongly Disagree to 5 = Strongly Agree) according to a five-point Likert scale. The questions pertaining to the individual’s ethnic identity are based on Phinney’s (1992:156) multi-group ethnic identity measure, which will be discussed in Section 4.6.1.

Section B of the questionnaire relates to online shopping and consists of six fixed alternative questions which canvass the respondent’s opinion on internet access (four questions) and online shopping (two questions).

Section C of the questionnaire consists of 24, five-point Likert style statements. Respondents were requested to rate each of the statements pertaining to online shopping orientation, according to a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). The online shopping orientation statements are based on the research of Kau et al., (2003:149-150) which will be explained in Section 4.6.2.

Lastly, Section D consists of three, five-point Likert style statements pertaining to an individual’s propensity to buy online, adapted from research conducted by Chen and Barnes (2007:25). The objective of Section D is to identify the likelihood of respondents buying online in the future. Within this Section, respondents also have to respond to an open-ended question indicating their past experiences while shopping online.
At the end of the questionnaire, respondents are offered the opportunity to provide their email address if they are interested in receiving a copy of the findings of this research. In the next two Sections the two measuring instruments used in questionnaires are examined. First, the Phinney (1992:156) multi-group ethnic identity measure is presented in Section 4.6.1, followed by a discussion on the Kau et al., (2003) Online Shopping Orientation Measuring Instrument in Section 4.6.2. The reliability and validity of both of these research measuring instruments are also outlined.

4.6.1 Phinney’s (1992) Multi-Group Ethnic Identity Measure

The ethnic identity statements are based on an existing research measuring instrument, namely Phinney’s (1992:156) multi-group ethnic identity measure. The objective of this measure is to identify how respondents feel about their ethnicity and/or how they react to their own ethnic group. One reason for utilising this existing instrument is because within South Africa there are people from many different backgrounds and ethnic groups. Since South Africans’ first language is generally acquired as part of an affiliation to a particular ethnic group, it can be said that language groupings are viewed as fundamentally the same as ethnic groupings (Byrne, 1996). The ethnic groups used in the questionnaire are namely Afrikaans, Asian, Coloured, English, Indian, Khoisan, Ndebele, Sotho, Swazi, Tsonga, Tswana, Venda, Xhosa, and Zulu.

This Multi-group Ethnic Identity measure is well known and has been developed for use across diverse ethnic groups, such as in United States of America and Australia. The 12 statements focus on two aspects of ethnic identity, which are commitment and exploration. Phinney (1992:156) state that ethnic identity is conceptualised as a continuous variable. Respondents are asked to indicate the degree to which they agree with item statements (1 = strongly disagree to 5 = strongly agree). A high average mean score signifies a high level of each of the ethnic identity aspects. Thus, an average mean score of 3.5 or higher depicts a high level of ethnicity identity.

In order to assess the quality of this research, it is important to look at the instrument’s reliability based on previous research. Reliability is defined as the degree to which any research measuring instrument generates similar results (Trochim, 2006c). If a measure is
reliable, the measure will have consistent results for the different items for the same construct, thus the research instrument has internal consistency (Trochim, 2006c). Cronbach's Alpha assesses the reliability of a research measuring instrument which measures some underlying factor, for example ethnic identity (Statacorp, 1999:20). Reliability, internal consistency as well as the Cronbach Alpha co-efficient alphas are discussed in detail in Section 4.9.1.

In previous research, Phinney (1992:156) reported a Cronbach Alphas for the subscales range between 0.69 and 0.81 in one sample. The reliability of this measure is considered as good. Internal consistency for the multi-group ethnic identity mean scores sample (i.e. Commitment = 0.77 and Exploration = 0.73) also shows good reliability. Internal consistency deals with the reliability of the measure; this is further discussed along with reliability in Section 4.9.1.

It can be concluded from the above discussion that Phinney’s (1992:156) multi-group ethnic identity measure is reliable.

4.6.2 Kau, Tang and Ghose’s (2003) Online Shopping Orientation Measure

The 24 online shopping orientation statements were constructed by Kau et al., (2003:149-150). As explained in Section 3.2.1, the six online shopping orientations are influenced by the online shopping factors according to Kau et al., (ibid).

Table 4.2 illustrates the rotated loadings for the online shopping factors statements used in Kau et al.,’s (2003) research. The rotated loadings of these statements clearly depict the statements’ validity. Trochim (2006d) states that if a research test measures what it claims to measure, then it is regarded as valid. Validity is important for the reason that the results can accurately be applied and interpreted (ibid). Validity is further expanded in Section 4.9.2.
Table 4.2 confirms that the statements used in Kau et al.,’s (2003) research measure show good validity for the reason that Eigen values for the online shopping factors greater than one are considered to be meaningful factors and factor loading scores (Statistics South Africa, 2007d). A factor loading of above 0.4 shows acceptable validity, thus the online shopping factors all have an acceptable validity. Additionally, since reliability is a necessary contributor to validity (Cooper and Schindler, 2006:321; Leedy and Ormrod, 1985:32), one can state that if the research findings are found to show good validity it can be assumed that the research findings are also reliable.

This measuring instrument was previously administered in Singapore, and so the statements had to be adapted to include South African-related examples and terms for the purpose of this research, so that the statements reflected the South African context under which the research was conducted. Internet-related terms were explained as well.

4.7 DATA COLLECTION, CAPTURING AND ANALYSIS

“What data is collected” and “how data is analysed” is discussed in this Section. The data collection process is defined by Sapsford and Jupp (1996) as the process of preparing and collecting data. It is a vital process in that it ensures the data gathered is accurate and moreover that the findings are valid (ibid).
The data collection process began at Rhodes University with a pilot survey. The researcher handed out the questionnaire to respondents, the pilot survey data ($n = 24$) was then analysed and then adapted into the final questionnaire. The final questionnaire was then administered again, starting at Rhodes University.

Lecturers in various faculties at Rhodes University were contacted telephonically and via email to assist in the administering of this questionnaire within lecture time. The Department of Management and the Department of Information Systems responded positively. The questionnaire was then handed out to first year and second year Management students, and second and third year Information Systems students. The respondents were offered the opportunity to volunteer to fill in a questionnaire as they entered the lecture venue. At the beginning of the lecture, the researcher had the opportunity to present the purpose of this research to the class, explained how to complete the questionnaire, and also thanked the respondents for volunteering. The respondents then completed the questionnaire during the lecture period. Completed questionnaires were collected by the researcher after the lecture.

Following from this, lecturers in various faculties at Nelson Mandela Metropolitan University were contacted via email and telephone to assist in the administering of this questionnaire within their lecture time. The Department of Management responded. The questionnaire was then handed out to first year Management students and third year Internet Marketing students. Both groups were at the South Campus, as well as the Missionvale Campus. Like Rhodes University, the respondents were able to volunteer to fill in a questionnaire. Students were explained the purpose of the questionnaire, and thanked for volunteering. Completed questionnaires were collected by the researcher after the lecture. The completed questionnaires were then taken back to Grahamstown.

At Fort Hare University, lecturers in various faculties at the university were approached to assist in the administering of this questionnaire within lecture time. The Department of Management, the Department of Information Systems, Department of Law, Department of Psychology as well as the Department of Economics responded. The questionnaire was then handed out to first, second and third year Management students, second and third year Information Systems students, second year Law students, second year Psychology students
and second year Economics students. Similar to Rhodes and Nelson Mandela Metropolitan Universities, the respondents were offered the opportunity to volunteer to complete a questionnaire as they walked into the lecture. Students who had previously completed a questionnaire at another lecture were asked not to fill in another questionnaire, so as to avoid duplication. The purpose of this research and instructions on how to complete the questionnaire were explained to the students prior to the start of their lecture. The completed questionnaires were collected by the researcher after the lecture. The questionnaires were then taken back to Grahamstown.

The number of respondents and responses from each university are shown in Table 4.3. The response rate is given in Chapter Five, Table 5.1.

**TABLE 4.3: Number of Responses from Each University**

<table>
<thead>
<tr>
<th>University and Department</th>
<th>Number of Total Respondents</th>
<th>Number of Actual Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>RHODES UNIVERSITY:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management (first year)</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Management (second year)</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Information Systems (second year)</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>Information Systems (third year)</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>400</td>
<td>323</td>
</tr>
<tr>
<td>NELSON MANDELA METROPOLITAN UNIVERSITY:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management (first year)</td>
<td>300</td>
<td></td>
</tr>
<tr>
<td>Management (second year)</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Internet Marketing (third year)</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>400</td>
<td>300</td>
</tr>
<tr>
<td>FORT HARE UNIVERSITY:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management (first year)</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td>Management (second year)</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Management (third year)</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>Information Systems (second year)</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Information Systems (third year)</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Law students (first year)</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>Psychology(first year)</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Psychology (second year)</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Economics (second year)</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td>300</td>
</tr>
<tr>
<td>TOTAL NUMBER OF RESPONSES:</td>
<td>1200</td>
<td>923</td>
</tr>
</tbody>
</table>

Source: Researcher’s own construction
With regards to the data capturing process, once the data was collected from each university, the researcher discarded questionnaires that were incorrectly completed. Following from this, the researcher numbered each usable questionnaire clearly to respond to the same code on MS Word Excel spreadsheet for control purposes. Each questionnaire’s data was then coded appropriately and entered into a spreadsheet using Microsoft Excel. Once the data was captured correctly, it was transferred to a statistical data analysis program, namely Statistica version 8 (Statistica South Africa, 2007c).

As stated in Section 4.1, “how the data was analysed” addressed the research statistical analysis. Given that the researcher adopted a positivistic paradigm, the data collected was of a quantitative nature, and the researcher therefore needed to apply certain types of statistical analysis (Collis and Hussey, 2003:186). The aim of statistical analysis is to enable a researcher to make some judgments about the data, furthermore statistical analyses determine whether or not some observed phenomenon is likely to be true (Riley et al., 2000:198). In Sections 4.8 and 4.9, the process of statistical analysis is divided into descriptive and inferential statistics. These two types of statistical analyses are defined and discussed.

4.8 DESCRIPTIVE STATISTICAL ANALYSIS

Firstly, the data gathered in all four Sections of the questionnaire was used in this research and analysed using descriptive statistics. Descriptive statistics are concerned with the description and/or summary of quantitative data obtained for a group of individual units of analysis and depicted in terms of numbers, tables and charts (Riley et al., 2000:148; Sekaran, 1992:259; Welman et al., 2005:231). According to Sekaran (1992:259), descriptive statistics identify how frequently specific phenomena occur (frequencies), depict the average score for a group (mean), and also measures the variation of the scores (standard deviation).

Within this research, descriptive statistics all used to summarise the demographical details of respondents found in Section A of the questionnaire, in addition to summarising the details found in Section B of the questionnaire pertaining to respondents’ Internet and online shopping habits. Furthermore, descriptive statistics were utilised to develop a profile
which identified respondents’ ethnic identity (Section A of the questionnaire), a profile regarding respondents’ online shopping orientations (Section C of the questionnaire), and lastly a profile concerning respondents’ propensity to buy online in the future (Section D of the questionnaire).

In the following subsections frequency tables, mean and standard deviation are explained.

**4.8.1 Frequency Tables**

Frequency tables are a common descriptive analysis procedure, which are used to analyse categorical data in order to review how different categories of values are distributed in a particular sample (Statistics South Africa, 2007c). The quantitative data collected under a positivistic paradigm are represented by numerical values, thus frequency tables illustrate the total number of observations or frequencies for the variables researched (Collis and Hussey, 2003:186). Sekaran (1992:259) affirms that frequencies refer to the number of times various subcategories of a certain phenomenon occur, from which the percentage and the cumulative percentage of the occurrence of the subcategories can be easily calculated. It is for this reason that simple frequency tables are used to statistically analyse all four Sections of the questionnaire used in this research. The results can be depicted in tables or graphs, consequently illustrating the results easily and facilitating the researcher’s understanding of the characteristics of the data (Sekaran, 1992:260). In addition to frequency tables, simple graphs were constructed so as to graphically illustrate the analysed data.

**4.8.2 Mean**

The calculation of the mean and standard deviation are the most often used descriptive statistics and are discussed within this descriptive analysis Section (Statistics South Africa, 2007c). The mean is described as the average score for a group which is calculated by adding together the values for all observations in a data set and then dividing by the number of items. (Riley et al., 2000: 177; Welman et al., 2005:230) Moreover, Riley et al., (2000: 177) states that the mean, which is often simply referred to as the average,
determines the central tendency and/or the central location of specific data, which indicates points around which a data set is situated.

### 4.8.3 Standard Deviation

The term „standard deviation’ was first used by Pearson in 1894, and is a popular measure of variation (Statistics South Africa, 2007c). The standard deviation establishes if the scores are evenly distributed on a parametric test; additionally the standard deviation indicates the „average’ spread of the data values that cluster around the arithmetic mean (Rowntree, 1981:54; Welman et al., 2005:230). Consequently, Riley et al., (2000: 193) stated that the bigger the dispersion, the greater the deviations, thus resulting in a larger standard („average’) deviation.

### 4.9 INFERENTIAL STATISTICAL ANALYSIS

Inferential statistics assist the researcher in drawing conclusions about the research data (Leedy and Ormrod, 1985:33). With regards to inferential statistics, the researcher uses quantitative data collected from a sample to draw conclusions about an entire population (Collis and Hussey, 2003: 196; Sekaran, 1992:259). Sekaran (1992:259) stated that the results obtained from inferential statistics allow the researcher to draw inferences from a sample to the population. With inferential statistics, the researcher is able to see how variables relate to each other and whether there are any differences between two or more groups (Sekaran, 1992:259; Welman et al., 2005:236).

In the following subsections, relevant inferential statistical analysis tools are identified and discussed in relation to this research.

### 4.9.1 Reliability

It is crucial that the reliability and validity of the research results obtained from the research instrument are considered. Both statistical criteria fundamentally deal with the adequacy of measures, which are vital in quantitative research. (Bryman, 2001:31; Leedy and Ormrod, 1985:31). Reliability and validity influence the extent to which meaningful
conclusions can be drawn from the data (Leedy and Ormrod, 1985:31). Reliability is concerned with the accuracy and the precision of a measurement procedure as well as whether the research findings can be repeated and are reliable (Bryman, 2001:29; Leedy and Ormrod, 1985:31).

Within quantitative research, the researcher is concerned with the question of whether a measure is stable or not, as well as whether the research findings are credible - in other words if the research were to be repeated, the same results should be obtained (Cooper and Schindler, 2006:321; Santos, 1999:1). Statistics South Africa (2007c) further adds that a measurement is reliable if it reflects mostly a true score, relative to the error. Likewise, Cooper et al., (2006:321) additionally state that a measure is reliable depending on the degree to which the measure supplies consistent results. Hence, reliable instruments work well at different times under different conditions, for the reason that reliability focuses on the degree to which a measurement is free of unstable or random error (Cooper et al., 2006:321). The most common numerical coefficient of reliability, the Cronbach's Alpha coefficient will subsequently be explained.

4.9.1.1 Cronbach’s Alpha

The most common numerical coefficient of reliability is the Cronbach's Alpha, whereby the calculation of Cronbach’s Alpha is based on the reliability of a test relative to other tests with the same number of items, and measuring the same construct of interest (Hatcher, 1994; Santos, 1999:2). Cronbach’s Alpha ranges in value from zero to one and may be used to describe the reliability of factors that have two possible answers and/or Likert rating scales. The higher the Cronbach’s Alpha, the more reliable the generated scale (Santos, 1999:2). Similarly, Collis and Hussey (2003:187) indicate that 0.7 is a good level of internal reliability, whereas values between 0.50 and 0.69 denote an acceptable level of reliability. Values less than 0.50, denote a poor level of reliability. Since reliability is estimated from the consistency of all items in the sum scales, it is also referred to as the internal-consistency reliability factor whereby every item is correlated with every other item across the entire sample and the average inter-item correlation is taken as the index of reliability (Collis and Hussey, 2003:187; Statistics South Africa, 2007c). Hence, the
reliability of the questionnaire was assessed using the Cronbach’s Alpha, to measure the internal consistency of the research questionnaire.

