## CONSUMER DECISION-MAKING STYLES AMONG GENERATION Y CONSUMERS IN NAMIBIA

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#### **ABSTRACT**

This study investigated the decision-making styles of Generation Y consumers in Namibia and the relationship between their decision-making styles and their learning styles, culture and e-literacy. Data were obtained by administering Sproles and Kendal's Consumer Style Inventory (CSI), Felder & Silverman Index of Learning Style (ILS), Hofstede Cultural Dimensions, demographic and e-literacy questionnaires to a random sample of 505 respondents from the 3 (three) major Universities in Namibia. Responses from the questionnaires were analysed using SPSS version 22. Descriptive statistics were used to report demographic information, measurements of central tendency (mean and median), variety (range, and standard deviation [SD]), percentage (%), and frequency (f) distribution of the survey items. And for inferential statistics, the principal components analysis (PCA) was used. In order to explore the relationships between consumer decision-making styles and learning styles, culture, e-literacy, Pearson correlation, Canonical correlation, multivariate analysis of variance (MANOVA), and analysis of variance (ANOVA), were used. The findings confirmed eight (8) consumer decision-making styles among the Generation Y consumers in Namibia in order of importance as follows: Factor 5 -Price Conscious, "Value for Money", Factor 3 - Novelty-Fashion Consciousness, Factor 2 - Brand Conscious, "Price Equals Quality", Factor 6 - Impulsive Careless, Factor 8- Habitual, Brand Loyal, Factor 1 - Perfectionistic High-Quality Consciousness, Factor 4 - Recreational, Hedonistic, and Factor 7 - Confused by Over choice. The study concluded that female millennials in Namibia were more brand loyal than their male counterpart and that the three major Universities in Namibia produced millennials with different Profiles of consumer decision-making styles. In terms of learning styles, the Namibian Generation Y consumers reported mild preferences for Activist Learning Style, moderate preferences for Sensing Learning Style, moderate preferences for Visual Learning Style, and mild preferences for Sequential Learning Style. The study found significant differences between ethnic groups as well as age groups. Further, the study concluded that the three major Universities in Namibia produced millennials with different learning style preferences. The five Dimensions of the Hofstede Cultural Instrument namely Power Distance [PDI], Uncertainty Avoidance [UAI], Masculinity [MAS], Individualism [IDV], Long-Term Orientation [LTO] were found applicable to Namibia Generation

Y consumers. Through coefficient analysis, the three major cultural dimensions among the Namibian Generation Y Consumers were identified as Long-Term Orientation, Uncertainty Avoidance and Power Distance. This is a significant finding in support of the notion that African cultures tend to accept power inequalities in societies. Once again, the study concluded that the three major Universities in Namibia produced millennials with different cultural values. In terms of e-literacy the study concluded that the Namibian Generation Y consumers had a strong "ability to respond to large volumes of media", "to access information from all sources including the Internet", in addition, they "know how to keep records of their favourite websites", and "can compose and send emails". The study found that the e-literacy distribution is significantly different for millennials who studied at the three major Universities in Namibia. Furthermore, the study found significant relationships between consumer decision-making styles, learning styles, cultural dimensions and e-Literacy. The study concluded that cultural dimensions had the most influence on the Namibian Generation Y consumers' decision-making followed by e-literacy and learning styles. The results prompted implications for guiding effective marketing strategies and policy making in dealing with the Y Generation consumers in Namibia and beyond including recommendations pertaining to market segmentation and communication strategies consistent with the identified consumer decision making styles of the Namibian Generation Y consumers. In addition, the identified learning styles, cultural dimensions and e-literacy capabilities of this generation is deemed important in assisting Institutions of higher Education for instance to devise teaching, learning and assessment strategies because effective classification of student's learning styles is often associated with effective teaching and pass throughput. Furthermore, given that the Born Frees, Exiles and Remainees were found to display the same consumer decision-making styles, learning styles, cultural dimensions and eliteracy capabilities; marketers, Government and local authorities alike are encouraged to use strategies and policies that are inclusive in nature in order to integrate these youths into the society.

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#### **ABBREVIATIONS**

**AC** Abstract Conceptualisation

**AE** Active Experimentation

**ANOVA** Analysis of Variance

**AR** Abstract Random

**AS** Abstract Sequential

**CE** Concrete Experience

**CR** Concrete Random

**CS** Concrete Sequential

**CSI** Consumer Styles Inventory

**ELT** Experiential Learning Theory

**GSD** Gregorc Style Delineator

ICT Information and Communications Technology

**IDV** Individualism

**ILS** Index of Learning Styles

**IUM** International University of Management

**KMO** Kaiser-Mayer-Olkin

**LTO** Long Term Orientation

MANOVA Multivariate analysis of variance

**MBTI** Myers-Briggs Type Indicator

MAS Masculinity

NBS Namibia Business School

**NUST** Namibia University of Science and Technology

PC Portable Computer

**PCA** Principal Component Analysis

**PDI** Power Distance Index

**RO** Reflective Observation

**SD** Standard Deviation

SPSS Statistical Package for Social Sciences

**UAI** Uncertainty Avoidance Index

**UNAM** University of Namibia

UK United Kingdom

**US** United States

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#### **DECLARATION**

I, Efigenia M.M. Semente, declare hereby that this study is a true reflection of my own research, and that this work, or part thereof has not been submitted for a degree in any other institution of higher education.
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#### 1. Chapter 1 - Introduction

#### 1.1 Introduction

Generation theorists propose that as the macro-environment changes, there are concomitant and distinctive changes in patterns of consumer behaviour (Strauss and Howe, 1999; Bekewell and Mitchell, 2003). The macro-environment consists of Political/Legal, Socio-cultural, Ecological, Demographic, Economic, International and Technological factors (Kotler, 2009; Lamb et al., 2013). Given the influence of these forces on consumers, today's consumers are more sophisticated, inquisitive and discriminating. They are no longer willing to tolerate substandard products and they insist on high-quality products that are healthy or save time and energy (Lamb, 2013). Generation Y, Millennial Generation or simply Millennials are defined as a group of people born roughly between 1982 and 2002 (Strauss and Howe, 1999), and are considered to have developed authentic and therefore distinctive consciousness (Lukina, 2016). Generation Y consumers, are considered to be digital natives, consequently they are likely to have developed a different shopping style compared to previous generations (Bakewell and Mitchell, 2003).

Youth in general is known to expend considerable amounts of money and time on technology related devices and the Internet. This in turn influences their purchasing decision-making. In order to respond to such challenges and opportunities in the marketplace, marketers need to be aware of these trends.

Sproles and Kendall (1986) have identified eight basic mental characteristics of consumer decision-making as follows: (1) Perfectionism or high-quality consciousness; (2) Brand Consciousness; (3) Novelty-fashion consciousness; (4) Recreational, hedonistic shopping consciousness; (5) Price Consciousness; (6)

Impulsiveness; (7) Confusion from over choice; (8) Brand-loyalty orientation towards consumption. A Consumer Style Inventory (CSI) with 40 Likert-scaled items has also been developed to measure these cognitive and personality characteristics (Chase, 2004; Sproles & Kendall, 1986).

The term Learning Style, as is used by Kolb (1984) and Honey and Mumford (1986), describes an individual's preferred or habitual ways of processing knowledge and transforming that knowledge into personal knowledge. According to Kolb (1984), individual differences derive from the psychological attributes that determine the strategies a person chooses while processing information. Felder & Silverman (1988), proposed a learning style model with four dimensions which was later revised. Today it is called the Index of Learning Styles (ILS) which is a self-scoring web-based instrument that assesses preferences on four scales of the learning style model as follows: sensing/intuitive (Sen/Int), visual/verbal(Vis/Vrb), active/reflective (Act/Ref), and sequential/global (Seq/Glo) (Felder & Solomon, 1997, Felder & Spurlin, 2005).

#### 1.1.1 Orientation of the study

It is important for marketers to analyse how consumers make decisions and the factors that influence such decisions. Durvasula *et al.* (1993) state that profiling consumers' decision-making styles helps advertisers and marketers to understand their purchasing behaviour. Marketers can use them to segment the consumers into various niches for product positioning. In this twenty-first century, consumers are bombarded by advertisement messages in print or in electronic format that provide a lot of information to the consumers. In addition to this, there is a large variety of products, services and distribution channels available to choose from (Sachdeva, 2015). Given that consumer decision-making varies from one person to another and from one

generation to another, it was important to identify a way so that marketers can understand the consumer decision-making of specific segments or generations. Hence, it is crucial for marketers, advertisers, institutions and government and government agencies alike to identify the factors that influence consumer decision making styles of the Y Generation consumers in Namibia given the importance of this generation to the economy. This knowledge will help marketers, advertisers and decision makers in many ways: (a) to customise their offerings according to the needs of the Y Generation Consumers in Namibia, (b) to position and advertise as per this generation decision-making style, (c) to understand their buying pattern (d) to frame strategies to improve the operational efficiency of their businesses or institutions. Thus, this research is not only set to contribute to the theoretical literature but may serve as a stepping stone towards businesses' competitive advantage and the country's economic growth.

#### 1.2 Statement of the problem

The world has become as connected as a village and new technologies are becoming the norm of the day. Technological advancement, socio-cultural, demographic and other macro environmental factors have brought changes to how people consume around the world. These changes severely affect how marketing is conducted today (Kotler, 2009).

Generation Y consumers are becoming sharper in terms of their social, academic and marketing focus due to marketing's vastness, its growing impact on the society and its increasing emphasis on buying power (Lukina, 2016). Generation Y consumers have been brought up in an era where shopping is not regarded as a simple act of purchasing. The proliferation of retail outlets and product choice has resulted in

a retail culture where shopping has taken on new experiential dimensions. Consequently, Generation Y consumers are likely to have developed a different shopping style compared with previous generations (Lehtonen and Mäenpää, 1997; Blackwell and Mitchell, 2003). Despite this, there have been very few studies, which focus on consumer decision- making styles of Generation Y consumers and which offer guidelines to marketers and retailers on how these consumers make their choices. For instance, Sproles and Kendal (1990) investigated consumer decisionmaking styles and learning styles, Blackwell and Mitchell (2003) investigated consumer decision making styles and gender, Chase (2004) investigated consumer decision-making and mind styles(learning styles) and Hsu (2012) investigated consumer decision-making styles and learning styles. Although the process of consumer decision-making is known to relate to learning as a process and to information acquisition, sharing and processing – which is perceived to be influenced by one's culture and one's ability to use technology related devices to access and share information; few studies have focused on exploring these relationships, thus leaving a vacuum in the literature.

By exploring the relationships between consumer decision making styles and individual learning styles, culture and electronic-literacy (e-literacy) of the Namibian Generation Y consumers, this study not only adds value to the body of knowledge of consumer behaviour and consumer education, but offers guidance to researchers, marketing practitioners and policy makers for future research in formulating effective strategies when targeting this new segment of consumers.

#### 1.3 Purpose of this Study

The purpose of this study was to profile the decision-making styles of the Generation Y consumers in Namibia and to investigate the relationship between their decision-making styles and their a) learning styles, b) culture and c) e-literacy.

#### 1.4 Significance of the study

Profiling the Namibian Generation Y consumer decision-making, as well as establishing whether or not a relationship exists between their consumer decision - making styles and learning styles, culture and e-literacy is of paramount importance, as this knowledge not only leads to understanding their purchasing behaviour and attitudes, but helps marketers and educators to better equip themselves to meet the needs of this cohort of consumers in terms of product decisions, advertising decisions, distribution decisions and even education/training curriculum decisions.

Given that few studies have assessed these key constructs (decision -making styles, learning styles, culture and e-literacy) in a single study, this study is set to robustly add value to the body of knowledge on consumer behaviour, which may lead to the formulation of specific marketing strategies and model(s) that may result in organisations acquiring competitive advantage. In addition, creating this knowledge about this specific generation's learning styles, culture and e-literacy also presents an opportunity to Curriculum and Programme Developers, Training Authorities and Institutions to create a framework or model in which their training should be devised and conducted.

#### 1.5 Limitations of the study

There are limitations regarding this particular research. The data mainly depended on the respondents' self-reported surveys; their answers simply had to be considered as reliable.

Although the sample was chosen from among the population of young people in Windhoek attending the universities every attempt has been made to include all possible ethnic groups in order to represent the wider population.

#### 1.6 Delimitation

Only undergraduate students at the three main Universities namely: UNAM (University of Namibia), IUM (International University of Management) and NUST (Namibia University of Science and Technology) were targeted.

#### 1.7 Generation Y Consumers also known as Millennials

The concept of Generations classification is supported by previous studies that describe five generations with the following birth dates: G.I. Generation (1901-1924), the silent Generation (1925-1942), the Boom Generation (1945-1690), Generation X (1961-1981) and the Millennial Generation or Generation Y (1982-2002) (Howe, Strauss, Matson, 2000).

The term 'generation' is meant to put people into a coherent group based on the years in which they were born and who thus share their models of behaviour, thoughts, feelings and attitudes (Pilcher 1994, Lukina, 2016). Generation Y, the Millennial generation or simply Millennials are defined as a group of people born roughly between 1982 and 2002 (Strauss and Howe, 1999), and who are said to have developed authentic and therefore distinctive consciousness (Lukina, 2016). Today in

2017 the oldest representatives of the mentioned demographics are about 37 years old with the youngest being just over 15 years old.

#### 1.9 Outline of the Study

The remaining chapters are structured as follows:

Chapter 2: Literature Review discusses Generation Y as a consumer segment, the Consumer decision-making process and the Consumer Style Inventory as tools to measure consumer decision making preferences among Generation Y consumers in Namibia. The Learning Styles Inventory is discussed as a tool to profile consumers learning styles. The Hofstede Cultural Index as well as e-Literacy Index as factors that influence consumer decision-making form part of this chapter.

**Chapter 3: Research Methodology** describes the research methodology used leading up to the development of the survey questionnaire.

Chapter 4: Results: Data Presentation and Analysis presents the results including descriptive statistics through tables and graphs.

**Chapter 5: Discussion** presents the discussions on a question-to-question basis.

**Chapter 6: Conclusions and Recommendations** concludes the study and provides recommendations for future research and marketing practice.

#### 2. Chapter 2: Literature Review

#### 2.1 Introduction

Consumers are decision makers and as such organisations need to be aware of how they make decisions in order to influence their decision making to the organisation's advantage (Reynolds and Olson, 2001). This chapter starts by defining Generation Y once more and discusses the various concepts underpinning this study and concludes by presenting the visual representation of this study as well as the research questions and hypotheses for this study.

#### 2.2 Generation Y

Even though there is a variety of terms and interpretations of this generation's title assignment in the literature, the terms coined by Strauss and Howe (1999), 'Millennial generation' and 'Millennials' refer to Generation Y and are accepted widely (Lukina, 2016).

Generation Y, Millennial Generation or simply Millennials are defined as a group of people born roughly between 1982 and 2002 (Strauss and Howe, 1999), and they are considered to have developed authentic and therefore distinctive consciousness (Lukina, 2016). They are also known as the 'net generation', the 'dot.com generation', and as well as the 'echo boomers' (Nicholas, 2008; Lamb, 2013). Today in 2017 the oldest representatives of this group are about 37 years old with the youngest being just over 15 years old.

Generation Y is the largest generation to hit global markets since the Baby Boomers. In the United States, it has reached 70 million and 13.8 million in UK. For instance, US teenagers spend \$ 97. 3 billion (annually) of which two-thirds goes on

clothing and almost 10 per cent on personal care (Bekewell and Mitchell, 2003). They have been characterised as special, team-oriented, high achieving, pressured, confident, sheltered, international, feedback-oriented, optimistic for the future, and concerned about the environment and human rights (Hsu, 2012).

Generation Y is becoming the ideal target market for many reasons, for instance, they have recently become the largest generation in world history and are therefore set to be the largest spenders, they have a basic desire for anything new and fresh (Koutras, 2006, Goldgehn, 2004). Over the coming half century they are to be major innovators of how society operates, including the infrastructure within all of society's parts, and they therefore require special marketing attention (DeChane 2014, Lukina, 2016).

#### 2.2.1 Namibian Generation Y Classification

The Election Watch Organisation in Namibia refers to Generation Y as people born between 1982 and 2014. The Namibian youth can be further classified into: **Born Frees** (Millennials born after the Independence date of 1991); **Exiles**(Millennials born in exile or born in the country but who left for exile during the liberation struggle); **Remainees** (Millennials born during the liberation struggle and who remained in the country) (2015 Election Watch).

For the purpose of this study the Namibian Generation Y consists of the segment with ages ranging between 18 and 34 in these three sub-categories (Born Frees, Exiles, and Remainees). Table 1 presents the age ranges among the Generation Y or the Millennial Generation consumers.

Table 1: Variations among Age Ranges of Generation Y/Millennial Generation

Label	Age Range	Authors
Millennial generation	1982-	Atkinson, 2004
Millennial generation	1980-1991	Cohen,2009
Millennial generation	1982-2002	Elam et al., 2007
Millennial generation	1982-	Fogarty, 2008
Millennial generation	1977-1992	Glass, 2007
Millennial generation	1973-1995	Henrie & Taylor, 2009
Millennial generation	1982-2002	Howe et al., 2000
Millennial generation	1982-	Maples & Hans, 2008
Millennial generation	1982-2002	McAlister, 2009
Millennial generation	1982-	Millioron, 2008
Millennial generation	1977-1999	Nowak et al, 2006
Millennial generation	1992	Tucker, 2006
Millennial generation	1977-1994	Xu, 2008
Net generation	1977-1997	Kim & Ammeter, 2008
GenerationY	1977-1994	Bakewell & Mitchell, 2003
GenerationY	1980-1996	Caruso & Westberg, 2008
Generation Y	1978-2001	Downing, 2006
Generation Y	1978-1995	Lai & Liang, 2009
GenerationY	1977-1994	Morton, 2002
Generation Y	1977-1994	Sullivan & Heitmeyer, 2008
Generation Y	1981-	Szamosi, 2006
Generation Y	1980-1989	Taylor, 2008
Generation Y	1977-1994	Wolburg & Pokrywezynski, 2001
Generation Y	1981-2001	WC., Hsu, 2012

Source: Adapted from (Hsu, 2012)

Table 1 indicates the age variations of Generation Y or Millennial Generation as per the different authors. This table demonstrates the diverse opinion researchers have about the specific birth date limits of the Generation Y cohort. Based on these diverse opinions about the birth date limits of the Generation Y cohorts, most studies have adopted what is now the common understanding of the Generation Y age range that is roughly between 1980 – 2002. Next, the consumer decision-making process and the consumer decision-making styles are discussed.

#### 2.3 Consumer Decision-Making Process

Consumer decisions are not made in isolation. They are influenced by both internal and external forces: On a personal or internal level, this refers to the consumer's existing knowledge, which is based on learning and prior experiences as well as personal characteristics such as intellectual capacity, personality, attitude, perception, and motives that determine the way in which problems and decisions are handled, and on an external level, a consumer is influenced by marketing-related and socio-cultural actors (Schiffman and Kanuk, 2004, Du Plessis et al. 2007, Jobber 2010, Parumasur & Roberts-Lombard 2012). In order to better understand different consumer needs based on their decision-making related cognition and emotion, studies have been conducted in various disciplines such as psychology, sociology, sociology and anthropology (Hsu, 2012).

Mpinganjira, Dos Santos, Botha, Du Toit, Erasmus, Maree and Mugobo (2013) describe the consumer decision-making process in terms of specific stages. Like any consumer cohort, Generation Y consumers partake in the decision-making process. It is important to gain insight into the consumer decision-making process in order to understand the perceptions and expectations of the Generation Y market segment.

The consumer decision-making process as presented by various authors such as (Cant and Machado, 2004; Koutras, 2006, Kotler, 2009, Schiffman and Kanuk, 2010, Sachdeva, 2015) is a five-stage model with the stages explained as follows:

1. Problem Recognition: According to the above-mentioned authors, the buying decision process starts when the buyer recognises a problem or a need triggered by internal or external stimuli. The marketer will have to communicate the new level of function or benefit of the product in such a way that the customer feels

the advantage of owning it. According to the authors, marketers need to identify the circumstances that trigger a particular need by gathering information from a number of consumers. They can then develop marketing strategies that trigger common interest.

2. Information Search: After recognising the need for a product, the

- consumer searches for alternatives that may fulfil his or her needs and desires.

  Consumers are likely to select products or services that match their predetermined set of alternatives. Consumer information sources are personal sources, commercial sources, public sources and experimental sources. The relative size and influence of these sources vary with the product category and the buyers' characteristics. By gathering information, the consumer learns about the competing brands and their features.
- **3. Evaluation of Alternatives**: In this step, the consumer evaluates the alternatives. Consumers use various evaluation criteria to arrive at a set of possible products that can be considered for purchase. According to the authors the various important choice criteria set by the consumers while evaluating a specific product or its alternatives are attributes of the product, benefits of the product, beliefs and attitudes of the consumers, brand image of the product and their involvement levels.
- **4. Purchase Decision:** Once the consumers have searched and evaluated the various alternatives, they finally purchase the product. The purchase process itself involves several more decisions regarding vendor decision, quantity decision, timing decision and payment method decision.
- **5. Post-Purchase Behavior:** after purchasing the product, the consumer might feel some level of satisfaction or dissatisfaction. If the product falls short of the buyer's expectation, the buyer will be disappointed and dissatisfied. If it meets the

expectations, the buyer will be satisfied. If it exceeds the expectations, the buyer will be delighted. According to Kotler (2009) the consumers might face cognitive dissonance, which is a discomfort felt by the buyer due to post-purchase conflict. Figure 1 below depicts the model of consumer decision-making.

### Consumer Decision Making Model

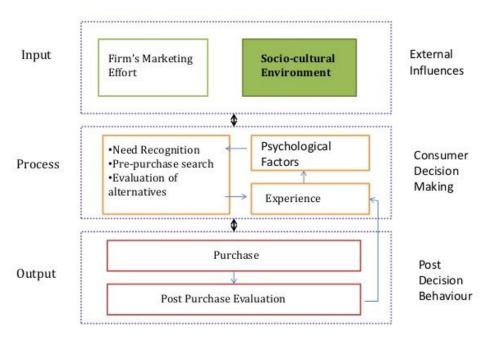


Figure 1: A Model of Consumer Decision Making

Source: Adapted from Schiffman L., Kanuk L., (2004)

As depicted in figure 1 above, the consumer behaviour model has three stages namely, the input stage, the process stage and the output stage. In **the input stage**, the psychological factors inherent in each individual (motivation, perception, learning, personality and attitudes) affect how the external inputs influence the consumer's recognition of a need, pre-purchase search for information, and evaluation of alternatives. Schiffman and Kanuk (2004) further state that "...external factors can influence buying and they include the marketing mix offered by a business as well as dynamic uncontrollable factors such as social, cultural and economic change" (p.19). **The process stage** of the model focuses on how consumers make decisions. In terms

of the **output stage**, Schiffman and Kanuk (2004) identify two closely related post-decision activities, namely purchase behaviour and post-purchase evaluation in which purchase behaviour might involve repeat buying. Furthermore in line with previous authors, they support the cognitive dissonance theory, which suggests that "discomfort or dissonance occurs when a consumer holds conflicting thoughts about a belief or an attitude towards an object" Schiffman and Kanuk (2004, p80). Hence marketers often use marketing strategies in order to decrease cognitive dissonance and maximise repeat purchases. In order to rationalise their predisposition to buying, consumers on the other hand display certain attitudes, preferences or mind-sets that are referred to in the literature as consumer decision-making styles. For instance, Sproles and Sproles (1990) suggest that learning is a function of the decision-making process and that consumer cognitive learning involves a process of personal problem solving to make decisions. Therefore it is expected that consumers display specific decision-making styles.

Next, the consumer decision-making styles which are key constructs in this study are presented, including not only criticism made of the Consumer Styles Inventory (CSI) but also a summary of studies conducted using the CSI.

#### 2.4 Consumer Decision making Styles

Consumer decision making and consumer decision-making styles are a widely researched area. Several studies have linked it to information-search and processing. For instance, earlier research suggest that consumer purchasing decision-making is triggered by stimuli and that repeated participation in consumer decision-making increases an individual's knowledge and experience – thus relating it to consumer

learning (Howard, 1963; Howard & Sheth, 1969). Another initial consumer decision making model is the Engel-Kollat-Blackwell model (1968); although it has been subjected to scrutiny over time to improve its descriptive ability, the model is linked to consumer learning theory and emphasises the information-search process (Hirschman, 1989). Other pioneering models include the Bettman (1979) and the Holbrook & Hirschman (1982) that describe the information processing theory of consumer choice and the experiential consumer behaviour respectively. Of late, researchers have begun to assess the relationship between consumer decision-making and other constructs including learning styles, culture, age, and other demographics (Hofstede 1980, 2001, Singhapakdi et al, 1994, Sample, 1999, Bekewell & Mitchell, 2003, Felder & Spurlin, 2005, Su, 2006, Kim & Ammeter; Hsu 2012). Sproles and Kendall (1986) proposed that consumers approach the marketplace with specific styles of consumer decision making.

Sproles and Kendall (1987, p.7) defined a consumer decision-making style as "a mental orientation characterising a consumer's approach to making choices". Based on previous consumer literature, Sproles and Kendal (1986) organised consumer characteristics specifically related to consumer decision-making in order to differentiate consumer styles from the psychographics or lifestyle approach, the consumer typology approach, and the consumer characteristic approach in the consumer-interest field. As discussed earlier, as a result, they identified eight basic mental characteristics of consumer decision-making and a Consumer Styles Inventory (CSI) with 40 Likert-scaled items was developed to measure these cognitive and personality characteristics (Chase, 2004, Sproles & Kendall, 1986).

Originally, the instrument contained 50 items to measure general orientations towards shopping, and in 1986 Sproles and Kendal narrowed this down to a 40 item

instrument, calling it the consumer style inventory. By conducting the CSI with over 500 high school students in the southwest states of America using factor analysis, an eight-factor CSI model was confirmed to be directly linked to consumer choices. The CSI dimensions as they are known are presented below. Table 2 depicts the CSI dimensions, description and factor composition.

Table 2: CSI Description and Factor composition

CSI Dimensions	Consumer Style	Description of Consumer Style	Factor Composition (Items)
1	Perfectionism or high-quality consciousness	Characteristic that describes a perfectionist, high-quality conscious consumer who searches for the very best quality in products, and is not satisfied with a "good enough" product.	<ul> <li>Getting very good quality is very important to me</li> <li>When it comes to purchasing products, I try to get the very best or the perfect choice</li> <li>In general, I usually try to buy the best overall quality</li> <li>I make special effort to choose the very best quality products</li> <li>I really don't give my clothing purchases much though or care</li> <li>My standards and expectations for products I buy are very high</li> <li>I shop quickly, buying the first product or brand I find that seems good enough</li> <li>A product does not have to be perfect, or the best, to satisfy me</li> </ul>
2	Brand Consciousness	Characteristic identifying those consumers who buy more expensive, well-known national brands. They believe that a higher price means better quality, and prefer best-selling advertised brands.	<ul> <li>The well-known national brands are best for me</li> <li>The more expensive brands are usually my choice</li> <li>The higher the price of a product, the better its quality</li> <li>Nice department and specialty stores offer me the best products</li> <li>I prefer buying the best-selling brands</li> <li>The most advertised brands are usually very good choices</li> </ul>
3	Novelty-fashion consciousness	Characteristic indicating consumers who are fashion and novelty conscious, and seek out new things; for them it is important to be up-to-date with styles.	I usually have one or more outfits of the very newest style I keep my wardrobe upto-date with the changing fashions Fashionable, attractive styling is very important to me To get variety, I shop different stores and choose different brands It's fun to buy something new and exciting
4	Recreational, hedonistic shopping	Characteristic identifying those consumers who find shopping pleasant and shops for the fun.	<ul><li>Shopping is not a pleasant activity to me</li><li>Going shopping is one of</li></ul>

	consciousness		the enjoyable activities of my life  Shopping the stores wastes my time  I enjoy shopping just for the fun of it  I make my shopping trips fast
5	Price Consciousness	Characteristic identifying those consumers who look for sale prices and are conscious of lower prices. They are concerned with getting the best value for their money, and are likely to be comparison shoppers.	<ul> <li>I buy as much as possible at sale prices</li> <li>The lower price products are usually my choice</li> <li>I look carefully to find the best value-for-money</li> </ul>
6	Impulsiveness	Characteristic identifying those consumers who do not plan their shopping, and are unconcerned about how much they spend.	I should plan my shopping more carefully than I do I am impulsive when purchasing I often make careless purchases I later wish I had not I take time to shop carefully for the buys I carefully watch how much I spend
7	Confusion from over choice	Characteristic identifying those consumers who have difficulty making choices, and experience information overload.	There are so many brands to choose from that I often feel confused  Sometimes it is hard to choose which stores to shop at  The more I learn about product, the harder it seems to choose the best  All the information I get on different products confuses me
8	Habitual-Brand- loyalty orientation towards consumption	Characteristic identifying those consumers who have favourite brands and stores. They stick to their brand and go shopping each time they shop.	<ul> <li>I have favourite brands I buy over and over</li> <li>Once I find a brand I like, I stick with it</li> <li>I got to the same stores each time I shop</li> <li>I change brands I buy regularly</li> </ul>

Source: Adapted from Sproles and Kendal (1986, 1987, 1990)

Table 2 describes the CSI dimensions and provides a holistic CSI Factor Composition which comprises 40 items spread throughout eight categories or dimensions as discussed in 2.4 above.

# **2.4.1** Critiques of the Consumer Style Inventory

Several studies have been conducted to investigate the applicability of the Consumer Styles Inventory (Sproles and Kendall, 1986) to other cultural populations and some concerns have emerged. For example, Walsh et al. (2001) suggested different shopping situations (such as different retail hours) might influence the outcome of results. However, a New Zealand study by Durvasula et al., (1993) suggested that differences in shopping environments did not influence results. Their findings were similar to those by Sproles and Kendall's (1986). Other concerns raised were related to language translations and grammatical issues related to the instrument, the nature of the sample used (the use of secondary students as opposed to undergraduates) and the reported factor loadings which were below 0.6 (Chase, 2004).

Despite these criticisms, the research by Sproles and Kendall (1986) was ground-breaking work in the field of consumer behaviour. Many researchers to date have used the CSI scale and found significant results. Table 3 below depicts previous studies related to the Consumer Style Inventory.