### 4.9.2 Validity

In Section 4.9.1, it was stated that research can only be measured accurately when it is measured consistently, however it is important to note that measuring a research instrument consistently does not necessarily mean that the research will be measured accurately (Leedy and Ormrod, 1985:32). Hence, reliability is a necessary contributor to validity, but an insufficient condition for validity (Cooper and Schindler, 2006:321; Leedy and Ormrod, 1985:32). Validity deals with the reliability of the conclusions that are generalised from a piece of research as well as the extent to which the instrument measures what it is supposed to measure (Bryman, 2001:30; Coolican, 1992:35; Cooper et al., 2006:318; Leedy and Ormrod, 1985:31). Collis and Hussey (2003:58) add that validity can be described as the extent to which the research findings accurately represent what is really happening in the situation. Furthermore, it is vital that research errors are avoided, in that research errors can undermine validity (Collis and Hussey, 2003:58). Similarly, they state that positivistic research highlights accuracy of the research instrument along with the ability to be able to replicate the research (ibid). Consequently there is a risk that the measure may not reflect the phenomena the researcher claims to be investigating (i.e. that validity will be very low). It is for this reason that there are a number of different ways in which the validity of research can be assessed (Collis and Hussey, 2003:59). The different types of validity will now be discussed.

#### 4.9.2.1 Types of Validity

The most common type of validity, according to Collis and Hussey (2003:59), is face validity which involves ensuring that the measures used by the researcher represent and/or measure what they are supposed to. Face validity identifies how a measure appears, and contrastingly to content validity, face validity does not depend on established theories for support (Fink, 1995). It is important to mention that face validity is a qualitative measure of validity and is not quantified with statistical methods. Subsequently, face validity is
referred to as the least quantifiable measure since this measure is biased and not scientific (Statistics South Africa, 2007b; Trochim, 2006b).

Another common validity used in quantitative research is internal validity. Bryman (2001:31) refers to this type of validity as being concerned with the reliability of findings that indicate a fundamental relationship. In addition, Leedy and Ormrod (1985:103) define the internal validity of a research study as the degree to which accurate assumptions can be drawn from the research design and the information collected. Similarly Bryman (2001:30) adds that internal validity relates to causality, in that the factor that has a fundamental influence is referred to as the independent variable (the cause) and the result is seen as the dependent variable (the effect). As a result, the question: “how confident can we be that the independent variable really is at least in part responsible for the variation that has been identified in the dependent variable” is raised by assessing a research measurement’s internal validity (Bryman, 2001:30).

On the other hand, external validity is concerned with the question of whether the results of a study can be generalised beyond the specific research context (Bryman, 2001:30). Hence the issue of how people are selected to participate in research is critical. Accordingly, it is important to quantitative researchers that a representative sample is generated (Bryman, 2001:31).

The last type of validity to be discussed is that of construct validity, where researchers consider both the measuring instrument being used as well as the theory (Bryman, 2001:30; Cooper et al., 2006:320; Sekaran, 1992:173). This type of validity answers two important questions (Cooper and Schindler, 2006:319). It specifically:

- Identifies the cause of inconsistency in the measure, and
- Identifies the fundamental construct(s) being measured and determines how well the instrument represents construct(s).

Evidently construct validity searches for measures of social scientific concepts and thus applies to research of a quantitative nature (Bryman, 2001:30). As previously mentioned
the evaluation of measurement validity assumes that a measure is reliable (Bryman, 2001:30). Bryman (ibid) states that if a measure of a concept is unreliable in that it fluctuates and is unstable, it cannot be supplying a valid measure of the specific theory. In other words, construct validity pertains to whether or not an assessment accurately measures a theoretical, non-observable construct or trait (Shuttleworth, 2009). According to Shuttleworth (ibid), a statistical approach of assessing the construct validity of a research measure can be through the use of factor analysis. Construct validity can also be assessed using internal consistency, which means scores on the individual test items should correlate highly with the total test score, and is used as evidence that the test is measuring a single construct (Shuttleworth, 2009). Subsequently, factor analysis is used to test construct validity as well as internal consistency of this research measure. Factor analysis is discussed in Section 4.9.2.

In the subsequent sections, the statistical analysis processes that were used in this research are discussed. They are namely factor analysis, Pearson's chi-square test, analysis of variance and cluster analysis. Each of these are defined and discussed, and then in Chapter 5 they are discussed in relation to the research results relevant to this research.

4.9.2.2 Factor Analysis

Factor analysis refers to a number of diverse techniques in which a large set of variables is concurrently discussed with relation to their bivariate relationships (Blaikie, 2004:219; Zikmund, 2003a: 586). The general purpose of factor analysis is to determine the underlying relationships or patterns in a large set of variables, and reduce these variables to smaller sets of factors (Blaikie, 2004:219; Zikmund, 2003a: 586). When administering factor analysis, the researcher begins with at least five indicators which are believed to measure a single construct (Neuman, 2003:522). The results identify how well these indicators relate to an underlying factor or hypothetical construct (ibid). Additionally, Neuman (ibid) states that factor scores are produced during factor analysis, and these factor scores are used as weights to create an index.

The statistical approach of factor analysis follows that the researcher begins the process with all the variables used in the questionnaire (Zikmund, 2003b:639). Factor analysis is
then conducted on all the variables and from this, specific factors are identified. The variables found in the questionnaire are then assigned to certain factors based on their factor loadings (ibid). Factor loadings are roughly analogous to the correlation or set of correlations of the original variables with the factor (ibid). Each factor loading is a measure of the importance of the variable in measuring each factor (ibid). Each variable is assigned to a particular factor in which it has the highest loading, usually greater than 0.4 (Zikmund, 2003b:640).

With regards to this research, factor analysis is used to categorise the variables used in Section A with regards to statements which reflect strength of respondents’ identification to ethnicity (namely commitment and exploration). Factor analysis is also used to categorise the variables used in Section C of the questionnaire into six online shopping factors, namely brand comparison, online shopping, deal proneness, information seeking, ad orientation and offline shopping. Lastly, factor analysis is also used to categorise the variables used in Section D of the questionnaire, regarding propensity to buy online.

Factor analysis measures the construct validity of the questionnaire, and secondly, instead of using all the variables, variables are broken down into six factors, in order to conduct further analysis. The threshold value for this statistical approach is 0.4, thus variables which had a factor loading of 0.4 or greater are assigned to that factor (ibid). The value of 0.4 or greater is used because this usually resulted in the highest factor loading relative to the other factor loadings.

### 4.9.3 Pearson’s Chi-Squared Test

Cross tabulation is used to describe sets of relationships (Zikmund, 2003a:575). Cross tabulations identify relations between cross tabulated variables, by examining the particular frequencies of observations that belong to specific categories on more than one variable (Statistics South Africa, 2007c). A cross-tabulation or contingency table is a joint frequency distribution of observations on two or more sets of variables (ibid). This generally means that tabulation of subgroups will be conducted for purposes of comparison. The statistical test for cross tabulations is known as ‘the chi-squared test for association’. Pearson's chi-square test \( \chi^2 \) is one of a variety of chi-square tests – statistical
procedures whose results are evaluated by reference to the chi-square distribution (Chernoff and Lehmann, 1954:576). It tests for differences in two groups’ distributions across categories. When comparing two groups (A and B), in general the null hypothesis will state that group A is independent of group B. Thus, the two groups have outcomes whose probabilities don’t affect each other (Zikmund, 2003a:577). In other words, there is no relationship or association between the two groups. A small value of chi-squared means the observed data for both groups fit their given expected distributions well (i.e. independent); and conversely a large value of chi-squared indicates a lack of independence (Zikmund, 2003a:578). Pearson’s Chi-squared is used to test the first and second set of hypotheses, which tested the relationship between demographic diversity and types of online shopping orientations.

4.9.4 Analysis of Variance (ANOVA)

Analysis of variance (ANOVA) is also used within the data analysis phase of this research. ANOVA is a test for statistically significant differences between means for two or more populations of hypothesised relationships (Blaikie, 2004; Hair, Babin, Money and Samouel, 2003:269; Statistics South Africa, 2007c; Zikmund, 2003a: 576). Similarly, ANOVA can also study research problems that involve several independent variables (Hair et al., 2003:268). Unfortunately ANOVA only enables the researcher to conclude that statistical differences are present somewhere between the group means (Hair et al., 2003:269). ANOVA is accomplished by dividing the total variance into the component that is a result of true random error, and the components that are due to differences between means (Statistics South Africa, 2007c). Differences between means are then tested for statistical significance, and if significant, the researcher will reject the null hypothesis of no differences between means, and accept the alternate hypothesis that the means (in the population) are different from each other (Statistics South Africa, 2007c). The variables that are measured are called dependent variables, and consequently the variables that are manipulated or controlled are called independent variables (Statistics South Africa, 2007c). ANOVA was used to test the third set of hypotheses, which tested the relationship between types of online shopping orientations and propensity to buy online.
4.9.5 Cluster Analysis

The final statistical analysis was assessed through the use of cluster analysis. Cluster analysis is defined as a body of statistical techniques used to classify objects or individuals that are similar, into a small number of mutually exclusive groups (Blaikie, 2004:219; Neuman, 2003:523; Statistics South Africa, 2007c; Terre Blanche and Durrheim, 2004:360; Zikmund, 2003a:589). This type of statistical analysis is appropriate when the research is descriptive in nature, and many variables or objects are being explored (Terre Blanche and Durrheim, 2004:360). Results gathered through cluster analysis are depicted in the form of a graph or picture (Neuman, 2003:589). Specifically a type of cluster analysis is namely the K-Means clustering method, whereby this method produces exactly \( k \) different clusters of greatest possible distinction (Magidson and Vermunt, 2004; Statistics South Africa, 2007c).

The researcher’s focus within cluster analysis is to establish how individuals or objects should be categorised into groups, to ensure that there will be as much similarity within groups and as much variation among groups as possible (ibid). Generally the cluster should have high internal (within cluster) similarity and high external (between clusters) variation (Blaikie, 2004:219; Zikmund, 2003a:589). Essentially the goal of cluster analysis can be defined as the endeavour to initiate a classification of elements or objects where none exists prior to the analysis (Terre Blanche and Durrheim, 2004:360). Ultimately resulting in a hierarchical classification or clustering system, each variable (or case) is given a location in this system (ibid). In fact, cluster analysis is not as much a typical statistical test as it is a group of various calculations that puts items into clusters in relation to definite similarity rules (Statistics South Africa, 2007c). Additionally, cluster analysis is simply used to discover structures in data without explaining why they exist (Statistics South Africa, 2007c). Statistics South Africa (2007c) further adds that clustering techniques have been applied to a wide variety of research problems. Statistics South Africa (2007c) stated that cluster analysis is effective whenever a large amount of information needs to be categorised into manageable meaningful piles. Additionally, Hartigan (1975) provides an excellent summary of the many published studies reporting the results of cluster analyses. With regards to this research specifically, Zikmund (ibid) states that a typical use of cluster analysis is to facilitate market segmentation by identifying subjects or individuals who have similar needs, lifestyles, or responses to marketing strategies. Thus cluster analysis
will be used to categorise individuals into one of six online shopping orientations in this research.

The results of the statistical analyses will be discussed in detail in Chapter Five.

4.10 ETHICAL CONSIDERATIONS

Remenyi (1998:109) emphasises the importance of a researcher’s understanding of what is considered right and wrong when researching. Accordingly, Leedy and Ormrod (1985:107) stated that the most ethical issues in research fall into one of four categories, namely protection from harm, informed consent, right to privacy and honesty with professional colleagues. Consequently for the purpose of this research, ethical considerations will be focused around three main issues, specifically:

- Data collection issues
- Data processing problems
- The use of the findings

Relating to data collection issues, the researcher ensured that respondents remained anonymous, that no authentication was attached to the submitted questionnaires and respondents were not required to disclose any personal details (Remenyi, 1998:111). Furthermore, the researcher explained the importance and expected outcomes of the proposed research to the respondents (ibid). Respondents were invited to voluntarily participate in this research.

Secondly, with reference to data processing problems, once the data was captured into a MS Word Excel spreadsheet, the researcher made no attempt to manipulate or omit, and consequently did not distort the data in any way (ibid). Subsequently, the researcher acted in an unbiased manner, with no individual prejudices manipulating the collection and analysis of the research data (ibid). The data was submitted to the supervisor for safekeeping.
Lastly, ethical considerations pertaining to the use of the research findings, Remenyi (1998:112) states that the research findings should be used solely for ethical purposes. Accordingly, the research findings obtained from this research will solely be used for the researcher’s academic purposes.

4.11 SUMMARY AND CONCLUSION

In this Chapter the research design and methodology, data collection and analyses techniques were discussed. This Chapter first outlined the importance of the research, with reference to the research aims and hypotheses statements in Section 4.2. Following from this, in Section 4.3, two main research paradigms were identified and discussed in detail, highlighting that the research paradigm best suited to this type of research is positivistic in nature. Next, in Section 4.4 the research population and relevant sampling methods were discussed and following from this, in Section 4.5, the research method, namely a questionnaire survey was examined. Subsequently, in Section 4.6 the two measuring instruments that were used within the questionnaire were examined in detail, including previous reliability and validity results. Thereafter, the data collection process was reviewed in addition to how the data was captured and then statically analysed, in Section 4.7. Section 4.8 explained descriptive statistical analysis, namely frequency tables, mean and standard deviation. These inferential statistical measures are explained in subsections of Section 4.9, namely reliability, validity (including factor analysis), Pearson’s chi-squared test, analysis of variance and cluster analysis. Lastly, ethical considerations that the researcher ensured were in place were discussed in Section 4.10.

In the next Chapter, Chapter Five, the research results found through the statistical analysis are discussed.
CHAPTER FIVE
RESEARCH RESULTS AND DISCUSSION

5.1 INTRODUCTION

The research objectives and hypotheses as stated in Chapter One, Section 1.2, will be integrated with the theoretical perspectives discussed in Chapter Two (Demographic Diversity Conceptualised) and Chapter Three (Online Shopping Orientation and Propensity to Buy Online). The research findings will be presented in this chapter.

The response rate concerning this research is presented first, followed by the descriptive statistics relevant to the demographical information of respondents (in Section 5.3) as well as the online shopping information of respondents in Section 5.4. Next, in Section 5.5, the internal reliability and validity of the measuring instruments is assessed. Reliability was assessed through the use of Cronbach’s Alpha coefficients. Factor analysis was done on the ethnic identity statements and the online shopping orientation statements to determine the construct validity of these measures. Validity of the research was also assessed through proportion of total variation and Eigen values. Subsequently, this Chapter discusses the average mean scores for the Ethnic identity factors in Section 5.6. Next, in Section 5.7, online shopping orientations are categorised through cluster analysis, where different combinations of online shopping factors define six online shopping orientation types. Following from this, the extent to which demographic diversity influences types of online shopping orientation is discussed in Section 5.8, thus testing the first set of hypotheses stated in Chapter 1, Section 1.2. Additionally, the extent to which demographical diversity influences propensity to buy online is reported in Section 5.9, thereby testing the second set of hypotheses. The third and final set of hypotheses is tested and reported in Section 5.10, thus considering the extent to which types of online shopping orientation influence propensity to buy online. Lastly, the open-ended question is discussed in Section 5.11, in view of previous research which state that a positive or negative online shopping experience could influence propensity to buy online.
5.2 RESPONSE RATE

The total number of respondents was 1200 students. However only 923 questionnaires were correctly completed and usable, while 277 were unusable responses and so these responses were discarded. The response rate achieved for this research, as illustrated in Table 5.1 (total number of responses/ the total sample size) was 70.6% and the total usable response rate (total usable responses/the total sample size) was 54.3%.

<table>
<thead>
<tr>
<th>TABLE 5.1: Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhodes</td>
</tr>
<tr>
<td>Sample (N)</td>
</tr>
<tr>
<td>Total Responses</td>
</tr>
<tr>
<td>Response Rate</td>
</tr>
<tr>
<td>Unusable Responses</td>
</tr>
<tr>
<td>Usable Responses</td>
</tr>
<tr>
<td>Usable Response Rate</td>
</tr>
</tbody>
</table>

This response rate of 54.3% (N= 923) is large enough for meaningful statistical analysis and acceptable interpretation (Welman et al., 2005:154). Additionally stated by Welman et al., (ibid), a response rate higher than 50% is considered to indicate a correct generalisation of the population and thus sufficient for the purpose of this research. Similarly, a response rate that is lower than 50% represents a minority, which would result in an entirely incorrect generalisation of the population.

5.3 THE DEMOGRAPHICAL INFORMATION OF RESPONDENTS

Statistica V8 was used to summarise the demographical information as shown in Figures 5.1 to 5.4. This Section contains all the bar graphs for the biographical information requested in Section A of the questionnaire, with N=923, giving effect to the first research objective, namely to determine the demographic diversity profile of the respondents.
As shown in Figure 5.1, 524 (57%) of the 923 respondents were female and 399 (43%) of the respondents were male.

**FIGURE 5.1: The Gender of Respondents**

Figure 5.2 illustrates that 563 (61%) of the respondents were African, 270 (30%) of the respondents were White, 58 (6%) of the respondents were Coloured, 21 (2%) of the respondents were Indian, and 11 (1%) of the respondents were Asian.

Given that Asian, Coloured and Indian races were minimally accounted for, the research cannot accurately generalise the findings relating to these three races, therefore African and White racial groups will be the main focus with regards to this area of the research.

**FIGURE 5.2: The Race of Respondents**
Figure 5.3 graphically illustrates the ethnicity of the respondents. A total of 74 (8%) of the respondents were Afrikaans, 9 (1%) of the respondents were Asian, 39 (4%) of the respondents were Coloured, 233 (25%) of the respondents were English, 21 (2%) of the respondents were Indian, 4 (0%) of the respondents were Khoisan, 17 (2%) of the respondents were Ndebele, 25 (3%) of the respondents were Sotho, 7 (1%) of the respondents were Swazi, 5 (1%) of the respondents were Tsonga, 26 (3%) of the respondents were Tswana, 8 (1%) of the respondents were Venda, 338 (37%) of the respondents were Xhosa, 31 (3%) of the respondents were Zulu, and 86 (9%) of the respondents were Other ethnic groups.

FIGURE 5.3: The Ethnicity of Respondents

Given that many of the ethnic groups were minimally accounted for, the research cannot accurately generalise the findings relating to these ethnic groups, therefore English and Xhosa ethnic groups will be the main focus with regards to this area of the research. These two ethnic groups were largely accounted for, and for the reason that the research was conducted in Eastern Cape universities where English and Xhosa are the main languages spoken in the area, it can be assumed that they are also the main ethnic groups in this province of South Africa.

Respondents current year of study are illustrated in Figure 5.4. The majority of respondents, 485 (53%), were first year students, 276 (30%) of the respondents were in their second year of study, 122 (13%) of the respondents were in their third year, 39 (3%)
of the respondents were in fourth year/honours and only one respondent was currently reading for a post graduate diploma.

FIGURE 5.4: The Year of Study of Respondents

To summarise, the majority of respondents were female (57%), African (61%) and were either Xhosa (37%) or English (25%) speaking. Most respondents were in their first year of studies (53%).

5.4 ONLINE SHOPPING INFORMATION OF RESPONDENTS

Statistica V8 was used to summarise the online shopping information as shown in Figures 5.5 to 5.7. This Section contains the descriptive information pertaining to online shopping as requested in Section B of the questionnaire. In this section effect is given to the research objective, namely to determine the online shopping orientation profile of the respondents.

Due to their location at Eastern Cape tertiary institutions, research was conducted at three universities in the Eastern Cape; all respondents had access to internet. It was for this reason that all respondents answered that the main purpose for their Internet use was for educational purposes. There is thus no need to review the three questions in Section B pertaining to internet access.
Figure 5.5 graphically illustrates how often respondents use the Internet. Of the 923 respondents, 319 (35%) of the respondents use the Internet a few times a week, and a total of 441 (48%), 96 (10%) of the respondents use the Internet once a month, 38 (4%) of the respondents use the Internet once a week, 16 (2%) of the respondents use the Internet a few times a month, and 11 (1%) of the respondents have only used the Internet once-off, respondents use the Internet every day.

**FIGURE 5.5: Frequency of Internet usage**

![Bar chart showing frequency of Internet usage](image)

Whether respondents shop online or not is illustrated in Figure 5.6. A total of 350 (38%) of the 923 respondents stated that they have shopped online, and 573 (62%) of the respondents stated that they had not shopped online before.

**FIGURE 5.6: Online Shopping**

![Bar chart showing online shopping](image)
Lastly, Figure 5.7 graphically shows how often respondents shop online in a year. Respondents who have not shopped online responded as either ‘never’ or ‘not applicable’ (62% total). Of the 350 (38%) respondents who shopped online, 84 (9%) respondents shop online less than once a year, 159 (17%) of the respondents shop online between two to five times a year, 63 (7%) of the respondents shop online less than five times a year, 35 (4%) of the respondents shop online once a month, and 8 (1%) of the respondents shop online once a week.

**FIGURE 5.7: Frequency of Online Shopping**

To summarise, the majority of respondents use the Internet daily. With regards to shopping online, only 38% of respondents stated that they shop online, with 17% of respondents stating that they shop online between two to five times a year.

In the next section, the reliability and validity of the measuring instruments used is discussed.

5.5 INTERNAL RELIABILITY AND VALIDITY OF THE MEASURING INSTRUMENTS

As previously discussed in Chapter four, Section 4.9.2, reliability indicates whether or not an instrument’s measures are free from error, therefore yielding consistent results (Collis and Hussey, 2003:58). Validity deals with the extent to which the instrument measures
what it is supposed to measure (Coolican, 1992:35). According to Myers (2008:1), construct validity can also be measured using internal consistency. This means the average mean scores on the individual test items should correlate highly with the total test score, and is used as evidence that the test is measuring a single construct. The purpose of this Section is to report on the reliability and validity of the measuring instruments used in this research.

5.5.1 Reliability and Validity for Ethnic Identity

The reliability of Phinney’s (1992:156) multi-group ethnic identity statements found in Section A of the questionnaire (Appendix A) was assessed by means of the Cronbach’s Alpha Coefficient. As previously mentioned in Chapter Four, Section 4.9.1.1, a Cronbach’s Alpha coefficient that is 0.70 or higher denotes a good level of internal reliability, while values between 0.50 and 0.69 denotes an acceptable level of reliability, and values less than 0.50 denotes a poor level of reliability (Collis and Hussey, 2003:187). Thus, a value of 0.50 or higher denotes an acceptable level of reliability (Trochim, 2006c). The Cronbach’s Alpha coefficients for each of the scales for ethnic identity are illustrated in Table 5.2. The Cronbach’s Alpha for the two scales range from acceptable to very good. The Cronbach’s Alpha coefficient for commitment (0.83) is seen to have a very good reliability whereas the Cronbach’s Alpha coefficient for exploration (0.62) illustrates having an acceptable level of reliability. The reliability of these statements is regarded as being good and can therefore yield consistent results and be repeated with the expectation of receiving the same results.

<table>
<thead>
<tr>
<th>Ethnic Identity Factors</th>
<th>Cronbach Alpha</th>
<th>Comment Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exploration</td>
<td>0.62401473</td>
<td>Acceptable</td>
</tr>
<tr>
<td>Commitment</td>
<td>0.83187274</td>
<td>Very Good</td>
</tr>
</tbody>
</table>

The reliability scores revealed in Table 5.2 are consistent with the results found by Phinney (1992:156) which are discussed in Chapter Four, Section 4.6.1. Specifically, the internal consistency for the Multi-group Ethnicity Mean Scores sample in previous research was shown as very good (i.e. Commitment = 0.77 and Exploration = 0.73) which is similar to
the existing research, which identifies both commitment (0.83) and exploration (0.62) to have acceptable reliability.

Table 5.3 illustrates the factor loadings for the 12 ethnic identity statements. The factor loadings provide an approach to understanding and classifying the factors (Zikmund, 2003a: 588). Factor analysis was conducted to determine if the ethnic statements used in the questionnaire fell into their theoretical constructs. From the factor analysis it was determined that the 12 ethnic identity statements measured two factors, namely commitment and exploration.

**TABLE 5.3: Factor Analysis of Ethnic Identity Statements**

<table>
<thead>
<tr>
<th>Ethnic Identity Statements</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EXPLORATION</strong></td>
<td></td>
</tr>
<tr>
<td>I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs.</td>
<td>0.633</td>
</tr>
<tr>
<td>I am active in organisations or social groups that include mostly members of my own ethnic group</td>
<td>0.439</td>
</tr>
<tr>
<td>I think a lot about how my life will be affected by my ethnic group membership.</td>
<td>0.435</td>
</tr>
<tr>
<td>In order to learn more about my ethnic background, I have often talked to other people about my ethnic group.</td>
<td>0.678</td>
</tr>
<tr>
<td>I participate in cultural practices of my own group, such as special food, music, or customs.</td>
<td>0.547</td>
</tr>
<tr>
<td><strong>COMMITMENT</strong></td>
<td></td>
</tr>
<tr>
<td>I have a clear sense of my ethnic background and what it means to me.</td>
<td>0.486</td>
</tr>
<tr>
<td>I am happy that I am a member of the group I belong to.</td>
<td>0.651</td>
</tr>
<tr>
<td>I have a strong sense of belonging to my own ethnic group</td>
<td>0.751</td>
</tr>
<tr>
<td>I understand pretty well what my ethnic group membership means to me.</td>
<td>0.717</td>
</tr>
<tr>
<td>I have a lot of pride in my ethnic group.</td>
<td>0.686</td>
</tr>
<tr>
<td>I feel a strong attachment towards my own ethnic group.</td>
<td>0.677</td>
</tr>
<tr>
<td>I feel good about my cultural or ethnic background.</td>
<td>0.559</td>
</tr>
</tbody>
</table>

From the factor analysis depicted in Table 5.3, it is evident that the factors loadings for these two factors have a high factor loading, with the entire factor loadings being greater than 0.4. The value of 0.4 or greater was used because this usually resulted in the highest factor loading relative to the other factor loadings (Zikmund, 2003b:640).
With regards to validity of ethnic identity factors, factor analysis was conducted on the ethnic identity factors, so the “proportion of total variation” column in Table 5.4 measures validity strength of the ethnic identity factors. The value of 0.4 or greater was used because this results in the highest factor loading relative to the other factor loadings. With regards to Eigen values, according to Kaiser’s criterion, only factors which had Eigen values greater than one show good validity (Statistics South Africa, 2007d).

### TABLE 5.4: Validity for the Ethnic Identity Factors

<table>
<thead>
<tr>
<th>Ethnic Identity Factors</th>
<th>Proportion Of Total Variation</th>
<th>Number Of Successfully Loaded Variables</th>
<th>Proportion Loaded</th>
<th>Comment Validity</th>
<th>Eigen Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exploration</td>
<td>0.42573</td>
<td>5</td>
<td>100%</td>
<td>Good</td>
<td>2.1286</td>
</tr>
<tr>
<td>Commitment</td>
<td>0.50457</td>
<td>7</td>
<td>100%</td>
<td>Excellent</td>
<td>3.5320</td>
</tr>
</tbody>
</table>

The proportion of total variation for commitment (0.5) is seen to have excellent validity, while exploration (0.42) has good validity. The “proportion loaded” column in Table 5.4 measures validity strength of exploration and commitment factors of ethnic identity. Both factors show the proportion loaded as 100%, which therefore identifies that the validity of the factors is excellent. Both commitment (3.53) and exploration (2.12) depicted in Table 5.4 show good validity as both Eigen values are greater than one.

In summary, the Cronbach’s Alpha coefficient for commitment (0.83) and exploration (0.62) illustrate an acceptable level of reliability and can therefore yield consistent results and can be repeated (Trochim, 2006c). The proportion of total variation for commitment (0.5) and exploration (0.42) illustrate good validity. Additionally, Eigen values for commitment (3.53) and exploration (2.12) show good validity for the reason that Eigen values are greater than one.

### 5.5.2 Reliability and Validity for Online Shopping Factors

The Cronbach’s Alpha coefficient estimated the reliability of the online shopping factors. Table 5.5 illustrates that the Cronbach’s Alpha coefficients for the online shopping factors
are regarded as being good. A value of 0.50 or higher denotes an acceptable level of reliability (Trochim, 2006c). The Cronbach’s Alpha coefficients for brand comparison (F1=0.75) and online shopping (F2=0.72) factors show that these factors are both reliable. The Cronbach’s Alpha coefficients for deal proneness (F3=0.58), information seeking (F4=0.55) and offline shopping (F6=0.52) were all established to have an acceptable reliability. Alternatively, ad orientation (F5=0.42) was found to have poor reliability. This means that only one online shopping factor (Ad Orientation) did not yield consistent results. A summary of the reliability for the six online shopping factors is illustrated in Table 5.5.

### TABLE 5.5: Reliability for the Online Shopping Factors

<table>
<thead>
<tr>
<th>Online Shopping Factors</th>
<th>Cronbach Alpha</th>
<th>Comment Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1 Brand Comparison</td>
<td>0.754212</td>
<td>Good</td>
</tr>
<tr>
<td>F2 Online Shopping</td>
<td>0.723251</td>
<td>Good</td>
</tr>
<tr>
<td>F3 Deal Proneness</td>
<td>0.576486</td>
<td>Acceptable</td>
</tr>
<tr>
<td>F4 Information Seeking</td>
<td>0.554882</td>
<td>Acceptable</td>
</tr>
<tr>
<td>F5 Ad Orientation</td>
<td>0.423399</td>
<td>Poor</td>
</tr>
<tr>
<td>F6 Offline Shopping</td>
<td>0.516787</td>
<td>Acceptable</td>
</tr>
</tbody>
</table>

Factor Analysis was conducted to determine if the online shopping orientation statements used in Section C of the questionnaire fall into their theoretical constructs. From the factor analysis it was determined that the 24 online shopping orientation statements measured six factors, namely brand comparison, online shopping, deal proneness, information seeking, advertisement orientation, and offline shopping. Table 5.6 illustrates the factor analysis of the online shopping orientation statements. From the factor analysis depicted in Table 5.6, it is evident that the factor loadings for these six factors have a high factor loading, with the entire factor loadings being greater than 0.4. Any factor loading lower than 0.4 denotes a low factor loading (Zikmund, 2003b:640).