Table 3: Summarised Lists of Previous Studies Related to the Consumer Styles Inventory

	Year	Authors	Country	N	Population	Total	Language	Items	No. of
						Variance			Factors
1	1986	GB Sproles &	U.S	482	High School	46%	English	40	8
		Kendal							
2	1992	Hafstrom et	S. Korea	310	Undergraduate	47%	Korean	38	8
		al.							
3	1993	Durvasula et	New	210	Undergraduate	56%	English	34	7
		al.	Zealand						
4	1996	Lysonski et al.	US	108	Undergraduate	57.5%	English	34	7
			New	210	Undergraduate	54.6%	English	34	7
			Zealand						
			India	73	Undergraduate	52.2%	English	34	7
			Greece	95	Undergraduate	53.7%	Greek	34	7
5	1998	Fan & Xiao	China	271	Undergraduate	35%	Chinese	29	5
6	2001	Siu et al.	China	357	Undergraduate	-	Chinese	25	8
7	2001	Walsh,	Germany	455	Adult	51.9%	German	38	7
		Mitchel et al.							
9	2002	Canabal	S India	173	Undergraduate	35%	English	38	5
	2003	Bakewell et	UK	244	Undergraduate Gen	-	English	40	8
		al.			Y females				
10	2004	Hung	Taiwan	446	Adult	-	Chinese	18	7
11	2004	Chase	US	416	Beginning college	-	English	40	8
					students				
13	2006	Bauer et al.	Germany	121	Age 18-28	65.0%	German	21	4
			UK	120	Age 18-28	64.8%	English	21	4
14	2006	Wesley et al.	US	527	Adult	57%	English	39	8
15	2006	Hou& Lin	Taiwan	123	Working Female	-	Chinese	55	10
16	2006	Gonen &	Turkey	202	Undergraduate	41%	English	30	5
		Ozmete							
17	2007	Kavas &	Turkey	229	Undergraduate	54%	English	36	8
		Yesilada							
18	2008	Ariffin et al.	Malaysia	149	Undergraduate	61.5%	English	23	8
19	2008	Tai	China	454	Adult	63.1%	English	26	8
20	2008	Kwan et al.	China	264	Undergraduate	66.4%	Chinese	27	7

21	2009	Hanzaee	Iran	338	Male Undergraduate	57.8%	Persian	40	10
22	2009			354	Female	60.1%	Persian	40	11
					Undergraduate				
23	2009	Mokhlis	Malaysia	419	Undergraduate	44.4%	English	28	7
24	2009	Mokhlis &	Malaysia	122	Male	59.2%	English	40	8
		Salleh			Undergraduate				
25	2010	Zhou et al.	China	440	Undergraduate	-	Chinese	39	8
26	2010	Mishra	India	425	Postgraduate	66.7%	English	38	10
27	2010	Anić et al	Macedonia	304	Students	-	English	40	8
28	2012	Hsu	Taiwan	1050	Undergraduate	-	Chinese	40	8
29	2013	Lysonski &	India	120	Young Consumers	-	English	40	8
		Durvasula							
30	2013	Potgieter et al.	South	344	Adults from two	-	English	40	10
			Africa		ethnic groups				
31	2014	Makgosa	Botswana	1000	Retail shoppers	-	English	38	8
32	2014	Tanksale et al.	India	254	Undergraduate	-	English	40	7
33	2015	Nayeem &	Australia	214	Young and Adult	-	English	45	8
		Casidy			consumers				

*It is important to note the following from table 3:* 

- The most popular research target populations were undergraduate university students.
- Factor analyses were utilised to determine the basic characteristics or the applicability of consumer decision-making styles models, ranging from 4 to 11 factors.
- The sample size varied from 122 to 602

The Sproles and Kendall (1986) CSI is the most commonly used measure to describe consumer decision making styles. Few studies have focused on exploring individual consumer decision-making styles, learning styles and culture, although attempts have been made to compare consumer decision-making characteristics of consumers across countries such as the example of

the Lysonski, Durvasula and Zotos (1996) study that investigated the decision-making styles of consumers in Greece, India, New Zealand, and the United States.

Although consumer decision-making styles present a relatively consistent pattern of cognitive and affective responses, national culture has been proven to impact significantly on individual values and attitudes (Hofstede, 1980, Anić et. al, 2010), thus culture is expected to have a significant influence on consumer decision-making styles (Leo, Bennett & Härtel, 2005 and Anić et al 2010).

Since learning and culture are expected to influence consumer decision making styles, it is important for marketers to translate this knowledge into actionable marketing strategies. A variety of marketing strategies are available to influence consumer decision-making.

# 2.4.2 Reliability and Validity of the Consumer Style Inventory (CSI)

The CSI has been validated in several cultures (Siu and Hui, 2001). Durvasula, Lysonski, and Andrews (1993) confirmed a high level of reliability and validity of the CSI instrument via the use of a sample of 210 undergraduate students in New Zealand. Hafstrom, Chae, and Chung (1992) employed the CSI and compared the differences between the decision-making styles of young US and Korean consumers. They found that five of the styles, *Brand Consciousness, Quality Consciousness, Recreational Shopping Consciousness, Impulsiveness, and Confused-by-Overchoice*, are common in both cultures. Furthermore, a study conducted by Lysonski, Durvasula, and Zotos (1996) compared the factor structures of the Scale across four countries (United States, New Zealand, Greece and India). The findings have provided a general level of support for the Sproles and Kendall (1986) CSI.

Hittleman and Simon (2005) suggest that reliability means that individual scores from an instrument, usually expressed in the form of a reliability coefficient ranging from 0.00 to 1.00 should be nearly the same, or stable, on repeated administrations of the instrument. Sproles and Kendall (1986) tested the internal consistency reliability of the CSI. According to Radder et al. (2006), Hair et al. (1998), Sekaran (2003), Orcher (2007) reliability coefficients lower than 0.60 are considered to be poor, but acceptable for exploratory research, whereas coefficients in the 0.70 range are deemed acceptable, and those over 0.80, good. Table 4 provides reliability coefficients comparison for previous studies on consumer decision-making styles.

**Table 4: Reliability Coefficients Comparison for Studies on Decision-Making Styles** 

Year	1986	1992	1993	1996			199	2001	2001	2001	2002
Country	U.S.	S.Korea	New Zealand	U.S	India	Greece	8 Chi	Chin a	German	Taiwa n	India
Authors	Sproles	Hafstro	Durvasul	Lyse	onski e	et al.	na	а	У	<b>"</b>	Canabal
	& Kendal l	m et al.	a et al.	,			Fan & Xia o	Siu et al.	Walsh et al	Lin et al.	Canabai
Profiles of Consumer Styles (PCS)											
Perfectionistic (High Quality) (factor1)											
Brand Conscious	.74	.77	.75	.72	.61	.65	.59	.73	.75	.85	.70
(factor 2)	.75	.84	.59	.63	.71	.68	.60	.70	.73	.88	.77
Novelty- Fashion (factor 3)	.74		.75	.75	.72	.64		.77	.71	.85	
Recreational- Shopping Conscious( factor 4)	.76	.70	.82	.85	.45	.61		.76	.65	.87	.47
Price-Value Conscious (Factor 5)	.48	.31	.50				.59	.44		.70	
Impulsive (Factor 6)	.48	.54	.71	.68	.41	64		.50	.70	.83	.59
Confused by Overchoice (Factor 7)	.55	.54	.66	.69	.64	.55		.59	.75	.71	
Habitual, Brand-Loyal (Factor 8)	.53	34	.58	.62	.51	.34		.46			
Time-Energy Conserving		.35									
Time Conscious							.62				
Information Utilization							.55				
Variety Seeking											

Table 4 (continued)

Year	2009	2009	2010	2010	2012	2013	2014	2015
Country	Turkey	Malaysia	India	Macedonia	Taiwan	SA	India	Australia
Authors	Kavas & Yesilada	Mokhlish	Mishra	Anić et al	Hsu	Potgieter et al.	Tanksale et al.	Nayeem & Casidy
Profiles of Consumer Styles (PCS)								
Perfectionistic (High Quality) (factor1)	.77	.67	.81	.78	.81	.78	.72	.62
Brand Conscious (factor 2)	.80	.83	.67	.77	.78	.70	.63	.55
Novelty- Fashion (factor 3)			.72	.74	.80	.70	.70	.58
Recreational- Shopping Conscious( factor 4)	.71	.65	.95	.85	.75	75	.75	.63
Price-Value Conscious (Factor 5)	.57		.71	.61	.80	.62		.57
Impulsive (Factor 6)	.47	.65	.78	.55	.67	.75		.71
Confused by Overchoice (Factor 7)	.58	.59	.85	.75	.69	.80	.64	.65
Habitual, Brand-Loyal (Factor 8)	.77	.52	.62	.79	.47	.59	.62	.56
Time-Energy Conserving	.56							
Time Conscious	.50							
Information Utilization		.42						
Variety Seeking								
	1			1	l	1	1	

The reliabilities of the CSI Scale, according to Sproles and Kendall (1986), ranged from 0.48 to 0.76. The scores of item-total correlation on all items were greater than Cronbach's alpha of 0.60. This confirms the reliability of the instrument. A summary of Cronbach's alpha coefficients established in previous studies is shown in Table 4 above. The coefficient values presented in table 4 range from 0.31 to 0.88

which suggest an acceptable and reliable scale for the instrument in most cases. Some studies used fewer than eight factors or components and hence the dashes shown in some of the factors indicate that such factors were not used in that specific study.

#### 2.4.2.1 Factor Analysis of the Consumer Styles Inventory (CSI)

The Principal component analysis (PCA) and factor analysis (FA) are essential statistical procedures applied to a set of variables in order to discover which variables can be reduced and clustered together, using the existence of shared variance, as defined by the intercorrelations among a set of measures (Mertler & Vannatta, 2004; Field, 2005, Leech et al, 2005; Tabachnick and Fidell 2007; Hsu, 2012). Factor loadings are obtained from PCA and FA, and the value of a factor loading is interpreted as the Pearson correlation coefficient of an original variable, with a factor ranging from 0 to ± 1.00 (Mertler & Vannatta, 2004; Leech et al, 2005; Tabachnick and Fidell 2007; Hsu, 2012). In order to determine how many items to retain, the most widely accepted criterion developed by Kaiser is that an item with an eigenvalue greater than or equal to one (1.00) should be retained. Other criteria that can be used for determining the components include the scree test, total variance, and the assessment of model fit (Mertler & Vannatta, 2004; Leech et al, 2005; Tabachnick and Fidell 2007; Hsu, 2012).

In Sproles and Kendall's (1986) study, PCA with orthogonal varimax rotation methods was used to classify eight factors which explained 46% of the variance by having all their eigenvalues above 1.0. Each factor only included items with a loading above 0.40 and Cronbach's alpha for each factor was above 0.48. Table 5 presents a summary of the factor loadings of previous studies that have used the CSI.

Table 5: Factor Loadings of factor analysis for studies using the Consumer Style Inventory

Year	Authors	Country	Factor Loadings Range	Number of
				factors
1986	Sproles & Kendall	U.S.	0.40 - 0.75	8
1992	Hafstrom et al	South Korea	0.31 – 0.84	8
1993	Durvasula et al.	New Zealand	0.20 - 0.83	8
1998	Fan & Xiao	China	0.55 - 0.60	5
2001	Siu et al.	China	0.18 – 0.87	8
2001	Walsh et al.	Germany	0.42 – 0.77	7
2002	Lin et al.	Taiwan	0.51 – 0.85	8
2006	Canabal	India	0.47 – 0.77	5
2007	Bauer et al.	U.K.	0.54 - 0.91	4
2009	Kavas & Yesilada	Turkey	0.42 – 0.76	8
2009	Mokhlis	Malaysia	0.51 – 0.75	8
2010	Mishra	India	059 – 0.85	10
2010	Anić et al	Macedonia	0.55 – 0.87	8
2012	Hsu	Taiwan	030 - 080	8
2013	Potgieter et al.	South Africa	0.50 - 0.80	10
2014	Tanksale et al.	India	0.46 - 0.75	7
2015	Nayeem & Casidy	Australia	0.55 – 0.71	8

Table 5 provides Factor Loadings of factor analysis for studies using the Consumer Style Inventory. The PCA with orthogonal varimax rotation become the dominant method to assess the validity of Sproles and Kendal's (1986) consumer decision-making styles in different settings. In most cases the questionnaires were administered to samples of college students or adults (Hafstrom et al, 1992; Walsh et al, 2001; Mishra, 2010; Hsu, 2012, Nayeem & Casidy, 2015). With the exception of Hafstrom et al (1992), Durvasula et al. (1993) and Siu et al. (2001) all the other studies found acceptable factor loadings.

# 2.4.2.2 Confirmation of the consumer decision-making styles for the Consumer Styles Inventory

In the literature, PCA has been the most popular approach to confirm consumer decision-making styles using the CSI with different cultural samples. It is however worth noting that when comparing the scale reliabilities and the list of confirmatory factors across the different cultural samples, the initial eight factors, such as novelty-fashion, price-value, and habitual/brand-loyal consciousness, are not consistent in all cultures (table 4) (Hafstrom et al 1992; Fan & Xiao, 1998; Walsh, 2001; Hsu, 2012).

# **2.4.3** Consumer Style Inventory, Market Segmentation and Target Marketing Strategies

According to Plummer (1974) marketing segmentation has existed ever since people have been selling products to one another. Given the fact that people are different and do things for different reasons there is a need to identify the differences and group them in such a way that a better understanding of the population under consideration emerges.

Segmentation involves dividing a market into distinct groups with distinct needs, characteristics, or behaviour that might require separate products or marketing mixes (Kotler and Keller, 2009; Lamb et al., 2013). Among the very well know segmentation variable are geographic, demographic, generational-based, behavioural and price vs quality sensitivity. With Segmentation come Target Marketing and Positioning.

Target Marketing involves selecting the best target market out of the many identified segments whereas Market Positioning refers to creating a favourable image in a consumer's mind about your product in relation to competing brands, through

marketing communication, branding, relationship marketing, corporate social responsibility and much more (Kotler and Keller, 2009; Lamb et al., 2013; Larsen, 2010)

The following are the common target market approaches or strategies that a marketer could select to reach the identified segments: undifferentiated (mass) marketing, differentiated (segmented marketing), concentrated (nice) marketing, and micromarketing (local or individual) marketing. Figure 2 depicts these different target marketing approaches.

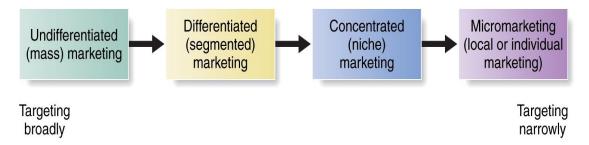


Figure 2: Target Marketing Strategies or Approaches:

Sources: Adapted from (Kotler and Keller, 2009)

Figure 2 above depicts the different target marketing strategies available to marketers, starting from the broad base of targeting to a much more narrow approach. It is important to stress that there is a link between consumer decision-making styles and segmentation, target marketing and market positioning strategies because marketers can devise specific market segmentation, target market and market positioning strategies to address the specific consumer decision-making styles of consumers, to their advantage.

Since learning is said to influence consumer decision-making styles, learning styles and the various theories that form the foundation for the learning styles theory are discussed next.

# 2.5 Learning Styles

# 2.5.1 Learning styles defined

Learning styles are "the way in which each person absorbs and retains information and/or skills" (Dunn, 1984, p.12). Learning is a process that brings together cognitive, emotional and environmental influences and experiences for acquiring, enhancing, or making changes in one's knowledge, skills, values, and worldviews (Sample, 1999, Căpită, 2014). Learning is not an "end product," but a "process" by which changes take place in an individual, and "each person's learning style is unique and involves how the mind takes in and holds on to information" (Chase, 2004, p.16 citing Dunn, 1984). Another definition is that learning styles "are a description of attitudes and behaviours that determine the preferred way of learning of an individual" (Honey & Mumford, 1986, 1992, Graf, Kinshuk & Liu, 2009). Kolb (1984) stresses the fact that learning is a process, and therefore a learning style is represented by "individual differences in learning based on the learner's preference for employing different phases of the learning cycle" (Kolb & Kolb, 2005).

## 2.5.1.1 Learning Styles and other disciplines including consumer decision-making

Studies in learning styles initially developed as a result of interest in individual differences (Curry, 1983). Since the introduction of learning styles, the number of studies using them has grown dramatically. According to Wang (2007), learning Style took its name in the 1970s.

Different authors had a different view of the concept but in general, emphasis was placed on "life styles" and on personality type's concepts. Wang (2007) stresses that learning styles, together with other constructs such as decision making and problem-solving style, mind style, perceptual style and thinking styles, with each

addressing different aspects and features of human cognition, were postulated to depict the variances among individuals.

The term Learning Style, as is used by Kolb (1984) and Honey and Mumford (1986), describes an individual's preferred or habitual ways of processing knowledge and transforming the knowledge into personal knowledge. According to Wang (2007) the first integrative model that depicted the traits of learning styles is the three-layer "onion" model developed by Curry (1983). The innermost layer of the model is composed of measures of personality dimensions. The middle layer comprises style measures of information processing, and the outermost layer is composed of measures addressing each individual's instructional preferences. Wang (2007) further stresses that there are two important points in understanding learning styles. The first is that learning styles do not suggest one's learning ability. The second is that different learning styles should not be judged as being better or worse; they are simply different.

# 2.5.2 Kolb Learning Styles (1984)

According to Kolb's (1984) experiential learning theory (ELT), a learning cycle is divided into four stages: (1) concrete experience (CE) - learning by feeling; (2) active experimentation (AE)- learning by doing; (3) reflective observation (RO) – learning by watching; and (4) abstract conceptualisation (AC) – learning by thinking (Chapman, 2009, kolb, 2005; Hsu 2012). These stages form the central principle by which it is possible to identify four types of learning styles as Deverting (CE/RO); Assimilating (RO/AC); Converging(AC/AE); and Accommodating (AE/CE) (Chapman, 2009, Kolb, 2005, Hsu, 2012).

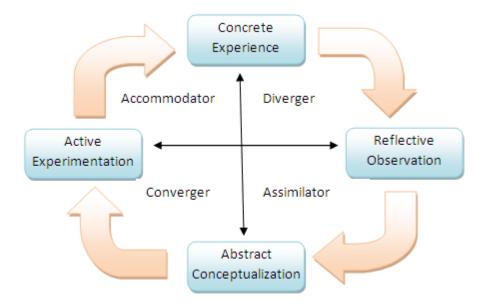


Figure 3: Kolb's learning cycle model

Source: Adapted from (Kolb, 1985)

Figure 3 depicts Kolb's stages or cycles of learning which, with other theories, laid a foundation for the learning styles theory.

# 2.5.3 Gregorc's Mediation Styles.

Gregorc (1984) developed a different measure for determining learning styles, called the Gregorc Style Delineator (GSD), based upon a model similar to Kolb's. The measure consists of ten sets of four words. The respondents are asked to rank the four words in each set. The results of the GSD categorise respondents along a concrete-abstract and a random-sequential continuum, thus producing four types of learning styles: concrete sequential (CS), abstract sequential (AS), abstract random (AR), and concrete random (CR). The learning style categories along with a brief description of each are presented in Table 6, Gregorc Mediation Style Categories.

**Table 6 : Gregorc Mediation Style Categories** 

Concrete Sequential	Abstract Sequential	Concrete Random	Abstract Random
Pragmatic, objective, instinctive, logical,	Reflective, analytical, conventional	Concrete Random (CR)	Sensitive, empathic, holistic,
methodical and deliberate. CS learners can be	and methodical. AS learners view	Intuitive, adventurous, instinctive	cautious, perceptive, spiritual.
perfectionists with an eye for detail and	life in abstract terms, relating more	and impulsive, "in" the physical	Abstract random learners use their
discrepancy. They focus on tangible results, and	to signs, symbols, knowledge,	world but looking beyond it. Able	feelings and emotions to make sense
their inventiveness is directed towards making	concepts and ideas than to physical	to "zoom out" from events to see	of their experience. They are focused
things work better, rather than creating entirely	events. They dissect their thoughts	the circumstances framing them.	on close relationships, establishing
novel things. People who are strongly CS prefer	into branching patterns of sections	Focuses on both process and	strong rapport with others. Their
busy, stable and orderly environments, and	and sub-sections, which seem two-	product, concerned with	creativity is expressive in nature and
practical pursuits. Focus on product.	dimensional. AS-style creativity	applications, methods and	often includes musical or artistic
	expresses itself in the synthesis and	underlying causes. CR-style	talent. People strong in AR thinking
	development of models and	creativity produces original and	prefer emotionally meaningful
	theories. They prefer quiet, orderly	unique inventions. They prefer	experiences and commitments, in
	environments and intellectual	experientially stimulating	vibrant, active environments.
	challenges. Focus on process over	environments featuring change,	
	product.	novelty and competition.	

Source: Adapted from (Gregorc, 1982)

# 2.5.4 Jungian Psychological Type and Myers-Briggs Type Indicator (MBTI).

In his theory of psychological types, Jung (1875-1961) developed a holistic framework for describing differences in human adaptive processes. He began by distinguishing between those people who are oriented toward the external world and those oriented toward the internal world. In his view, human individuality develops through transactions with the social environment that reward and develop one function over another. Jung (1875-1961)saw that this specialised adaptation is in service of society's need for specialised skills to meet the differentiated, specialized role demands required for the survival of and development of culture (Kolb, 1984). Hence he proposed the eight personality types as depicted in Figure 4 below.

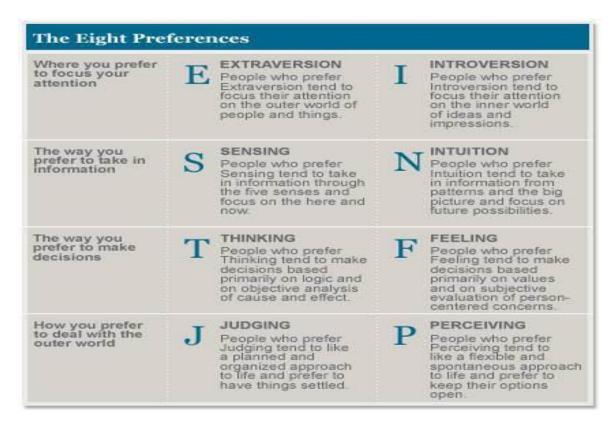


Figure 4: Jung's Psychological Types

Sources: Adapted from (Kolb, 1984)

Figure 4, depicts the eight Carl Jung's learning preferences. Carl Jung's (1875-1961) theory of psychological types serves as the historical backbone for the learning styles model identified with the Myers-Briggs Type Indicator (MBTI). The results of the MBTI, classify people as extraverts or introverts, sensors or intuitors, thinkers or feelers, and judgers or perceivers. Individual student's preferences in each of these categories can then be combined to form any of 16 different learning style types (Felder, 1997, Wilson, 2011). While the MBTI is actually a personality assessment, the information that is gathered has often been related to how people think, learn, and make decisions. In reality, all people exhibit characteristics of each of the four categories, but individuals display their uniqueness in the extent to which they employ these characteristics and the individual's effectiveness in doing so (Reiff, 1992, Wilson, 2011).

# 2.5.5 Visual, auditory, and bodily-kinesthetic learning style preferences.

The perceptual learning style elements, sometimes referred to as learning modalities, include preferences for learning through visual, auditory, and bodily-kinesthetic processes. People with a preference for the visual modality favour visual stimuli and prefer tasks that involve seeing, such as watching a demonstration, reading a book, and observing a diagram or chart. People who favour auditory stimuli and display a preference for hearing or listening to information, are characterised by a preference for the auditory. People reveal bodily-kinesthetic preferences through their desire to be physically involved in the learning task, through movement and touch(CAPSOL® Styles of Learning, nd; Zapalska & Dabb, 2002; Wilson, 2011).

#### 2.5.6 Felder and Silverman

Felder and Silverman developed a self-scoring web-based instrument called the Index of Learning Styles (ILS) that assesses preferences on four scales of the learning style model (Felder & Silverman, 1988, Felder & Soloman, 1997, Felder & Spurlin, 2005). By employing both Kolb's (1984) experiential learning theory (ELT), Jung's psychological theory, and modality theory with visual-auditory-kinaesthetic formulation, Felder and Silverman (1988) proposed a learning style model with the following four dimensions: **sensing/intuitive** (Sen/Int), **visual/verbal** (Vis/Vrb), **active/reflective** (Act/Ref), and **sequential/global** (Seq/Glo) (Felder & Spurlin, 2005, Hsu 2012). A 44-item Index of Learning Styles (ILS) questionnaire focusing on engineering students was designed and revised by Felder and Soloman (1997) in order to assess preferences with 11 questions in each dimensions of the Felder-Silverman model. Detailed characteristics of these learning styles are given in table 7. Felder and Silverman (1988) recommended some corresponding teaching styles with preferred learning styles, shown in table 8, to accommodate each individual learning style effectively.

**Table 7: Felder Silverman Model of Learning Styles** 

	Learning Style	Characteristics of Learning Styles
Sent/Int (SI)	Sensing	Think with concrete and practical orientation toward facts and procedures
	Intuitive	
		Think with abstract, conceptual, innovative orientation toward theories and underlying meanings
Vis/Vrb (VA)	Visual	Learn with the preference for visual presentations of presented materials, such as pictures, diagrams, and flow charts
	Verbal	Charts
		Learn with preference for written nd spoken explanations
Act/Ref (AR)	Active	Learn by trying things out and enjoy working in groups
	Reflective	Learn by thinking things through and prefer working alone
Seq/Glo (SG)	Sequential	Use a linear thinking process and learn in small incremental steps
	Global	Use a holistic thinking process and learn in large leaps

Source: Adapted from Felder and Silverman (1998)

Table 7 depicts Felder and Silverman (1988) model of learning styles. It is critical to pinpoint the fact that a preferred learning style may require a specific teaching style which, for marketing purposes, could be used as the preferred way to reach the specific individual with the marketing stimuli. This is based on the assumption that specific marketing stimuli trigger specific marketing reactions (Kotler and Keller, 2009). For instance if the preferred learning style is Active, the corresponding teaching style is said to be participation (Hsu 2012). This suggests that such individuals will likely respond to a marketing stimulus that requires participation or involvement from the individual. Based on this assumption, Table 8 below depicts

the dimensions of learning styles and the corresponding teaching styles that could be used to trigger specific reactions from the individual.

**Table 8: Dimensions of Learning and Teaching Styles** 

Preferred Learning S	tyles	<b>Corresponding Teaching Styles</b>		
Sensing/Intuitive	Perception	Concrete/Abstract	Content	
Visual/Auditory	Input	Visual/Verbal	Presentation	
Active/Reflective	Processing	Active/Passive	Participation	
Sequential/Global	Understanding	Sequential/Global	Perspective	

Source: Adapted from Felder and Silverman (1998) Graf, Kinshuk, & Liu (2009)

# 2.5.7 Previous studies using the Index of Learning Style (ILS)

The Index of Learning Style (ILS) questionnaire is a self-scoring instrument and is available at no cost. Several studies have translated the ILS into different languages and administered it to undergraduate students, for classifying learning-style preferences, in various countries, including the United States, Brazil, Puerto Rico, Jamaica, China, United Kingdom, Taiwan and South Africa (Bacon, 2004; Cook & Smith, 2006; Dee, Nauman, Livesay, & Rice, 2002; Felder & Spurlin, 2005; Graf, Viola, Leo, & Kinshuk, 2007; Ku & Shen, 2009; Litzinger, Lee, Wise, & Felder, 2005; Litzinger et al., 2007; Livesay & Dee, 2005; Livesay et al., 2002; McChlery & Visser, 2009; Van Zwanenberg, Wilkinson, & Anderson, 2000; Wang, 2007; Zhang & Lambert 2008; Zywno, 2003, Teater, 2011). Due to it being a widely used and accepted tool to measure learning styles, the study has used the ILS to profile the learning styles of the Namibian Generation Y consumers.

# 2.5.8 Reliability and Validity of the Index of Learning Styles (ILS) Questionnaires

Felder and Spurlin (2005) compared the studies of Livesay et al (2002), Spurlin (2002), van Zwanenberg et al. (2000), Zywno (2003), and other researchers administering the original Felder-Solomon ILS (1997) to their engineering undergraduate and faculty members in different countries, including native and nonnative English speaking settings, to test the validity and reliability of the ILS. Their findings revealed that t-retest correlation coefficients for all scales of the instrument varied between 0.7 and 0.9 for an interval of four weeks between test administrations and between 0.5 and 0.8 for an interval of 7 - 8 months, and were significant at the 0.05 level or better. Cronbach alpha coefficients were all greater than the criterion value of 0.5 for attitude surveys in three of the four studies, and were greater than that value for all but the sequential-global dimension in the fourth, as shown in Table (9).

"Factor analyses supported the conclusion that the active-reflective, sensing-intuitive, and visual-verbal scales are orthogonal but the sequential-global and sensing-intuitive scales show some association. That association is consistent with the theory that underlies the Index of Learning Styles and does not compromise the validity of the instrument for its principal intended purpose of designing balanced instruction" (Felder & Spurlin, 2005, p. 110, Hsu, 2012, p. 56).

**Table 9: Reliability Coefficients Comparison for Studies on Learning Styles** 

Year	Author	N	Act/Ref	Sen/Int	Vis/Vrb	Seq/Glo
	nsistency Reliability					
2000	Van Zwanenberg et al.	284	0.51	0.65	0.56	0.41
2002	Livesay et al	242	0.56	0.72	0.60	0.54
2002	Spurlin*	584	0.62	0.76	0.69	0.55
2003	Zywno	557	0.60	0.70	0.63	0.53
2004	Bacon	161	0.60	0.70	0.66	0.47
2005	Litzinger et al.	572	0.60	0.77	0.74	0.56
2006	Cook & Smith	138	0.61	0.78	0.70	0.67
2007	Litzinger et al. (original)	448	0.61	0.76	0.75	0.55
2007	Litzinger et al. (modified)	448	0.69	0.82	0.77	0.60
2009	McChlery & Visser	469	0.50	0.60	0.63	0.45
2009	McChlery & Visser	266	0.53	0.63	0.66	0.46
Test-retest	Reliability					
2003	Zywno (8 months)	124	0.683	0.678	0.511	0.507
2003	Seery et al.* (4 weeks)	46	0.804	0.787	0.87	0.725
2005	Livesay et al. (7 months)	24	0.73	0.75	0.68	0.60
2006	Cook & Smith (6 months)	47	0.75	0.81	0.6	0.81

Source: Adapted from Felder & Spurlin, 2005 and Hsu, 2012

Note: All studies were administered to college students with the 44-item ILS; samples in all studies were undergraduate.

# 2.5.8.1 Confirmation of four dimensions in Index of Learning Styles (ILS)

Felder (2010) further confirms the four dimensions in the Index of Learning Styles by indicating that the Learning Styles are preferences and tendencies students demonstrate for certain ways of taking and processing information and responding to different instructional environments. Litzinger et al. (2005, p. 2) states that "the internal consistency reliability of the scores was established through the Cronbach alpha coefficient calculated for each of the four scales of the ILS based, on the sample of 572 students" (Table 9). The Cronbach alpha values obtained in his study show a similar pattern to past studies and are comparable in magnitude to the values obtained

in three of the four studies. "The Sensing-Intuitive (S-N) scale and the Visual-Verbal (V-V) scale both were found to have reliability in excess of 0.7, whereas the Active-Reflective (A-R) and Sequential-Global (S-G) scales had Cronbach alphas of 0.60 and 0.56, respectively" (Litzinger et al. 2005, p. 2).

The findings of Litzinger et al. (2005) are consistent with previous studies on the ILS questionnaire, as supported by table 13. In addition, in Litzinger et al. (2007) the construct validity was assessed by an exploratory factor analysis and students' perception of their learning styles, and 90% or more of the students indicated the match. By using rotated principal component analysis, the studies of Litzinger et al (2005), Livesay et al. (2002), Van Zwanenberg et al. (2000), and Zywno (2003) concluded that sensing/intuitive (Sen/Int), visual/verbal (Vis/Vrb), and active/reflective (Act/Ref) dimensions can be considered as independent, but there was correlation between the sequential/global (Seq/Glo) dimension and the sensing/intuitive (Sen/Int) dimension.

#### 2.6 Cultural Dimensions on consumer decision-making

Culture has been regarded as one of the important elements in business ethical decision-making (Singhapakdi et al, 1994, Su, 2006, Kim & Kim, 2009). Culture is learned within a society, and it affects the basic values in people's everyday lives (Kim & Kim 2009). Although culture is generally defined at a societal level, culture impacts on individual behaviour. Culture can be seen to mediate between societal culture and specific individual personality (Janseen, 2010 citing Hofstede, 1991).

Understanding culture can equip individuals and organisations for the challenges of contemporary international business even within the national context (Podrug et al., 2006). Another objective of this study as presented earlier, was to profile the cultural dimensions of the Namibian Generation Y consumers using the methodology introduced by Hofstede (1980) that profiles cultural dimensions along power distance, uncertainty avoidance, individualism/collectivism, masculinity/femininity and long versus short-term orientation dimensions representing cultural differences which have been empirically confirmed in many occasions by several studies.

"Culture consists of patterns, explicit and implicit of and for behaviour acquired and transmitted by symbols, constituting achievement of human groups, including their embodiment in artefacts; the essential core of culture consists of traditional (historically derived and selected) ideas and especially their attached values...shared by almost all members of some social group" (Podrug et al., 2006, p.2). Management's practices suited for one cultural environment may bring about undesirable consequences in another. To avoid such problems modern managers have to understand the core concept of the culture (Podrug et al., 2006)

In addition to profiling Hofstede's cultural dimensions for the Y Generation consumers in Namibia, the goal of this research is to determine how their consumer decision-making styles are influenced by Hofstede's (1980) cultural dimension as this relationship is often neglected in the literature.

According to Prodrug et al. (2006) Taylor (1947), Tannerbaum and Schmidt (1973), Vroom and Yetton (1973) and others, were pioneers in academic discussions on decision-making styles although these were closely connected to leadership styles; they defined different typologies of decision-making styles.

Like organisational decision-making, consumer decision-making styles are said to be culturally contingent, in order words, they depend on the values, beliefs, attitudes and behavioural patterns of the people involved. Hence, according to Prodrug et al. (2006) at each step in decision-making, culture influences the ways managers and others make decisions and solve problems.

Besides Hofstede (1980), Trompenaars and Hampden-Turner (1993, 1997, 2011), House et al., (2004) and others also participated in better understanding and accepting national culture as a prerequisite for the comparison of national and international business, but Hofstede (1980) major contribution on cross-cultural management and other researcher fields on the global level is unquestionable (Podrug et al., 2006).

#### 2.6.1 Hofstede's cultural dimensions

Hofstede's cultural dimensions have over the years been used widely to understand consumer decision-making. Hofstede analysed a large data base of employee value scores collected by IBM between 1967 and 1973 covering more than 70 countries from which he first used the 40 largest only and afterwards extended the analysis to 50 countries and 3 regions (Hofstede, 1980, 1983, 1991, Hofstede & Bond, 1984). Hofstede (2001) lists 74 countries and regions, partly based on replications and extensions of the IBM study on different international populations. Subsequent studies validating the earlier results have included commercial airline pilots and students in 23 countries, civil service managers in 14 countries, 'up-market' consumers in 15 countries and 'elites' in 19 countries (Hofstede, 1980 - 2001).

Hofstede's (1980- 2001) work on work-related cultural dimensions has been regarded as a paradigm in the field of cross cultural studies. Specifically, his country

classification on five work-related cultural values, power distance (PDI), uncertainty avoidance (UAI), masculinity-femininity (MAS), individualism-collectivism(IDV), and Confucian work dynamics/Long-Term Orientation (LTO), have been frequently cited by researchers in the past few decades (Wu, 2006, Kim & Kim, 2009, Janseen, 2010). Table 10 describes the Hofstede Cultural Dimensions.

Several studies have attempted to profile the cultures of a nation through the use of a comprehensive survey. Such is the case of Trompenaars (1993), Schwartz (1992), and House et al. (2004), and according to Janseen (2010) the Hofstede (1980) study is wide-spread in the management literature and widely used.

**Table 10: Hofstede Cultural Dimensions** 

Cultural	Description
Dimension	
PDI	Power distance, refers to the power inequality in societies or it refers to the degree
	of equality and inequality and the extent to which less powerful members expect
	and accept unequal power and wealth distribution within a society.
UAI	The second dimension, uncertainty avoidance, refers to people's tolerance of
	ambiguity. Uncertainty avoidance reflects the degree to which the members of a
	society feel threatened by ambiguity and are rule-oriented. Cultures characterised
	by weak uncertainty avoidance have a somewhat greater willingness to take risks
	associated with new methods and procedures associated with the new application
	and will be particularly resistant to the abandonment of systems with which they are
	familiar and feel secure. There is a great emotional need for rules, either written or
	unwritten.
MAS	The third dimension, masculinity, defines the gender roles in societies. It reflects
	the degree to which the social gender roles are clearly distinct. In masculine
	cultures, males are expected to be assertive, tough and focused on material success,
	and females are expected to be tender and focused on quality of life.

	Traditional masculine goals include: earnings, recognition, and advancement,
	valuing material possessions, assertiveness and money. In feminine cultures, both
	gender roles overlap. Both men and women are expected to be modest, tender, and
	concerned with quality of life. Traditional feminine goals include: good relations
	with supervisors, peers, and subordinated; good living and working conditions; and
	employment security.
IDV	The fourth dimension, individualism-collectivism, refers to how people value
	themselves within a society. People with high individualistic values tend to care
	about self-actualization and career progress in the organisation, whereas people
	with low individualistic values tend to value organisational/group benefits more
	than their own interests. In-collectivistic value orientation, people's major concern
	is their in-group. The in-group is expected to look after an individual in exchange
	for loyalty. Individuals are very loyal to each other and resources are shared within
	the family. If a person has got a job, the rest of the family members who are
	unemployed get support.
LTO	The dimension of long term-orientation, reflects the extent to which a society
	exhibits a pragmatic future oriented perspective rather than a conventional historic
	or short term point of view. Cultures scoring low tend to be conventional and
	traditional, and pursue instant benefits and satisfaction in work related aspects.
	Cultures scoring high have thrift for investment and a long-term orientation both
	financially and psychologically. These cultures also value long-term commitment
	towards organisations and career.

Source: Adapted from Hofstede, 1980; Wu, 2006; Janseen, 2010

Table 10 provides a description of the variables or dimensions that form the Hofstede Cultural Dimensions.

# 2.6.1 Reliability and Validity of the Hofstede cultural dimensions questionnaire

The following studies have investigated the ethical attitudes of practitioners, managers or consumers using Hofstede's typology of cultural dimensions in business and advertising (Kim and Kim, 2010):

Christie et al. (2003) found a significant influence of culture on business managers' attitudes toward business ethics and practices in India, Korea, and the USA using Hofstede's typology. The study found that high individualism and low power distance strongly relate to high sensitivity to unethical activities.

Blodgett et al.'s (2001) research with marketing Professionals in Taiwan and the USA suggested that uncertainty avoidance positively affected ethical sensitivity toward various stakeholders, while power distance, individualism, and masculinity negatively affect it.

McSweeney (2002) criticised the data that Hofstede obtained from IBM employees, noting that they cannot represent national cultural values. Dorfman and Howell (1988) criticized Hofstede's (1984) uncertainty avoidance index suggesting that the items reflect three different constructs.

Dorfman and Howell's (1988) presented a new measure to supplement

Hofstede's (1984) dimensions. This measure has been used in several cross cultural
studies. Williamson (2002), however, agreed with Hofstede and rejected

McSweeney's criticism. Williamson (2002) argued that "to reject totally Hofstede's or
similar functionalist models of national culture, before more satisfactory models have
been developed, would be to throw away valuable insight. For social scientists
working within the functionalist paradigm, quantification of national culture opens up
what is otherwise a black box of cultural factors. For social scientists working outside
the functionalist paradigm, Hofstede has named and described attributes of

national culture that may be either used to describe social phenomenon or put up as a comparative yardstick for other cultural attributes" (Williamson, 2002, p.1391).

# 2.7 E-Literacy.

E-literacy has been defined in a variety of ways but it generally relates to the skill set required to make efficient use of all of the materials, tools, and resources that are available online (Martin, 2003, Martin, 2006). Given that Generation Y consumers are said to be technology savvy (Lukina, 2016), it is vital to establish the relationship between e-literacy and consumer decision making styles among Namibian Generation Y consumers. This is so because, for the purpose of purchasing decision-making online for instance, it is expected that consumers have a modicum of computer and Internet skills.

"Electronic literacy refers to literacy activities that are delivered, supported or assessed digitally through computer or other electronic means rather than on paper" (Topping, 1997, p. 4). It should not be confused with computer literacy which is applied to the knowledge and competencies in using computers generally nor should it be confused with literacy as literacy applies both an area and a level of competence with reading and writing.

Electronic literacy is multidimensional and multi focal. It is socially situated and not isolated from its context of practice since it happens in specific times and places and it is different from one context to another, depending on the culture and value of each context (Cooke & Simpson, 2008; Kress, 2003; Shetzer & Washchauer, 2000; Snyder, 2001; Warchauer, 1999, Hallajow 2015).

Among its key features, e-literacy is seen as the ability to read and write texts online, the ability to interact with texts online, using new ways to communicate with other users through online forums and social network sites. Hallajow (2015) suggests that e-literacy is influenced by the context it is practiced in, it is interrelated with the context where it is performed, and the nature of electronic literacy practice differs from one context to another, based on the nature of that context.

Brandtweiner, Donat, & Kerschbaum (2010) present a two-dimensional concept of e-literacy, consisting of basic skills like e-competence (comprising of technical use of a computer and the Internet) and advanced skills like media competence (which addresses the more cognitive skills of the respondent). For this study, e-literacy focuses on the respondent's e-competence – that is his/her ability to use a computer, a mobile application and the Internet for purchasing decision making having in mind that the basic levels of knowledge and literacy are vital for getting people online (Brandtweiner et. al, 2010). This assertion also suggests that the higher the e-competency for an individual, the greater are his/her chances of effective consumer purchase decision making. Pokpas (2014) suggests that there are electronic skills which are critical for consumer decision-making. These are described in table 11 below:

**Table 11: Electronic Skills and Electronic Literacy** 

Electronic Skills	Description
Awareness	This comprises of technology awareness, information awareness and private,
	security, legal and ethical awareness. These include the awareness of various
	ICT and how these may potentially be (economically, socially, politically,
	health, civic and culturally) beneficial for the individual and society.
	Understanding of the human, cultural, and societal issues related to technology.
	Awareness of the abundance and value of information and the nature of
	information resources. Awareness of legal and ethical issues in digital media
	and the safety risks which accompany the use of technology.
Basic Literacy	This includes basic competences in reading, writing and numeracy.
Technological	This comprises of operational skills, navigation skills and security skills:
Literacy	Interact with hardware, software, networks and various ICT devices,
	understanding the context and purpose of use. Navigate through a medium to
	obtain specific information, particularly related to internet navigation and the
	ability to find relevant information within a non-linear structure. Apply security
	measures in digital environments to minimise risk.
Information	Involves understanding and assessing information from all kinds of sources
Literacy	(identify access, organise, evaluate, interpret, analyse, synthesise and apply
	information).
Media Literacy	Involves understanding how the traditional mass media and the digital media
	are merging, combining and evolving towards a new media landscape. Ability
	to deal with content 'pushed' at the user, in a variety of digital and non-digital
	formats.

Communication	Involves speaking, listening, presenting and conveying digital information and
and Collaboration	knowledge to others; communicate and interact through online tools; participate
	in online networks; convey emotion through digital platforms; work as part of a
	team.
Real-time thinking	Refers to processing and responding to large volumes of different stimuli
	simultaneously and very quickly, which is particularly important in modern
	multimedia environments (e.g. simulations and games).
Creation of content	The ability to contribute to user-generated content by integrating and re-
	elaborating previous content and knowledge to construct new digital content by
	organising, integrating, editing, adapting, designing, inventing, applying or
	representing digital information.
Transferable	This includes a broad range of non-technical skills and attitudes: Critical
Competences:	thinking, problem-solving, sense-making, learning to learn, adaptability, self-
	regulation, responsibility, reflection, creativity, cultural awareness and strategic
	thinking.

# From table 11, **e-literacy** is comprised of the following components:

- The ability to discern technology, information and safety issues related to ICT;
- The ability to use a PC, a Tablet, Mobile Phone or any other ICT device;
- The ability to assess information from all kinds of sources;
- The ability to process and respond to large volumes of different stimuli simultaneously and very quickly;
- The ability to use search engines;
- The ability to compose, edit and send emails or send media content;
- The ability to download materials from the Internet;

- The ability to join chat rooms/Social Media;
- The ability to keep a record of favourite websites.

# 2.7.1 Reliability and Validity of the e-literacy questionnaire

Reliability and validity tests were conducted. PCA with varimax rotation was conducted and the scale was found to be suitable. The Kaiser-Meyer-Olkin Measure of sampling adequacy at 0.86 indicated sufficient items for each factor in support of the correlation matrix with Determinants of .019, suggesting collinearity and association among the items of the scale.

Since Millennials are known for being technology savvy (Bakewell and Mitchell, 20003), determining the e-literacy distribution among the Namibian Generation Y consumers as well as the relationship between e-literacy and consumer decision-making of this generation is crucial. Hence one of the objectives of this study is to determine the e-literacy distribution of Generation Y consumers in Namibia and explore the relationship between the Namibian Generation Y consumer decision-making styles and their e-literacy.

This study explores the applicability of CSI, the ILS, and the Hofstede Cultural Dimensions. Subsequently, it profiles the Namibian Generation Y consumer decision-making styles and explores the relationships between the Namibian GenerationY consumer decision-making styles and a) learning styles, b) culture, c) e-literacy, through the use of the CSI and the Index of ILS Questionnaires, Hofstede cultural dimensions and the e-Literacy questionnaire. Figure 5 gives a visual representation of this study.

# 2.8 Visual Representation of the Study Demographic Namibian Generation Y **Consumer Decision-**Factors/Moderating RQ5 variables **Making Styles** [Consumer Styles Age Inventory (CSI)] RQ1 Age Category (based on Namibian Classification of Generation Y Consumers: Born Frees, Exiles, and Perfectionism or high-Remainees) quality consciousness Brand Consciousness Gender Novelty-fashion consciousness Ethnicity Recreational, hedonistic shopping consciousness University Attended RQ2 Price Consciousness Impulsiveness Confusion from over choice Brand-loyalty **Index of Learning Styles** Sensing/intuitive Visual/verbal Active/reflective Sequential/global **Hofstede Cultural Dimensions** Power distance (PDI) Uncertainty avoidance (UAI), Masculinity-femininity (MAS) Individualism-collectivism (IDV), Long-Term Orientation (LTO), RQ4 E-Literacy Computer Internet

Figure 5: Visual Representation of the Conceptual Framework of this study

The visual representation or the conceptual framework for this study as portrayed in figure 5 above. It depicts seven (7) relationships that the study attempts to explore through hypothesis testing.

# 2.8.1 Research Questions and Hypotheses

Table 12 below sets out the five research questions and their corresponding hypotheses. Questions 1 to 4 relate to the CSI, ILS, Hofstede Cultural Dimensions and e-Literacy, and explore their relationships with the Demographic variables depicted in Figure 5, whereas research questions 5 relate to the CSI, ILS, Hofstede Cultural Dimensions and e-Literacy; it explores how the dependent variable (CSI) is influenced by each independent variable (ILS, Hofstede cultural dimensions, and e-literacy).

**Table 12: Research Questions and Hypothesis** 

pothesis 1a: The CSI is not applicable to the Namibian Generation Y
sumer decision-making.
pothesis 1b: Consumer decision-making styles are not significantly
ferent between males and females.
pothesis 1c: Consumer decision-making styles are not significantly
ferent for individuals who come from different ethnic groups.
pothesis 1d: Consumer decision-making styles are not significantly
ferent for individuals of different ages.
pothesis 1e: Consumer decision-making styles are not significantly
ferent for individuals who study in different Universities.
pothesis 1f: Consumer decision-making styles are not significantly
ferent for Born Frees, Exiles and Remainees.
por fee

Research Question 2a: Is the ILS applicable to the	Hypothesis 2a The ILS is not applicable to the Namibian Generation Y
Namibian Generation Y consumers?	consumers.
	Hypothesis 2b: Learning styles are not significantly different between
Research Question 2b: What is the distribution of	males and females.
learning styles among Generation Y Consumers in	Hypothesis 2c: Learning styles are not significantly different for
Namibia?	individuals who come from different ethnic groups.
Research Question 2c Are the learning styles	Hypothesis 2d: Learning styles are not significantly different for
significantly different when comparing their gender,	individuals of different ages.
ethnic group, age, University and age category (Born	Hypothesis 2e: Learning styles are not significantly different for
Frees, Exiles and Remainees)? If so, which categories	individuals who study in different Universities.
differ?	Hypothesis 2f: Learning styles are not significantly different for Born
	Frees, Exiles and Remainees.
Research Question 3a: Are the Hofstede's cultural	Hypothesis 3a The Hofstede's cultural dimensions are not applicable to the
dimensions applicable to the Namibian Generation Y	Namibian Generation Y consumers.
consumers?	Hypothesis 3b: Hofstede cultural dimensions are not significantly different

Research Question 3b: What is the distribution of	between males and females.
Cultural dimensions among Namibian Generation Y	Hypothesis 3c: Hofstede cultural dimensions are not significantly different
consumers?	for individuals who come from different ethnic groups.
Research Question 3c: Are the Cultural dimensions	Hypothesis 3d: Hofstede cultural dimensions are not significantly different
significantly different when comparing their gender,	for individuals of different ages.
ethnic group, age, University and age category (Born	Hypothesis 3e: Hofstede cultural dimensions are not significantly different
Frees, Exiles and Remainees)? If so, which categories	for individuals who study in different Universities.
differ?	Hypothesis 3f: Hofstede cultural dimensions are not significantly different
	for Born Frees, Exiles and Remainees.
Research Question 4a: Are the proposed 13 e-literacy	Hypothesis 4a: The proposed 13 e-literacy statements are not applicable to
statements applicable to the Namibian Generation Y	the Namibian Generation Y consumers.
consumers?	Hypothesis 4b: The e-literacy distribution is not significantly different
Research Question 4b: at is the e-literacy	between males and females.
distribution among Namibian Generation Y	Hypothesis 4c: The e-literacy distribution is not significantly different for

consumers?	individuals who come from different ethnic groups.
Research Question 4c: Is the e-literacy distribution	Hypothesis 4d: The e-literacy distribution is not significantly different for
significantly different when comparing their gender,	individuals of different ages.
ethnic group, age, University and age category (Born	Hypothesis 4e: The e-literacy distribution is not significantly different for
Frees, Exiles and Remainees)? If so, which categories	individuals who study in different Universities.
differ?	Hypothesis 4f: The e-literacy distribution is not significantly different for
	Born Frees, Exiles and Remainees.
<b>Research Question 5</b> : Is there a relationship between	Hypothesis 5a: There is no significant relationship between the learning
Consumer decision-making styles of the Generation Y	styles and consumer decision-making styles of the Generation Y consumers
consumers in Namibia and their a) Learning Styles, b)	in Namibia.
Cultural Dimensions, and c) e-Literacy Distribution?	Hypothesis 5b: There is no significant relationship between culture
If so, what is the strength of the relationships?	dimensions and consumer decision-making styles of the Generation Y
	consumers in Namibia.
	Hypothesis 5c: There is no significant relationship between e-literacy and

con	nsumer	decision-making	styles	of	the	Generation	Y	consumers	in
Nar	mibia.								

# 2.9 Conclusion

This session reviewed the literature related to key concepts and constructs underpinning this study, such as Generation Y including the Namibian classification of Generation Y. It discussed the consumer decision-making process as well as the consumer decision-making styles and the Consumer Styles Inventory, as a tool to measure consumer decision-making styles. Further, it presented the nature of learning styles as well the Index of Learning Style, as a tool for assessing learning styles. Finally, key concepts such as the Hofstede Cultural Dimensions and e-Literacy were presented.

# 3. Chapter 3: Research Methodology

#### 3.1 Introduction

Chapter 3 describes the nature of the research methodology used in this study. It includes the research design, the study population, sample design, data collection instruments and data analysis procedures.

# 3.2 Research Design

A research design is simply a framework or plan for a study used as a guide in collecting and analysing data relating to the purpose or the objectives of the research. In order to explain the association between consumer decision-making styles and learning styles as well as culture and e-literacy, a cross-sectional correlational survey design which is also known as a one-shot survey (quantitative) design was used in this study. This allowed the researcher to classify consumer decision-making styles, learning styles, cultural dimensions and e-literacy of the Generation Y consumers at a particular point in time which is an alternative to using a longitudinal design which can be used to classify the respondent's perceptions at different time intervals. Longitudinal designs tend to be time-consuming and expensive (Welman & Kruger, 2003). Figure 6 shows the stages of this quantitative design.

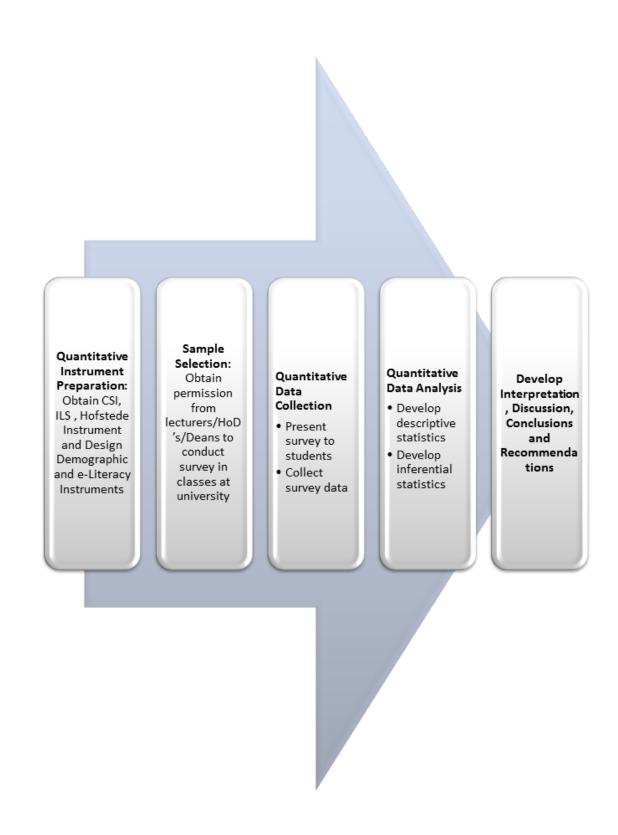


Figure 6: Quantitative Research Design

Source: (Researcher Own)

#### 3.3 Population

The Study population consists of Namibian youth between the ages of 18 and 34 (known as Generation Y). According to the 2011 Namibian Population Census, those people in the range 15-24 years of age are said to represent 23.1 % of the population, and those in the range 25-54 years are said to represent 35.9% of the population. The exact number of youths between the ages of 18-34 in Namibia is not known but is estimated to be over 30% of the population (Census 2011). Since the Generation Y consumer segment can easily be found at University campuses and colleges, the population for this study consists of Namibian youth between the ages of 18 and 34 from the three major Universities in Namibia namely (UNAM, IUM and NUST); who were said to be about 30 000 at the time of the study. This population is further classified into three strata namely: **Born Frees** (Millennials born after the Independence in 1991); **Exiles** (Millennials born in exile or born in the country but who left for exile during the liberation struggle); **Remainees** (Millennials born during the liberation struggle who have remained in the country).

#### 3.4 Sample Design and Sample Size

Non-probability convenience and judgement sampling techniques were used to select undergraduate students between the ages of 18 – 34 from University undergraduate programmes in Windhoek (UNAM, IUM and NUST). A total of 505 undergraduate students (males & females) were selected for convenience purpose.

#### 3.5 Data Collection Instruments

#### 3.5.1 The Demographic Questionnaire:

A demographic questionnaire was used to gather demographic data (Appendix 3).

The information collected from the demographic questionnaire section was used to

describe the sample including age, gender, ethnicity, languages spoken, university, marital status and income.

#### 3.5.2 The CSI instrument

The 40-item, eight-factor Consumer Styles Inventory (Appendix 4) was used to profile Generation Y consumers' decision-making styles. The CSI section contains statements that require one chosen answer for each item in order to best represent the responses and to differentiate between the consumer decision-making styles. (The responses to each statement were recorded using a five-point Likert rating scale, with 5 representing strongly agree and 1 representing strongly disagree.

#### 3.5.3 The Index of Learning Styles Questionnaire (ILS):

The Index of Learning Styles section (Appendix 5) contains 44 statements, 11 items for each of the four dimensions with each having dichotomous options (a or b) corresponding to one of the four dimensions, to measure tendencies in learning styles (Felder & Solomon, 1997). The scores are tabulated for four learning styles: (a) sensing/intuitive (Sen/Int), (b) visual/verbal (Vis/Vrb), (c) active/reflective (Act/Ref), and (d) sequential/global (Seq/Glo). Table 13 illustrates the score calculation for the learning preferences. For example the "a" responses refer to Sensing, Visual, Verbal, Active learning styles whereas the "b" responses refer to Intuitive, Verbal, Reflective and Global learning styles. For statistical analysis, the ILS uses a scoring method from 0 to 11 in each option by subtracting the "b" responses from the "a" responses in each dimension in order to obtain a score. Then, scores are tabulated for the four learning styles. For example if a total of 4 "a" responses is obtained and a total of 7 "b" responses is obtained in the Activist/Reflector Dimensions, the score is tabulated as follows:

7 - 4 = 3; since the "b" score is greater than the "a" score; the total is equal to 3b, suggesting a preference for the Reflector learning style instead of the Activist learning style. Scores between 1- 3 reflect a mild preference for one of the other dimension but essentially well balanced. Scores between 4-7 reflect a moderate preference for one dimension of the scale. Scores between 8-11 reflect a strong preference for one dimension of the scale. In this example, the total score reflects a mild preference for the Reflector learning style dimension.

**Table 13: Learning Styles Questionnaire Scoring Sheet** 

Activist/Reflecto	Sensin	Sensing/Intuitive				1	Sequential/Global			
Q  a  b	Q	а	b	Q	а	b	Q	а	b	
1	2			3			4			
5	6			7			8			
9	10	10					12			
13	14	14					16			
17	18	18					20			
21	22	22					24			
25	26	26					28			
29	30	30					32			
33	34			35			36			
37	38			39			40			
41	42			43			44			
Total (add up eac	h column)									
Activist/Reflector	Sensin	Sensing/Intuitive			Visual/Verbal			Sequential/Global		
Q a b	Q	а	b	Q	а	b	Q	а	b	
Larger – Smaller +	Letter of Lar	ger (see	below)	I	I		1	1	ı	

Note: Learning Styles Questionnaire Scoring Sheet. Adapted from Felder & Salomon notes (n.d.)

#### 3.5.4 The Hofstede Cultural Dimensions Questionnaire

Hofstede's cultural framework has been applied in a wide variety of contexts, across most of the behavioural science disciplines. In marketing, Hofstede's cultural framework has been applied in studies of advertising, global brand strategies and ethical decision making (Kim and Kim, 2010). The Hofstede instrument consists of a 48 item- semantical scale, but for consistency and adaptation to the local needs, the questionnaire has been reduced to 24-item. Instead of a semantical differential scale, the short version uses a five point Likert scale with scores ranging from1 strongly disagree to 5 strongly agree. The short version questionnaire measures Hofstede's (1984; 1990; 2001) five cultural dimensions (power distance, uncertainty avoidance, individualism, masculinity, and Long-Term Orientation). The 24 –item Hofstede cultural dimensions section (Appendix 6) was used to profile Generation Y consumers' cultural dimensions.

# 3.5.5 E-Literacy questionnaire

A 13-item e-literacy section (Appendix 7) was used to gather e-literacy or e-competency data as presented in the literature review session. This instrument was designed by the researcher.

#### 3.6 Reliability and Validity of the Instruments

Both reliability and validity are essential parts of a measuring instrument. The reliability of an instrument in concerned with the consistency of measurements from time to time, from form to form, from item to item. In essence, reliability refers to the extent to which the obtained scores may be generalised to the different measuring occasions, measurement/tests forms and measurement /test administrators. On the other hand, the validity of an instrument is usually defined as the extent to which the instrument measures what it is designed to measure or what it purports to measure.

Validity is therefore concerned with the relevance of the instrument for addressing the study's purpose and research questions. Both validity and reliability are context specific (Knapp and Mueller 2010, Welman and Kruger 2003).

Validity can be established by various validation procedures, such as construct validity, content validity, face validity, concurrent validity, and predictive validity, on the other hand, reliability can be established by test-retest reliability, internal consistency reliability, equivalent forms reliability, and scorer or rater reliability (Welman and Kruger, 2003, Hittleman and Simon, 2005, Hsu, 2012).