### TABLE 5.6 Factor Analysis of the Online Shopping Statements

<table>
<thead>
<tr>
<th>Online Shopping Orientation Statements</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1 BRAND COMPARISON</td>
<td></td>
</tr>
<tr>
<td>I actively evaluate a larger number of brands when shopping in a traditional retail environment than when I shop online.</td>
<td>0.552</td>
</tr>
<tr>
<td>Statement</td>
<td>Score</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>I do an overall comparison of different brands before I decide on my most preferred brand.</td>
<td>0.746</td>
</tr>
<tr>
<td>I prefer to look at a larger variety of brands when shopping online.</td>
<td>0.598</td>
</tr>
<tr>
<td>I first pick a product feature and then compare each brand on that product feature.</td>
<td>0.732</td>
</tr>
<tr>
<td>I tend to trade off the strengths and weaknesses of a brand before deciding on the brand.</td>
<td>0.733</td>
</tr>
<tr>
<td>I find it easier to identify and eliminate brands online than in a traditional retail environment.</td>
<td>0.473</td>
</tr>
<tr>
<td>I do more brand price comparisons online than in a traditional retail environment.</td>
<td>0.415</td>
</tr>
<tr>
<td><strong>F2 ONLINE SHOPPING</strong></td>
<td></td>
</tr>
<tr>
<td>I am more likely to make an “impulse purchase” online than in a traditional retail environment.</td>
<td>0.453</td>
</tr>
<tr>
<td>I prefer to buy from an online store, compared with a retailer offering both a physical and online store.</td>
<td>0.814</td>
</tr>
<tr>
<td>In general, I would prefer to buy products from an online store rather than from a traditional store</td>
<td>0.703</td>
</tr>
<tr>
<td>I like participating in online auctions.</td>
<td>0.565</td>
</tr>
<tr>
<td><strong>F3 DEAL PRONENESS</strong></td>
<td></td>
</tr>
<tr>
<td>I am more price-sensitive when shopping online compared to when I shop in a traditional retail environment.</td>
<td>0.641</td>
</tr>
<tr>
<td>I prefer to buy well known brands when shopping online.</td>
<td>0.661</td>
</tr>
<tr>
<td>I only consider the price when selecting a particular brand.</td>
<td>0.468</td>
</tr>
<tr>
<td>I react more to sales promotions online compared to that in a traditional retail environment.</td>
<td>0.464</td>
</tr>
<tr>
<td><strong>F4 INFORMATION SEEKING</strong></td>
<td></td>
</tr>
<tr>
<td>When I shop online I prefer looking at photos/images compared to purely text-based messages.</td>
<td>0.482</td>
</tr>
<tr>
<td>I use the same search engine (for example, Google, Yahoo) on a regular basis.</td>
<td>0.563</td>
</tr>
<tr>
<td>I am a frequent user of bookmarks for accessing my favourite websites.</td>
<td>0.371</td>
</tr>
<tr>
<td><strong>F5 AD ORIENTATION</strong></td>
<td></td>
</tr>
<tr>
<td>I often click a banner ad when visiting a site.</td>
<td>0.447</td>
</tr>
<tr>
<td>I pay more attention to online ads compared to TV ads.</td>
<td>0.536</td>
</tr>
<tr>
<td><strong>F6 OFFLINE SHOPPING</strong></td>
<td></td>
</tr>
<tr>
<td>I would prefer to browse a brand of automobile online however, make the actual purchase in a traditional store.</td>
<td>0.647</td>
</tr>
<tr>
<td>I would prefer to browse a brand of computer online however, make the actual purchase in a traditional store.</td>
<td>0.691</td>
</tr>
<tr>
<td>I will not buy a brand if I do not have sufficient information about the particular brand.</td>
<td>0.487</td>
</tr>
<tr>
<td>I would prefer to buy from an online store rather than from a physical store which offers short-term sales promotional campaign.</td>
<td>0.533</td>
</tr>
</tbody>
</table>
With regards to validity of online shopping factors, factor analysis was conducted on the online shopping factors. The measures of validity strength of the six online shopping factors can be seen in the “proportion of total variation” column in Table 5.7. The value of 0.4 or greater was used because this results in the highest factor loading relative to the other factor loadings. All online shopping factors depicted in Table 5.7 had a proportion of total variation greater than 0.4, which similarly shows good validity. With regards to Eigen values, according to Kaiser’s criterion, only Factors which had Eigen values greater than one show good validity. All online shopping factors depicted in Table 5.7 were greater than one, which similarly shows good validity.

**TABLE 5.7: Validity for the Online Shopping Factors**

<table>
<thead>
<tr>
<th>Online Shopping Factors</th>
<th>Proportion Of Total Variation</th>
<th>Number Of Successfully Loaded Variables</th>
<th>Proportion Loaded</th>
<th>Comment Validity</th>
<th>Eigen Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1 Brand Comparison</td>
<td>0.444637</td>
<td>6</td>
<td>100%</td>
<td>Excellent</td>
<td>3.1124</td>
</tr>
<tr>
<td>F2 Online Shopping</td>
<td>0.553137</td>
<td>4</td>
<td>100%</td>
<td>Excellent</td>
<td>2.2125</td>
</tr>
<tr>
<td>F3 Deal Proneness</td>
<td>0.443964</td>
<td>4</td>
<td>100%</td>
<td>Excellent</td>
<td>1.7758</td>
</tr>
<tr>
<td>F4 Information Seeking</td>
<td>0.480651</td>
<td>3</td>
<td>100%</td>
<td>Excellent</td>
<td>1.4419</td>
</tr>
<tr>
<td>F5 Ad Orientation</td>
<td>0.554941</td>
<td>2</td>
<td>100%</td>
<td>Excellent</td>
<td>1.1098</td>
</tr>
<tr>
<td>F6 Offline Shopping</td>
<td>0.421489</td>
<td>3</td>
<td>100%</td>
<td>Excellent</td>
<td>1.6859</td>
</tr>
</tbody>
</table>

Kau et al.,’s (2003) research tested the validity of the online shopping orientation statements with regards to the six online shopping factors. In Chapter Four, Table 4.3 clearly depicted that the statements showed good validity, in that proportion of total variation was greater than 0.4. Since validity can be described as the extent to which the research findings accurately represent what is really happening in the situation, one can state that if the research findings are found to show good validity it can be assumed that the research findings are also valid. These results are consistent with the results of the existing research shown above in Table 5.7.
In Summary, the Cronbach’s Alpha coefficients for Brand Comparison (F1=0.75), Online Shopping (F2=0.72), Deal Proneness (F3=0.58), Information Seeking (F4=0.55) and Offline Shopping (F6=0.52) were all established to have an acceptable reliability. Alternatively, Ad Orientation (F5=0.42) was found to have poor reliability. All online shopping factors depicted in Table 5.7 had a proportion of total variation greater than 0.4, which similarly shows good validity. Additionally, Eigen values for six online shopping factors depicted in Table 5.7 were greater than one, which similarly shows good validity.

5.6 ETHNIC IDENTITY

The purpose of this section is to present the research results pertaining to how strongly respondents identify with a particular ethnic group, as requested in Section A of the questionnaire.

The ethnic groups used in the questionnaire are namely Afrikaans, Asian, Coloured, English, Indian, Khoisan, Ndebele, Sotho, Swazi, Tsonga, Tswana, Venda, Xhosa, and Zulu. The 12 statements focus on two aspects of ethnic identity, which are namely commitment and exploration.

An average mean score of 3.5 or higher signifies a high level of commitment and exploration. Within the existing research it was found that respondents at all three universities, in general, had a strong commitment and exploration to their specified ethnic group. The average mean score was found to be 3.85 out of 5 (77%), which signifies a relatively high mean score, therefore confirming that respondents have a strong identification to their ethnic group.

5.7 ONLINE SHOPPING ORIENTATION

The purpose of this section is to provide the research results giving effect to a research objective, namely to determine the online shopping orientation profile of the respondents, as requested in Section C of the questionnaire.
The six online shopping factors identified through the factor analysis process, namely Brand Comparison, Online Shopping, Deal Proneness, Information Seeking, Ad Orientation and Offline Shopping, were used to describe types of online shopper orientation namely Dual Shopper, Comparison Shopper, Traditional Shopper, E-Laggard, Information Surfer and On-Off Shopper. This was achieved by means of cluster analysis.

The 24 online shopping orientation statements were reduced to six online shopping factors. Then the average for each online shopping factor was calculated (Statistics South Africa, 2007c). Thus, each shopping factor was given its own score. These six factor averages were fed into a cluster analysis (Statistics South Africa, 2007c). Similar to a factor analysis, the cluster analysis resulted in the formation of six groups/clusters of participants. Each cluster demonstrated the characteristics similar to Kau et al., (2003) and the descriptions from Table 3.3. Hence the researcher was able to compare these results to Kau et al., (2003) results, and classify each cluster accordingly. Thus cluster analysis will be used to categorise individuals into one of six online shopping orientations in this research.

In Figure 5.8, the means for each online shopping cluster are illustrated. The means of each online shopping cluster helped to categorise the online shopping factors into six identified online shopping orientation types.

**FIGURE 5.8: Mean average of each Online Shopping Cluster**
The plotted means of each of the online shopping clusters in Figure 5.8 illustrates the strength of each of the online shopping factors. Different combinations of online shopping factors assist the research in categorising respondents into six online shopping orientation types. Table 5.8 identifies the different combinations of online shopping factors. The descriptions of the six types of online shopping orientations were explained in Chapter Three, Section 3.2.1.

**TABLE 5.8: Categorisation of Online Shopping Factors into Six Types of Online Shopping Orientations**

<table>
<thead>
<tr>
<th>Online Shopping Factors</th>
<th>Comparison Shopper</th>
<th>Dual Shopper</th>
<th>E-Laggard</th>
<th>Information Surfer</th>
<th>On-Off Shopper</th>
<th>Traditional Shopper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand Comparison</td>
<td>Neutral</td>
<td>High</td>
<td>Low</td>
<td>High</td>
<td>Neutral</td>
<td>Neutral</td>
</tr>
<tr>
<td>Online Shopping</td>
<td>Very Low</td>
<td>Low</td>
<td>Very Low</td>
<td>Neutral</td>
<td>Neutral</td>
<td>Low</td>
</tr>
<tr>
<td>Deal Proneness</td>
<td>Neutral</td>
<td>Neutral</td>
<td>Low</td>
<td>High</td>
<td>Neutral</td>
<td>Low</td>
</tr>
<tr>
<td>Information Seeking</td>
<td>High</td>
<td>High</td>
<td>Low</td>
<td>High</td>
<td>Neutral</td>
<td>Neutral</td>
</tr>
<tr>
<td>Ad Orientation</td>
<td>Very Low</td>
<td>Low</td>
<td>Very Low</td>
<td>High</td>
<td>Neutral</td>
<td>Neutral</td>
</tr>
<tr>
<td>Offline Shopping</td>
<td>Neutral</td>
<td>High</td>
<td>Low</td>
<td>High</td>
<td>Neutral</td>
<td>Neutral</td>
</tr>
</tbody>
</table>

In Table 5.8, it is evident that the Comparison Shopper possesses a high level of the information seeking factor and is neutral with regards to Brand Comparison, Deal Proneness, and Offline Shopping factors. Comparison Shoppers do not possess Online Shopping and Ad Orientation factors.

The Dual Shopper, illustrated in Table 5.8, possesses a high level of the following online shopping factors: Brand Comparison, Information Seeking and Offline Shopping, and is neutral with regards to Deal Proneness. However, similar to the Comparison Shopper, the Dual Shopper possesses a low level of Online Shopping and Ad Orientation factors, in that Dual Shoppers rely on the Internet for information gathering. However they are not Deal Prone.
Whereas, the E-Laggard in Table 5.8, possess low levels of all six online shopping factors, for the reason that E-Laggards are not very computer literate and are suspicious of shopping online.

On the other hand in Table 5.8, the Information Surfer possesses a high level of the following online shopping factors: Brand Comparison, Deal Proneness, Information Seeking and Ad Orientation, for the reason that Information Surfers are highly competent with computers and possess good navigation expertise.

From Table 5.8 it is evident that the On-off Shopper is neutral in all six online shopping factors: Brand Comparison, Online Shopping, Deal Proneness, Information Seeking, Ad Orientation and Offline Shopping, since the On-Off Shopper likes to surf the Internet and collect online information and is an active online or offline spender.

Lastly, Table 5.8 illustrates that the Traditional Shopper does not shop online, thus does not possess Online Shopping factor and Deal Proneness. This traditional shopper has limited computer literacy and online insecurity, therefore this type of shopper prefers to buy from brick and mortar stores.

In summary, from Table 5.8, it is evident that different combinations of online shopping factors categorise respondents into six online shopping orientation types. In the next Section, the first set of hypotheses will be tested and the results discussed.

5.8 DEMOGRAPHIC DIVERSITY INFLUENCE ON TYPES OF ONLINE SHOPPING ORIENTATIONS.

The research results pertaining to the relationship between demographic diversity and types of online shopping orientations is given in this Section. The results given in this section give effect to the fifth objective and test the first set of hypotheses - namely to test the extent to which demographic diversity influences types of online shopping orientations:

\( \text{Ho1.1: There is no significant relationship between gender and types of online shopping orientations.} \)
Ha1.1: There is a significant relationship between gender and types of online shopping orientations.

Ho1.2: There is no significant relationship between race and types of online shopping orientations.

Ha1.2: There is a significant relationship between race and types of online shopping orientations.

Ho1.3: There is no significant relationship between ethnicity and types of online shopping orientations.

Ha1.3: There is a significant relationship between ethnicity and types of online shopping orientations.

5.8.1 Testing the First Set of Hypotheses

The purpose of the first set of hypotheses, as stated in previous section, was to determine whether there is a significant relationship between demographic diversity and online shopping orientation.

Cross-tabulation was used to describe sets of relationships. Cross tabulations identify relations between cross tabulated variables, by examining the particular frequencies of observations that belong to specific categories on more than one variable (Statistics South Africa, 2007c). Pearson’s chi-squared test provides a means for testing the statistical significance of cross-tabulation. The variables that were cross tabulated in this research were that of demographic diversity against specific types of online shopping orientations. When comparing two variables with Pearson’s chi-squared test, the researcher is testing to see whether a significant relationship exists between the two variables, as identified by the p-value. If the p-value is less than 0.05, the researcher rejects the null hypothesis and the alternate hypothesis is supported, thus a significant relationship does exist between the two specific variables.
5.8.1.1 Hypothesis 1.1: The Relationship between Gender and Types of Online Shopping Orientations.

Ha₁₁: There is a significant relationship between gender and types of online shopping orientations.

Table 5.9 indicates the extent to which gender of respondents influences online shopping orientation. From Table 5.9 it can be seen that a majority of males are regarded as Dual Shoppers, with 109 out of a total of 399 males (27%) categorised as having this type of online shopping orientation. The minority type of online shopping orientation for male respondents’ is the E-Laggard, with 29 males (7% of male sample) classified as having this type of online shopping orientation. With regards to female respondents, the majority type of online shopping orientation for female respondents is the On-Off Shopper, with 136 out of a total of 524 females (26%) classified as this type of online shopping orientation. The minority type of online shopping orientation for females is the E-Laggard, with 41 female respondents (8% of female sample) regarded as this type of online shopper.

**TABLE 5.9: Influence of Gender on Online Shopping Orientation**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Dual Shopper</th>
<th>Comparison Shopper</th>
<th>Traditional Shopper</th>
<th>E-Laggard</th>
<th>Information Surfer</th>
<th>On-Off Shopper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>109 (27.3%)</td>
<td>67 (16.8%)</td>
<td>39 (10%)</td>
<td>29 (7%)</td>
<td>62 (15.5%)</td>
<td>93 (23.3%)</td>
</tr>
<tr>
<td>Female</td>
<td>104 (19.8%)</td>
<td>112 (21.4%)</td>
<td>74 (14.1%)</td>
<td>41 (8%)</td>
<td>57 (11%)</td>
<td>136 (26%)</td>
</tr>
<tr>
<td>Total</td>
<td>213</td>
<td>179</td>
<td>113</td>
<td>70</td>
<td>119</td>
<td>229</td>
</tr>
</tbody>
</table>

Next the two variables (gender and online shopping orientation types) were compared using the Pearson’s chi-squared test. The researcher tested the alternate hypothesis to see whether a significant relationship existed between gender and online shopping orientation, as identified by the p-value. If the p-value is less than 0.05, the researcher rejects the null hypothesis and the alternate hypothesis is supported, which then confirms that a significant relationship does exist between gender and online shopping orientation. Table 5.10 illustrates the results of the Pearson’s chi-squared test on gender and online shopping orientation types.
TABLE 5.10: Pearson’s Chi-Squared Test: Gender and Online Shopping Orientation

<table>
<thead>
<tr>
<th>Demographical Variables</th>
<th>X-squared</th>
<th>Df</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>15.9769</td>
<td>5</td>
<td>0.006</td>
</tr>
</tbody>
</table>

The p-value is 0.006, which is less than 0.05, thus the researcher rejects the null hypothesis and the alternate hypothesis, $H_{a1.1}$, is supported, which then shows a significant relationship between gender and online shopping orientations. It is evident from Table 5.10 that there is a significant relationship between gender and types of online shopping orientations.