According to Allen (2008), content validity is concerned with the degree to which an instrument assesses all relevant aspects of the conceptual or behavioural domain the instrument is intended to measure. Criterion validity concerns how accurately an instrument predicts a well-accepted indicator of a given concept, or a criterion. Construct validity determines whether a given measure, or operational definition, actually assesses the underlying conceptual variance, or construct, that the measure is intended to represent.

Although the instruments used in this study such as the CSI, LSI and the Hofstede cultural dimensions questionnaires have been validated before in other countries, this study has assessed their reliability and validity in relation to the data collected from the Namibian Generation Y consumers through PCA and Cronbach's Alpha coefficients. This was done to establish whether or not the instruments were applicable in the Namibian setting.

# 3.7 Data Collection and analysis Procedures

#### 3.7.1 Data Collection Procedures

As already explained the researcher used a demographic survey questionnaire to gather demographic data, an e-literacy survey questionnaire to gather e-literacy or e-competency data, the Consumer Styles Inventory (CSI) to assess consumer decision-making styles, the Index of Learning Styles Questionnaire (ILS) to assess learning styles preferences and a revised Hofstede cultural dimensions questionnaire to collect data on cultural dimensions. All these instruments or sections formed part of a single data collection instrument. The survey administration took place on the premises of the three chosen Universities (UNAM, IUM and NUST). The Convenience sampling approach was used. The survey took place during August and September 2016. Relevant information about the purpose of the survey, how the results would be used, and the protection of anonymity and confidentiality were provided in advance. Finally, a sample size of 505 participants was achieved.

#### 3.7.2 Data Analysis Procedures:

Responses from the five questionnaires (Demographic, Consumer Style Index, the Inventory of Learning Styles, Hofstede Cultural Dimensions and e-Literacy) were analysed using Statistical Packages for the Social Sciences software (SPSS) version 22. Both descriptive and inferential statistics were used to examine the research questions. Descriptive statistics were used to report demographic information, measurements of central tendency (mean and median), variety (range, and standard deviation [SD]), percentage (%), and frequency (f) distribution of the survey items. And for inferential statistics, the principal components analysis (PCA) was used to establish which variables could be reduced and clustered together, and Cronbach's

alpha coefficients were used to examine the validity and reliability of the survey instruments. Further, in order to explore the interrelationships between consumer decision-making styles and learning styles, culture, e-literacy, Pearson correlation, Canonical correlation, multivariate analysis of variance (MANOVA), analysis of variance (ANOVA) were used. It is argued that if the data displays a non-normal distribution, the means and standard deviation may not give meaningful answers, therefore, in these cases the median and a nonparametric test would be preferred. Alternatively some parametric statistics, such as the two-tailed *t* test and ANOVA, are quite robust, so even a skewness of more than +/-1 may not change the results much. Hence ANOVA test were performed in this study. The statistical methods performed in this study are displayed in Figure 7 and are shown in the order in which they were conducted.

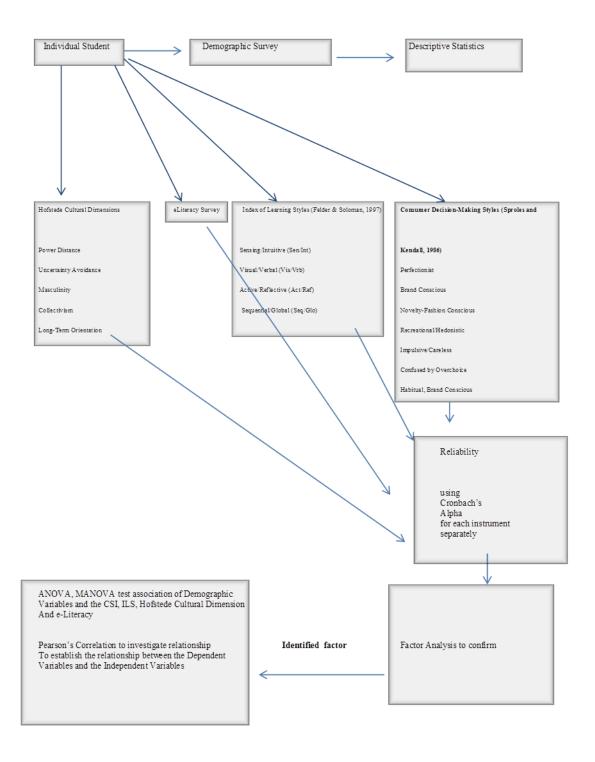


Figure 7: The Statistical analysis flow chart - Summary of Reliability Tests

Note: Canonical Correlation was performed in addition to Pearson's Correlation to measure the strength of the relationships between CSI, ILS, Hofstede Cultural Dimensions and e-Literacy

# 3.7.3 Data pre-analysis:

Before computing any inferential statistics, it was necessary to code the data into SPSS. Thereafter Exploratory data analysis (EDA) was conducted to identify possible errors in the data. Coding was done through assigning numbers to the variables, ensuring that each variable for each case or participant occupied the same column in the SPSS Data Editor, that all values (codes) for a variable were mutually exclusive, that coding rules were consistent and that problems with completed questionnaires were handled such as answers which were incomplete, unclear or doubled (Leech, 2005). For example, data were examined for variables containing missing values, given the one on one interaction with the respondents throughout the data collection process, missing values were easily identified and corrected. If the missing data were not detected during the data collection process, then these incomplete sets were not included in the dataset. The CSI, the ILS, Hofstede Dimensions and the e-Literacy Survey formed part of one data set.

#### 3.7.4 Statistical Tests

Besides factor analyses, several statistical tests were conducted to address the corresponding research questions, including Pearson correlation, Canonical Correlation, MANOVA, and ANOVA.

#### 3.7.4.1 Pearson's Correlation:

Pearson correlation is a measure of the linear correlation between two variables. Pearson correlation analysis is conducted to establish the association between two continuous variables through Pearson Correlation coefficients (r) ranging from -1 to 1, negatively or positively. The size of the absolute r value indicates the strength of the relationship, showing a perfect correlation with the value of 1 or -1, while 0 as no linear relationship. The commonly used cut off values are that an r value of + 0.1 represents a small effect, a value between + 0.3 and  $\pm$  0.49 indicates a

medium effect, and a value greater than ± 0.5 indicates a large effect (Field, 2005). Needless to say, the closer the coefficient is to +1, the stronger the correlation. The closer the coefficient is to -1, the weaker the correlation (Carver &Nash, 2000, Chase, 2004, Leech, 2005). Pearson's correlation was conducted to "assess the basic association between an individual consumer's decision-making style(s) and their learning style(s), cultural dimensions, and e-Literacy. "Correlation is a special case of regression ...Pearson's correlation also shows the linear relationship between two variables that have been measured on interval or ratio scales" (Vogt, 1999, p. 211, Chase, 2004). The CSI were the dependent variables and each statement from the ILS, Hofstede Cultural Dimensions and e-Literacy were the independent variable.

#### 3.7.4.2 MANOVA:

The one- way MANOVA was employed to compare several continuous response variables with a single factor. In this case, it was used to evaluate the dependent variables which were the consumer decision-making styles, the learning styles, the cultural dimensions and the e-literacy components based on independent variables such as the participants' demographic information including gender; age, age category, ethnicity, as well as the university in question.

#### 3.7.4.3 ANOVA:

In addition, the ANOVA with post-hoc Bonferroni tests were used as followup tests to compare the mean scores of each diverse group and determine how groups differed from each other.

#### 3.7.4.4 Factor Analysis:

Exploratory factor analysis was performed to determine whether some factors might be reduced or grouped together and to determine whether some variables might be related. Varimax rotation is used to simplify the expression of factor(s) in terms of just a few major items each. The actual coordinate system is unchanged; it is the orthogonal basis that is being rotated to align with those coordinates. Varimax rotation of factors is "orthogonal rotation of the axes in a factor analysis which maximises the variances of the factors" (Vogt, 1999, p. 304, Chase, 2004). For factor analysis, factors should load 0.60 or higher, items with lower factor loadings should be reduced (Hair et al., 1998, Sekaran, 2003, Chase, 2004, Radder et al., 2006). Kim and Mueller (1978) suggest that the main reason for using orthogonal rotation is that it is much simpler to understand and to interpret than other methods.

#### 3.7.4.5 Canonical Correlation

Canonical Correlation is a multivariate analysis of correlation. Canonical is the statistical term for analysing latent variables (which are not directly observed) that represent multiple variables (which are directly observed). It is the analysis of multiple-X multiple-Y correlation. The Canonical Correlation Coefficient measures the strength of association between two Canonical Variates. Canonical Correlation was selected to measure the strength of the relationship between the Dependent Variable (CSI) and the Independent Variables (ILS, Hofstede Cultural Dimensions and e-Literacy) in a single analysis as compared to Pearson's correlation which is a measure of the linear correlation between two variables only.

# 3.8 Research Questions, Variables and Corresponding Analysis Types

In line with the research questions presented in chapter 2, table 14 provides the list of independent and dependent variables used in the study as well as the proposed statistical analysis methods.

Table 14: Research Questions, Variables and Analysis Types

	Number of  Nya Analysis Types						
Research Questions	IVs	DVs Analysis Type					
<ol> <li>a. Is the CSI applicable to the Namibian Generation Y consumer decision making? b. What are the consumer decision-making styles of Generation Y Consumers in Namibia? c. Are consumer decision-making styles significantly different when comparing their gender, ethnicity, age, University and age category (Born Frees,</li> </ol>	40, five-point Likert scale Gender, Age, ethnicity, age category, University,	8 PCSs	Principal component  One-way MANOVA ANOVA, Pearson Correlation				
Exiles and Remainees)? If so, which categories differ?	Born frees, exiles, remainees						
a. Is the ILS applicable to the Namibian     Generation Y consumers? b. What is the     distribution of learning styles among Generation	44, Dichotomous		Principal Component				
Y Consumers in Namibia? c. Are the learning styles significantly different when comparing their gender, ethnic group, age, University and age category (Born Frees, Exiles and Remainees)? If so, which categories differ?	Gender, Age, ethnicity, age category, University, Born frees, exiles, remainees	4 Styles: AR, SI, VA, SG	One-way MANOVA ANOVA, Pearson Correlation				
3. <b>a.</b> Are the Hofstede's cultural dimensions applicable to the Namibian Generation Y consumers? <b>b.</b> What is the distribution of Cultural dimensions among Namibian Generation	24, five-point Likert Scale		Principal Component				
Y consumers? c. Are the Cultural dimensions significantly different when comparing their gender, ethnic group, age, University and age category (Born Frees, Exiles and Remainees)? If so, which categories differ?	Gender, Age, ethnicity, age category, University, Born frees, exiles, remainees	5 Dimensions: PDI, UAI, MAS, IVDLTO	One-way MANOVA ANOVA, Pearson Correlation				
4. <b>a.</b> Are the proposed 13 e-literacy statements applicable to the Namibian Generation Y consumers? <b>b.</b> What is the e-literacy distribution	13, five-point Likert scale		Principal Component				
among Namibian Generation Y consumers? c. Is the e-literacy distribution significantly different when comparing their gender, ethnic group, age, University and age category (Born Frees, Exiles and Remainees)? If so, which categories differ?	Gender, Age, ethnicity, age category, University, Born frees, exiles, remainees	13 statements	One-way MANOVA ANOVA, Pearson Correlation				
5. Is there a relationship between Consumer decision-making styles of the Generation Y	AR, SI, VA,SG	8 PCSs	Pearson Correlations				
consumers in Namibia and their a) Learning Styles, b) Cultural Dimensions, and c) e-Literacy Distribution? If so, what is the strength of the relationships?	PDI, UAI, LTO,MAS, IVD, s		Canonical Correlations				
	13 e-literacy statements						

Note: IV: Independence variable. DV: Dependence variable. MANOVA. Multivariate Analysis of Variance. ANOVA: Analysis of Variance. PCS: Profiles of Consumer decision-making styles. AR: Active-Reflective; SI: Sensing-Intuitive; VA: Visual-Verbal; SG: Sequential-Global. PDI: Power Distance Index; UAI: Uncertainty Avoidance Index; MAS: Masculinity; IDV: Individualism; LTO: Long-Term Orientation.

Table 14 provides the list of research questions, the Independent and Dependent variables used in the study as well as the respective proposed statistical tests and analysis methods used.

#### 3.9 Research ethics

All participants' identity was kept confidential. The participants were informed of the purpose and of benefits of the study, how data were to be used and all procedures to be followed to keep information confidential. Both an introductory cover letter and a consent form (Appendix 1) agreement were provided with explanations about the study and an opportunity for respondents to terminate their participation at any time without any obligation. The questionnaires were coded by numbers rather than by names in order to ensure anonymity. The data was to be kept in a safe place and destroyed at the conclusion of the study to ensure confidentiality.

#### 3.10 Conclusion

The Consumer style Inventory, the Index of Learning Styles Questionnaire, the Hofstede Cultural Dimension Questionnaire, an e-Literacy questionnaire and a Demographic questionnaire were used to collect data between August and September 2016 from three major Universities in Namibia. Following on from the exploratory study of Sproles and Kendal (1986), Sproles and Sproles (1990), Chase, 2004 and Hsu (2012), the purpose of this study was to investigate the relationship between learning styles and consumer decision-making styles of Generation Y consumers in Namibia via similar statistical methods. In addition, in order fill the gap in the literature in the field of consumer decision-making, this study also aimed to explore the relationship between consumer decision-making and cultural dimensions as well as the relationship between consumer decision-making and e-Literacy distribution, among the chosen set of Generation Y consumers in Namibia. Principal components analysis using orthogonal varimax rotation was used to profile and validated the CSI, the ILS, Hofstede cultural dimensions, and the e-Literacy questionnaires. The calculation of

the Cronbach's alpha coefficient was used to establish the reliabilities of the survey instruments. MANOVA and ANOVA tests were conducted to test the hypotheses. Pearson correlation was performed to assess the basic relations between the learning styles, cultural dimensions, e-literacy and consumer decision-making style characteristics.

# 4. Chapter 4: Results: Data Presentation and Analysis

#### 4.1 Introduction

This chapter presents the reliability and validity of the survey instruments and the research results of both descriptive and inferential statistical analysis. The chapter starts by presenting the results of the demographic questionnaire, followed by the validity and reliability tests of the instruments and finally it presents the results of the hypothesis tests.

The responses from the five (5) questionnaires or sections [Demographic questionnaire section (Appendix 3), Consumer style Index section (Appendix 4), the Inventory of Learning Styles section (Appendix 5), Hofstede Cultural Dimensions section (Appendix 6) and e-Literacy questionnaire section (Appendix 7) were analysed using SPSS version 22. The data was collected at the three major Namibian Universities (Windhoek main campuses) between August and September 2016. The data was collected from a total of 505 participants with ages ranging between 18 and 34. The data was analysed using a significance level of 0.05. Table 15 below depicts the variables used in the five instruments based on categorical, ordinal and interval measurements.

Table 15: Description of the Items in the CSI, ILS, Hofstede cultural dimensions, e-Literacy and Demographic Instruments

Item	Variable Category	Items	Data Type
CSI 01 - 40	Consumer decision making	Measured consumer decision-making behaviour while making purchases	Interval Likert scale
ILS 1,5,9,13,17,21,25,29,33,37,41	Active- Reflective(AR)	Learned by trying out or thinking through	Nominal Dichotomous
2,6,10,14,18,22,26,30,34,38,42	Sensing- Intuitive (SI)	Learned by practical procedures or abstract theoretical thinking	Nominal Dichotomous
3,7,11,15,19,23,27,31,35,39,43	Visual-Verbal (VA)	Preference for visual presentation or oral communication	Nominal Dichotomous
4,8,12,16,20,24,28,32,36,40,44	Sequential- Global (SG)	Learned with either a linear or holistic thinking process	Nominal Dichotomous
Hofstede 01 - 24	PDI	Power distance, the extent to which less powerful members of society expect and accepted power inequality in societies or unequal power and wealth distribution within a society.	Interval Likert scale
	UAI,	Uncertainty avoidance, referred to the respondent's tolerance of ambiguity or how s/he felt threatened by ambiguity thus becoming rule-oriented. For example weak uncertainty avoidance results in a greater	Interval Likert scale
	MAS,	willingness to take risks.  Masculinity reflected the degree to which the social gender roles are clearly distinct. In masculine cultures, males are expected to be assertive, tough and focused on material success, and females are expected	Interval Likert scale
	IVD	to be tender and focused on quality of life. Individualism-collectivism reflected how respondents valued themselves within a society. People with high individualistic values tended to care about self-actualization and career progress in the organisation, whereas people with low individualistic values tended to value organisational/group benefits more than their own interests.	Interval Likert scale
	LTO	Long term-orientation, reflected the extent to which respondents exhibited a pragmatic future oriented perspective rather than a conventional historic or short term point of view. Low scores here suggested a conventional and traditional culture that pursues instant benefits and satisfaction. High scores suggested a culture of investment and a long-term orientation both financially and psychologically.	Interval Likert scale
E-Literacy 01-13	E-Literacy	Awareness of ICT, Usage of ICT, Information accessibility & processing interaction with various ICT platforms	Interval Likert scale
Demographic 01-12	Demographic	Gender, Age, Age category, ethnic group, university attended, current year of programme, marital status, income, parents education, whether or not own a cell phone, table, PC.	Nominal Ordinal

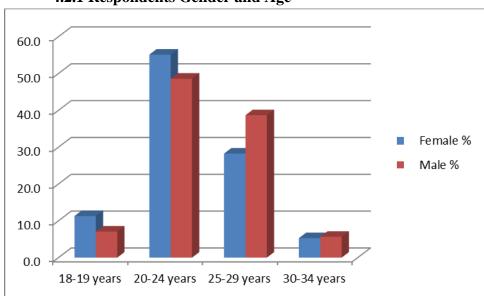
Note: Abbreviations as in table 14

Table 15 depicts items in the five (5) instruments, what they measure, and the type or scale used in this study.

# 4.2 Results of the Demographic Questionnaire

The sample demographics includes Age, Age category, Gender, Ethnic group, University Attended, Marital status, Education level of Mother and Father, Monthly Disposable Income and whether or not the respondent owns a cell phone, tablet, laptop or a PC of any /other sort.

Figure 8 depicts the respondents' gender and age.

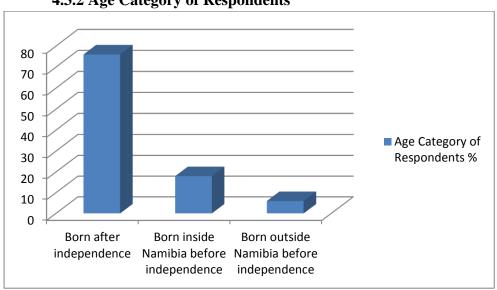


4.2.1 Respondents Gender and Age

Figure 8: Respondents' Gender and Age

In total, 505 undergraduate students aged between 18 and 34 years both males and females participated in the study. The majority 52.3% are in the age range 20-24, of which (55.1% are females and 48.6% are males). 32.7% are between the ages of 25 and 29 of which (28.3% females and 38.7% males), 9.5% are between the ages of 18 and 19 of which (11.3% females and 7.1% males) and 5.5% are between the ages of 30 and 34 (5.3% females and 5.7% males).

Figure 9 depicts the age categories of the respondents.



# **4.3.2** Age Category of Respondents

**Figure 9: Age Categories of Respondents** 

The majority of the participants76% were born after Independence (Born Frees) 18% of the respondents were born inside Namibia before Independence (Remainees) and 6% were born outside Namibia before Independence (Exiles).

Figure 10 presents the ethnic groups of the respondents.

# 4.3.3 Respondents' Ethnic Groups

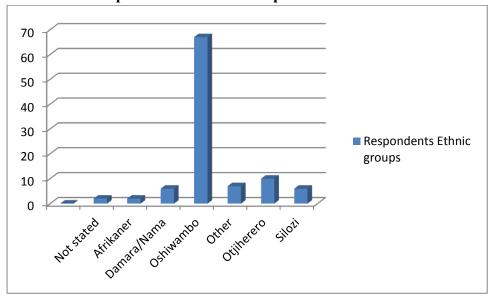


Figure 10: Respondents' Ethnic Groups

The majority of the participants 67% were from the Oshiwambo ethnic group; this can be attributed to the fact that the Oshiwambo ethnic group is the single largest ethnic group in the country (Footprint Travel Guide) and is widely distributed, followed by the OTjiherero ethnic group which accounted for 10%, "Other" accounted to 7%, the Damara/Nama and the Silozi were 6% each, the Afrikaner accounted for 2% and the remaining 2% did not state their ethnicity.

Figure 11 presents the universities attended by the respondents.

# 4.3.4 Universities Attended by the Respondents

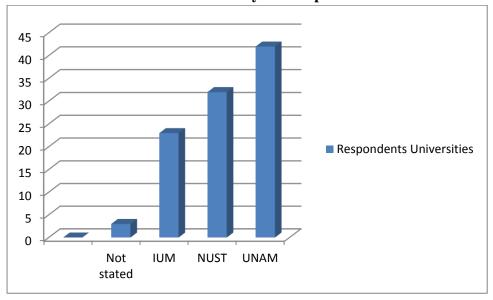


Figure 11: Universities Attended by the Respondents

UNAM's participants represented 42%, followed by 32% of NUST participants and 23% by IUM, 3% of the respondents did not state which University they attended.

Figure 12 depicts the respondents' marital status.

# 4.3.5 Respondents' Marital Status 100 90 80 70 60 50 40 30 20 10 0 No. 25 ated Oivorced Radied Single

Figure 12: Respondents' Marital Status

The majority of the participants (93 %) are single and 5% are married, 1% divorced and 1% did not state their marital status.

Figure 13 depicts the highest educational level of the respondents' mothers.

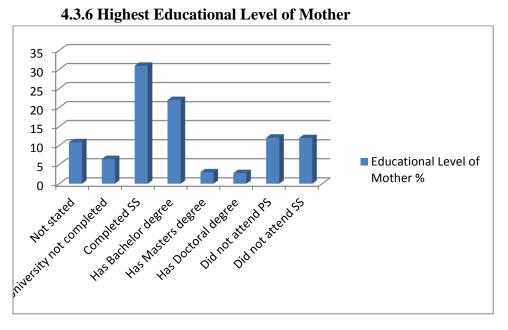


Figure 13: Highest Educational Level of Mother

The majority of mothers 30.9% have completed Secondary School education, 6.5% attended university but did not complete, 21.8% hold Bachelor degrees, 2.8% hold Master's degree, 2.88% hold Doctoral degrees, 12.1% did not attend Primary School and 12.1% did not attend Secondary School and 10.9% did not state.

Figure 14 depicts the highest educational level of the respondents' fathers.

#### 4.3.7 Educational Level of Father

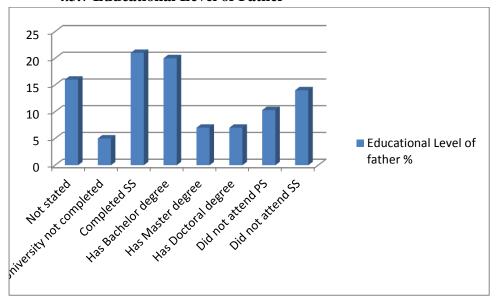


Figure 14: Educational Level of Father

The 21.4% of fathers have completed Secondary School education, 5% attended university but did not complete, 20.4% have Bachelor degrees, 6.7 have Master's degree, 7.1 have Doctoral degrees, 10.3 did not attend Primary School, 13.7% did not attend Secondary School and 15.6% did not state.

In terms of educational qualification of both mother and father, it is worth noting that 30.9 % of mothers have completed Senior Secondary education compared to 21.4% of fathers. 21.8% of mothers completed a University degree compared to 20.4% of fathers.

Figure 15 depicts the approximate monthly disposable income of the respondents.

# 4.3.8 Approximate monthly disposable income

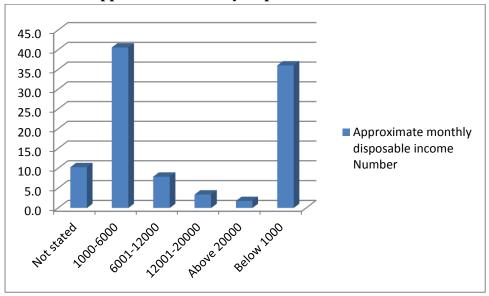


Figure 15: Approximate monthly disposable income

The largest percentage, 40.6% of the participants' monthly disposable income is between N\$ 1000 and N\$ 6000 whereas 36.0% have a monthly disposable income of below N\$ 1000. 3.4% of the participants disposable income is between N\$6001 – N\$12 000, 7.9% of the participants disposable income is between N\$12 001-20 000, 1.8% participants' disposable income is above N\$ 20 000, while 10.3% of respondents did not state what their monthly disposable income is.

Figure 16 below depicts whether or not the respondents own a cell phone, tablet, and/or laptop.

# 4.3.9 Whether or not the Respondent own a Cell phone, Tablet, Laptop,

# PC

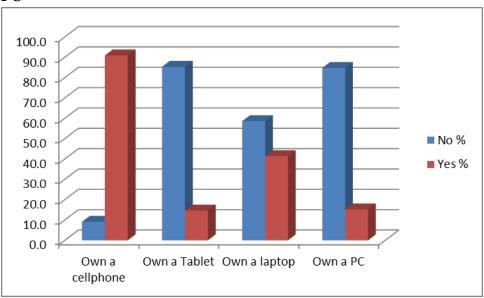


Figure 16: Whether or not the Respondent owns a Cell phone, Tablet, Laptop

Figure 16 show that 90.9% of the participants own a cell phone while 9.1% do not own one. It further shows that 14.7% own a tablet while 85.3% do not, 41.4% own a laptop while 58.6% do not and that 15.2% own some sort of a PC while 84.8% do not.

# 4.4 Results of the Validity and Reliability Testing: CSI, ILS, Hofstede and eliteracy Instruments

Following the approach of Chase (2004) and Hsu (2012), this section presents the process of factor analysis, validity and reliability tests for the CSI, the ILS, Hofstede's and e-Literacy instruments conducted prior to hypothesis testing. First, Principal Component Analysis (PCA) was performed to reduce/regroup the total number of CSI, ILS, Hofstede and e-Literacy variables and to investigate the structures for the current study.

#### 4.4.1 PCA for the 40 items of the CSI:

Participants were asked to evaluate the 40 CSI statements shown in Table 16, using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The 40 items are grouped into eight factors that make up the CSI Instrument as per Sproles and Kendal (1986). The eight factors are used in this study. The descriptive statistics of the CSI 40 items are presented in Table 16, and a PCA through Factor Analysis was performed to analyse the underlying structures of the components.

Table 16: Descriptive statistics of the 40 variables in the CSI

Descriptive Statistics											
•							Std.				
	N	Range	Minimum	Maximum	Mean	G. 1	Deviation	Skewne		Kurtosi	
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic	Std. Error	Statistic	Std. Error
Getting high good						0.74				2.50	240
1 7 1	497	4	1	5	3.94	.051	1.141	-1.007	.110	.359	.219
important											
Try making the best or perfect choice	498	4	1	5	3.89	.046	1.021	952	.109	.736	.218
Try buying the best											
overall quality	497	4	1	5	3.71	.046	1.017	564	.110	017	.219
Special effort choosing											
the best quality	496	4	1	5	3.74	.044	.987	608	.110	.090	.219
products											
Don't give clothing											
purchases thought or	495	4	1	5	3.01	.055	1.221	.006	.110	915	.219
care											
Standards and											
	496	4	1	5	3.63	.045	1.013	501	.110	051	.219
products are high											
Shop quickly buying	495	4	1	5	3.34	.054	1.191	280	.110	818	.219
first product I find											
Product not have to be	495	4	1	5	3.28	.059	1.307	245	.110	-1.065	.219
perfect best Well known national											
brands are best	496	4	1	5	3.19	.054	1.212	143	.110	784	.219
Choose more											
expensive brands	497	4	1	5	3.01	.054	1.212	.036	.110	891	.219
The higher the price											
the better the quality	496	4	1	5	3.47	.055	1.224	429	.110	729	.219
Nice specialty stores											
	497	4	1	5	3.55	.050	1.110	267	.110	623	.219
products											
Prefer buying best-	497	4	1	5	3.37	.055	1.221	223	.110	909	.219
selling brands	497	4	1	3	3.37	.055	1.221	223	.110	909	.219
Advertised brands	500	4	1	5	3.18	.052	1.154	207	.109	699	.218
usually good choices	500	7	1	3	5.16	.032	1.134	207	.10)	077	.210
Usually have one more											
	497	4	1	5	3.24	.053	1.180	310	.110	743	.219
newest style											
Keep wardrobe up to	400	,	1	~	2.00	055	1 225	070	100	010	210
date with changing fashions	498	4	1	5	3.09	.055	1.235	079	.109	910	.218
Fashionable attractive											
styling is very	499	4	1	5	3.34	.054	1.217	326	.109	685	.218
important	777	Γ	1	5	5.54	.034	1.217	520	.10)	003	.210
To get variety, shop											
	497	4	1	5	3.80	.048	1.076	865	.110	.351	.219
choose different brands											
Eun burging comothing	495	4	1	5	2.00	050	1 104	7.00	110	206	210
new and exciting	495	4	1	5	3.89	.050	1.104	760	.110	296	.219
Shopping not a	500	4	1	5	2.89	.057	1.264	.088	.109	982	.218
pleasure activity	300	+	1	3	2.09	.057	1.204	.000	.105	902	.210
Going shopping is the											
	496	4	1	5	3.70	.052	1.150	649	.110	323	.219
my life											
Shopping stores wastes	498	4	1	5	2.79	.057	1.271	.289	.109	954	.218
my time								1		ļ - ·	
Enjoy shopping just for	497	4	1	5	3.37	.056	1.242	352	.110	873	.219
lun	-									-	
Make shopping trips	499	4	1	5	3.28	.053	1.189	101	.109	888	.218
fast	1	I .	<u> </u>		l		1	I .	<u> </u>	1	I .