Since a significant relationship exists between gender and types of online shopping orientations, one can state that in order to market products to men online, marketers should be aware that men are more likely to compare brands and features of products online and men rely on the Internet for information gathering. However men are not Deal Prone and they are generally competent computer users who frequently buy online. Therefore the majority of men who shop online are classified as Dual Shoppers. On the other hand, marketers should equally be aware that women shop online differently to that of men consumers, in that women often practice online window shopping, women often look at advertisements online as well as looking for the best deals either online or offline, thus women are active spenders at online stores as well as offline stores. Hence the majority of women who shop online are regarded as On-Off shoppers.

5.8.1.2 Hypothesis 1.2: The Relationship between Race and Types of Online Shopping Orientations.

$H_{a1.2}$: There is a significant relationship between race and types of online shopping orientations.

In Table 5.11 the relationship between race and types of online shopping orientations is reflected. Since it was established that the majority of respondents are categorised as either White or African, only these two racial groups will be used in this analysis. In terms of White respondents, 95 out of a total of 270 White respondents (35%) are considered to be
Dual Shoppers. While 155, out of a total of 563, African respondents (27.5%) are characterised as On-Off shoppers.

**TABLE 5.11: Influence of Race on Online Shopping Orientation**

<table>
<thead>
<tr>
<th>Race</th>
<th>Dual Shopper</th>
<th>Comparison Shopper</th>
<th>Traditional Shopper</th>
<th>E-Laggard</th>
<th>Information Surfer</th>
<th>On-Off Shopper</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>95 (35%)</td>
<td>70 (26%)</td>
<td>21 (7%)</td>
<td>11 (4%)</td>
<td>22 (8%)</td>
<td>51 (19%)</td>
</tr>
<tr>
<td>Indian</td>
<td>5</td>
<td>6</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>African</td>
<td>103 (18%)</td>
<td>91 (16%)</td>
<td>81 (14%)</td>
<td>46 (8%)</td>
<td>87 (15.5%)</td>
<td>155 (27.5%)</td>
</tr>
<tr>
<td>Coloured</td>
<td>9</td>
<td>11</td>
<td>6</td>
<td>9</td>
<td>5</td>
<td>18</td>
</tr>
<tr>
<td>Asian</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>213</td>
<td>179</td>
<td>113</td>
<td>70</td>
<td>119</td>
<td>229</td>
</tr>
</tbody>
</table>

Next the two variables (race and online shopping orientation types) were compared using the Pearson’s chi-squared test. The researcher tested the alternate hypothesis to see whether a significant relationship existed between race and online shopping orientation, as identified by the p-value. If the p-value is less than 0.05, thus the researcher rejects the null hypothesis and the alternate hypothesis is supported, which then illustrates a significant relationship does exist between race and online shopping orientations. Table 5.12 illustrates the results of the Pearson’s chi-squared test on race and online shopping orientation types.

**TABLE 5.12: Pearson’s Chi-Squared Test: Race and Online Shopping Orientation**

<table>
<thead>
<tr>
<th>Demographical Variables</th>
<th>X-squared</th>
<th>Df</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
<td>70.9279</td>
<td>20</td>
<td>0.001</td>
</tr>
</tbody>
</table>

The p-value is 0.001, which is less than 0.05, thus the researcher rejects the null hypothesis and the alternate hypothesis, \( H_{a1,2} \), is supported, which then confirms that race influences online shopping orientations. It is evident from Table 5.12 that there is a significant relationship between race and types of online shopping orientations.

Since a significant relationship exists between race and types of online shopping orientations, one can state that in order to market products to White consumers online, marketers should be aware that White consumers are more likely to compare brands and
features of products online and White consumers rely on the Internet for information gathering. However White consumers are not deal prone and they are generally competent computer users who frequently buy online. Therefore the majority of White consumers who shop online are classified as Dual shoppers. On the other hand, marketers should equally be aware that African consumers shop online differently to that of White consumers, in that African consumers often practice online window shopping, African consumers often look at advertisements online as well as looking for the best deals either online or offline, thus African consumers are active spenders at online stores as well as offline stores. Hence the majority of African consumers who shop online are regarded as On-Off shoppers.

These findings, combined with the findings regarding gender, can be used by marketers in order to market to their consumers successfully. It is evident that White respondents can be categorised as Dual Shoppers, and therefore White, male respondents are regarded as Dual Shoppers. Similarly, the majority of African respondents can be classified as On-Off Shoppers, thus African, female respondents are regarded as On-Off shoppers.

5.8.1.3 Hypothesis 1.3: The Relationship between Ethnicity and Types of Online Shopping Orientations.

$H_{a1.3}$: There is a significant relationship between ethnicity and types of online shopping orientations.

In Table 5.13 the relationship between ethnicity and types of online shopping orientations is illustrated. Since it was established that the majority of respondents are classified as either English or Xhosa; only these two ethnic groups will be highlighted in this Section. 87 out of a total of 233 English respondents can be categorised as Dual Shoppers (37%) and 99 out of a total of 338 Xhosa respondents fall under the On-Off Shopper type (29%). The minority type of online shopping orientation for both ethnic groups is the E-Laggard, with 9 English respondents (4% of English sample) and 32 Xhosa respondents (9% of Xhosa sample) regarded as this type of online shopper.
TABLE 5.13: Influence of Ethnicity on Online Shopping Orientation

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Dual Shopper</th>
<th>Comparison Shopper</th>
<th>Traditional Shopper</th>
<th>E-Laggard Information Surfer</th>
<th>On-Off Shopper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afrikaans</td>
<td>15</td>
<td>17</td>
<td>9</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>English</td>
<td>87 (37%)</td>
<td>63 (27%)</td>
<td>15 (6%)</td>
<td>9 (4%)</td>
<td>15 (6%)</td>
</tr>
<tr>
<td>Indian</td>
<td>7</td>
<td>5</td>
<td>4</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>26</td>
<td>13</td>
<td>8</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>Zulu</td>
<td>4</td>
<td>7</td>
<td>4</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Xhosa</td>
<td>46 (14%)</td>
<td>52 (15%)</td>
<td>56 (17%)</td>
<td>32 (9%)</td>
<td>53 (16%)</td>
</tr>
<tr>
<td>Venda</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Tswana</td>
<td>7</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Ndebele</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Sotho</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Coloured</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Swazi</td>
<td>3</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Asian</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Tsonga</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Khoisan</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>213</td>
<td>179</td>
<td>113</td>
<td>70</td>
<td>119</td>
</tr>
</tbody>
</table>

Next the two variables (namely ethnicity and online shopping orientation types) were compared using the Pearson’s chi-squared test. The researcher tested the alternate hypothesis to see whether a significant relationship existed between ethnicity and online shopping orientation, as identified by the p-value. If the p-value is less than 0.05, then the researcher rejects the null hypothesis and the alternate hypothesis is supported, which then illustrates that a significant relationship does exist between ethnicity and online shopping orientation. Table 5.14 illustrates the results of the Pearson’s chi-squared test on ethnicity and online shopping orientation types.

Table 5.14: Pearson’s Chi-Squared Test: Ethnicity and Online Shopping Orientation

<table>
<thead>
<tr>
<th>Demographical Variables</th>
<th>X-squared</th>
<th>Df</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnicity</td>
<td>136.5596</td>
<td>70</td>
<td>0.001</td>
</tr>
</tbody>
</table>

The p-value is 0.001, which is less than 0.05, thus the alternate hypothesis, $H_{a_{1,3}}$, is supported, which then confirms that ethnicity influences online shopping orientations. It is
evident from Table 5.14 that there is a significant relationship between ethnicity and types of online shopping orientations.

Since a significant relationship exists between ethnicity and types of online shopping orientations, one can state that in order to market products to English consumers online, marketers should be aware that English consumers are more likely to compare brands and features of products online and English consumers rely on the Internet for information gathering. However English consumers are not Deal Prone and they are generally competent computer users who frequently buy online. Therefore the majority of English consumers who shop online are classified as Dual Shoppers. On the other hand, marketers should equally be aware that Xhosa consumers shop online differently to that of English consumers, in that Xhosa consumers often practice online window shopping, Xhosa consumers often look at advertisements online as well as looking for the best deals either online or offline, thus Xhosa consumers are active spenders at online stores as well as offline stores. Hence the majority of Xhosa consumers who shop online are regarded as On-Off shoppers.

From Tables 5.9 to 5.14 it can be concluded that a relationship exists between demographic diversity and types of online shopping orientations. The significant findings gained from Tables 5.9 to 5.14 were that the majority of respondents regarded as On-Off Shoppers, predominantly consisted of female, African, Xhosa respondents. Additionally, respondents seen as Dual Shoppers predominantly consisted of male, White, English respondents.

In the next Section, the second set of hypotheses will be tested and the results discussed.

5.9 DEMOGRAPHIC DIVERSITY INFLUENCE ON PROPENSITY TO BUY ONLINE

The relationship between demographic diversity and propensity to buy online is discussed in this Section, so as to give effect to the fourth objective to determine the profile of respondents’ propensity to buy online. This section tests the second set of hypotheses, namely to assess the extent to which demographic diversity influences propensity to buy online:
There is no significant relationship between gender and propensity to buy online.

There is a significant relationship between gender and propensity to buy online.

There is no significant relationship between race and propensity to buy online.

There is a significant relationship between race and propensity to buy online.

There is no significant relationship between ethnicity and propensity to buy online.

There is a significant relationship between ethnicity and propensity to buy online.

5.9.1 Testing the Second Set of Hypotheses

The existence of a relationship between demographic diversity and propensity to buy online was explored, so as to assess whether demographic diversity of respondents influences propensity to buy online.

This relationship was assessed by Analysis of variance (ANOVA). Differences between means are tested for statistical significance, and, if significant, the researcher will accept the alternate hypothesis (Statistics South Africa, 2007c).

5.9.1.1 Hypothesis 2.1: The Relationship between Gender and Propensity to Buy Online.

There is a significant relationship between gender and propensity to buy online.

Table 5.15 illustrates the descriptive statistics pertaining to how respondents answered the three five-point Likert style statements in Section D of the questionnaire. This Table identifies whether or not male and female respondents are likely to buy online in the future. An average mean score of 3.5 or higher signifies a high level of propensity to buy online.
TABLE 5.15: Gender and Propensity to Buy Online

<table>
<thead>
<tr>
<th>Gender</th>
<th>Average Mean</th>
<th>Percentage</th>
<th>Comment on Propensity to buy Online</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>3.199666</td>
<td>64%</td>
<td>Neutral</td>
</tr>
<tr>
<td>Male</td>
<td>3.052163</td>
<td>61%</td>
<td>Neutral</td>
</tr>
</tbody>
</table>

The average mean score for female respondents was found to be 3.1 out of 5 (64%), which signifies a relatively neutral mean score, therefore illustrating that female respondents are neutral in their likelihood to buy online in the future. Similarly, the average mean score for male respondents was found to be 3.0 out of 5 (61%), which also indicates a relatively neutral mean score, therefore illustrating that male respondents are neutral in their likelihood to buy online in the future. In summary, from Table 5.15 it can be seen that both genders are neutral with regards to their propensity to buy online in the future, therefore the neutral average mean scores above imply that gender does not influence propensity to buy online.

The relationship between gender and propensity to buy online was assessed by Analysis of variance (ANOVA). Differences between means are tested for statistical significance, and, if significant, the researcher finds support for the alternate hypothesis and rejects the null hypothesis (Statistics South Africa, 2007c). Figure 5.9 illustrates the relationship between gender and propensity to buy online, in terms of the p-value.

FIGURE 5.9: The Relationship between Gender and Propensity to buy online
The p-value is 0.03600, which is less than 0.05, thus the researcher rejects the null hypothesis and the alternate hypothesis, $H_{a_{2.1}}$, is supported. It is evident from Figure 5.9 that there is a significant relationship between gender and propensity to buy online. Since a significant relationship exists between gender and propensity to buy online, one can state that differences in gender will influence propensity to buy online in the future. Since Figure 5.9 shows a significant relationship between gender and propensity to buy online, it can be said that males are more likely to buy online in the future, than females.

5.9.1.2 Hypothesis 2.2: The Relationship between Race and Propensity to Buy Online.

$H_{a_{2.2}}$: There is a significant relationship between race and propensity to buy online.

Table 5.16 illustrates the descriptive statistics pertaining to how respondents answered the three five-point Likert style statements in Section D of the questionnaire. It identifies whether or not respondents of different racial groups are likely to buy online in the future. An average mean score of 3.5 or higher signifies a high level of propensity to buy online.

<table>
<thead>
<tr>
<th>Race</th>
<th>Average Mean</th>
<th>Percentage</th>
<th>Comment on Propensity to buy Online</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>3.117284</td>
<td>62.3%</td>
<td>Neutral</td>
</tr>
<tr>
<td>Indian</td>
<td>3.238095</td>
<td>64.8%</td>
<td>Neutral</td>
</tr>
<tr>
<td>African</td>
<td>3.134399</td>
<td>62.7%</td>
<td>Neutral</td>
</tr>
<tr>
<td>Coloured</td>
<td>2.873563</td>
<td>57.5%</td>
<td>Low</td>
</tr>
<tr>
<td>Asian</td>
<td>3.181818</td>
<td>63.6%</td>
<td>Neutral</td>
</tr>
</tbody>
</table>

The average mean score for White respondents was found to be 3.1 out of 5 (62.3%), which signifies a relatively neutral mean score, therefore illustrating that White respondents are neutral in their likelihood to buy online in the future. Similarly, the average mean score for Indian respondents was found to be 3.2 out of 5 (64.8%), for African respondents the average mean score was found to be 3.1 out of 5 (62.7%), and the average mean score for Asian respondents was found to be 3.1 out of 5 (63.6%) therefore illustrating that Indian, African and Asian respondents are neutral in their likelihood to buy online in the future.
Coloured Respondents had an average mean score of 2.8 out of 5 (57.5%) which also indicates a low mean score, which illustrates that Coloured respondents are not likely to buy online in the future.

From Table 5.16 it can be seen that 4 out of 5 racial groups were neutral with regards to their propensity to buy online in the future, and Coloured respondents were the only racial group to disagree, stating that they were not likely to shop online in the future. Thus the average mean scores above imply that race does not influence propensity to buy online.

The relationship between race and propensity to buy online was assessed by Analysis of variance (ANOVA). Differences between means are tested for statistical significance, and if significant, the researcher will accept the alternate hypothesis (Statistics South Africa, 2007c). Figure 5.10 illustrates the relationship between race and propensity to buy online, in terms of the p-value.

**FIGURE 5.10: The Relationship between Race and Propensity to Buy Online**

![Figure 5.10](image)

The p-value is 0.47387, which is greater than 0.05, thus the researcher finds support for the null hypothesis and the alternate hypothesis, $H_{a_{2,1}}$, is rejected. It is evident from Figure 5.10 that there is a no significant relationship between race and propensity to buy online. Since
no significant relationship exists between race and propensity to buy online, one cannot state that differences in race will influence propensity to buy online in the future.

5.9.1.3 Hypothesis 2.3: The Relationship between Ethnicity and Propensity to Buy Online

Ha$_{2.3}$: There is a significant relationship between ethnicity and propensity to buy online.

Table 5.17 illustrates the descriptive statistics pertaining to how respondents answered the three five-point Likert style statements in Section D of the questionnaire. It identifies whether or not respondents of different ethnic groups are likely to buy online in the future. An average mean score of 3.5 or higher signifies a high level of propensity to buy online.

<table>
<thead>
<tr>
<th>Ethnic Groups</th>
<th>Average Mean</th>
<th>Percentage</th>
<th>Comment on Propensity to buy Online</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afrikaans</td>
<td>3.103604</td>
<td>62.1%</td>
<td>Neutral</td>
</tr>
<tr>
<td>English</td>
<td>3.105865</td>
<td>62.1%</td>
<td>Neutral</td>
</tr>
<tr>
<td>Indian</td>
<td>3.333333</td>
<td>66.7%</td>
<td>Neutral</td>
</tr>
<tr>
<td>Other</td>
<td>3.263566</td>
<td>65.3%</td>
<td>Neutral</td>
</tr>
<tr>
<td>Zulu</td>
<td>3.150538</td>
<td>63%</td>
<td>Neutral</td>
</tr>
<tr>
<td>Xhosa</td>
<td>3.094675</td>
<td>61.9%</td>
<td>Neutral</td>
</tr>
<tr>
<td>Venda</td>
<td>2.791667</td>
<td>55.8%</td>
<td>Low</td>
</tr>
<tr>
<td>Tswana</td>
<td>3.230769</td>
<td>64.6%</td>
<td>Neutral</td>
</tr>
<tr>
<td>Ndebele</td>
<td>3.411765</td>
<td>68.2%</td>
<td>Neutral</td>
</tr>
<tr>
<td>Sotha</td>
<td>3.533333</td>
<td>70.7%</td>
<td>High</td>
</tr>
<tr>
<td>Coloured</td>
<td>2.700855</td>
<td>54%</td>
<td>Low</td>
</tr>
<tr>
<td>Swazi</td>
<td>3</td>
<td>60%</td>
<td>Neutral</td>
</tr>
<tr>
<td>Asian</td>
<td>2.925926</td>
<td>58.5%</td>
<td>Low</td>
</tr>
<tr>
<td>Tsonga</td>
<td>2.2</td>
<td>44%</td>
<td>Low</td>
</tr>
<tr>
<td>Khoisan</td>
<td>3</td>
<td>60%</td>
<td>Neutral</td>
</tr>
</tbody>
</table>

The average mean score for Afrikaans respondents was found to be 3.1 out of 5 (62.1%), English respondents was found to be 3.1 out of 5 (62.1%), for Indian respondents was found to be 3.3 out of 5 (66.7%), for Ethnic Group respondents was found to be 3.2 out of 5 (65.3%), for Zulu respondents was found to be 3.1 out of 5 (63%), for Xhosa respondents was found to be 3.0 out of 5 (61.9%), for Tswana respondents was found to be 3.2 out of 5
(64.6%), for Ndebele respondents was found to be 3.4 out of 5 (68.2%), for Swazi respondents was found to be 3.0 out of 5 (60%), and the average mean score for Khoisan respondents was found to be 3.0 out of 5 (60%). These results all signify a relatively neutral mean score, therefore illustrating that Afrikaans, English, Indian, Other Ethnic Groups, Zulu, Xhosa Tswana, Ndebele, Swazi and Khoisan respondents are all neutral in their likelihood to buy online in the future. Venda respondents had an average mean score of 2.7 out of 5 (55.8%) which indicates a low mean score, which illustrates that Venda respondents are not likely to buy online in the future. Similarly, Coloured respondents had an average mean score of 2.7 out of 5 (54%), Asian respondents had an average mean score of 2.9 out of 5 (58.5%), and Tsonga respondents had an average mean score of 2.2 out of 5 (44%). These are also low mean scores, which illustrates that Coloured, Asian and Tsonga respondents are not likely to buy online in the future. Sotho respondents were the only ethnic group that illustrated a high average mean score of 3.5 out of 5 (70.7%) which indicates a relatively high mean score, therefore illustrating that Sotho respondents are likely to buy online in the future.

Given that it was established in Figure 5.3 that the majority of respondents are classified as either English or Xhosa; only these two ethnic groups will be highlighted in this Section. The average mean score for English respondents was found to be 3.1 out of 5 (62.1%), and for Xhosa respondents was found to be 3.0 out of 5 (61.9%). Both of these results signify a relatively neutral mean score, therefore illustrating that English, and Xhosa respondents are both neutral in their likelihood to buy online in the future.

In summary, from Table 5.17 it can be seen that the two majority ethnic groups (namely English and Xhosa) were neutral with regards to their propensity to buy online in the future, and thus the average mean scores above imply that ethnicity does not influence propensity to buy online.

The relationship between ethnicity and propensity to buy online was assessed by Analysis of variance (ANOVA). Differences between means are tested for statistical significance, and, if significant, the researcher will find support for the alternate hypothesis (Statistics South Africa, 2007c). Figure 5.11 illustrates the relationship between ethnicity and propensity to buy online, in terms of the p-value.
The p-value is 0.15718, which is greater than 0.05, thus the researcher finds support for the null hypothesis and the alternate hypothesis, $H_{a_{2,3}}$, is rejected. It is evident from Figure 5.11 that there is no significant relationship between ethnicity and propensity to buy online. Since no significant relationship exists between ethnicity and propensity to buy online, one cannot state that differences in ethnicity will influence propensity to buy online in the future.

To review, the second set of Hypotheses concludes that there is only a significant relationship between gender and propensity to buy online.

In the next Section, the third set of hypotheses will be tested and the results discussed.

5.10 THE EXTENT TO WHICH TYPES OF ONLINE SHOPPING ORIENTATIONS INFLUENCE PROPENSITY TO BUY ONLINE.

The relationship between types of online shopping orientations and propensity to buy online is discussed in this Section. So as to give effect to the seventh objective and to test the third set of hypotheses, namely to assess the extent to which types of online shopping orientations influence propensity to buy online:
Ho3: There is no significant relationship between types of online shopping orientations and propensity to buy online.

Ha3: There is a significant relationship between types of online shopping orientations and propensity to buy online.

5.10.1 Testing the Third Set of Hypotheses

The existence of a relationship between types of online shopping orientations and propensity to buy online was explored, so as to assess whether types of online shopping orientations influence propensity to buy online.

The abovementioned relationship was assessed by ANOVA. Pertaining to this relationship, the dependent variable is propensity to buy online and the independent variable is online shopping orientations.

5.10.1.1 Hypothesis 3: The Relationship between Types of Online Shopping Orientations and Propensity to Buy Online

Ha3: There is a significant relationship between types of online shopping orientations and propensity to buy online.

In Table 5.18 the relationship between types of online shopping orientation and propensity to buy online is examined. It identifies whether or not respondents with different online shopping orientations are likely to buy online in the future. An average mean score of 3.5 or higher signifies a high level of propensity to buy online.

<table>
<thead>
<tr>
<th>Online Shopping Orientations</th>
<th>Average Mean</th>
<th>Percentage</th>
<th>Comment on Propensity to Buy Online</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dual Shopper</td>
<td>3.538341</td>
<td>71%</td>
<td>High</td>
</tr>
<tr>
<td>Comparison Shopper</td>
<td>2.774674</td>
<td>55%</td>
<td>Neutral</td>
</tr>
<tr>
<td>Traditional</td>
<td>2.79941</td>
<td>56%</td>
<td>Neutral</td>
</tr>
</tbody>
</table>
The average mean score for Dual Shoppers was found to be 3.5 out of 5 (71%) and for Information Surfers the average mean was found to be 3.9 out of 5 (79%), which signifies a relatively high mean score, therefore illustrating that Dual Shoppers and Information Surfers are likely to buy online in the future. In contrast, E-Laggards had an average mean score of 2.1 out of 5 (55.8%) which indicates a low mean score, which illustrates that E-Laggards are not likely to buy online in the future. Furthermore, the average mean score for Comparison Shoppers was found to be 2.7 out of 5 (55%), Traditional Shoppers was found to be 2.7 out of 5 (56%), and On-Off Shoppers was found to be 3.0 out of 5 (60%). These results all signify a relatively neutral mean score, therefore illustrating that Comparison; Traditional and On-Off shoppers are all neutral in their likelihood to buy online in the future.

In summary, from Table 5.18 it can be seen that three out of six online shopping orientations were neutral with regards to their propensity to buy online in the future, and one online shopping orientation (E-Laggards) disagreed, stating that they were not likely to shop online in the future. Two online shopping orientations (namely Dual Shopper and Information Shopper) agreed, stating that they were likely to shop online in the future. Thus the average mean scores above imply that online shopping orientations influence propensity to buy online.

The relationship between online shopping orientations and propensity to buy online was assessed by Analysis of Variance (ANOVA). Differences between means are tested for statistical significance, and, if significant, the researcher will reject the null hypothesis and find support for the alternate hypothesis (Statistics South Africa, 2007c). Figure 5.12 illustrates the relationship between online shopping orientations and propensity to buy online, in terms of the p-value.
The p-value is 0.0000, which is less than 0.05, thus the researcher rejects the null hypothesis and the alternate hypothesis, \(H_a\), is supported. It is evident from Figure 5.12 that there is a significant relationship between online shopping orientations and propensity to buy online. Since a significant relationship exists between online shopping orientations and propensity to buy online, one can state that different online shopping orientations will influence propensity to buy online in the future.

Thus, the third set of Hypotheses concludes that a significant relationship exists between online shopping orientations and propensity to buy online.

In the next Section, the findings on the open-ended question are discussed.

5.11 FINDINGS ON THE OPEN-ENDED QUESTION

This Section refers to the findings obtained through the open-ended question in Section D of the questionnaire. As previously mentioned in Chapter Three, Section 3.7, consumers’ previous online experiences influence their propensity to buy online in the future (Johnson et al., 2003:187). Therefore a positive experience pertaining to online shopping, results in
the propensity that the consumers will buy online again (Biehal and Chakravarti, 1982:434).

A total of 350 (38%) of the total respondents stated that they have shopped online. Below in Table 5.19, the number of respondents who stated that they had had a negative/positive online shopping experience is illustrated. The number of respondents who stated they had previously had a negative online shopping experience was 21.4% of the total sample of respondents who stated that had shopped online. Whereas 52% of respondents answered that they had previously had a positive online shopping experience a further 26.6% of respondents who have shopped online felt that their previous experience of shopping online was neither positive nor negative.

**TABLE 5.19: Positive vs. Negative Experience Regarding Online Shopping**

<table>
<thead>
<tr>
<th></th>
<th>No. of Respondents</th>
<th>Total Respondents who shop online</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative Experience</td>
<td>75</td>
<td>350</td>
<td>21.4%</td>
</tr>
<tr>
<td>Positive Experience</td>
<td>182</td>
<td>350</td>
<td>52%</td>
</tr>
<tr>
<td>Neutral</td>
<td>93</td>
<td>350</td>
<td>26.6%</td>
</tr>
</tbody>
</table>

From Table 5.19, it is evident that the majority of online shoppers have had a positive experience shopping online. This result indicates that positive online shopping experiences results in a greater likelihood of buying online in the future.

5.12 SUMMARY AND CONCLUSION

The response rate concerning this research was presented first in Section 5.2, followed by the descriptive statistics relevant to the demographical information of respondents in Section 5.3 as well as the online shopping information of respondents in Section 5.4. Next, in Section 5.5, the internal reliability and validity of the measuring instruments was assessed. Reliability was assessed through the use of Cronbach’s Alpha coefficient. Factor analysis was done on the ethnic identity statements as well as the online shopping orientation statements, to determine the construct validity of these measures. Validity of the research was also assessed through proportion of total variation and Eigen values.
Subsequently, Section 5.6 discussed the average mean scores for the Ethnic identity factors. Next, in Section 5.7, online shopping orientations are categorised through cluster analysis, so that different combinations of online shopping factors defined six online shopping orientation types. Following from this, in Section 5.8, the extent to which demographic diversity influences types of online shopping orientation was discussed, thus testing the first set of hypotheses, stated in Chapter One, Section 1.2. Additionally, the extent to which demographical diversity influences propensity to buy online was reported in Section 5.9, thereby testing the second set of hypotheses. The third and final set of hypotheses was tested and reported in Section 5.10, thus considering the extent to which types of online shopping orientation influence propensity to buy online. Lastly, the open-ended question was discussed in Section 5.11, in view of previous research which stated that a positive or negative online shopping experience could influence propensity to buy online.

In Chapter Six, the final Chapter, a summary, conclusion and recommendations pertaining to this research are given.
6.1 BRIEF SYNOPSIS OF THE RESEARCH

Online shopping is a growing phenomenon all over the world, and it has thus had an influence on the shopping process for many consumers (Brengman et al., 2005:79; Brown et al., 2003:1667; Kau, et al., 2003:139). Consumers are now choosing to shop online due to changes in their lifestyles and demographic diversity (Kau, et al., 2003:139). South Africa, in particular, consists of multi-racial and diverse ethnic origins, which has resulted in a demographically diverse South African nation. Therefore, marketers need to develop a better understanding of consumers’ online shopping orientation (Donthu and Garcia, 1999:57; Jayawardhena and Foley, 2000:19; Kau, et al., 2003:140). Understanding consumers’ online shopping orientation will assist marketers in being able to market to specific consumers and meet the needs of consumers effectively (Kau, et al., 2003:140). Since demographic diversity influences the online shopping orientations of consumers, major opportunities for marketers will be made available by providing for a demographically diverse South African nation.

The purpose of this research was to examine the extent to which demographic diversity influences online shopping orientation and propensity to buy online. The researcher first conducted an in-depth theoretical study of previous research into demographic diversity, online shopping orientation and propensity to buy online. Next the researcher conducted an empirical survey questionnaire, in order to assess the opinions of students at the three selected Eastern Cape universities.

In order to fulfil the purpose and objectives of this research, a concise chapter by chapter overview is presented below.

Chapter One provided the introduction and orientation to the research with regards to the problem statement, research purposes, objectives and hypotheses. The research design and methodology was also discussed along with identifying both secondary and primary
sources for this research. Lastly, the structure of the thesis was also established in Chapter One.

Demographic diversity was defined in Chapter Two, and a theoretical overview of demographic diversity in South Africa was given. Demographic diversity, namely gender, race and ethnicity were identified and discussed within Chapter Two with reference to the South African population. Additionally, both etic/objective and emic/subjective approaches to ethnicity were defined and explained. Ethnic identity and the purpose of Phinney’s multi-group ethnic identity factors, namely commitment and exploration were explained and discussed. The relationship between demographic diversity and online shopping orientation and propensity to buy online was discussed.

In Chapter Three, the conceptualisation of the term „online shopping orientation’ was discussed in conjunction with previous research studies on online shopping orientations. Furthermore, six online shopping factors were identified, together with a discussion on previous research studies that have been conducted with regards to types of online shopping orientations. These were adapted and categorised into six main online shopping orientation types for the purpose of this research. Additionally this Chapter defined propensity to buy online and referred to previous research regarding two predictors (namely consumers’ online shopping orientations and consumers’ previous online experiences) that would influence propensity to buy online. Lastly, the relationship between online shopping orientation and an individual’s propensity to buy online was highlighted and discussed.

In Chapter Four, the research design and methodology, data collection and analyses techniques were discussed. The importance of the research, with reference to the research aims and hypotheses statements were outlined. Following from this, two research paradigms were identified and discussed in detail. It was decided that the research paradigm best suited to this type of research was a positivistic research paradigm. Next, the research population and relevant sampling methods were discussed, followed by the research method. Subsequently, the two measuring instruments that were used within the questionnaire were examined in detail, including previous reliability and validity results. Thereafter, the data collection process was reviewed in addition to how the data was
captured and then statically analysed. The next Section explained descriptive statistical analysis, namely frequency tables, mean and standard deviation. Inferential statistical measures, namely reliability, validity (including factor analysis), Pearson’s chi-squared test, analysis of variance and cluster analysis, were explained. Lastly, ethical considerations that the researcher ensured were in place were discussed.