Table 16 (continues)

Buy as possible at sale	499	4	1	5	3.86	.049	1.104	820	.109	.069	.218
prices	.,,		•		5.00	.0 17	1.10	.020	.107	.007	.210
Lower price products are usually my choice	497	4	1	5	3.33	.052	1.154	140	.110	779	.219
I look carefully to find best value for money	498	4	1	5	3.83	.047	1.049	806	.109	.258	.218
Plan my shopping more carefully	498	4	1	5	3.92	.046	1.016	775	.109	.140	.218
I am impulsive when purchasing	498	4	1	5	3.45	.047	1.059	342	.109	123	.218
I often make careless purchases I later regret	499	4	1	5	3.37	.055	1.239	281	.109	826	.218
Take time to shop carefully for the buys	498	4	1	5	3.53	.046	1.017	375	.109	098	.218
Carefully watch how spending	499	4	1	5	3.85	.047	1.045	788	.109	.188	.218
Many brands and often feel confused	499	4	1	5	3.44	.051	1.136	310	.109	631	.218
Sometimes hard to choose stores	499	4	1	5	3.41	.052	1.152	351	.109	655	.218
More learning about products the harder seems to choose the best	499	4	1	5	3.37	.051	1.149	338	.109	645	.218
All information on I products confuse me	495	4	1	5	3.04	.053	1.184	.028	.110	803	.219
Table 27 (continues) Buy favourite brands over and over	498	4	1	5	3.47	.053	1.194	475	.109	680	.218
Stick to a brand I like	494	4	1	5	3.52	.052	1.167	385	.110	695	.219
Got to same stores each time	500	4	1	5	3.14	.054	1.218	048	.109	924	.218
Change brands I buy regularly	499	4	1	5	3.47	.052	1.160	346	.109	570	.218
Valid N (listwise)	437										

According to Table 16 it appears that the average score for all the tests is very similar and all have a similar spread. The mean score of close to 4 suggests that most respondents agreed with the statements. Principal components analysis is most useful if one simply wants to reduce a relatively large number of variables. The CSI consists of eight factors. A PCA using Varimax rotation was conducted to assess the underlying structure for the 40 items of the CSI. PCA with Orthogonal (Varimax) rather than Oblique rotation was conducted due to its simplicity. Eight factors were requested, based on the fact that the items were designed to index eight constructs, namely: Perfectionistic/High-Quality Conscious consumer, Brand Conscious consumer, Novelty-Fashion Conscious consumer, Recreational/Hedonistic consumer, Price Conscious/Value for Money consumer, Impulsive/Careless consumer, Confused

by Over Choice consumer, Habitual/Brand Loyal consumer. The interrelationship between items was addresses through an inspection of the correlation matrix for evidence of coefficient greater than 0.3. In addition, two statistical calculations generated in SPSS were used to assess the factorability: Bartlett's Test of Sphericity and Kaiser-Mayer-Olkin (KMO) measure of sampling adequacy. Furthermore, some techniques were implemented to assist in making the decision concerning the number of factors to retain, including Kaiser's criterion (Mertler and Vannatta, 2004, Tabachnick and Fidell, 2007, Hsu, 2012). Kaiser's criterion used an eigenvalue of 1.0 and above as a cut-off point to retain factors for further investigation, and the eigenvalue showed the size of the total variance explained by that factor.

#### 4.4.2 Reliability of the CSI

Cronbach's alpha is the most common measure of internal consistency "reliability". Hsu (2012) and Orcher (2007) suggest that the reliability of an instrument requires a Cronbach's alpha of 0.7 or higher. Radder et al. (2006), Hair et al. (1998), Sekaran (2003) state that reliability coefficients lower than 0.60 are considered to be poor, but acceptable for exploratory research, whereas, coefficients in the 0.70 – 0.79 range are deemed acceptable, and those over 0.80, good. Kaiser-Meyer-Olkin and Bartlett's test were conducted to assess the internal reliability of the instrument as well as the FA correlation matrix.

Table 17 presents the CSI Factor Analysis Correlation Matrix.

**Table 17: CSI Factor Analysis Correlation Matrix** 

Correlation Matrix<sup>a</sup>

	Factor 1 – Perfectionistic, High-Quality Conscious	Conscious, "Price Equals	Fashion	Factor 4 – Recreational,	"Value for		Confused by Over	Factor 8 – Habitual, Brand Loyal
CorrelationFactor 1 – Perfectionistic, High-Quality Conscious	1.000	.410	.477	.314	.155	.330	.231	.216
Factor 2 – Brand Conscious, "Price Equals Quality"	.410	1.000	.517	.492	.144	.392	.407	.373
Factor 3 – Novelty-Fashion Conscious	.477	.517	1.000	.347	.150	.316	.245	.456
Factor 4 – Recreational, Hedonistic	.314	.492	.347	1.000	.259	.339	.314	.327
Factor 5 – Price Conscious, "Value for Money"	.155	.144	.150	.259	1.000	.378	.196	.091
Factor 6 – Impulsive, Careless	.330	.392	.316	.339	.378	1.000	.443	.310
Factor 7 – Confused by Over choice	.231	.407	.245	.314	.196	.443	1.000	.331
Factor 8 – Habitual, Brand Loyal	.216	.373	.456	.327	.091	.310	.331	1.000

a. Determinant = .135

Table 17 depicts the Determinant of 0.135 which is greater than 0.0001. This suggests there is collinearity; which means there is association between the factors and that further tests can be performed.

Table 18 presents the results of the CSI KMO and Bartlett's test.

Table 18: CSI KMO and Bartlett's Test

#### **KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure	.809			
Bartlett's Test of Sphericity	Bartlett's Test of Sphericity Approx. Chi-Square			
	df	28		
	Sig.	.000		

The Kaiser-Meyer-Olkin Measure of sampling adequacy is 0.809, which exceeds 0.70, thus indicating sufficient items for each factor in support of the correlation matrix. Bartlett's Test of Sphericity, p< 0.000, reached statistical significance at p<0.05 to support the appropriateness of the correlation matrix.

Table 19 explains the CSI Total Variance.

**Table 19: CSI Total Variance Explained** 

#### **Total Variance Explained**

Component/CSI		Initial Eigenvalue	es .	Extracti	on Sums of Squared	d Loadings	Rotatio	Rotation Sums of Squared Loadings		
Factors	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	
1	3.302	41.273	41.273	3.302	41.273	41.273	2.638	32.973	32.973	
2	1.079	13.489	54.762	1.079	13.489	54.762	1.743	21.789	54.762	
3	.859	10.739	65.502							
4	.714	8.921	74.423							
5	.696	8.697	83.120							
6	.493	6.163	89.282							
7	.484	6.051	95.333							
8	.373	4.667	100.000							

Extraction Method: Principal Component Analysis.

Note: Factor 1 – Perfectionistic, High-Quality Conscious, Factor 2 – Brand Conscious, "Price Equals Quality", Factor 3 – Novelty-Fashion Conscious, Factor 4 – Recreational, Hedonistic, Factor 5 – Price Conscious, "Value for Money", Factor 6 – Impulsive, Careless, Factor 7 – Confused by Over choice, Factor 8 – Habitual, Brand Loyal

Table 19 shows that the first two factors have eigenvalues over 1.00 and together these explain 55% of the total variability in the data.

Table 20 depicts the CSI Rotated Component Matrix; the values of a rotated component matrix can be interpreted as Cronbach's Alphas for each of the rotated solutions.

**Table 20: CSI Rotated Component Matrix** 

**Rotated Component Matrix**<sup>a</sup>

	Comp	onent
	1	2
Factor 1 – Perfectionistic, High-Quality Conscious	.635	.159
Factor 2 – Brand Conscious,  "Price Equals Quality"	.753	.242
Factor 3 – Novelty-Fashion Conscious	.803	.066
Factor 4 – Recreational,	.540	.401
Hedonistic Factor 5 – Price Conscious,	072	.843
"Value for Money" Factor 6 – Impulsive,	072	.043
Careless	.351	.710
Factor 7 – Confused by Over choice	.399	.519
Factor 8 – Habitual, Brand Loyal	.665	.105

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

Table 20 shows that the two rotated factors are just as good as the initial factors in explaining and reproducing the observed correlation matrix in table 17 above. Acceptable Cronbach's Alphas were found in the first rotated solution for

Factor 1 - Perfectionistic High-Quality Consciousness (0.64), Factor 2 - Brand Conscious, "Price Equals Quality" (0.75), Factor 3 - Novelty-Fashion Consciousness (0.80), Factor 4 - Recreational, Hedonistic(0.54), and Factor 8- Habitual, Brand Loyal (0.67). While acceptable Cronbach's Alpha for Factor 5 - Price Conscious, "Value for Money" (0.84), Factor 6 – Impulsive Careless (0.71), and, Factor 7 - Confused by Over choice (0.52) were found in the second rotated solution. The factors in the first rotated solution seem to be clustered around product and brand values and hence could be classified as "Consumer Product/Brand Sensitivity behaviour" whereas the second rotated solution appear to be clustered around Price, Impulsiveness and Confused by Over choice and could be classified as "Consumer Price/Impulsive Sensitivity behaviour". Both solutions present acceptable Cronbach's Alphas and, hence the eight factors and the 40 items were retained.

#### 4.4.3 PCA for the 44 items of the ILS:

Participants were asked to evaluate the 44 ILS statements, using a dichotomous scale. The 44 items are grouped into four factors that make up the ILS Instrument. A PCA through Factor Analysis was performed to assess the underlying structure of the components. Assessment of univariate normality was obtained through inspecting the skewness and kurtosis, the results were close to normal and no data transformation was performed.

#### 4.4.4 Reliability and Validity of the Index of Learning Styles (ILS)

Cronbach's Alpha was used to measure the reliability of the 44 dichotomous ILS instrument. Principal components analysis (FA) with varimax rotation was conducted to assess the underlying structure of the 44 items of the ILS instrument. No modification was made to the results since the Cronbach's Alphas were good. Table 21 provides the descriptive statistics of the 44-items of the ILS Instrument.

**Table 21: Descriptive Statistics of the ILS Instrument** 

			onses	Percent
Item#		N	Percent	of Cases
ILS 1	a.Activist	303	1.4%	60.5%
	b.Reflector	193	0.9%	38.5%
ILS 2	a. Sensing	313	1.4%	62.5%
	b.Intuitive	179	0.8%	35.7%
ILS3	a. Visual	292	1.3%	58.3%
	b.Verbal	205	0.9%	40.9%
ILS4	a.Sequential	265	1.2%	52.9%
	b.Global	230	1.1%	45.9%
ILS5	a.Activist	215	1.0%	42.9%
	b.Reflector	274	1.3%	54.7%
ILS6	a.Sensing	290	1.3%	57.9%
	b.Intuitive	207	0.9%	41.3%
ILS7	a.Visual	276	1.3%	55.1%
	b.Verbal	218	1.0%	43.5%
ILS8	a.Sequential	261	1.2%	52.1%
	b.Global	233	1.1%	46.5%
ILS9	a.Activist	289	1.3%	57.7%
	b.Reflector	208	1.0%	41.5%
ILS10	a.Sensing	305	1.4%	60.9%
	b.Intuitive	190	0.9%	37.9%
ILS11	a.Visual	278	1.3%	55.5%
	b.Verbal	218	1.0%	43.5%
ILS12	a.Sequential	327	1.5%	65.3%
	b.Global	169	0.8%	33.7%
ILS13	a.Activist	274	1.3%	54.7%
	b.Reflector	223	1.0%	44.5%
ILS14	a.Sensing	310	1.4%	61.9%
	b.Intuitive	187	0.9%	37.3%
ILS15	a.Visual	210	1.0%	41.9%
	b.Verbal	287	1.3%	57.3%
ILS16	a.Sequential	321	1.5%	64.1%
-	b.Global	178	0.8%	35.5%
ILS17	a.Activist	202	0.9%	40.3%
	b.Reflector	295	1.3%	58.9%
ILS18	a.Sensing	271	1.2%	54.1%
	b.Intuitive	227	1.0%	45.3%
ILS19	a.Visual	311	1.4%	62.1%
	b.Verbal	187	0.9%	37.3%

B.Global   285   1.3%   56.9%     ILS21	ILS20	a.Sequential	212	1.0%	42.3%
ILS22		b.Global	285	1.3%	56.9%
B.Reflector   227	ILS21	a.Activist	270	1.2%	53.9%
ILS22		b.Reflector	227	1.0%	45.3%
ILS23	ILS22	a.Sensing	237	1.1%	47.3%
ILS24		b.Intuitive	259	1.2%	51.7%
ILS24	ILS23	a.Visual	232	1.1%	46.3%
B.Global   179		b.Verbal	261	1.2%	52.1%
ILS25	ILS24	a.Sequential	316	1.4%	63.1%
B.Reflector   261		b.Global	179	0.8%	35.7%
ILS26   a.Sensing   214   1.0%   42.7%   b.Intuitive   284   1.3%   56.7%   ILS27   a.Visual   235   1.1%   46.9%   b.Verbal   263   1.2%   52.5%   b.Global   237   1.1%   47.3%   ILS29   a.Activist   305   1.4%   60.9%   b.Reflector   194   0.9%   38.7%   ILS31   a.Visual   272   1.2%   54.3%   b.Verbal   225   1.0%   44.9%   ILS32   a.Sequential   273   1.2%   54.5%   b.Global   222   1.0%   44.3%   ILS33   a.Activist   262   1.2%   52.3%   b.Reflector   237   1.1%   47.3%   ILS34   a.Sensing   240   1.1%   47.3%   ILS34   a.Sensing   240   1.1%   47.9%   ILS35   a.Visual   259   1.2%   51.5%   ILS35   a.Visual   259   1.2%   51.5%   ILS36   a.Sequential   240   1.1%   47.9%   ILS36   a.Sequential   240   1.1%   47.9%   ILS36   a.Sequential   240   1.1%   47.9%   1.1%   47.9%   ILS37   a.Activist   248   1.3%   57.1%   b.Global   209   1.0%   41.7%   ILS38   a.Sensing   283   1.3%   56.5%   b.Reflector   250   1.1%   49.9%   ILS38   a.Sensing   283   1.3%   56.5%   b.Intuitive   216   1.0%   43.1%   ILS39   a.Visual   305   1.4%   60.9%   ILS39   a.Visual   305   1.4%   60.9%   ILS39   a.Visual   305   1.4%   60.9%   ILS30   a.Sequential   176   0.8%   35.1%   b.Global   323   1.5%   64.5%   ILS41   a.Activist   334   1.5%   66.7%   ILS41   a.Activist   334   1.5%	ILS25	a.Activist	236	1.1%	47.1%
Box   Box		b.Reflector	261	1.2%	52.1%
ILS27	ILS26	a.Sensing	214	1.0%	42.7%
B.Verbal   263   1.2%   52.5%     ILS28   a.Sequential   263   1.2%   52.5%     b.Global   237   1.1%   47.3%     ILS29   a.Activist   305   1.4%   60.9%     b.Reflector   194   0.9%   38.7%     ILS30   a.Sensing   234   1.1%   46.7%     b.Intuitive   263   1.2%   52.5%     ILS31   a.Visual   272   1.2%   54.3%     b.Verbal   225   1.0%   44.9%     ILS32   a.Sequential   273   1.2%   54.5%     b.Global   222   1.0%   44.3%     ILS33   a.Activist   262   1.2%   52.3%     b.Reflector   237   1.1%   47.3%     ILS34   a.Sensing   240   1.1%   47.9%     b.Intuitive   258   1.2%   51.5%     ILS35   a.Visual   259   1.2%   51.7%     bVerbal   240   1.1%   47.9%     ILS36   a.Sequential   286   1.3%   57.1%     b.Global   209   1.0%   41.7%     ILS37   a.Activist   248   1.1%   49.5%     b.Reflector   250   1.1%   49.9%     ILS38   a.Sensing   283   1.3%   56.5%     b.Intuitive   216   1.0%   43.1%     ILS39   a.Visual   305   1.4%   60.9%     b.Verbal   194   0.9%   38.7%     ILS40   a.Sequential   176   0.8%   35.1%     b.Global   323   1.5%   64.5%     ILS41   a.Activist   334   1.5%   66.7%		b.Intuitive	284	1.3%	56.7%
ILS28   a.Sequential   263   1.2%   52.5%   b.Global   237   1.1%   47.3%   47.3%   1.15%   60.9%   b.Reflector   194   0.9%   38.7%   1.1%   46.7%   b.Reflector   194   0.9%   38.7%   1.2%   52.5%   1.2%   52.5%   1.2%   52.5%   1.2%   54.3%   52.5%   1.2%   54.3%   54.3%   54.5%   5.Global   225   1.0%   44.9%   1.2%   54.5%   5.Global   222   1.0%   44.3%   1.2%   52.3%   5.Reflector   237   1.1%   47.3%   1.2%   52.3%   5.Reflector   237   1.1%   47.3%   1.2%   54.5%   1.2%   52.3%   5.Reflector   237   1.1%   47.9%   5.Intuitive   258   1.2%   51.5%   1.2%   51.5%   1.2%   51.5%   1.2%   51.7%   54.5%   1.2%   51.5%   1.2%   51.7%   1.2%   51.5%   1.2%   51.7%   1.2%	ILS27	a.Visual	235	1.1%	46.9%
B.Global   237   1.1%   47.3%     ILS29   a.Activist   305   1.4%   60.9%     b.Reflector   194   0.9%   38.7%     ILS30   a.Sensing   234   1.1%   46.7%     b.Intuitive   263   1.2%   52.5%     ILS31   a.Visual   272   1.2%   54.3%     b.Verbal   225   1.0%   44.9%     ILS32   a.Sequential   273   1.2%   54.5%     b.Global   222   1.0%   44.3%     ILS33   a.Activist   262   1.2%   52.3%     b.Reflector   237   1.1%   47.3%     ILS34   a.Sensing   240   1.1%   47.9%     b.Intuitive   258   1.2%   51.5%     ILS35   a.Visual   259   1.2%   51.7%     bVerbal   240   1.1%   47.9%     ILS36   a.Sequential   286   1.3%   57.1%     b.Global   209   1.0%   41.7%     ILS37   a.Activist   248   1.1%   49.5%     b.Reflector   250   1.1%   49.9%     ILS38   a.Sensing   283   1.3%   56.5%     b.Intuitive   216   1.0%   43.1%     ILS39   a.Visual   305   1.4%   60.9%     b.Verbal   194   0.9%   38.7%     ILS40   a.Sequential   176   0.8%   35.1%     b.Global   323   1.5%   64.5%     ILS41   a.Activist   334   1.5%   66.7%     ILS41   a.Activist   334   1.5%   66.7%		b.Verbal	263	1.2%	52.5%
ILS29	ILS28	a.Sequential	263	1.2%	52.5%
Description		b.Global	237	1.1%	47.3%
ILS30   a.Sensing   234   1.1%   46.7%   b.Intuitive   263   1.2%   52.5%   1.2%   54.3%   b.Verbal   225   1.0%   44.9%   44.9%   1.2%   54.5%   b.Global   222   1.0%   44.3%   1.2%   52.3%   b.Reflector   237   1.1%   47.3%   1.1%   47.9%   1.1%   49.5%   1.1%   49.5%   1.1%   49.5%   1.1%   49.5%   1.1%   49.5%   1.1%   49.5%   1.1%   49.5%   1.1%   49.5%   1.1%   49.9%   1.1%   43.1%   1.5%   66.5%   1.1%	ILS29	a.Activist	305	1.4%	60.9%
Description		b.Reflector	194	0.9%	38.7%
ILS31	ILS30	a.Sensing	234	1.1%	46.7%
B.Verbal   225   1.0%   44.9%		b.Intuitive	263	1.2%	52.5%
ILS32   a.Sequential   273   1.2%   54.5%   b.Global   222   1.0%   44.3%   44.3%   Example   262   1.2%   52.3%   b.Reflector   237   1.1%   47.3%   47.3%   Example   240   1.1%   47.9%   47.9%   51.5%   Example   258   1.2%   51.5%   Example   258   1.2%   51.5%   Example   259   1.2%   51.7%   51	ILS31	a.Visual	272	1.2%	54.3%
b.Global   222   1.0%   44.3%     ILS33   a.Activist   262   1.2%   52.3%     b.Reflector   237   1.1%   47.3%     ILS34   a.Sensing   240   1.1%   47.9%     b.Intuitive   258   1.2%   51.5%     ILS35   a.Visual   259   1.2%   51.7%     bVerbal   240   1.1%   47.9%     ILS36   a.Sequential   286   1.3%   57.1%     b.Global   209   1.0%   41.7%     ILS37   a.Activist   248   1.1%   49.5%     b.Reflector   250   1.1%   49.9%     ILS38   a.Sensing   283   1.3%   56.5%     b.Intuitive   216   1.0%   43.1%     ILS39   a.Visual   305   1.4%   60.9%     b.Verbal   194   0.9%   38.7%     ILS40   a.Sequential   176   0.8%   35.1%     b.Global   323   1.5%   64.5%     ILS41   a.Activist   334   1.5%   66.7%		b.Verbal	225	1.0%	44.9%
ILS33	ILS32	a.Sequential	273	1.2%	54.5%
December 237   1.1%   47.3%   1.18   47.3%   47.3%   47.9%   47.9%   47.9%   47.9%   47.9%   47.9%   47.9%   47.9%   51.5%   51.5%   51.5%   51.7%		b.Global	222	1.0%	44.3%
ILS34   a.Sensing   240   1.1%   47.9%   b.Intuitive   258   1.2%   51.5%   51.5%	ILS33	a.Activist	262	1.2%	52.3%
b.Intuitive   258   1.2%   51.5%     ILS35   a.Visual   259   1.2%   51.7%     bVerbal   240   1.1%   47.9%     ILS36   a.Sequential   286   1.3%   57.1%     b.Global   209   1.0%   41.7%     ILS37   a.Activist   248   1.1%   49.5%     b.Reflector   250   1.1%   49.9%     ILS38   a.Sensing   283   1.3%   56.5%     b.Intuitive   216   1.0%   43.1%     ILS39   a.Visual   305   1.4%   60.9%     b.Verbal   194   0.9%   38.7%     ILS40   a.Sequential   176   0.8%   35.1%     b.Global   323   1.5%   64.5%     ILS41   a.Activist   334   1.5%   66.7%		b.Reflector	237	1.1%	47.3%
ILS35	ILS34	a.Sensing	240	1.1%	47.9%
Description		b.Intuitive	258	1.2%	51.5%
ILS36   a.Sequential   286   1.3%   57.1%   b.Global   209   1.0%   41.7%     ILS37   a.Activist   248   1.1%   49.5%   b.Reflector   250   1.1%   49.9%     ILS38   a.Sensing   283   1.3%   56.5%   b.Intuitive   216   1.0%   43.1%     ILS39   a.Visual   305   1.4%   60.9%   b.Verbal   194   0.9%   38.7%     ILS40   a.Sequential   176   0.8%   35.1%   b.Global   323   1.5%   64.5%     ILS41   a.Activist   334   1.5%   66.7%	ILS35	a.Visual	259	1.2%	51.7%
b.Global   209   1.0%   41.7%     ILS37		bVerbal	240	1.1%	47.9%
ILS37	ILS36	•	286		
b.Reflector   250   1.1%   49.9%     ILS38   a.Sensing   283   1.3%   56.5%     b.Intuitive   216   1.0%   43.1%     ILS39   a.Visual   305   1.4%   60.9%     b.Verbal   194   0.9%   38.7%     ILS40   a.Sequential   176   0.8%   35.1%     b.Global   323   1.5%   64.5%     ILS41   a.Activist   334   1.5%   66.7%		b.Global	209	1.0%	41.7%
b.Reflector       250       1.1%       49.9%         ILS38       a.Sensing       283       1.3%       56.5%         b.Intuitive       216       1.0%       43.1%         ILS39       a.Visual       305       1.4%       60.9%         b.Verbal       194       0.9%       38.7%         ILS40       a.Sequential       176       0.8%       35.1%         b.Global       323       1.5%       64.5%         ILS41       a.Activist       334       1.5%       66.7%	ILS37	a.Activist	248	1.1%	49.5%
b.Intuitive   216   1.0%   43.1%     ILS39   a.Visual   305   1.4%   60.9%     b.Verbal   194   0.9%   38.7%     ILS40   a.Sequential   176   0.8%   35.1%     b.Global   323   1.5%   64.5%     ILS41   a.Activist   334   1.5%   66.7%		b.Reflector	250	1.1%	49.9%
b.Intuitive   216   1.0%   43.1%     ILS39   a.Visual   305   1.4%   60.9%     b.Verbal   194   0.9%   38.7%     ILS40   a.Sequential   176   0.8%   35.1%     b.Global   323   1.5%   64.5%     ILS41   a.Activist   334   1.5%   66.7%	ILS38	a.Sensing	283	1.3%	56.5%
b.Verbal 194 0.9% 38.7%  ILS40 a.Sequential 176 0.8% 35.1% b.Global 323 1.5% 64.5%  ILS41 a.Activist 334 1.5% 66.7%		b.Intuitive	216	1.0%	43.1%
b.Verbal 194 0.9% 38.7%  ILS40 a.Sequential 176 0.8% 35.1% b.Global 323 1.5% 64.5%  ILS41 a.Activist 334 1.5% 66.7%	ILS39	a.Visual	305	1.4%	60.9%
b.Global 323 1.5% 64.5%  ILS41 a.Activist 334 1.5% 66.7%		b.Verbal	194	0.9%	38.7%
b.Global 323 1.5% 64.5%  ILS41 a.Activist 334 1.5% 66.7%	ILS40	a.Sequential	176	0.8%	35.1%
16541		b.Global	323	1.5%	64.5%
	ILS41	a.Activist	334	1.5%	66.7%
		b.Reflector	164	0.8%	32.7%

ILS42	a.Sensing	309	1.4%	61.7%
	b.Intuitive	189	0.9%	37.7%
ILS 43	a.Visual	351	1.6%	70.1%
	b.Verbal	148	0.7%	29.5%
ILS44	a.Sequential	274	1.3%	54.7%
	bGlobal	224	1.0%	44.7%
			100.0%	

The descriptive statistics of the 44 dichotomous items in the ILS are presented in Table 21.

The Visual learning style 54,83% followed by Sensing learning style, 54, 6% the Sequential learning style 53,97% and the Activist learning style 53,32% reported the highest percentages of these cases.

Figure 17 below depicts the four preferred learning styles among the Namibian Generation Y consumers.

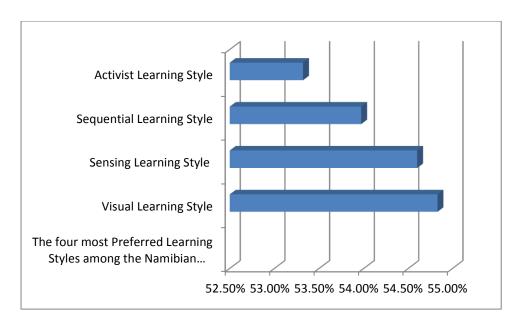


Figure 17: The four most Preferred Learning Styles among the Namibian Generation Y Consumers

Table 22 presents the ILS Factor Analysis Correlation Matrix.

**Table 22: ILS Factor Analysis Correlation Matrix** 

#### **Correlation Matrix**<sup>a</sup>

	Activist	Reflector	Sensing	Intuitive	Visual	Verbal	Sequential	Global
Correlation Activist	1.000	867	.257	133	.341	229	.273	133
Reflector	867	1.000	123	.249	204	.317	138	.264
Sensing	.257	123	1.000	870	.323	212	.266	129
Intuitive	133	.249	870	1.000	201	.311	144	.267
Visual	.341	204	.323	201	1.000	896	.123	003
Verbal	229	.317	212	.311	896	1.000	010	.122
Sequential	.273	138	.266	144	.123	010	1.000	822
Global	133	.264	129	.267	003	.122	822	1.000

a. Determinant = 4.028E-6

Although Table 22 shows that the Determinant is 0.000004028, less than the expected 0.001. Table 23, shows a KMO value of 0.384 which is far lower than the expected 0.70. However Bartlett's test of Sphericity with an associated p value of <0.000 reached statistical significance at p<0.05 to support the appropriateness of the correlation matrix.

Table 23: ILS KMO and Bartlett's Test

#### **KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure	.384					
Bartlett's Test of Sphericity	6217.380					
	df	28				
	Sig.					

According to Table 24 below, the PCA found 4 components with eigenvalues of 1 (one) and above accounting for over 93% the variance.

**Table 24: ILS Total Variance Explained** 

## **Total Variance Explained**

Initial Eigenvalues			Extrac	Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.078	38.469	38.469	3.078	38.469	38.469	1.896	23.700	23.700
2	1.725	21.565	60.035	1.725	21.565	60.035	1.869	23.359	47.059
3	1.487	18.591	78.625	1.487	18.591	78.625	1.866	23.321	70.381
4	1.166	14.572	93.197	1.166	14.572	93.197	1.825	22.817	93.197
5	.503	6.287	99.484						
6	.030	.380	99.864						
7	.006	.081	99.945						
8	.004	.055	100.000						

Extraction Method: Principal Component Analysis.

Table 24 shows that the four rotated factors are just as good as the initial factors in explaining and reproducing the observed correlation matrix in Table 28 above. In order to assess whether the 4 items that were summed to create the 44 ILS score formed a reliable scale, Cronbach's Alpha was computed.

Table 25 presents the ILS rotated component Matrix.

**Table 25: ILS Rotated Component Matrix** 

#### **Rotated Component Matrix**<sup>a</sup>

	Component						
	1	2	3	4			
Visual	.957						
Verbal	953						
Intuitive		949					
Sensing		.949					
Reflector			.950				
Activist			944				
Global				.945			
Sequential				943			

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

Table 25 shows high factor loadings for all items, with Cronbach's Alphas ranging from -0.943 to 0.957, which indicates that the items form a scale that has good internal reliability. Loadings resulting from an orthogonal rotation are correlation coefficients of each item with the factor, so they range from -1.0 through 0 to +1.0. A negative loading just means that the question or the factor is to be interpreted in the opposite direction from the way it is written (Leech, 2005). For example, the Verbal learning style is the opposite of the Visual learning style.

# 4.4.5 PCA for the 24 items of the Hofstede Cultural Dimensions Instrument

Participants were asked to evaluate the 24 Hofstede Cultural Dimensions statements, using a 5 point Likert scale. The 24 items are grouped into the five factors that make up the Hofstede Cultural Dimensions Instrument. A PCA through Factor Analysis was performed to assess the underlying structure of the components. An assessment of the univariate normality was obtained through inspecting the skewness and kurtosis, the results were close to normal and no data transformation was performed.

# **4.4.6** Reliability and Validity of Hofstede Cultural Dimensions Questionnaire

Cronbach's Alpha was used to measure the reliability of the 24 item Hofstede Cultural Dimensions Instrument. Principal components analysis through FA with Varimax rotation was conducted to assess the underlying structure for the 24 items of the instrument. No modification was made in the results since the Cronbach's Alpha were acceptable.