The response rate concerning this research was presented first in Chapter Five, followed by the descriptive statistics relevant to the demographical information of respondents as well as the online shopping information of respondents. Next, the internal reliability and validity of the measuring instruments was assessed. Reliability was assessed through the use of Cronbach’s Alpha coefficient. Factor analysis was done on the ethnic identity statements as well as the online shopping orientation statements, to determine the construct validity of these measures. Validity of the research was also assessed through proportion of total variation and Eigen values. Subsequently, this Chapter discussed the average mean scores for the Ethnic identity factors. Next, online shopping orientations were categorised through cluster analysis, and different combinations of online shopping factors defined six online shopping orientation types. Following from this, the extent to which demographic diversity influences types of online shopping orientation was discussed, thus testing the first set of hypotheses, stated in Chapter One, Section 1.2. Additionally, the extent to which demographical diversity influences propensity to buy online was reported, thereby testing the second set of hypotheses. The third and final set of hypotheses was tested and reported, thus considering the extent to which types of online shopping orientation influence propensity to buy online. Lastly, the open-ended question was discussed in view of previous research which stated that a positive or negative online shopping experience could influence propensity to buy online.

6.2 CONCLUSIONS

With regards to the empirical findings, the conclusions will be highlighted in the following order:

- Ethnic identity
- Online shopping orientation
• The extent to which demographic diversity influences types of online shopping orientation.
• The extent to which demographic diversity influences propensity to buy online.
• The extent to which types of online shopping orientation influence propensity to buy online.
• Findings on the open question

6.2.1 Ethnic Identity

Ethnicity was measured according to the etic/objective approach, where respondents selected the category that most described their ethnicity (which ethnic/cultural group you most identify with). The emic/subjective approach to measuring ethnicity was also used in this research study whereby respondents identified how strong their affiliation is with a particular ethnic group (Phinney’s (1992:156) multi-group ethnic identity measure).

Phinney (1992:156)’s multi-group ethnic identity measure was administered in order to identify how respondents feel about their ethnicity and/or how they react to their own ethnic group. Within this research it was found that respondents at all three universities in general had a strong ethnic identity to their specified ethnic group, according to the two ethnic identity factors, namely commitment and exploration. The average mean score was found to be 3.85 out of 5 (77%), which signifies a relatively high score, therefore illustrating that respondents have a strong identification to their ethnic group.

The Cronbach’s Alpha coefficient for commitment (0.83) and exploration (0.62) illustrated an acceptable level of reliability. From the factor analysis, it was evident that these two aspects of ethnic identity, namely commitment and exploration, had a high factor loading, with the entire factor loadings being greater than 0.40. The proportion of total variation for commitment (0.5) and exploration (0.42) illustrated good validity. Additionally, Eigen values for commitment (3.53) and exploration (2.12) showed good validity for the reason that Eigen values were greater than one.
6.2.2 Online Shopping Orientation

The purpose of this section in this research study was to provide the research results giving effect to a research objective, namely to determine the online shopping orientations profile of the respondents, as requested in Section C of the questionnaire.

The Cronbach’s Alpha coefficients for Brand Comparison (F1=0.75), Online shopping (F2=0.72), Deal Proneness (F3=0.58), Information Seeking (F4=0.55) and Offline Shopping (F6=0.52) had an acceptable reliability. Alternatively, Ad Orientation (F5=0.42) had poor reliability. With regards to factor analysis, all online shopping factors had a proportion of total variation greater than 0.4, which similarly shows good validity. Additionally, Eigen values for six online shopping factors were greater than one, which similarly showed good validity.

Kau et al., (2003)’s online shopping orientation statements were used to help identify six relevant online shopping factors. The six online shopping factors identified through the factor analysis process; namely Brand Comparison, Online Shopping, Deal Proneness, Information Seeking, Ad Orientation and Offline Shopping, were used to describe the types of online shopper orientation, namely Dual Shopper, Comparison Shopper, Traditional Shopper, E-Laggard, Information Surfer and On-Off shopper. This was achieved by means of cluster analysis. The 24 online shopping orientation statements were reduced to six online shopping factors. Then the average for each online shopping factor was calculated (Statistics South Africa, 2007c). Thus, each shopping factor was given its own score. These six factor averages were fed into a cluster analysis (Statistics South Africa, 2007c). Similar to a factor analysis, the cluster analysis resulted in the formation of six groups/clusters of participants. Each cluster demonstrated the characteristics similar to Kau et al., (2003) and the descriptions from Table 3.3. Hence the researcher was able to compare these results to Kau et al., (2003) results, and classify each cluster accordingly. Thus cluster analysis will be used to categorise individuals into one of six online shopping orientations in this research.
6.2.3 The Relationship between Demographic Diversity and Online Shopping Orientation.

The purpose of the first set of hypotheses was to determine whether there is a significant relationship between demographic diversity (namely gender, race and ethnicity) and online shopping orientation (namely On-Off Shopper, Comparison Shopper, Traditional Shopper, Dual Shopper, E-Laggard, and Information Surfer). Pearson’s chi-squared test identified if a relationship existed between demographic diversity and types of online shopping orientation, and this was identified by looking at the p-value. If the p-value was less than 0.05, then the researcher rejected the null hypothesis, thus the alternate hypothesis was accepted, which illustrates that a significant relationship exists between gender and online shopping orientation.

\[ H_{a1.1} \]: There is a significant relationship between gender and a specific type of online shopping orientation.

The result of Pearson’s chi-square test indicated that there is a significant relationship between gender and a specific type of online shopping orientation. Therefore the researcher rejected the null hypothesis, thus the alternate hypothesis, \( H_{a1.1} \), was supported.

Since a significant relationship exists between gender and types of online shopping orientations, marketers need to be aware that the majority of men who shop online are classified as dual shoppers. Therefore, men are more likely to compare brands and features of products online, and men rely on the Internet for information gathering. However they not Deal Prone and men are generally competent computer users who frequently buy online.

On the other hand, marketers should equally be aware that the majority of women who shop online are regarded as On-Off shoppers. Thus, women shop online differently to that of men consumers, in that women often practice online window shopping, women often look at advertisements online and look for the best deals either online or offline, thus women are seen as active spenders at online stores as well as offline stores.
Previous research discussed in Chapter Three, Section 2.3.1, stated that men are more comfortable shopping online than women, thus if gender differences exist among Internet users, men and women consumers are likely to shop online differently (Ackerman and Tellis, 2001:59; Ha and Stoel, 2004:378; Jayawardhena et al., 2007:518; Li et al., 1999:1). Therefore, this research supports previous research in that men and women exhibit different online shopping orientations.

H_{a1.2}: There is a significant relationship between race and a specific type of online shopping orientation.

The result of Pearson’s chi-squared test indicated that there is a significant relationship between race and a specific type of online shopping orientation. Thus the researcher rejected the null hypothesis, and the alternate hypothesis, H_{a1.2}, was supported.

Since a significant relationship exists between race and types of online shopping orientations, marketers need to be aware that the majority of White consumers who shop online are classified as Dual Shoppers. Therefore, White consumers are more likely to compare brands and features of products online, White consumers rely on the Internet for information gathering, however they not Deal Prone and White consumers are generally competent computer users who frequently buy online.

On the other hand, marketers should equally be aware that the majority of African consumers who shop online are regarded as On-Off shoppers. Thus, African consumers shop online differently to White consumers, in that African consumers often practice online window shopping, African consumers often look at advertisements online, and look for the best deals either online or offline, thus African consumers are seen as active spenders at online stores as well as offline stores.

Previous research discussed in Chapter Three, Section 2.3.2, with regards to Race and Online shopping orientations, is supported by this research study, in that differences in online shopping orientations exist among consumers of different race groups (Akers 1968:283; Dalrymple et al., 2001:65; Sexton 1972:39). However, Akers (1968:283) suggested that ethnic consumers were more brand conscious than White consumers. In this
research study the opposite was illustrated. White consumers are seen as Dual Shoppers and are more likely to compare brands and features of products online than African consumers. In contrast, African consumers are more likely to make a more informed purchase decision, by looking for the best deals regardless of whether they are online or offline. Additionally, previous studies conducted in the United States of America have generally followed an approach whereby they compared the demographic characteristics of ethnic subcultures with those of the White American majority. In contrast, this research study aimed to focus on all race groups that exist in South Africa, and tested them individually rather than comparing them to each other.

\( H_{a1.3} \): There is a significant relationship between ethnicity and a specific type of online shopping orientation.

The result of Pearson’s chi-squared test indicated that there is a significant relationship between ethnicity and a specific type of online shopping orientation. Therefore the researcher rejected the null hypothesis, and the alternate hypothesis, \( H_{a1.3} \), was supported.

Since a significant relationship exists between ethnicity and types of online shopping orientations, marketers need to be aware that the majority of English consumers who shop online are classified as Dual Shoppers. Therefore, English consumers are more likely to compare brands and features of products online and English consumers rely on the Internet for information gathering. However they not deal prone and English consumers are generally competent computer users who frequently buy online.

On the other hand, marketers should equally be aware that the majority of Xhosa consumers who shop online are regarded as On-Off shoppers. Thus, Xhosa consumers shop online differently to English consumers, in that Xhosa consumers often practice online window shopping. Xhosa consumers often look at advertisements online as well as looking for the best deals either online or offline. Thus Xhosa consumers are seen as active spenders at online stores as well as offline stores.

From these findings, it is evident that White, English, male consumers are regarded as Dual shoppers. Similarly, African, Xhosa, female consumers are regarded as On-Off shoppers.
As a result it was concluded that a relationship exists between demographic diversity and types of online shopping orientations, whereby the gender, race and ethnicity of respondent is likely to influence the way consumers shop online, namely the consumers’ online shopping orientation.

Previous research discussed in Chapter Three, Section 2.3.3, with regards to ethnicity and Online Shopping Orientations, found that some researchers believe that there are no differences amongst consumers with different ethnic backgrounds (Anderson and Engledow 1977:185; Douglas and Craig, 1992:312). Other research found that similarities as well as differences to online shopping behaviours exist among individuals from different ethnic backgrounds (Aaker and Maheswaran, 1997:315; Henry, 1976:121; Park and Jun, 2003:531; Tse et al., 1988:82). This research study supports previous research that stated that different ethnic groups shop online differently.

6.2.4 The Relationship between Demographic Diversity and Propensity to Buy Online.

The relationship between demographic diversity and propensity to buy online was discussed, so as to give effect to the fourth objective to determine the profile of respondents’ propensity to buy online. The researcher tested the second set of hypotheses namely, to assess the extent to which demographic diversity influences propensity to buy online.

Ha2.1: There is a significant relationship between gender and propensity to buy online.

The researcher rejects the null hypothesis, thus the alternate hypothesis is accepted, which illustrates that a statistically significant relationship exists between gender and propensity to buy online. Differences in gender may influence propensity to buy online in the future. From Figure 5.9 it can be said that males are more likely to buy online in the future than females.

According to previous research discussed in Chapter Three, the role of gender has previously remained unknown with regards to propensity to buy online (Ackerman and
This research study found that men have a greater propensity to buy online in the future, which is valuable information for marketers wanting to successfully market products to specific genders online.

Ha$_{2.2}$: There is a significant relationship between race and propensity to buy online.

White and African racial groups were the main racial groups that could be generalized; however it was found that both of these racial groups were neutral with regards to their propensity to buy online in the future. The researcher found support for the null hypothesis, thus the alternate hypothesis, Ha$_{2.2}$, was rejected, which illustrates that no significant relationship exists between race and propensity to buy online.

According to previous research discussed in Chapter Three, the role of race has previously remained unknown with regards to propensity to buy online (Wells and Prensky, 1996:45; Wu, 2003:38). This research study found that race does not influence propensity to buy online, thus there is a need to expand still further to see the differences that exist between consumers of different racial groups.

Ha$_{2.3}$: There is a significant relationship between ethnicity and propensity to buy online.

This research focused on English and Xhosa ethnic groups, nevertheless it was determined that both of these ethnic groups were neutral with regards to their propensity to buy online in the future. The researcher found support for the null hypothesis, thus the alternate hypothesis, Ha$_{2.3}$, was rejected, which illustrates that no significant relationship exists between ethnicity and propensity to buy online.

From the above mentioned hypotheses it can be concluded that only gender may influence propensity to buy online. However, no relationship exists between demographic diversity and propensity to buy online, in terms of the race and ethnicity of respondents.

According to previous research discussed in Chapter Three, the role of ethnicity has previously remained unknown with regards to propensity to buy online (Dalrymple et al., 2001:65; Stayman and Deshpande, 2001:65; Kim et al., 2003:33). This research study
found that ethnicity does not influence propensity to buy online, thus there is a need to expand further to see the differences that exist between consumers of different ethnic groups.

6.2.5 The Relationship between Online Shopping Orientations and Propensity to Buy Online.

The relationship between types of online shopping orientations and propensity to buy online was discussed, so as to give effect to the seventh objective and to test the third set of hypotheses, namely to assess the extent to which types of online shopping orientations influence propensity to buy online. The existence of a relationship between types of online shopping orientations and propensity to buy online was explored using ANOVA, so as to assess whether types of online shopping orientations influence propensity to buy online.

Ha₃: There is a significant relationship between types of online shopping orientations and propensity to buy online.

The relationship between types of online shopping orientation and propensity to buy online was examined. It identifies whether or not respondents with different online shopping orientations are likely to buy online in the future. An average mean score of 3.5 or higher signifies a high level of propensity to buy online.

The average mean score for Dual Shoppers and Information Surfers both showed a relatively high mean score, therefore illustrating that these types of online shopping orientations are likely to buy online in the future. In contrast, E-Laggards had a low average mean score which illustrated that E-Laggards are not likely to buy online in the future. Furthermore, the average mean score for Comparison Shoppers, Traditional Shoppers, and On-Off Shoppers illustrated a neutral average mean score, therefore illustrating that Comparison, Traditional and On-Off shoppers are all neutral in their likelihood to buy online in the future.

The relationship between online shopping orientations and propensity to buy online was also assessed by Analysis of Variance (ANOVA). Differences between means are tested for
statistical significance, and if significant, the researcher found support for the alternate hypothesis, in terms of the p-value. The p-value was less than 0.05, thus the alternate hypothesis, \( H_{a3} \), was supported. Thus, the third set of Hypotheses concluded that a significant relationship exists between online shopping orientations and propensity to buy online. Since a significant relationship exists between online shopping orientations and propensity to buy online, one can state that different online shopping orientations will influence propensity to buy online in the future.

These findings suggest that different online shopping orientations have different propensities to buy online in the future. Hence, marketers should be aware of the online shopping orientations more likely to buy online in the future and focus their marketing programs on them as well as trying new ways to attract the online shopping orientations that may not buy online, in the hopes of changing their opinions and perceptions of the Internet and online shopping.

Previous research discussed in Chapter Three, Section 3.4 indicated that online shopping orientations influence consumers’ likelihood of purchasing online in the future (Bergad et al., 2001:18; Breitenbach and Van Doren, 1998:559; Kim and Kim, 2004:886; Shim et al., 2000:7; Supphellen and Nysveen, 2001:343; Szymanski and Hise, 2000:309). Since demographic diversity influences online shopping orientations as well as propensity to buy online, it was therefore found that a relationship between online shopping orientation and propensity to buy exists.

Table 6.1 summarises the results of the hypothesis testing, where an “X” indicates whether the researcher rejected the null hypothesis or the alternate hypothesis was accepted.

**TABLE 6.1: Summary of Hypothesis Testing**

<table>
<thead>
<tr>
<th>Stated Hypotheses</th>
<th>( H_a ) supported (not rejected)</th>
<th>( H_a ) rejected</th>
</tr>
</thead>
<tbody>
<tr>
<td>( H_{a1.1} ): There is a significant relationship between gender and a specific type of online shopping orientation.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>( H_{a1.2} ): There is a significant relationship between race and a specific type of online shopping orientation.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>( H_{a1.3} ): There is a significant relationship between ethnicity and a specific type of online shopping orientation.</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
### 6.2.6 The Open Ended Question

A total of 350 (38%) of the total respondents stated that they have shopped online. The number of respondents who had a negative online shopping experience in the past was 21.4% of the total sample size of respondents who stated that have shopped online. Whereas, 52% of respondents answered that they had previously had a positive online shopping experience. A further 26.6% of respondents who have shopped online felt that their previous experience of shopping online was neither positive nor negative. Therefore, it is evident that the majority of online shoppers have had a positive experience shopping online.

This result supports previous research discussed in Chapter Three, Section 3.5, whereby positive online shopping experiences results in a greater likelihood of buying online in the future (Biehal and Chakravarti, 1982:434; Chen and Barnes, 2007:25; Johnson et al., 2003:187 Pope et al., 1999:25; Shim and Drake, 1990:22; Shim et al, 2001:397). Consequently, consumers’ previous online experiences influence their propensity to buy online in the future and a positive online shopping experience results in a greater likelihood that the consumers will buy online in the future.

### 6.3 RECOMMENDATIONS

In connection with the research findings, several recommendations for Internet marketers as well as future research have been identified.
6.3.1 Recommendations for Internet Marketers

Previously mentioned in Chapter Five, Section 5.8.1, a relationship exists between demographic diversity and types of online shopping orientations, in that gender, race and ethnicity of respondent are likely to result in respondents’ shopping online differently. In order for marketers to effectively market their products and services on the Internet, it is recommended that:

Marketers should be aware that the majority of men who shop online are classified as Dual Shoppers in that men are more likely to compare brands and features of products online. Additionally, men rely on the Internet for Information Gathering; however they are not Deal Prone and are generally competent computer users who frequently buy online.

Marketers should equally be aware that women shop online differently to that of men consumers, in that the majority of women who shop online are regarded as On-Off shoppers. Women often practice online window shopping, and look at advertisements online as well as looking for the best deals either online or offline. Thus women are active spenders at online stores as well as offline stores.

With regards to race, it is evident that the majority of White respondents can be categorised as Dual Shoppers, whereas the majority of African respondents can be classified as On-Off shoppers.

Pertaining to ethnic groups, marketers should be aware that the majority of English respondents can be classified as Dual Shoppers while Xhosa respondents are predominantly On-Off shoppers.

The research results indicated in Chapter Five, Section 5.10.1 showed that there is a significant relationship between specific types of online shopping orientation and propensity to buy online. From these results it is recommended that:

- The Dual Shopper and the Information Surfer are the two types of online shoppers that are likely to buy online in the future.
• However, the E-Laggard is the least likely to buy online.

• As shown in Chapter Five, Section 5.11, it is evident that the majority of online shoppers have had a positive experience shopping online. It also indicates that positive online shopping experiences results in a greater likelihood of buying online in the future.

6.3.2 Recommendations for Future Research

It is recommended that:

• Other demographic diversity characteristics (such as age, income levels and use of credit cards online) are assessed with regards to their influence on online shopping orientations and propensity to buy online.

• More research focuses on what influences consumers to buy online in the future (such as convenience, information and security issues).

• Review what consumers purchase online, in order to assess whether a specific product will influence propensity to buy online in the future.

• Sample size is increased and the present research is extended to other universities and/or provinces in South Africa.

6.4 LIMITATIONS OF THIS RESEARCH

It must be noted that this research has limitations, and these limitations are noted below.

• Not all of the racial and ethnic groups were successfully targeted, and so results of African and White racial groups and similarly English and Xhosa ethnic groups could
only be discussed, and therefore the other racial and ethnic groups found in South Africa are excluded from this research.

- The results found in this research were obtained using a convenience/purposive sample at three universities in the Eastern Cape, and should therefore not be generalised beyond the sample.

- The three universities can not be classified as a representative of all of Eastern Cape consumers, and thus results found at these universities should not be generalised beyond this sample.

In conclusion, demographic diversity influences consumers’ online shopping orientation. Online shopping orientations as well as previous experiences shopping online influence consumers’ propensity to buy online.
LIST OF REFERENCES


STATACORP. 1999 *Stata Statistical Software: Release 6.0.* College Station: Stata Corporation.


Dear Respondent

For the purpose of reading for a Masters Research Dissertation, the researcher is approaching you as a university student to canvass your views and perceptions with regards to online shopping, your online shopping orientation as well as your propensity to buy online.

**PURPOSE OF THE SURVEY**
Shopping online is fast becoming a popular trend in South Africa. Therefore, the researcher aims to canvass your opinions of online shopping in order to ascertain whether your individual demographical diversity impacts on your online shopping orientation and your propensity to buy online.

Please complete the attached questionnaire that has been compiled to gauge your opinions in this regard. All information will be used for research purposes only. The confidentiality of your opinion will be respected. You are not required to identify yourself unless you wish to have a copy of the research report.

The questionnaire should not take longer than 15-20 minutes to complete. There is no right or wrong answer. Only your opinions are important!

**THE STRUCTURE OF THE QUESTIONNAIRE IS AS FOLLOWS:**
- **Section A** requires some basic demographical information,
- **Section B** online shopping,
- **Section C** online shopping orientation,
- **Section D** propensity to buy online.

Thank you for sharing your views.

Researcher:

M.J. Tapson
SECTION A: DEMOGRAPHICAL INFORMATION

- Please indicate by making a cross (X) next to the option that best relates to you:

1. Gender:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</table>
a. Female |   |
b. Male   |   |

2. Nationality:

- Please identify which country you were born in.

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<table>
<thead>
<tr>
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</thead>
</table>
a. Botswana |   |
b. Namibia  |   |
c. South Africa |   |
d. Zambia   |   |
e. Zimbabwe |   |
f. Other (Please specify) |   |

3. Would you describe yourself as:

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<table>
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<tr>
<th></th>
<th></th>
</tr>
</thead>
</table>
a. Asian |   |
b. African |   |
c. Coloured |   |
d. Indian |   |
e. White |   |
f. Other (Please specify) |   |
4. Ethnic/Cultural Group:

- Please indicate which ethnic/cultural group you most identify with:

<p>| | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>a</td>
<td>Afrikaans</td>
</tr>
<tr>
<td>b</td>
<td>Asian</td>
</tr>
<tr>
<td>c</td>
<td>Coloured</td>
</tr>
<tr>
<td>d</td>
<td>English</td>
</tr>
<tr>
<td>e</td>
<td>Indian</td>
</tr>
<tr>
<td>f</td>
<td>Khoisan</td>
</tr>
<tr>
<td>g</td>
<td>Ndebele</td>
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<td>h</td>
<td>Sotho</td>
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<tr>
<td>i</td>
<td>Swazi</td>
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<tr>
<td>j</td>
<td>Tsonga</td>
</tr>
<tr>
<td>k</td>
<td>Tswana</td>
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<tr>
<td>l</td>
<td>Venda</td>
</tr>
<tr>
<td>m</td>
<td>Xhosa</td>
</tr>
<tr>
<td>n</td>
<td>Zulu</td>
</tr>
<tr>
<td>o</td>
<td>Other (please specify)</td>
</tr>
</tbody>
</table>
Listed below are a number of statements that refer to an individual’s ethnicity. The objective of this section is to identify how you feel about your ethnicity and/or how you react to your ethnicity. In your opinion, please indicate to what extent do you agree or disagree with each of the following statements (1 = Strongly Disagree to 5 = Strongly Agree).

<table>
<thead>
<tr>
<th>ETHNIC/CULTURAL GROUP STATEMENTS</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral or no opinion</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 I am active in organisations or social groups that include mostly members of my own ethnic group</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 I have a clear sense of my ethnic background and what it means to me.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 I think a lot about how my life will be affected by my ethnic group membership.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 I am happy that I am a member of the group I belong to.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 I have a strong sense of belonging to my own ethnic group</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 I understand pretty well what my ethnic group membership means to me.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ETHNIC/CULTURAL GROUP STATEMENTS</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Neutral or no opinion</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>---------------------------------</td>
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<td>----------</td>
<td>----------------------</td>
<td>-------</td>
<td>---------------</td>
</tr>
<tr>
<td>In order to learn more about my ethnic background, I have often talked to other people about my ethnic group.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I have a lot of pride in my ethnic group.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I participate in cultural practices of my own group, such as special food, music, or customs.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I feel a strong attachment towards my own ethnic group.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I feel good about my cultural or ethnic background.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

5. Year of Study:

| a. | First Year |
| b. | Second Year |
| c. | Third Year |
| d. | Fourth Year/Honours |
| e. | Masters/PHD |
| f. | Post Graduate Diploma |
| g. | Other (please specify) |
SECTION B: ONLINE SHOPPING

6. Listed below are a number of questions that refer to your Internet access. Please indicate with a cross (X) next to the option which best applies to you.

- Do you have internet access?

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>a.</td>
<td>Yes</td>
</tr>
<tr>
<td>b.</td>
<td>No</td>
</tr>
</tbody>
</table>

- If yes, where do you have access to the internet? (If no, answer “not applicable”)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Home</td>
</tr>
<tr>
<td>b.</td>
<td>Office / Place of work</td>
</tr>
<tr>
<td>c.</td>
<td>University</td>
</tr>
<tr>
<td>d.</td>
<td>Other (please specify)</td>
</tr>
<tr>
<td>e.</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

- How often do you use the internet?

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<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>a.</td>
<td>Once-off</td>
</tr>
<tr>
<td>b.</td>
<td>Once a week</td>
</tr>
<tr>
<td>c.</td>
<td>A few times a week</td>
</tr>
<tr>
<td>d.</td>
<td>A few times a month</td>
</tr>
<tr>
<td>e.</td>
<td>Once a month</td>
</tr>
<tr>
<td>f.</td>
<td>Everyday</td>
</tr>
<tr>
<td>g.</td>
<td>Other (please specify)</td>
</tr>
</tbody>
</table>
- What is the purpose of your internet use? (you may specify more than one)

<p>| | |</p>
<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Banking</td>
</tr>
<tr>
<td>b.</td>
<td>Communication</td>
</tr>
<tr>
<td>c.</td>
<td>Education</td>
</tr>
<tr>
<td>d.</td>
<td>Entertainment</td>
</tr>
<tr>
<td>e.</td>
<td>News</td>
</tr>
<tr>
<td>f.</td>
<td>Shopping</td>
</tr>
<tr>
<td>g.</td>
<td>Software</td>
</tr>
<tr>
<td>h.</td>
<td>Other (please specify)</td>
</tr>
</tbody>
</table>

7. Online Shopping:
- The term “Online Shopping” refers to any purchase made on the internet. (For Example: Airplane tickets, concert tickets, books etc.)

- Have you shopped online?

<p>| | |</p>
<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Yes</td>
</tr>
<tr>
<td>b.</td>
<td>No</td>
</tr>
</tbody>
</table>

- If Yes, How often have you shopped online? (If no, answer “not applicable”)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>a.</td>
<td>Never</td>
</tr>
<tr>
<td>b.</td>
<td>Less than once a year</td>
</tr>
<tr>
<td>c.</td>
<td>2-5 times a year</td>
</tr>
<tr>
<td>d.</td>
<td>Over 5 times a year</td>
</tr>
<tr>
<td>e.</td>
<td>Once a month</td>
</tr>
<tr>
<td>f.</td>
<td>Once a week</td>
</tr>
<tr>
<td>g.</td>
<td>Daily</td>
</tr>
<tr>
<td>h.</td>
<td>Other (please specify)</td>
</tr>
<tr>
<td>i.</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
**SECTION C: ONLINE SHOPPING ORIENTATIONS**

Listed below are a number of statements that form the basis of the identification of your online shopping orientation. The objective of this section is to identify your online shopping orientation.

In order to ensure that respondents understand the statements, herewith are relevant definitions of the terms referred to in the statements in this section.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Brand</strong></td>
<td>A collection of images and ideas representing an economic producer; more specifically, it refers to the concrete symbols such as a name, logo, slogan, and design scheme.</td>
</tr>
<tr>
<td><strong>Product Feature</strong></td>
<td>The characteristics by which products are identified and differentiated.</td>
</tr>
<tr>
<td><strong>Traditional retail environment</strong></td>
<td>A Physical Store</td>
</tr>
<tr>
<td><strong>Search Engine</strong></td>
<td>Google, Excite, Lycos, AltaVista, Infoseek, and Yahoo are all search engines. They index millions of sites on the Web, so that Web surfers like you and me can easily find Web sites with the information we want.</td>
</tr>
<tr>
<td><strong>Bookmarks</strong></td>
<td>Similar to a real-life bookmark, an Internet bookmark acts as a marker for a Web site. (In Internet Explorer, they're called &quot;Favourites&quot;.)</td>
</tr>
<tr>
<td><strong>Banner Ad</strong></td>
<td>It is a long, rectangular image that can be placed just about anywhere on a Web page. They may contain text, images, or sometimes animations. When a user clicks the advertisement, they are redirected to the advertiser's website.</td>
</tr>
</tbody>
</table>
8. In your opinion, please indicate to what extent do you agree or disagree with each of the following statements (1 = Strongly Disagree to 5 = Strongly Agree).

<table>
<thead>
<tr>
<th>ONLINE SHOPPING ORIENTATION STATEMENTS</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral or no opinion</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 I actively evaluate a larger number of brands when shopping in a traditional retail environment than when I shop online.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2 I do an overall comparison of different brands before I decide on my most preferred brand.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3 I prefer to look at a larger variety of brands when shopping online.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4 I first pick a product feature and then compare each brand on that product feature.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5 I tend to trade off the strengths and weaknesses of a brand before deciding on the brand.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6 When I shop online I prefer looking at photos/images compared to purely text-based messages.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7 I find it easier to identify and eliminate brands online than in a traditional retail environment.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8 I do more brand price comparisons online than in a traditional retail environment.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9 I am more likely to make an “impulse purchase” online than in a traditional retail environment.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10 I often click a banner ad when visiting a site.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11 I prefer to buy from an online store, compared with a retailer offering both a physical and online store.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12 I pay more attention to online ads compared to TV ads.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13 In general, I would prefer to buy products from an online store rather than from a traditional store.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14 I am more price-sensitive when shopping online compared to when I shop in a traditional retail environment.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15 I like participating in online auctions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16 I would prefer to browse a brand of automobile online however, make the actual purchase in a traditional store.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>ONLINE SHOPPING ORIENTATION STATEMENTS</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Neutral or no opinion</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>----------------</td>
<td>-------</td>
<td>-----------------------</td>
<td>----------</td>
<td>------------------</td>
</tr>
<tr>
<td>17 I prefer to buy well known brands when shopping online.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18 I only consider the price when selecting a particular brand.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19 I use the same search engine (for example, Google, Yahoo) on a regular basis.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20 I would prefer to browse a brand of computer online however, make the actual purchase in a traditional store.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>21 I am a frequent user of bookmarks for accessing my favourite web sites.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>22 I will not buy a brand if I do not have sufficient information about the particular brand.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>23 I would prefer to buy from an online store rather than from a physical store which offers short-term sales promotional campaign.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>24 I react more to sales promotions online compared to that in a traditional retail environment.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
SECTION D: PROPENSITY TO BUY ONLINE

Listed below are a number of statements that refer to an individual’s propensity to buy online. The objective of this section is to identify the likelihood of you buying online in the future.

9. In your opinion, please indicate to what extent do you agree or disagree with each of the following statements (1 = Strongly Disagree to 5 = Strongly Agree).

<table>
<thead>
<tr>
<th>PROPENSITY TO BUY ONLINE STATEMENTS</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 I am very likely to buy brands online in the near future</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Given the chance, I intend to shop online.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 I enjoy shopping online.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. If you are an online shopper, did you have a positive or negative experience while shopping online? And why?

___________________________________________________________________

11. If you would like a copy of the research findings, please provide your name and email address.

___________________________________________________________________

Thank you for your time and co-operation.