Table 26 presents the Hofstede Cultural Dimensions descriptive statistics.

**Table 26: Hofstede Cultural Dimensions Descriptive Statistics** 

**Descriptive Statistics** 

Des	criptive Stat	ISTICS	
	Mean	Std. Deviation	Analysis N
Strong loyalty to groups	3.86	1.106	465
belong to	3.00	1.106	400
Conventions/rules of a group	3.62	1.129	465
influence behavior	3.02	1.129	403
Concerned what others think	3.22	1.301	465
about	0.22	1.501	+05
Immoral for a boss offering	3.06	1.253	465
relatives a job	0.00	1.200	400
Children must be taught to			
cope with chaos and	3.87	1.127	465
ambiguity			
People moving different			
environments appreciated in	3.87	1.023	465
society			
People should always carry	4.15	1.158	465
an ID	1.10	1.100	100
Improper to express feelings	3.34	1.253	465
in public	0.01	1.200	100
Society has very few rules	3.42	1.279	465
People know clearly what is	3.68	1.123	465
good and bad	0.00	20	
People value personal	3.75	.970	465
stability and continuity			
Taught children to ask why	3.70	1.065	465
Roots influence behavior	3.83	1.101	465
People want coherence in	3.81	1.077	465
the information presented			
Taught children that their	3.58	1.165	465
opinions are important			
Group conventions influence	3.62	1.127	465
behavior			
Concerned what others think	3.27	1.253	465
people promoted/recognised	3.64	1.082	465
based on loyalty and age			
Inappropriate for a boss not	3.15	1.186	465
to offer relatives jobs			

Sympathy for those who do			
not win and envy success of	3.43	1.283	465
others			
At school/work motivated by	3.80	1.056	465
relaxed friendly atmosphere	3.60	1.056	400
Decisions at work/school are	3.56	1.113	465
based on consensus	3.30	1.113	705
Good quality of life is	3.80	1.164	465
important for men woman	3.00	1.104	705
Seek love and mutual	4.01	1.117	465
infection in partner	4.01	1.117	400

According to Table 26 it appears that the average score for all the tests have a similar spread. The mean score is close to 4 suggesting that participants agreed with most of the statements. The interrelationship between items was assessed through an inspection of the correlation matrix, Bartlett's Test of Sphericity and Kaiser-Mayer-Olkin (KMO) measure of sampling adequacy.

Table 27 presents the Hofstede KMO and the Bartlett's Test.

Table 27: Hofstede KMO and Bartlett's Test

#### **KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure	.830	
Bartlett's Test of Sphericity	Approx. Chi-Square	2100.792
	df	276
	Sig.	.000

Keiser-Meyer-Olkin Measure of Sampling Adequacy is 0.830 which is adequate since is above the expected 0.70. Bartlett's test of Sphericity with an associated p value of <0.000 reached statistical significance at p<0.05 to support the appropriateness of the correlation matrix.

Table 28 presents the Hofstede Cultural Dimensions Correlation Matrix.

**Table 28: The Hofstede Cultural Dimensions Correlation Matrix** 

#### Correlation Matrix<sup>a</sup>

		Power		Uncertainty	Long-term	
		Distance	Individualism	Avoidance	orientation	Masculinity
Correlation	Power Distance	1.000	.465	.436	.385	.278
	Individualism	.465	1.000	.414	.375	.227
	Uncertainty	.436	.414	1.000	.491	.332
	Avoidance					
	Long-term-	.385	.375	.491	1.000	.485
	orientation					
	Masculinity	.278	.227	.332	.485	1.000

a. Determinant = .312

From Table 28, the Determinant is 0.312, which is above the expected 0.0001. This suggests there is collinearity; which means there is association between the factors and that further tests can be performed.

Table 29 explains Hofstede Total Variance.

**Table 29: Hofstede Total Variance Explained** 

**Total Variance Explained** 

		Initial Eigenvalu	ies	Extraction	on Sums of Square	ed Loadings
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.566	51.320	51.320	2.566	51.320	51.320
2	.870	17.399	68.719			
3	.575	11.510	80.228			
4	.536	10.721	90.949			
5	.453	9.051	100.000			

Extraction Method: Principal Component Analysis.

Table 29 shows that the PCA found 1 component with eigenvalues of above 1 (one) which explains 51% of the variance, hence no rotation was required. The factorability was confirmed through Bartlett's test of Sphericity which was significant at 0.000.

Table 30 presents Hofstede Cultural Dimensions Component Matrix.

**Table 30: Hofstede Cultural Dimensions Component Matrix** 

#### Component Matrix<sup>a</sup>

	Component
	1
Power Distance	.719
Individualism	.691
Uncertainty Avoidance	.759
Long-term orientation	.775
Macculinity	620

Extraction Method: Principal

Component Analysis.

a. 1 components extracted.

Table 30 depicts Hofstede Cultural Dimensions' Component Matrix with Cronbach Alphas ranging from 0.63 to 0.78, suggesting an acceptable scale. All five factors were retained. This is a significant finding which provides a new scale for measuring cultural dimensions of Namibia's demographic groups and other such groups outside Namibia.

#### 4.4.7 PCA for the e-Literacy Instrument

Participants were asked to evaluate the 13 e-literacy statements, using a 5 point Likert scale. PCA through Factor Analysis was performed to assess the underlying structure of the components. An assessment of univariate normality was obtained through inspecting the skewness and kurtosis, the results were close to normal and no data transformation was performed.

### 4.4.8 Reliability and Validity of the e-Literacy Questionnaire

The e-literacy instrument is a 13 item scale instrument consisting of a 5 point Likert scale with 1 Strongly Disagree to 5 Strongly Agree. Cronbach's Alpha was used to measure the reliability of the 13 item scale. Principal components analysis through FA with Varimax rotation was conducted and the scale was found to be suitable.

Table 31 presents the e-literacy descriptive statistics.

**Table 31: e-Literacy Descriptive Statistics** 

#### **Item Statistics**

	Mean	Std. Deviation	N
Aware of ICT issues	4.15	.903	471
Use ICT devices to share	4.25	.806	471
information			
Ability to access information	4.06	.924	471
from all sources including			
internet			
Ability to respond to large	3.80	.957	471
volumes of media			
Use search engines	3.68	.988	471
effectively			
Ability to create simple	3.27	1.218	471
webpage			
Can download materials	4.14	.903	471
from internet			
Can compose and send	4.10	.894	471
emails			
Can join chat rooms/social	4.05	1.037	471
media			
ICT literacy negatively affect	3.32	1.285	471
purchasing decisions			
Can send media content	4.19	.890	471
such as videos/images			
through internet			
Comfortable with social	4.36	.859	471
media such as FB,			
WhatsApp, Instagram, etc.			
Know how to keep records	4.09	1.014	471
off a favorite websites			

According to Table 31 it appears that the average score for all the tests in the eliteracy scale is very similar and all have a similar spread. The mean score is close to 4 suggesting that most of the respondents agreed with the statements.

Table 32 presents the e-literacy KMO and Bartlett's test results.

Table 32: e-Literacy KMO and Bartlett's Test

#### **KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure	.862	
Bartlett's Test of Sphericity	1844.060	
	df	78
	Sig.	.000

Table 32 shows the Kaiser-Meyer-Olkin Measure of sampling adequacy of 0.862, which indicates sufficient items for each factor in support of the correlation matrix. The correlation matrix displays Determinants of 0.019, suggesting collinearity and association between the items of the scale.

Table 33 explains the e-literacy total variance.

**Table 33: e-Literacy Total Variance Explained** 

**Total Variance Explained** 

Total Variation Explained									
				Extra	action Sums	of Squared	Rota	ation Sums o	of Squared
		Initial Eigen	values		Loading	gs		Loading	gs
		% of	Cumulative		% of	Cumulative		% of	Cumulative
Component	Total	Variance	%	Total	Variance	%	Total	Variance	%
1	4.714	36.260	36.260	4.714	36.260	36.260	3.284	25.258	25.258
2	1.278	9.831	46.091	1.278	9.831	46.091	2.707	20.822	46.080
3	1.111	8.550	54.640	1.111	8.550	54.640	1.113	8.560	54.640
4	.972	7.477	62.117						
5	.810	6.232	68.349						
6	.742	5.710	74.059						
7	.651	5.009	79.068						
8	.586	4.509	83.576						
9	.520	3.998	87.575						
10	.484	3.722	91.296						
11	.444	3.419	94.715						
12	.412	3.166	97.881						
13	.276	2.119	100.000						

Extraction Method: Principal Component Analysis.

Table 33 indicates that the first three items have eigenvalues over 1.00 and together account for 55% of the total variability in the data.

Table 34 explains how the items are grouped based on the three solutions.

**Table 34: e-Literacy Rotated Component Matrix** 

## **Rotated Component Matrix**<sup>a</sup>

Component				
Item#	Item description	1	2	3
1	Ability to respond to large volumes of media	.779	.174	.143
2	Ability to access information from all sources including internet	.734	.275	193
3	Use search engines effectively	.723	.139	.079
4	Use ICT devices to share information	.676	.255	308
5	Aware of ICT issues	.533	.224	.026
6	Ability to create simple webpage	.492	.048	.313
7	Know how to keep records of a favourite websites	.486	.485	.199
8	Comfortable with social media such as FB, Whatsapp, Instagram, etc.	054	.774	.213
9	Can send media content such as videos/images through internet	.170	.716	064
10	Can compose and send emails	.320	.650	110
11	Can join chat rooms/social media	.312	.626	.051
12	Can download materials from internet	.403	.549	190
13	My ICT literacy negatively affect purchasing decisions	.049	.031	.846

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 4 iterations.

Table 34 shows high Cronbach's Alphas (ranging from 0.485 – 0.846) for items distributed along the 3 (three) rotated solutions as follows: Solution 1 (one): Items 1, 2, 3, 4, 5, 6 and 7; Solution 2 (two): Items 8, 9, 10, 11, 12; Solution 3 (three): Item 13. All 13 items were retained. It is worth noting that item 13 - "My ICT literacy negatively affects purchasing decisions" scored the highest factor loading; this reflects the respondents' perceptions in terms of what impacts them the most when making purchasing decisions.

#### 4.5 Results of testing the Hypotheses

The next section presents the results of testing the Hypotheses.

#### 4.5.1 Hypothesis Testing

# 4.5.1.1 Hypothesis 1a: The CSI is not applicable to the Namibian Generation Y consumer decision-making

The CSI reliability test validated Sproles and Kendall (1986) scale and hence the eight Factors or Dimensions with the 40 items were retained in this study. Thus, the CSI is applicable to the consumer decision-making styles of the Generation Y Consumers in Namibia, and can be listed in order of their importance as follows:

- 1. Factor 5 Price Conscious, "Value for Money" (0.84)
- 2. Factor 3 Novelty-Fashion Consciousness (0.80)
- 3. Factor 2 Brand Conscious, "Price Equals Quality" (0.75)
- 4. Factor 6 Impulsive Careless(0.71)
- 5. 8- Habitual, Brand Loyal (0.67)
- 6. Factor 1 Perfectionistic High-Quality Consciousness (0.64)
- 7. Factor 4 Recreational, Hedonistic(0.54)
- 8. Factor 7 Confused by Over choice (0.52)

Further, the Factor 1 - Perfectionistic High-Quality Consciousness, Factor 2 - Brand Conscious, "Price Equals Quality", Factor 3 - Novelty-Fashion Consciousness, Factor 4 - Recreational, Hedonistic, and 8- Habitual, Brand Loyal (0.67), were found in the first rotated solution. These factors seem to be clustered around product and brand values and hence could be classified as "Consumer Product and Brand Sensitivity behaviour. Factor 5 - Price Conscious, "Value for Money, Factor 6 - Impulsive

Careless, and, Factor 7 - Confused by Over choice, were found in the second rotated solution. These factors appear to be clustered around Price, Impulsiveness and Confused by Over choice and could be classified as "Consumer Price/Impulsive behaviour".

Table 35 below provides extracts from the items in the CSI scale that had high loading. Hence these items can be used to identify key consumer behaviour among the Namibian Generation Y consumers.

Table 35: Key Consumer Behaviour of the Generation Y consumers in Namibia

		Cronbach's
Item#	Decription	Alpha
	Prefer buying best- selling	0.65
	brands	
13		
	Advertised brands usually	0.63
	good choices	
14	TT 11 1	
	Usually have one more	0.70
	outfits of the very newest	
	style	
15		
	Keep wardrobe up to date	0.73
	with changing fashions	
16		
16		0.62
	Fashionable attractive styling	0.62
17	is very important	
	Lower price products are	0.34
	usually my choice	
26		

Table 35 presents items in CSI that describe key consumption attitudes of the Namibian Generation Y consumers based on their loadings, namely:

Item # 16 "I Keep my wardrobe up to date with changing fashions"; item #15 "I Usually have one more outfits of the very newest style" item # 13 "I prefer buying best-selling brands", item#14 "The most advertised brands are usually very good choices"; item# 17 "Fashionable attractive styling is very important". At the bottom of the list is item#26 "Lower price products are usually my choice" – this suggests that the Namibian Generation Y consumers tend to be product and brand conscious and somehow concerned about prices. Tables 36 and 37 present a comparison of Factor Loadings among the CSI studies.

**Table 36: Comparison of Factor Loadings among CSI Studies** 

Sproles & Kendall (1986)	Lyonski, Durvasula & Zotos (1996)	Canabal (2002)	Hsu (2012)	Current Study
Brand Consciousness (0.75)	Perfectionist (0.61)	Brand Consciousness (0.77)	Brand Consciousness (0.81)	Perfectionist/High Quality-Conscious Consumer (0.64)
Price-Value Conscious Shopper (0.48)	Brand Consciousness (0.71)	Perfectionist/High- Quality Consciousness (0.70)	Price-Value Conscious Shopper (0.78)	Brand Conscious Consumer (0.75)
High-Quality Conscious Shopper (0.74)	Novelty-Fashion Consciousness (0.72)	Confused by Overchoice (0.63)	High-Quality Conscious Shopper (0.80)	Novelty Fashion Conscious Consumer (0.80)
Time –Energy and Recreational Shopper (0.76)	Recreational/Hedonistic (0.45)	Recreational Shopper (0.47)	Time –Energy and Recreational Shopper (0.75)	Recreational/Hedonistic Consumer ( 0.54)
Novelty- Fashion Shopper (0.74)	Confused by Overchoice (0.64)		Novelty- Fashion Shopper (0.83)	Price Conscious/Value for money Consumers (0.84)
Habitual and Brand-Loyal Shopper (0.53)	Habitual, Brand Loyal (0.51)		Habitual and Brand-Loyal Shopper (0.74)	Impulsive/Careless (0.71)
Confused-by- Overchoice Shopper (0.55)	Impulsiveness (0.41)		Confused-by- Overchoice Shopper (0.69)	Confused by over- choice Consumer (0.52)
Impulsive Shopper (0.48)			Impulsive Shopper (0.59)	Habitual, Brand Loyal (0.67)

Table 36 indicates that the factor loadings of the current study range between (0.52) to (0.84) and are in line with the previous studies.

Table 37: Further Comparison of Factor Loadings of factor analysis for studies using the Consumer Style Inventory

Year	Authors	Country	Factor Loadings Range	Number of	
				factors	
1986	Sproles & Kendall	U.S.	0.40 - 0.75	8	
1992	Hafstrom et al	South Korea	0.31 – 0.84	8	
1993	Durvasula et al.	New Zealand	0.20 - 0.83	8	
1998	Fan & Xiao	China	0.55 – 0.60	5	
2001	Siu et al.	China	0.18 – 0.87	8	
2001	Walsh et al.	Germany	0.42 – 0.77	7	
2002	Lin et al.	Taiwan	0.51 – 0.85	8	
2002	Canabal	India	0.47 – 0.77	5	
2007	Bauer et al.	U.K.	0.54 - 0.91	4	
2009	Kavas & Yesilada	Turkey	0.42 – 0.76	8	
2009	Mokhlis	Malaysia	0.51 – 0.75	8	
2010	Mishra	India	059 – 0.85	10	
2010	Anić et al	Macedonia	0.55 – 0.87	8	
2012	Hsu	Taiwan	030 - 080	8	
2013	Potgieter et al.	South Africa	0.50 - 0.80	10	
2014	Tanksale et al.	India	0.46 - 0.75	7	
2015	Nayeem & Casidy	Australia	0.55 – 0.71	8	
2017	Current Study	Namibia	0.52-0.84	8	

The present study has classified the general consumer decision-making characteristics of the Namibian Generation Y consumers. The Namibian eight-factor model has confirmed all eight of Sproles and Kendall (1986) characteristics. Thus, similar to previous studies, it has emerged from this study that the CSI is sensitive enough and is able to assess cultural differences and produce sensible results in Namibia. In other words, it can be said that consumer decision-making styles are culturally dependent as suggested by Mishra (2010).

Furthermore, Multivariate analysis of variance (MANOVA) tests were conducted to establish the mean differences among different categories such as gender, ethnicity, age, age category and university. The eight CSI Factors (Perfectionist, Brand Conscious, Novelty, Recreational, Price Conscious, Impulsive, Confused, and Habitual) were the Dependent Variables. In addition, ANOVA tests were employed to determine which Dependent Variable(s) are being affected by the Independent Variable.

In order to measure the strength of the association in the MANOVA tests, Wilks' Lambda was used in this study. This is because it explains the variance not accounted for by the combined Dependent Variables and because it is the most commonly reported test statistic which gives an exact F-statistic

Other statistics displayed by the MANOVA tests were: Hotelling's trace which is the pooled ratio of effect variance to error variance, the Pillai-Bartlett criterion which, although it is considered robust and powerful, gives conservative F-statistics and the Roy's Largest Root which looks at the largest eigenvalue to give an upper-bound of the F-statistic. Further, in order to determine whether the covariance matrices were equal, the Box's Test of Equality of Covariance Matrix was used. Furthermore, Levene's tests were conducted to test if samples have equal variances or homogeneity of variance. The Levene's test was used to verify that variances were equal across groups or samples. Levene's test is an alternative to the Bartlett test but it is less sensitive than the Bartlett test to departures from normality.

4.5.1.2 Hypothesis 1b: Consumer decision-making styles are not significantly different between males and females.

One-way MANOVA test between groups was done to investigate gender differences in consumer decision-making styles. The eight Factors or profiles of consumer decision-making styles were the Dependent Variables and the Independent Variable was gender. Before doing the MANOVA test, Pearson's correlation analysis of the Dependent Variables was performed.

Table 38 presents the correlation results.

**Table 38: Correlation of the Profiles of Consumer Decision-Making Styles** 

#### Correlations<sup>b</sup>

		Factor 1 – Perfectionistic, High-	Factor 2 – Brand Conscious, "Price	Factor 3 – Novelty-Fashion	Factor 4 – Recreational,	Factor 5 – Price Conscious, "Value	Factor 6 – Impulsive,	Factor 7 – Confused by	Factor 8 – Habitual,
Factor 1 – Perfectionistic, High-	Pearson Correlation	Quality Conscious	Equals Quality" .410	Conscious .477**	Hedonistic	for Money" .155	Careless	Over choice	Brand Loyal
Quality Conscious	Sig. (2- tailed)		.000	.000	.000	.001	.000	.000	.000
Factor 2 – Brand Conscious, "Price	Pearson Correlation	.410	1	.517 <sup>**</sup>	.492**	.144**	.392**	.407**	.373 <sup>**</sup>
Equals Quality"	Sig. (2- tailed)	.000		.000	.000	.003	.000	.000	.000
Factor 3 – Novelty- Fashion Conscious	Pearson Correlation	.477	.517 <sup>**</sup>	1	.347 <sup>**</sup>	.150 <sup>**</sup>	.316 <sup>**</sup>	.245 <sup>**</sup>	.456 <sup>**</sup>
	Sig. (2- tailed)	.000	.000		.000	.002	.000	.000	.000
Factor 4 – Recreational,	Pearson Correlation	.314"	.492**	.347**	1	.259 <sup>**</sup>	.339**	.314 <sup>**</sup>	.327**
Hedonistic	Sig. (2- tailed)	.000	.000	.000		.000	.000	.000	.000

Table 38 (Continues)

Factor 5 – Price	Pearson								
Conscious, "Value for	Correlation	.155 <sup>**</sup>	.144**	.150 <sup>**</sup>	.259**	1	.378**	.196**	.091
			ı						
Money"	Sig. (2-	.001	.003	.002	.000		.000	.000	.056
	tailed)	.001	.000	.002	.000		.000	.000	.000
Factor 6 – Impulsive,	Pearson	**	**	**	**	**		**	**
Careless	Correlation	.330**	.392 <sup>**</sup>	.316 <sup>**</sup>	.339 <sup>**</sup>	.378**	1	.443**	.310 <sup>**</sup>
	Sig. (2-								
	tailed)	.000	.000	.000	.000	.000		.000	.000
Factor 7 – Confused by Pearson		204**	407**	0.45**	04.4**	400**	4.40**		004**
Over choice	Correlation	.231 <sup>**</sup>	.407**	.245**	.314 <sup>**</sup>	.196 <sup>**</sup>	.443**	1	.331**
	Sig. (2-								
	tailed)	.000	.000	.000	.000	.000	.000		.000
Factor 8 – Habitual,	Pearson	.216 <sup>°°</sup>	.216" .373"	.456 <sup>**</sup>	.327**	.091	.310 <sup>**</sup>	.331	
Brand Loyal	Correlation								1
	Sig. (2-	.000	200	000	200	050	000	000	
	tailed)		.000	.000	.000	.056	.000	.000	

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

b. Listwise N=437

According to Table 38, the Pearson's correlation results show that the correlations for the eight CSI Factors are significant at 10%. In terms of gender the test population was made up of 243 females and 191 males.

Table 39 presents the results of the CSI Box's test and Table 40 present the results of Levene's test.

Table 39: CSI Box's Test of Equality of Covariance Matrices

#### Box's Test of Equality of

**Covariance Matrices**<sup>a</sup>

Box's M	47.431
F	1.291
df1	36
df2	559987.019
Sig.	.113

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.

a. Design: Intercept +

a. Booigiii iiitoroopi

Gender

The Box's Test of Equality of Covariance Matrices (Table 39) has an insignificant value of 0.113 indicating that the observed covariance matrices of the dependent variables are equal across the groups. Hence Wilks' Lambda in MANOVA was the appropriate test to use.

Table 40: CSI and Gender Levene's Test of Equality of Error Variances

Levene's Test of Equality of Error Variances<sup>a</sup>

	F	df1	df2	Sig.
Factor 1 – Perfectionistic, High-Quality Conscious	.815	1	432	.367
Factor 2 – Brand Conscious, "Price Equals Quality"	2.712	1	432	.100
Factor 3 – Novelty-Fashion Conscious	.741	1	432	.390
Factor 4 – Recreational, Hedonistic	1.359	1	432	.244
Factor 5 – Price Conscious, "Value for Money"	.004	1	432	.952
Factor 6 – Impulsive, Careless	1.300	1	432	.255
Factor 7 – Confused by Over choice	.250	1	432	.617
Factor 8 – Habitual, Brand Loyal	.048	1	432	.826

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Gender

Table 40 indicates that most of the variables of the Levene's test were insignificant; hence linearity and equal variances were assumed. The results of the MANOVA test are presented in Table 41.

**Table 41: CSI and Gender Multivariate Test** 

### **Multivariate Tests**<sup>a</sup>

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	t Pillai's Trace	.985	3393.884 <sup>b</sup>	8.000	425.000	.000	.985
	Wilks' Lambda	.015	3393.884 <sup>b</sup>	8.000	425.000	.000	.985
	Hotelling's Trace	63.885	3393.884 <sup>b</sup>	8.000	425.000	.000	.985
	Roy's Largest Root	63.885	3393.884 <sup>b</sup>	8.000	425.000	.000	.985
Gender	Pillai's Trace	.036	1.975 <sup>b</sup>	8.000	425.000	.048	.036
	Wilks' Lambda	.964	1.975 <sup>b</sup>	8.000	425.000	.048	.036
	Hotelling's Trace	.037	1.975 <sup>b</sup>	8.000	425.000	.048	.036
	Roy's Largest Root	.037	1.975 <sup>b</sup>	8.000	425.000	.048	.036

a. Design: Intercept + Gender

b. Exact statistic

A multivariate analysis of variance was conducted.

Table 41 depicts Wilks' Lambda test with the following results Wilks'  $\Lambda$  = 0.964, F= (425, 425) = 1.98, P=0.048, Partial Eta Square ( $\eta$ <sup>2</sup>) = 0.036 suggesting that there is significant difference between males and females on the combined Dependent Variables (eight Factors/Profiles of consumer decision-making styles). To follow up on these results, an ANOVA test of the Dependent Variables was conducted.

Table 42: CSI and Gender ANOVA

#### ANOVA

	7110171					
		Sum of Squares	df	Mean Square	F	Sig.
Factor 1 – Perfectionistic, High-Quality Conscious	Between Groups	214.435	18	11.913	.572	.919
	Within Groups	9658.695	464	20.816		
	Total	9873.130	482			
Factor 2 – Brand Conscious, "Price Equals Quality"	Between Groups	345.677	18	19.204	.659	.852
	Within Groups	13463.325	462	29.141		
	Total	13809.002	480			
Factor 3 – Novelty-Fashion Conscious	Between Groups	544.695	18	30.261	1.868	.017
	Within Groups	7531.576	465	16.197		
	Total	8076.271	483			
Factor 4 – Recreational, Hedonistic	Between Groups	246.411	18	13.690	1.149	.301
	Within Groups	5553.477	466	11.917		
	Total	5799.889	484			
Factor 5 – Price Conscious, "Value for Money"	Between Groups	80.030	18	4.446	.887	.595
	Within Groups	2356.792	470	5.014		
	Total	2436.822	488			
Factor 6 – Impulsive, Careless	Between Groups	183.761	18	10.209	1.070	.380
	Within Groups	4464.888	468	9.540		
	Total	4648.649	486			
Factor 7 – Confused by Over choice	Between Groups	227.968	18	12.665	1.089	.360
	Within Groups	5454.130	469	11.629		
	Total	5682.098	487			
Factor 8 – Habitual, Brand Loyal	Between Groups	376.154	18	20.897	1.911	.014
	Within Groups	5107.690	467	10.937		
	Total	5483.844	485			

Table 42 depicts the results of the ANOVA test, using an Alpha value at the significance level of P<0.05; The ANOVA test suggested that Factor 3 – Novelty-Fashion Conscious and Factor 8 – Habitual, Brand Loyal were significantly different between males and females.

**Table 43: CSI and Gender Descriptive statistics** 

Gender		N	Mean	Std. Deviation	Std. Error Mean
Factor 1 – Perfectionistic, High-Quality Conscious	Female	275	25.45	4.480	.270
Conscious	Male	209	25.00	4.562	.316
Factor 2 – Brand Conscious, "Price Equals Quality"	Female	275	22.91	5.611	.338
Quality	Male	207	23.20	5.098	.354
Factor 3 – Novelty-Fashion Conscious	Female	278	17.29	3.976	.238
	Male	206	17.40	4.287	.299
Factor 4 – Recreational, Hedonistic	Female	278	15.84	3.587	.215
	Male	207	16.21	3.229	.224
Factor 5 – Price Conscious, "Value for Money"	Female	279	11.31	2.255	.135
	Male	210	10.68	2.143	.148
Factor 6 – Impulsive, Careless	Female	279	18.31	3.143	.188
	Male	208	17.92	3.009	.209
Factor 7 – Confused by Over choice	Female	277	13.50	3.351	.201
	Male	210	12.92	3.460	.239
Factor 8 – Habitual, Brand Loyal	Female	278	13.42	3.325	.199
	Male	208	13.82	3.384	.235

Table 43 (CSI and Gender Descriptive Statistics) revealed that males presented a slightly higher score for Factor 3 – Novelty-Fashion Conscious (M=17.40, SD=4.287, SE=0.299) as well as for Factor 8 – Habitual, Brand Loyal (M=13.82, SD=3.384, SE=0.235).

# 4.5.1.3 Hypothesis 1c: Consumer decision-making styles are not significantly different for individuals who come from different ethnic groups.

The Dependent Variables were the eight Factors/profiles of consumer decision-making styles and the Independent Variable was Ethnicity. The MANOVA test was employed and the results are shown in the tables below.

In terms of ethnicity, the sample was made up of Afrikaners, Damara/Nama, Oshiwambo, OTjiherero, Silozi and Other. The Test of Equality of Covariance Matrices has a significant value of P<0.000 indicating that the observed covariance matrices of the Dependent Variables were not equal across the groups; this was attributed to the fact that the Oshiwambo speaking group were the largest in the data set given the fact that it is the largest ethnic group in Namibia. With the exception of Factor 7 (Confused by Overchoice) that reported a P<0.06, the rest had insignificant P values suggesting linearity and equal variances and hence the researcher decided to continue with the MANOVA test using Wilks' Lambda (Table 44).

**Table 44: CSI and Ethnicity Multivariate Test** 

Multivariate Tests<sup>a</sup>

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.951	1017.279 <sup>b</sup>	8.000	423.000	.000	.951
	Wilks' Lambda	.049	1017.279 <sup>b</sup>	8.000	423.000	.000	.951
	Hotelling's Trace	19.239	1017.279 <sup>b</sup>	8.000	423.000	.000	.951
	Roy's Largest Root	19.239	1017.279 <sup>b</sup>	8.000	423.000	.000	.951
Ethnicgroup	Pillai's Trace	.125	1.138	48.000	2568.000	.240	.021
	Wilks' Lambda	.880	1.139	48.000	2085.400	.239	.021
	Hotelling's Trace	.130	1.140	48.000	2528.000	.238	.021
	Roy's Largest Root	.056	2.998 <sup>c</sup>	8.000	428.000	.003	.053

a. Design: Intercept + ethnicgroup

b. Exact statistic

c. The statistic is an upper bound on F that yields a lower bound on the significance level.

Table 44 depicts Wilk's Lambda test with the following results:

Wilks'  $\Lambda$  = 0.880, F= (423, 2085) = 1.14 P=0.240, Partial Eta Squared ( $\eta^2$ ) = 0.021 suggesting that there is no significant difference between the ethnic groups on the combined Dependent Variables (eight Factors/Profiles of consumer decision-making styles). This was also supported by ANOVA's Post-Hoc Bonferroni test. Hence the Consumer decision-making styles of Generation Y consumers in Namibia are not significantly different among the ethnic groups.

## 4.5.1.4 Hypothesis 1d: Consumer decision-making styles are not significantly different for individuals of different ages.

The Dependent Variables were the eight Factors/Profiles of consumer decision-making styles and the Independent Variable was Age. The MANOVA test was employed and the results are shown in the tables below.

Table 45 below depicts the age distribution of the participants.

Table 45: Age distribution of the participants

**Between-Subjects Factors** 

		N
Age of respondent	18	5
	19	36
	20	38
	21	50
	22	44
	23	49
	24	52
	25	45
	26	27
	27	38
	28	11
	29	16
	30	11
	31	2
	32	5
	33	2
	34	3
		ı

The age distribution of the participants is between 18 and 36. The bulk of the participants were between the ages of 19 and 27.

Table 46 presents the CSI and Age Levene's test.

Table 46: CSI and Age Levene's Test of Equality of Error Variances

Levene's Test of Equality of Error Variances<sup>a</sup>

	F	df1	df2	Sig.
Factor 1 – Perfectionistic, High-Quality Conscious	1.481	18	415	.093
Factor 2 – Brand Conscious, "Price Equals Quality"	.847	18	415	.644
Factor 3 – Novelty-Fashion Conscious	1.071	18	415	.380
Factor 4 – Recreational, Hedonistic	1.451	18	415	.104
Factor 5 – Price Conscious, "Value for Money"	.939	18	415	.531
Factor 6 – Impulsive, Careless	1.023	18	415	.432
Factor 7 – Confused by Over choice	.916	18	415	.560
Factor 8 – Habitual, Brand Loyal	.745	18	415	.764

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + age

The Box's Test of Equality of Covariance Matrices revealed an insignificant P <0.141 indicating that there are no significant differences between the covariance matrices. The Levene's test of Equality of Error Variances in Table 46 provided insignificant P values for most of the factors which suggested that the assumption of homogeneity of variances is not violated and hence further analysis could be done.

Table 47 presents the CSI and Age Multivariate Tests.

**Table 47: CSI and Age Multivariate Tests** 

#### Multivariate Tests<sup>a</sup>

				Hypothesis			Partial Eta
Effect		Value	F	df	Error df	Sig.	Squared
Intercept	t Pillai's Trace	.917	563.837 <sup>b</sup>	8.000	408.000	.000	.917
	Wilks' Lambda	.083	563.837 <sup>b</sup>	8.000	408.000	.000	.917
	Hotelling's Trace	11.056	563.837 <sup>b</sup>	8.000	408.000	.000	.917
	Roy's Largest Root	11.056	563.837 <sup>b</sup>	8.000	408.000	.000	.917
age	Pillai's Trace	.348	1.049	144.000	3320.000	.331	.044
	Wilks' Lambda	.697	1.053	144.000	3015.407	.321	.044
	Hotelling's Trace	.374	1.056	144.000	3250.000	.311	.045
	Roy's Largest Root	.124	2.848 <sup>c</sup>	18.000	415.000	.000	.110

a. Design: Intercept + age

Table 47 depicts Wilks' Lambda test with the following results:

Wilks'  $\Lambda = 0.697$ , F = (408, 3015) = 1.053 P = .321, Partial Eta Square[d] ( $\eta^2$ ) = 0.044 suggesting that there is no significant difference for individuals of different ages on the combined Dependent Variables (eight Factors/Profiles of consumer decision-making styles). Hence, the Consumer decision-making styles of Generation Y consumers in Namibia are not significantly different for individuals of different ages.

b. Exact statistic

c. The statistic is an upper bound on F that yields a lower bound on the significance level.

## 4.5.1.5 Hypothesis 1e: Consumer decision-making styles are not significantly different for individuals who study in different Universities.

The Dependent Variables were the eight Factors/Profiles of consumer decision-making styles and the Independent Variable was name of University. The MANOVA test was employed and the results are shown in the tables below.

Table 48 presents the CSI and University Levene's Test.

Table 48: CSI and University Levene's Test of Equality of Error Variance

Levene's Test of Equality of Error Variances<sup>a</sup>

	vene's Test of Equality of Error Variances							
	F	df1	df2	Sig.				
Factor 2 – Brand Conscious,	1 402	8	426	150				
"Price Equals Quality"	1.492	0	436	.158				
Factor 3 – Novelty-Fashion	1.176	8	436	.312				
Conscious	1.170	0	430	.512				
Factor 4 – Recreational,	2.752	8	436	.006				
Hedonistic	2.702	O	400	.000				
Factor 5 – Price Conscious,	1.586	8	436	.127				
"Value for Money"	1.000	J	100	.127				
Factor 6 – Impulsive,	.980	8	436	.451				
Careless	.000							
Factor 7 – Confused by Over	1.881	8	436	.061				
choice	1.001		100	.001				
Factor 8 – Habitual, Brand	1.344	8	436	.220				
Loyal	1.011		100	.220				

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Name of University

The Box's Test of Equality of Covariance Matrices revealed an insignificant P <0.112 indicating that there are no significant differences between the covariance matrices. The Levene's test of Equality of Error Variances Table 48 found, with the exception of two factors, Factor 4: Recreational, Hedonistic Consumer and Factor 7: Confused by Over choice, insignificant P values which suggested that the assumption of homogeneity of variances is not violated for most of the variables. Table 49 presents the CSI and University Multivariate Test.

**Table 49: CSI and University Multivariate Test** 

### Multivariate Tests<sup>a</sup>

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.705	146.633 <sup>b</sup>	7.000	430.000	.000	.705
	Wilks' Lambda	.295	146.633 <sup>b</sup>	7.000	430.000	.000	.705
	Hotelling's Trace	2.387	146.633 <sup>b</sup>	7.000	430.000	.000	.705
	Roy's Largest Root	2.387	146.633 <sup>b</sup>	7.000	430.000	.000	.705
Name of University	Pillai's Trace	.196	1.569	56.000	3052.000	.005	.028
	Wilks' Lambda	.815	1.603	56.000	2320.932	.003	.029
	Hotelling's Trace	.213	1.633	56.000	2998.000	.002	.030
	Roy's Largest Root	.131	7.151 <sup>c</sup>	8.000	436.000	.000	.116

a. Design: Intercept + Name of University

b. Exact statistic

c. The statistic is an upper bound on F that yields a lower bound on the significance level.

Table 49 depicts Wilks' Lambda test with the following results: Wilks'  $\Lambda = 0.815$ , F = (430, 3052) = 1.603 P = .003, Partial Eta Square[d] ( $\eta^2$ ) = 0.029 suggesting there is a significant difference for individuals who studied in different Universities on the combined Dependent Variables (eight Factors/Profiles of consumer decision-making styles). Hence, the Consumer decision-making styles of Generation Y consumers in Namibia are significantly different for individuals who studied in different Universities. In order to establish how the specific Factors or Profiles of consumer decision making differed between the Universities, an ANOVA test was employed. The results are depicted in table 50 below.

Table 50: CSI and University Name ANOVA

	ANOVA					
		Sum of		Mean		
	_	Squares	df	Square	F	Sig.
Factor 1 – Perfectionistic, High- Quality Conscious	Between Groups	466.896	7	66.699	3.375	.002
	Within Groups	9465.563	479	19.761		
	Total	9932.460	486			
Factor 2 – Brand Conscious, "Price Equals Quality"	Between Groups	788.433	8	98.554	3.530	.001
	Within Groups	13291.064	476	27.922		
	Total	14079.497	484			
Factor 3 – Novelty-Fashion Conscious	Between Groups	274.701	8	34.338	2.082	.036
	Within Groups	7900.379	479	16.493		
	Total	8175.080	487			
Factor 4 – Recreational, Hedonistic	Between Groups	87.410	8	10.926	.912	.506
	Within Groups	5764.853	481	11.985		
	Total	5852.263	489			
Factor 5 – Price Conscious, "Value for Money"	Between Groups	57.003	8	7.125	1.450	.173
	Within Groups	2382.926	485	4.913		
	Total	2439.929	493			
Factor 6 – Impulsive, Careless	Between Groups	228.398	8	28.550	3.109	.002
	Within Groups	4435.236	483	9.183		
	Total	4663.634	491			
Factor 7 – Confused by Over choice	Between Groups	271.113	8	33.889	3.015	.003
	Within Groups	5428.180	483	11.238		
	Total	5699.293	491			

Factor 8 – Habitual, Brand Loyal	Between Groups	37.865	8	4.733	.416	.911
	Within Groups	5480.835	482	11.371		
	Total	5518.701	490			

According to Table 50, the following Factors of Profiles of consumer decision-making were found to be different at different Universities: Factor 1 – Perfectionistic, High-Quality Conscious; Factor 2 – Brand Conscious, "Price Equals Quality"; Factor 3 – Novelty-Fashion Conscious; Factor 6 – Impulsive, Careless and Factor 7 – Confused by Over choice.

Table 51 provides the Universities descriptive Statistics.

**Table 51: CSI and University Descriptive Statistics** 

#### **Descriptive Statistics**

	Name of University	Mean	Std. Deviation	N
Factor 1 – Perfectionistic, High-	<del>.</del>			
Quality Conscious	IUM	25.84	4.204	104
	NUST	26.40	4.280	137
	UNAM	24.23	4.758	184
	Total	25.34	4.543	437
Factor 2 – Brand Conscious, "Price				
Equals Quality"	IUM	24.45	5.084	104
	NUST	24.02	5.551	137
	UNAM	21.78	5.330	184
	Total	23.21	5.431	437
Factor 3 – Novelty-Fashion Consciou	S			
	IUM	17.94	4.031	104
	NUST	18.04	4.007	137
	UNAM	16.73	4.113	184
	Total	17.49	4.080	437
Factor 4 – Recreational, Hedonistic				
	IUM	16.46	3.924	104
	NUST	16.47	3.523	137
	UNAM	15.79	3.154	184
	Total	16.14	3.465	437
Factor 5 – Price Conscious, "Value fo				
Money"	IUM	11.11	2.238	104
	NUST	11.38	1.975	137
	UNAM	10.78	2.312	184
	Total	11.05	2.193	437
Factor 6 – Impulsive, Careless				
	IUM	18.71	2.838	104
	NUST	18.81	3.083	137
	UNAM	17.57	3.079	184
Factor 7 – Confused by Over choice	Total	18.27	3.072	437
racioi 7 – Coniused by Over Choice	IUM	13.79	3.189	104
	NUST	14.05	2.979	137
	UNAM	12.61	3.773	184
	Total	13.34	3.464	437
Factor 8 – Habitual, Brand Loyal	. • • • • • • • • • • • • • • • • • • •	10.04	0.704	407
	IUM	13.67	3.372	104
	NUST			137
		13.59	3.375	
	UNAM	13.88	3.289	184
	Total	13.74	3.309	437

From Table 51, the following differences, between the Profiles of consumer decision-making, were found at the different Universities:

### **NUST**

NUST (M=26.40, SD=4.280, SE=2.26) reported slightly higher levels of **Perfectionistic-High Quality Conscious individuals** compared to IUM (M=25.84, SD=4.280, SE=2.534) and UNAM (M=24.23, SD= 4.758, SE=1.789).

NUST (M=18.4, SD=4.007, SE= 1.54) reported slightly higher levels of **Novelty Fashion Conscious individuals** compared to IUM (M=17.94, SD=4.031, SE=1.76) and UNAM (M=16.73, SD=4.113, SE=1.18).

NUST (M=18.81, SD=3.083, SE= 1.61) reported slightly higher levels of **Impulsiveness, Careless individuals** compared to IUM (M=18.71, SD=2.838, SE=1.83) and UNAM (M=17.57, SD=3.079, SE=1.30).

NUST (M=14.05, SD=2.979, SE= 127) reported slightly higher levels of **Confused by Over choice individuals** compared to IUM (M=13.79, SD=3.189, SE=1.20) and UNAM (M=12.61, SD=3.773, SE=0.922).

#### **IUM**

IUM (M=24.45, SD=4.204, SE=2.40) reported slightly higher levels **of Brand Conscious – Price Equal Quality individuals** compared to NUST (M=24.02, SD=5.551, SE=2.052) reported and UNAM (M=21.78, SD=5.330, SE=1.61).

## 4.5.1.6 Hypothesis 1f: Consumer decision-making styles are not significantly different for Born Frees, Exiles and Remainees.

The Dependent Variables were the eight Factors/Profiles of consumer decision-making styles and the Independent Variable was age category (Born Frees, Exiles and Remainees). A MANOVA test was employed and the results are shown in the tables below.

Table 52 presents the CIS and Age Categories Box Test.

Table 52: CSI and age categories (Born Frees, Exiles and Remainees) Box's Test of Equality of Covariance

Box's Test of Equality of Covariance

Matrices <sup>a</sup>							
Box's M	201.261						
F	1.185						
df1	144						
df2	8709.616						
Sig.	.166						

Table 52 shows that the Box's Test of Equality of Covariance Matrices revealed an insignificant value of P <0.166 indicating that the observed covariance matrices of the Dependent Variables are equal across the groups. This result was supported by Levene's test of equality of error variance, in which none of the variables were significant.

Table 53 presents the CSI and the Age Categories Multivariate tests.

Table 53: CSI and Age Category (born frees, exiles and remainees) Multivariate Tests

### Multivariate Tests<sup>a</sup>

Multivariate Tests									
Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared		
Intercept	Pillai's Trace	.734	145.464 <sup>b</sup>	8.000	422.000	.000	.734		
	Wilks' Lambda	.266	145.464 <sup>b</sup>	8.000	422.000	.000	.734		
	Hotelling's Trace	2.758	145.464 <sup>b</sup>	8.000	422.000	.000	.734		
	Roy's Largest Root	2.758	145.464 <sup>b</sup>	8.000	422.000	.000	.734		
N1aBornafterindependence	Pillai's Trace	.009	.494 <sup>b</sup>	8.000	422.000	.860	.009		
	Wilks' Lambda	.991	.494 <sup>b</sup>	8.000	422.000	.860	.009		
	Hotelling's Trace	.009	.494 <sup>b</sup>	8.000	422.000	.860	.009		
	Roy's Largest Root	.009	.494 <sup>b</sup>	8.000	422.000	.860	.009		
N1bBorninsideNamibia	Pillai's Trace	.013	.709 <sup>b</sup>	8.000	422.000	.684	.013		
	Wilks' Lambda	.987	.709 <sup>b</sup>	8.000	422.000	.684	.013		
	Hotelling's Trace	.013	.709 <sup>b</sup>	8.000	422.000	.684	.013		
	Roy's Largest Root	.013	.709 <sup>b</sup>	8.000	422.000	.684	.013		
N1cBornoutsideNamibia	Pillai's Trace	.017	.891 <sup>b</sup>	8.000	422.000	.524	.017		
	Wilks' Lambda	.983	.891 <sup>b</sup>	8.000	422.000	.524	.017		
	Hotelling's Trace	.017	.891 <sup>b</sup>	8.000	422.000	.524	.017		
	Roy's Largest Root	.017	.891 <sup>b</sup>	8.000	422.000	.524	.017		

Table 53 (Continues)

-							
N1aBornafterindependence *	Pillai's Trace	.013	.712 <sup>b</sup>	8.000	422.000	.681	.013
N1bBorninsideNamibia	Wilks' Lambda	.987	.712 <sup>b</sup>	8.000	422.000	.681	.013
	Hotelling's Trace	.013	.712 <sup>b</sup>	8.000	422.000	.681	.013
	Roy's Largest Root	.013	.712 <sup>b</sup>	8.000	422.000	.681	.013
N1aBornafterindependence *	Pillai's Trace	.010	.518 <sup>b</sup>	8.000	422.000	.843	.010
N1cBornoutsideNamibia	Wilks' Lambda	.990	.518 <sup>b</sup>	8.000	422.000	.843	.010
	Hotelling's Trace	.010	.518 <sup>b</sup>	8.000	422.000	.843	.010
	Roy's Largest Root	.010	.518 <sup>b</sup>	8.000	422.000	.843	.010
N1bBorninsideNamibia *	Pillai's Trace	.011	.590 <sup>b</sup>	8.000	422.000	.787	.011
N1cBornoutsideNamibia	Wilks' Lambda	.989	.590 <sup>b</sup>	8.000	422.000	.787	.011
	Hotelling's Trace	.011	.590 <sup>b</sup>	8.000	422.000	.787	.011
	Roy's Largest Root	.011	.590 <sup>b</sup>	8.000	422.000	.787	.011
N1aBornafterindependence *	Pillai's Trace	.016	.850 <sup>b</sup>	8.000	422.000	.559	.016
N1bBorninsideNamibia *	Wilks' Lambda	.984	.850 <sup>b</sup>	8.000	422.000	.559	.016
N1cBornoutsideNamibia	Hotelling's Trace	.016	.850 <sup>b</sup>	8.000	422.000	.559	.016
	Roy's Largest Root	.016	.850 <sup>b</sup>	8.000	422.000	.559	.016

a. Design: Intercept + N1aBornafterindependence + N1bBorninsideNamibia + N1cBornoutsideNamibia + N1aBornafterindependence \* N1bBorninsideNamibia + N1aBornafterindependence \* N1cBornoutsideNamibia + N1bBorninsideNamibia \* N1cBornoutsideNamibia + N1aBornafterindependence \* N1bBorninsideNamibia \* N1cBornoutsideNamibia

b. Exact statistic

Table 53 depicts Wilks' Lambda test with the following results for each of the age categories:

### **Born after independence (Born Frees):**

Wilks'  $\Lambda$  = 0.991, F= (422 422) = 0.494 P=0.860, Partial Eta Squared ( $\eta^2$ ) = 0.009 suggested that there was no significant difference for the "Born frees" on the combined Dependent Variables (eight Factors/Profiles of consumer decision-making styles). Hence the Consumer decision-making styles of Generation Y consumers in Namibia are not significantly different for the "Born frees".

## **Born inside Namibia (Remainees)**

Wilks'  $\Lambda = 0.987$ , F = (422, 422) = 0.709 P=0.684, Partial Eta Squared ( $\eta^2$ ) = 0.013 suggested that there was no significant difference for "Remainees" on the combined Dependent Variables (eight Factors/Profiles of consumer decision-making styles). Hence the Consumer decision-making styles of Generation Y consumers in Namibia are not significantly different for the "Remainees".

### Born outside Namibia (Exiles)

Wilks'  $\Lambda = 0.017$  F= (422, 422) = 891 P=0.524 Partial Eta Squared ( $\eta^2$ ) = 0.017 suggested that there was no significant difference for "Exiles" on the combined Dependent Variables (eight Factors/Profiles of consumer decision-making styles). Hence the Consumer decision-making styles of Generation Y consumers in Namibia are not significantly different for the "Exiles".

## 4.5.1.7 Hypothesis 2 a: The ILS is not applicable to the Namibian Generation Y consumers.

The reliability of the factors in the ILS instrument reached 0.96 and suggested a good internal reliability. The PCA found 4 components with eigenvalues exceeding one, explaining over 93% the variance. The factorability was confirmed through Bartlett's test of Sphericity which was significant at 0.000. Hence the four Factors or components (Activist/Reflector [Act/Ref], Sensing/Intuitive [Sen/Int], Visual/Verbal [Vis/Vrb], Sequential/Global [Seq/Glo]) that make up the 44-item ILS scale were found reliable, validated and thus applicable to the Namibian Generation Y consumers.

Table 54 provides summary of the key Index of Learning Styles of the Generation Y consumers in Namibia.

**Table 54: Index of Learning Styles of Namibian Generation Y Consumers** 

Learning Style Scores	Sum	(i.e activist/reflector = 2938-2526	Letter for larger
activist_a	2938	37/11	3.4a
reflector_b	2526		
sensing_a	3006	50/11	4.5a
intuitive_b	2459		
visual_a	3021	52/11	4.7a
verbal_b	2446		
sequential_a	2647	14/11	1.3a
global_b	2489		

For statistical analysis, the ILS used a scoring method ranging from 0 to 11 in each option by subtracting the answer b (-1) responses from answer a (1) responses in order to obtain a score from -11 to +11 in each dimension. Answer a corresponded to

the individual preferences for active, sensing, visual or sequential learning while answer *b* to the personal tendencies toward reflective, intuitive, verbal, or global learning" (Hsu, 2012, p.145, Felder & Solomon, 1997, Felder & Spurlin, 2005). Scores from 1-3 represent mild preference for one or the other dimension but essentially well balanced. Scores from 5-7, represent a moderate preference for one dimension of the scale. Scores from 9-11 represent a strong preference for one dimension of the scale.

Table 54 shows that the Namibian Generation Y Consumers reported the following ILS preferences: mild preferences for Activist, moderate preferences for Sensing, moderate preferences for Visual, and mild preferences for Sequential.

In addition, Pearson correlation coefficients were calculated to examine the relationships between the four dimensions.

**Table 55: ILS Dimensions Correlation** 

#### Correlations

	Correlations										
		Activist	Reflector	Sensing	Intuitive	Visual	Verbal	Sequential	Global		
Activist	Pearson Correlation	1	867	.257	133	.341	229	.273	133		
	Sig. (2-tailed)		.000	.000	.003	.000	.000	.000	.003		
	N	505	505	505	505	505	505	505	505		
Reflector	Pearson Correlation	867	1	123	.249	204	.317	138	.264		
	Sig. (2-tailed)	.000		.006	.000	.000	.000	.002	.000		
	N	505	505	505	505	505	505	505	505		
Sensing	Pearson Correlation	.257	123	1	870	.323	212	.266	129		
	Sig. (2-tailed)	.000	.006		.000	.000	.000	.000	.004		
	N	505	505	505	505	505	505	505	505		
Intuitive	Pearson Correlation	133	.249	870	1	201	.311	144	.267		
	Sig. (2-tailed)	.003	.000	.000		.000	.000	.001	.000		
	N	505	505	505	505	505	505	505	505		
Visual	Pearson Correlation	.341	204	.323	201	1	896	.123	003		
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.006	.942		
	N	505	505	505	505	505	505	505	505		
Verbal	Pearson Correlation	229	.317	212	.311	896	1	010	.122		
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.817	.006		
	N	505	505	505	505	505	505	505	505		
Sequentia	l Pearson Correlation	.273	138	.266	144	.123	010	1	822		
	Sig. (2-tailed)	.000	.002	.000	.001	.006	.817		.000		
	N	505	505	505	505	505	505	505	505		
Global	Pearson Correlation	133	.264	129	.267	003	.122	822	1		
	Sig. (2-tailed)	.003	.000	.004	.000	.942	.006	.000			
	N	505	505	505	505	505	505	505	505		

The results (Table 55) revealed that there were statistically significant correlations between the four dimensions or scales. Multivariate analysis of variance (MANOVA) tests were conducted to establish the mean differences among different categories such as gender, ethnicity, income, age, and university. The four ILS Dimensions (Activist/Reflector [Act/Ref], Sensing/Intuitive [Sen/Int], Visual/Verbal [Vis/Vrb], Sequential/Global [Seq/Glo]) were the Dependent Variables. In addition,

ANOVA tests were employed to determine which Dependent Variable(s) are being affected by the Independent Variable.

4.5.1.8 Hypothesis 2b: Learning styles are not significantly different between males and females.

The Dependent Variables were the 4 dimensions of the 44 scale ILS instrument (Activist/Reflector [Act/Ref], Sensing/Intuitive [Sen/Int], Visual/Verbal [Vis/Vrb], Sequential/Global [Seq/Glo]) and the Independent Variable was Gender. A MANOVA test was employed and the results are shown in the tables below.

Table 56 presents the ILS and Gender Levene's Test of Equality of Error Variances and Table 57 presents the ILS and Gender Box's Test respectively.

Table 56: ILS and Gender Levene's Test of Equality of Error Variances

Levene's Test of Equality of Error Variances<sup>a</sup>

	F	df1	df2	Sig.
Activist	1.062	1	497	.303
Reflector	.992	1	497	.320
Sensing	.050	1	497	.824
Intuitive	.001	1	497	.975
Visual	.191	1	497	.663
Verbal	.044	1	497	.835
Sequential	.150	1	497	.699
Global	.939	1	497	.333

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Gender

The Levene's test of Equality of Error Variances (Table 56) provided insignificant P values which suggested that the assumption of homogeneity of variances is not violated. Hence Wilks's Lambda test was appropriate.

Table 57: ILS and gender Box's Test of Equality of Covariance Matrices

**Box's Test of Equality of** 

**Covariance Matrices**<sup>a</sup>

Box's M	21.028
F	1.386
df1	15
df2	834655.901
Sig.	.143

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.

a. Design: Intercept +

Gender

Table 57 shows that the Box's Test of Equality of Covariance Matrices revealed an insignificant P > 0.143 which indicates that there are no significant differences between the covariance matrices.

Table 58 presents the ILS and Gender Multivariate Tests.

**Table 58: ILS and Gender Multivariate Tests** 

Multivariate Tests <sup>a</sup>									
				Hypothesis			Partial Eta		
Effect		Value	F	df	Error df	Sig.	Squared		
Intercept	t Pillai's Trace	.992	11797.298 <sup>b</sup>	5.000	493.000	.000	.992		
	Wilks' Lambda	.008	11797.298 <sup>b</sup>	5.000	493.000	.000	.992		
	Hotelling's Trace	119.648	11797.298 <sup>b</sup>	5.000	493.000	.000	.992		
	Roy's Largest Root	119.648	11797.298 <sup>b</sup>	5.000	493.000	.000	.992		
Gender	Pillai's Trace	.011	1.117 <sup>b</sup>	5.000	493.000	.350	.011		
	Wilks' Lambda	.989	1.117 <sup>b</sup>	5.000	493.000	.350	.011		
	Hotelling's Trace	.011	1.117 <sup>b</sup>	5.000	493.000	.350	.011		
	Roy's	.011	1.117 <sup>b</sup>	5.000	493.000	.350	.011		

a. Design: Intercept + Gender

Largest Root

Table 58 shows that Wilks'  $\Lambda=0.989$  F= (493, 493) = 1.117, P=0.350 Partial Eta Squared ( $\eta^2$ ) = 0.011 which suggested there was no significant difference between males and females on the combined Dependent Variables (Activist/Reflector [Act/Ref], Sensing/Intuitive [Sen/Int], Visual/Verbal [Vis/Vrb], Sequential/Global [Seq/Glo] of the ILS). Hence the Learning Styles of Generation Y consumers in Namibia are not significantly different for males and females.

b. Exact statistic

4.5.1.9 Hypothesis 2c: Learning styles are not significantly different for individuals who come from different ethnic groups.

The Dependent Variables were the 4 dimensions of the 44 scale ILS instrument (Activist/Reflector [Act/Ref], Sensing/Intuitive [Sen/Int], Visual/Verbal [Vis/Vrb], Sequential/Global [Seq/Glo]) and the Independent Variable was Ethnicity. A MANOVA test was employed and the results are shown in the tables below. Table 59 presents the results of ILS and Ethnicity Box's Test of Equality of Covariance.

Table 59: ILS and Ethnicity Box's Test of Equality of Covariance

Box's Test of Equality
of Covariance

Matrices							
Box's M	347.564						
F	4.141						
df1	75						
df2	7874.973						
Sig.	.000						

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.

a. Design: Intercept + ethnicgroup

Table 59 shows that the Box's Test of Equality of Covariance Matrices revealed a significant P <0.000 which indicates there are significant differences between the covariance matrices, the Levene's test of Equality of Error Variances

(Table 60) however provided insignificant P values which suggested that the assumption of homogeneity of variances is not violated.

Table 60: ILS and Ethnicity Levene's Test of Equality of Error Variances

Levene's Test of Equality of Error Variances<sup>a</sup>

Levelle 6 feet of Equality of Effet Variations								
	F	df1	df2	Sig.				
Intuitive	.759	6	498	.602				
Visual	.349	6	498	.910				
Verbal	.545	6	498	.774				
Sequential	.907	6	498	.490				
Global	.566	6	498	.757				

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + ethnicgroup

**Table 61: ILS and Ethnicity Multivariate Tests** 

Multivariate Tests<sup>a</sup>

			Mullivariale	10010			
Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.970	3179.302 <sup>b</sup>	5.000	494.000	.000	.970
	Wilks' Lambda	.030	3179.302 <sup>b</sup>	5.000	494.000	.000	.970
	Hotelling's Trace	32.179	3179.302 <sup>b</sup>	5.000	494.000	.000	.970
	Roy's Largest Root	32.179	3179.302 <sup>b</sup>	5.000	494.000	.000	.970
Ethnicgroup	Pillai's Trace	.098	1.663	30.000	2490.000	.013	.020
	Wilks' Lambda	.905	1.668	30.000	1978.000	.013	.020
	Hotelling's Trace	.102	1.671	30.000	2462.000	.013	.020
	Roy's Largest Root	.053	4.389 <sup>c</sup>	6.000	498.000	.000	.050

a. Design: Intercept + ethnicgroup

b. Exact statistic

c. The statistic is an upper bound on F that yields a lower bound on the significance level.

Table 61 shows that Wilks'  $\Lambda$  = 0.905 F= (494, 1978) = 1.668, P=0.013 Partial Eta Squared ( $\eta^2$ ) = 0.020. These figures suggested that there was a significant difference between ethnic groups on the combined Dependent Variables (Activist/Reflector [Act/Ref], Sensing/Intuitive [Sen/Int], Visual/Verbal [Vis/Vrb], Sequential/Global [Seq/Glo] of the ILS). Hence the Learning Styles of Generation Y consumers in Namibia are significantly different for individuals who come from different ethnic groups. To further describe the differences among the ethnic groups, an ANOVA test was conducted.

Table 62 presents the results of the ANOVA test.

**Table 62: ILS and Ethnicity ANOVA** 

#### **ANOVA**

		Sum of Squares	df	Mean Square	F	Sig.
Activist	Between Groups	26.089	6	4.348	.957	.454
	Within Groups	2263.151	498	4.544		
	Total	2289.240	504			
Reflector	Between Groups	49.105	6	8.184	1.834	.091
	Within Groups	2221.893	498	4.462		
	Total	2270.998	504			
Sensing	Between Groups	48.177	6	8.029	1.723	.114
	Within Groups	2320.683	498	4.660		
	Total	2368.859	504			
Intuitive	Between Groups	54.949	6	9.158	2.028	.060
	Within Groups	2248.426	498	4.515		
	Total	2303.374	504			
Visual	Between Groups	21.702	6	3.617	.610	.723
	Within Groups	2955.137	498	5.934		
	Total	2976.840	504			
Verbal	Between Groups	20.253	6	3.375	.589	.739
	Within Groups	2852.389	498	5.728		
	Total	2872.642	504			
Sequential	Between Groups	50.271	6	8.379	2.516	.021
	Within Groups	1658.256	498	3.330		
	Total	1708.527	504			
Global	Between Groups	50.475	6	8.412	2.278	.035

Within Groups	1838.959	498	3.693	,	
Total	1889.434	504			

Table 62 depicts the results of the ANOVA test, using Alpha value at the significance of 0.05; The ANOVA test suggested that the Sequential and the Global dimensions are significantly different for individuals who come from different ethnic groups. Table 63 below presents the ILS and Ethnicity Descriptive Statistics which depicts the differences between the Sequential and Global dimensions for individuals who come from different ethnic groups.

**Table 63: ILS and Ethnicity Descriptive Statistics** 

**Descriptive Statistics** 

	Descriptive Statistics				
	Ethnic Group	Mean	Std. Deviation	N	
Intuitive	1	4.36	2.292	11	
	Afrikaner	5.50	1.732	12	
	Damara/Nama	4.40	2.298	30	
	Oshiwambo	4.85	2.082	340	
	Other	5.78	2.434	41	
	Otjiherero	4.50	2.104	48	
	Silozi	4.87	2.074	23	
	Total	4.87	2.138	505	
Visual	1	5.55	2.296	11	
	Afrikaner	5.67	2.146	12	
	Damara/Nama	5.40	2.415	30	
	Oshiwambo	6.07	2.454	340	
	Other	5.93	2.274	41	
	Otjiherero	6.17	2.495	48	
	Silozi	5.57	2.537	23	
	Total	5.98	2.430	505	
Verbal	1	4.45	2.018	11	
	Afrikaner	5.17	2.329	12	
	Damara/Nama	5.30	2.103	30	
	Oshiwambo	4.76	2.421	340	
	Other	4.95	2.302	41	
	Otjiherero	4.79	2.458	48	
	Silozi	5.43	2.537	23	
	Total	4.84	2.387	505	
Sequential	1	4.09	1.921	11	
	Afrikaner	5.50	1.883	12	
	Damara/Nama	5.67	1.583	30	
	Oshiwambo	5.24	1.900	340	
	Other	4.56	1.501	41	
	Otjiherero	5.67	1.754	48	
	Silozi	5.52	1.534	23	
	Total	5.24	1.841	505	
Global	1	5.18	2.316	11	
	Afrikaner	5.00	1.809	12	

Damara/Nama	4.43	1.591	30
Oshiwambo	4.93	1.986	340
Other	5.83	1.716	41
Otjiherero	4.63	1.886	48
Silozi	4.48	1.563	23
Total	4.93	1.936	505

A closer look at table 63 (ILS and Ethnicity Descriptive Statistics) revealed that Afrikaner, Damara/Nama, Oshiwambo, Otjiherero and Silozi displayed slightly higher scores for the Sequential Dimension whereas "Other" displayed a preference for the Global dimension.

4.5.1.10 Hypothesis 2d: Learning styles are not significantly different for individuals of different ages.

The Dependent Variables were the 4 dimensions of the 44 scale ILS instrument (Activist/Reflector [Act/Ref], Sensing/Intuitive [Sen/Int], Visual/Verbal [Vis/Vrb], Sequential/Global [Seq/Glo]) and the Independent Variable was Age. A MANOVA test was employed and the results are shown in the tables below.

Table 64 presents the ILS and the Age group Distribution.

Table 64: ILS and Age group Distribution

Age gro	up	Activist	Reflector	Sensing	Intuitive	Visual	Verbal	Sequential	Global
18-19 years	Mean	5.04	5.87	5.51	5.36	6.09	4.79	4.77	5.28
,	N	47	47	47	47	47	47	47	47
	Std. Deviation	2.095	2.153	2.084	2.110	2.725	2.645	1.563	1.570
20-24 years	Mean	5.85	5.00	6.06	4.80	6.13	4.73	5.14	5.10
,	N	263	263	263	263	263	263	263	263
	Std. Deviation	1.971	1.975	2.243	2.208	2.401	2.349	1.797	1.929
25-29 years	Mean	5.96	4.76	5.80	4.94	5.66	5.10	5.41	4.63
,	N	163	163	163	163	163	163	163	163
	Std. Deviation	2.357	2.282	2.094	2.057	2.391	2.355	1.965	2.040
30-34 years	Mean	5.85	5.11	6.48	4.37	6.07	4.74	6.11	4.41
you.o	N	27	27	27	27	27	27	27	27
	Std. Deviation	2.125	2.154	1.968	1.964	2.480	2.625	1.502	1.600
Total	Mean	5.81	5.01	5.94	4.88	5.97	4.86	5.25	4.92
	N	500	500	500	500	500	500	500	500
	Std. Deviation	2.132	2.121	2.171	2.141	2.436	2.394	1.836	1.932

Table 64 shows that the age groups of 18-19 and 20-24 both displayed slightly higher preference for the Visual dimension, that the 25-29 group displayed slightly higher preference for the Activist dimension, whereas the 30-34 group displayed slightly higher preference for Sensing.

Table 65 presents the ILS and the Age Box's Test.

Table 65: ILS and Age Box's Test of Equality of Covariance Matrices

Box's Test of Equality of Covariance

**Matrices**<sup>a</sup>

	· 5
Box's M	790.148
F	4.276
df1	165
df2	9971.449
Sig.	.000

Table 65 shows that the Box's Test of Equality of Covariance Matrices revealed a significant P <0.000 which indicates that there are significant differences between the covariance matrices, however, the Levene's test of Equality of Error Variances (Table 66) provided insignificant P values for most of the dimensions except for Intuitive which suggested that the assumption of homogeneity of variances is only violated to a small degree. Further analyses were then conducted using Wilks' Lambda test (Table 67).

Table 66: ILS and Age Levene's Test of Equality of Error Variance

Levene's Test of Equality of Error Variances<sup>a</sup>

F								
	F	df1	df2	Sig.				
Intuitive	1.655	18	481	.044				
Visual	1.140	18	481	.309				
Verbal	1.221	18	481	.239				
Sequential	1.205	18	481	.252				
Global	1.370	18	481	.141				

**Table 67: ILS and Age Multivariate Test** 

Multivariate Tests<sup>a</sup>

			Multivariate re	StS			
							Partial
							Eta
Effect		Value	F	Hypothesis df	Error df	Sig.	Squared
Intercept	Pillai's Trace	.947	1712.697 <sup>b</sup>	5.000	477.000	.000	.947
	Wilks' Lambda	.053	1712.697 <sup>b</sup>	5.000	477.000	.000	.947

	Hotelling's Trace	17.953	1712.697 <sup>b</sup>	5.000	477.000	.000	.947
	Roy's Largest Root	17.953	1712.697 <sup>b</sup>	5.000	477.000	.000	.947
age	Pillai's Trace	.218	1.218	90.000	2405.000	.083	.044
	Wilks' Lambda	.799	1.221	90.000	2318.572	.080	.044
	Hotelling's Trace	.232	1.225	90.000	2377.000	.077	.044
	Roy's Largest Root	.092	2.456 <sup>c</sup>	18.000	481.000	.001	.084

a. Design: Intercept + age

Table 67 shows that Wilks'  $\Lambda = 0.799$ , F = (477, 2319) = 1.221, P = 0.080

Partial Eta Squared ( $\eta^2$ ) = 0.044. These figures suggested there was a significant difference for individuals of different ages on the combined Dependent Variables (Activist/Reflector [Act/Ref], Sensing/Intuitive [Sen/Int], Visual/Verbal [Vis/Vrb], Sequential/Global [Seq/Glo] of the ILS). Hence the Learning Styles of Generation Y consumers in Namibia are significantly different for individuals of different ages.

In order to establish how different the learning styles were, an ANOVA test was conducted. The results suggest that the Activist/Reflector and Sequential/Global learning styles are different among the age groups. The respondents between the ages of 25 and 29 appeared to have a higher mean score for the Activist learning styles. While, the respondents between the ages of 30 and 34 had a higher mean score for the Sequential learning style.

b. Exact statistic

c. The statistic is an upper bound on F that yields a lower bound on the significance level.

# 4.5.1.11 Hypothesis 2e: Learning styles are not significantly different for individuals who study in different Universities.

The Dependent Variables were the 4 dimensions of the 44 scale ILS instrument (Activist/Reflector [Act/Ref], Sensing/Intuitive [Sen/Int], Visual/Verbal [Vis/Vrb], Sequential/Global [Seq/Glo]) and the Independent Variable was the name of the university. A MANOVA test was employed, the Box's Test of Equality of Covariance Matrices revealed an insignificant P <0.165 which indicates that there are insignificant differences between the covariance matrices. Table 68 presents the results of the Levene's Test of Equality of Error Variances.

Table 68: ILS and Name of University Levene's Test of Equality of Error Variances

Levene's Test of Equality of Error Variances<sup>a</sup>

Lovelle & rest of Equality of Error variations								
	F	df1	df2	Sig.				
Intuitive	2.984	8	496	.003				
Visual	1.979	8	496	.047				
Verbal	1.957	8	496	.110				
Sequential	1.454	8	496	.172				
Global	1.364	8	496	.210				

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + university

The Levene's test of Equality of Error Variances (Table 68) provided insignificant P values for most of the dimensions except for Intuitive and Visual which suggested that the assumption of homogeneity of variances is only violated to a small degree. Further analyses were then conducted using Wilks' Lambda test (Table 69).

Table 69: ILS and Name of University Multivariate Tests

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.789	367.003 <sup>b</sup>	5.000	492.000	.000	.789
	Wilks' Lambda	.211	367.003 <sup>b</sup>	5.000	492.000	.000	.789
	Hotelling's Trace	3.730	367.003 <sup>b</sup>	5.000	492.000	.000	.789
	Roy's Largest Root	3.730	367.003 <sup>b</sup>	5.000	492.000	.000	.789
university	Pillai's Trace	.172	2.214	40.000	2480.000	.000	.034
	Wilks' Lambda	.836	2.252	40.000	2147.373	.000	.035
	Hotelling's Trace	.186	2.285	40.000	2452.000	.000	.036
	Roy's Largest Root	.118	7.319 <sup>c</sup>	8.000	496.000	.000	.106

a. Design: Intercept + university

Table 69 shows that Wilks'  $\Lambda=0.836$ ,  $F=(492,\ 2147)=2.255$ , P=0.000 Partial Eta Squared ( $\eta^2$ ) = 0.035. These results suggested that there was a significant difference between universities on the combined Dependent Variables (Activist/Reflector [Act/Ref], Sensing/Intuitive [Sen/Int], Visual/Verbal [Vis/Vrb], Sequential/Global [Seq/Glo] of the ILS). Hence the Learning Styles of Generation Y consumers in Namibia are significantly different for individuals who study in different Universities. To further describe the differences among individuals who study in different Universities, an ANOVA test was conducted.

Table 70 presents the results of the ANOVA test.

b. Exact statistic

c. The statistic is an upper bound on F that yields a lower bound on the significance level.

**Table 70: ILS and Name of University ANOVA** 

#### **ANOVA**

		7.01				
		Sum of Squares	df	Mean Square	F	Sig.
Activist	Between Groups	62.617	8	7.827	1.744	.006
	Within Groups	2226.623	496	4.489	1	
	Total	2289.240	504			
Reflector	Between Groups	101.792	8	12.724	2.909	.004
	Within Groups	2169.206	496	4.373		
	Total	2270.998	504			
Sensing	Between Groups	176.965	8	22.121	5.006	.000
	Within Groups	2191.894	496	4.419		
	Total	2368.859	504			
Intuitive	Between Groups	196.392	8	24.549	5.779	.000
	Within Groups	2106.982	496	4.248		
	Total	2303.374	504			
Visual	Between Groups	77.634	8	9.704	1.660	.008
	Within Groups	2899.206	496	5.845		
	Total	2976.840	504			
Verbal	Between Groups	121.923	8	15.240	2.748	.006
	Within Groups	2750.719	496	5.546		
	Total	2872.642	504			
Sequential	Between Groups	42.748	8	5.343	1.591	.125
	Within Groups	1665.779	496	3.358		
	Total	1708.527	504			
Global	Between Groups	40.115	8	5.014	1.345	.219
	Within Groups	1849.319	496	3.728		
	Total	1889.434	504			

Table 70 depicts the results of the ANOVA test, using an Alpha value with a significance of 5%. The ANOVA test reported that the Activist, Reflector, Sensing, Intuitive, Visual and Verbal dimensions are significantly different for individuals who study in different Universities.

Table 71: ILS and Name of University Descriptive Statistics

Descriptives

		•		<u>U</u>	escriptives				
						95% Confidence	Interval for Mean		
		N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
Activist	IUM	115	5.23	1.938	.181	4.87	5.58	0	10
	NUST	160	5.88	1.950	.154	5.58	6.19	1	10
	UNAM	210	6.05	2.281	.157	5.74	6.36	0	11
Reflector	IUM	115	5.70	1.969	.184	5.34	6.07	1	11
	NUST	160	5.02	1.944	.154	4.72	5.32	1	10
	UNAM	210	4.69	2.232	.154	4.39	4.99	0	11
Sensing									
	IUM	115	5.43	2.111	.197	5.04	5.82	0	10
	NUST	160	5.62	2.251	.178	5.27	5.97	1	11
	UNAM	210	6.54	1.971	.136	6.27	6.81	0	11
Intuitive									
	IUM	115	5.50	2.087	.195	5.12	5.89	1	11
	NUST	160	5.27	2.240	.177	4.92	5.62	0	10
	UNAM	210	4.21	1.881	.130	3.96	4.47	0	9
Visual									
	IUM	115	5.81	2.127	.198	5.42	6.20	0	11
	NUST	160	5.60	2.476	.196	5.21	5.99	0	11
	UNAM	210	6.29	2.539	.175	5.95	6.64	0	11

1				1		1	I	Ī	1
Verbal	IUM	115	5.17	2.144	.200	4.77	5.56	0	11
	NUST	160	5.32	2.422	.191	4.94	5.70	0	10
	UNAM	210	4.42	2.449	.169	4.09	4.76	0	10
Sequential									
	IUM	115	5.03	1.764	.165	4.70	5.35	1	10
	NUST	160	5.48	1.648	.130	5.22	5.73	2	10
	UNAM	210	5.21	1.963	.135	4.95	5.48	0	10
Global									
	IUM	115	5.25	1.905	.178	4.90	5.60	0	9
	NUST	160	4.71	1.739	.137	4.44	4.98	0	8
	UNAM	210	4.92	2.059	.142	4.64	5.20	0	11

Table 71 above, presents a description of the five identified dimensions which differed between individuals who studied in different Universities:

#### **UNAM**

**Activist:** UNAM reported a strong preference for Activist learning style (M=6.05, SD=2.281, SE=0.157) compared to NUST and IUM.

**Sensing:** UNAM reported a stronger preference for Sensing learning (M=6.54, SD=1.971, SE=.136) compared to NUST and IUM.

**Visual:** UNAM reported a stronger preference for Visual learning (M=6.29, SD=2.539, SE=.175) compared to IUM and NUST.

#### **IUM**

**Reflector:** IUM reported slightly higher preferences for Reflector learning style (M=5.70, SD=1.969, SE=.184) compared to NUST and UNAM.

**Intuitive:** IUM reported a slightly higher preference for Intuitive learning style (M=5.50, SD=2.087, SE=.195) compared to NUST and UNAM.

#### **NUST**

**Verbal:** NUST reported a slightly higher preference for Verbal learning style (M=5.32, SD=2.422, SE=.191) compared to IUM and UNAM.

4.5.1.12 Hypothesis 2f: Learning styles are not significantly different for Born Frees, Exiles and Remainees.

The Dependent Variables were the 4 dimensions of the 44 scale ILS instrument (Activist/Reflector [Act/Ref], Sensing/Intuitive [Sen/Int], Visual/Verbal [Vis/Vrb], Sequential/Global [Seq/Glo]) and the Independent Variable was age category (Born Frees, Exiles and remainees). A MANOVA test was employed and the results are shown in the tables below.

Table 72 depicts the Age Category Distribution.

**Table 72: Age Category Distribution** 

	Age Category of Respondents
Born after independence	76%
Born inside Namibia before	
independence	18%
Born outside Namibia before	
independence	6%

The majority of the respondents 76% were born after independence (Born Frees), 18% were born inside Namibia before independence (Remainees) and 6% were born outside Namibia before Independence (Exiles).

Table 73 depicts the ILS and Age Category Box's Test of Equality of Covariance Matrices.

Table 73: ILS and Age Category Box's Test of Equality of Covariance Matrices

**Box's Test of Equality** 

of Covariance Matrices<sup>a</sup>

Box's M	153.235
F	4.917
df1	30
df2	44487.844
Sig.	.124

Table 73 shows that the Box's Test of Equality of Covariance Matrices revealed an insignificant P <0.124 which indicates that there are no significant differences between the covariance matrices.

Table 74: ILS and Age Category Levene's Test of Equality of Error Variances

Levene's Test of Equality of Error Variances<sup>a</sup>

	F	df1	df2	Sig.
Intuitive	.956	7	497	.463
Visual	1.435	7	497	.189
Verbal	1.576	7	497	.140
Sequential	1.447	7	497	.184
Global	1.360	7	497	.220

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

The Levene's test of Equality of Error Variances (Table 74) provided insignificant P values for all dimensions and suggested that the assumption of homogeneity of variances was not violated. Further analyses were conducted using Wilks's Lambda test (Table 75).

**Table 75: ILS and Age Category Multivariate Test** 

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.803	401.968 <sup>b</sup>	5.000	493.000	.000	.803
	Wilks' Lambda	.197	401.968 <sup>b</sup>	5.000	493.000	.000	.803
	Hotelling's Trace	4.077	401.968 <sup>b</sup>	5.000	493.000	.000	.803
	Roy's Largest Root	4.077	401.968 <sup>b</sup>	5.000	493.000	.000	.803
N1aBornafterindependence	Pillai's Trace	.007	.713 <sup>b</sup>	5.000	493.000	.614	.007
	Wilks' Lambda	.993	.713 <sup>b</sup>	5.000	493.000	.614	.007
	Hotelling's Trace	.007	.713 <sup>b</sup>	5.000	493.000	.614	.007
	Roy's Largest Root	.007	.713 <sup>b</sup>	5.000	493.000	.614	.007
N1bBorninsideNamibia	Pillai's Trace	.001	.118 <sup>b</sup>	5.000	493.000	.988	.001
	Wilks' Lambda	.999	.118 <sup>b</sup>	5.000	493.000	.988	.001
	Hotelling's Trace	.001	.118 <sup>b</sup>	5.000	493.000	.988	.001
	Roy's Largest Root	.001	.118 <sup>b</sup>	5.000	493.000	.988	.001
N1cBornoutsideNamibia	Pillai's Trace	.014	1.442 <sup>b</sup>	5.000	493.000	.208	.014
	Wilks' Lambda	.986	1.442 <sup>b</sup>	5.000	493.000	.208	.014
	Hotelling's Trace	.015	1.442 <sup>b</sup>	5.000	493.000	.208	.014
	Roy's Largest Root	.015	1.442 <sup>b</sup>	5.000	493.000	.208	.014
N1aBornafterindependence *	Pillai's Trace	.013	1.301 <sup>b</sup>	5.000	493.000	.262	.013
N1bBorninsideNamibia	Wilks' Lambda	.987	1.301 <sup>b</sup>	5.000	493.000	.262	.013
	Hotelling's Trace	.013	1.301 <sup>b</sup>	5.000	493.000	.262	.013
	Roy's Largest Root	.013	1.301 <sup>b</sup>	5.000	493.000	.262	.013

Table 75 (Continues)

N1aBornafterindependence *	Pillai's Trace	.003	.295 <sup>b</sup>	5.000	493.000	.915	.003
N1cBornoutsideNamibia	Wilks' Lambda	.997	.295 <sup>b</sup>	5.000	493.000	.915	.003
	Hotelling's Trace	.003	.295 <sup>b</sup>	5.000	493.000	.915	.003
	Roy's Largest Root	.003	.295 <sup>b</sup>	5.000	493.000	.915	.003
N1bBorninsideNamibia *	Pillai's Trace	.007	.677 <sup>b</sup>	5.000	493.000	.641	.007
N1cBornoutsideNamibia	Wilks' Lambda	.993	.677 <sup>b</sup>	5.000	493.000	.641	.007
	Hotelling's Trace	.007	.677 <sup>b</sup>	5.000	493.000	.641	.007
	Roy's Largest Root	.007	.677 <sup>b</sup>	5.000	493.000	.641	.007
N1aBornafterindependence *	Pillai's Trace	.013	1.262 <sup>b</sup>	5.000	493.000	.279	.013
N1bBorninsideNamibia *	Wilks' Lambda	.987	1.262 <sup>b</sup>	5.000	493.000	.279	.013
N1cBornoutsideNamibia	Hotelling's Trace	.013	1.262 <sup>b</sup>	5.000	493.000	.279	.013
	Roy's Largest Root	.013	1.262 <sup>b</sup>	5.000	493.000	.279	.013

a. Design: Intercept + N1aBornafterindependence + N1bBorninsideNamibia + N1cBornoutsideNamibia + N1aBornafterindependence \* N1bBorninsideNamibia + N1aBornafterindependence \* N1cBornoutsideNamibia + N1cBornoutsideNamibia + N1aBornafterindependence \* N1bBorninsideNamibia \* N1cBornoutsideNamibia

b. Exact statistic

The results of Table 75 are discussed below:

#### **Born after independence (Born frees):**

Wilks's  $\Lambda = 0.993$ , F = (493, 493) = 0.713 P=0.614, Partial Eta Squared ( $\eta^2$ ) = 0.007. These figures suggested there was no significant difference for the "Born frees" on the combined Dependent Variables (Four Dimensions of the ILS: Activist/Reflector [Act/Ref], Sensing/Intuitive [Sen/Int], Visual/Verbal [Vis/Vrb], and Sequential/Global [Seq/Glo])). Hence the Learning Styles of Generation Y consumers in Namibia *are not significantly different* for the "Born Frees" as compared to the other age categories.

### **Born inside Namibia (Remainees)**

Wilk's  $\Lambda=0.999$ , F=(493,493)=0.118 P=0.988, Partial Eta Squared ( $\eta^2$ ) = 0.001. These figures suggested there was no significant difference for the "Remainees" on the combined Dependent Variables (Four Dimensions of the ILS: Activist/Reflector [Act/Ref], Sensing/Intuitive [Sen/Int], Visual/Verbal [Vis/Vrb], and Sequential/Global [Seq/Glo])). Hence the Learning Styles of Generation Y consumers in Namibia *are not significantly different* for the "Remainees" as compared to the other age categories.

#### **Born outside Namibia (Exiles)**

Wilk's  $\Lambda = 0.986$  F= (493, 493) = 1.442 P=0.208 Partial Eta Square[d] ( $\eta^2$ ) = 0.017. These figures suggested there was no significant difference for the "Exiles" on the combined Dependent Variables (Four Dimensions of the ILS: Activist/Reflector [Act/Ref], Sensing/Intuitive [Sen/Int], Visual/Verbal [Vis/Vrb], and Sequential/Global

[Seq/Glo])). Hence the Learning Styles of Generation Y consumers in Namibia *are* not significantly different for "Exiles" as compared to the other age categories.

# 4.5.1.13 Hypothesis 3a The Hofstede cultural dimensions are not applicable to the Namibian Generation Y consumers.

The reliability of the Hofstede instrument reached an acceptable Cronbach's Alpha of 0.78, which is acceptable. The PCA 1 component had eigenvalues of above 1 (one) which explains 51% of the variance. The factorability was confirmed through Bartlett's test of Sphericity which was significant at 0.000. Hence the Five Dimensions of the Hofstede Cultural Instrument (Power Distance [PDI .72], Uncertainty Avoidance [UAI .76], Masculinity [MAS .63], Individualism [IDV .69], and Long-Term Orientation [LTO .78]) were found reliable, valid and thus applicable to the Namibian Generation Y consumers.

This finding suggests that all five dimensions are applicable to the Namibian GenerationY consumers. The dimension of long term-orientation which has the highest Cronbach's Alpha, reflects the extent to which a society exhibits a pragmatic future oriented perspective rather than a conventional historic or a short term point of view. This suggests that the Namibian Generation Y consumers have thrift for investment and a long-term orientation both financially and psychologically. Long-term orientation also suggests that the Namibian Generation Y consumers value long-term commitment towards organisations and career. Uncertainty Avoidance had the second highest Cronbach's Alpha. This Dimension refers to people's tolerance of ambiguity and reflects the degree to which the members of a society feel threatened by ambiguity and are rule-oriented. This suggests that the Namibian Generation Y consumers can be classified as risk averse. It also suggests that this generation has a

great emotional need for rules, either written or unwritten. Power distance had the third highest Cronbach's Alpha. It refers to the power inequality in societies or it refers to the degree of equality and inequality and the extent to which less powerful members expect and accept unequal power and wealth distribution within a society. This finding suggests that Namibian Generation Y consumers expect and accept unequal power and wealth distribution among them and the society at large. This seems to justify why Namibian Generation Y consumers are very accepting and accommodating. Individualism was the fourth dimension which suggests that the Namibian Generation Y consumers tend to care about self-actualization and career progress. The fifth and last dimension was Masculinity. In Masculine cultures, males are expected to be assertive, tough and focused on material success, and females are expected to be tender and focused on quality of life. Traditional masculine goals for instance include: earnings, recognition, and advancement, valuing material possessions, assertiveness and money. In such cultures, men are expected to be the decision makers whereas females are expected to willingly accept these decisions.

# 4.5.1.14 Hypothesis 3b: Hofstede cultural dimensions are not significantly different between males and females.

The Dependent Variables were the 5 dimensions of the 24 scale Hofstede Instrument (Power Distance Index, Masculinity, Long-Term Orientation, Uncertainty Avoidance Index, and Individualism/Collectivism) and the Independent Variable was gender. A MANOVA test was employed and the results are shown in the tables below.

Table 76 presents Hofstede cultural dimensions and Gender Box's Test.

Table 76: Hofstede cultural dimensions and Gender Box's Test of Equality of Covariance Matrices

Box's Test of Equality of Covariance Matrices<sup>a</sup>

Box's M	416.183
F	1.311
df1	300
df2	568178.753
Sig.	.000

Table 76 shows that the Box's Test of Equality of Covariance Matrices revealed a significant P <0.000 which indicates that there are significant differences between the covariance matrices, however, the Levene's test of Equality of Error Variances (Table 77) provided insignificant P values for most dimensions and suggested that the assumption of homogeneity of variances was not violated. Further analyses were conducted using Wilks's Lambda test (Table 78).

Table 77: Hofstede cultural dimensions and Gender Levene's Test of Equality of Error Variances

### Levene's Test of Equality of Error Variances<sup>a</sup>

	F	df1	df2	Sig.
People choose their friends	6.172	1	459	.013
based on common				
likes/dislikes/interests				
I am concerned only with my	.034	1	459	.853
own rules and objectives				
People are promoted based	.439	1	459	.508
on competence, no matter				
their age				
Immoral for a boss offering	.032	1	459	.859
relatives a job				
Children must be taught to	1.086	1	459	.298
be organised and avoid				
ambiguity				
High competent and expert	1.076	1	459	.300
leadership are appreciated in				
society				
People should always have	.173	1	459	.678
an ID				
It is ok to show feelings in	.178	1	459	.673
public, at the right place and				
time				
There are some rules and	.418	1	459	.518
customs that all people must				
respect	000	4	450	054
People embark on common	.003	1	459	.954
goals without being so				
concerned with what is Good and what is Bad				
	1 207	1	450	254
People think everything is relative and permanently	1.307	1	459	.254
changing				
Children must be taught to	.069	1	459	.793
ask WHAT and HOW	.009	'	408	.133
People project their actions	1.491	1	459	.223
into the future	1.731	'	703	.220
into the latere				

People can live with	4.019	1	459	.046
contradictory information				
they are presented				
Children should be taught to	.225	1	459	.635
never question their parents'				
authority				
Children should be taught to	2.148	1	459	.143
accept the authority of older				
or important people				
All people in an organisation	.664	1	459	.416
or company have clearly				
defined roles				
The boss takes all decisions,	5.874	1	459	.016
everybody in an				
organisation/company				
accept and respect him				
The most effective way to	.005	1	459	.946
change a political system is				
to replace those in power				
through drastic means				
I admire winners and think	.082	1	459	.774
those who lose must be				
punished				
At work/School, I need to	.711	1	459	.400
have clear objectives and an				
evaluation system for what I				
accomplish				
Conflict is positive and	.022	1	459	.881
productive				
Men should be focused on	2.670	1	459	.103
material success and women				
must be concerned with the				
well-being of the others				
What I want most from my	.431	1	459	.512
partner is support in difficult				
situations				

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Gender

**Table 78: Hofstede cultural dimensions and Gender Multivariate Tests** 

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.982	1011.038 <sup>b</sup>	24.000	436.000	.000	.982
	Wilks' Lambda	.018	1011.038 <sup>b</sup>	24.000	436.000	.000	.982
	Hotelling's Trace	55.653	1011.038 <sup>b</sup>	24.000	436.000	.000	.982
	Roy's Largest Root	55.653	1011.038 <sup>b</sup>	24.000	436.000	.000	.982
Gender	Pillai's Trace	.054	1.044 <sup>b</sup>	24.000	436.000	.407	.054
	Wilks' Lambda	.946	1.044 <sup>b</sup>	24.000	436.000	.407	.054
	Hotelling's Trace	.057	1.044 <sup>b</sup>	24.000	436.000	.407	.054
	Roy's Largest Root	.057	1.044 <sup>b</sup>	24.000	436.000	.407	.054

a. Design: Intercept + Gender

b. Exact statistic

Table 78 shows that Wilks'  $\Lambda$  = 0.946, F= (436, 436) = 1.044, P=0.407 Partial Eta Squared ( $\eta^2$ ) = 0.054. These results suggested there was no significant difference between genders on the combined Dependent Variables (Power Distance Index, Uncertainty Avoidance Index, Masculinity, Long-term orientation and Individualism/Collectivism). Hence the cultural dimensions are not significantly different between males and females. This is a significant finding.

# 4.5.1.15 Hypothesis 3c: Hofstede cultural dimensions are not significantly different for individuals who come from different ethnic groups.

The dependent variables were the 5 dimensions of the 24 scale Hofstede Instrument (Power Distance Index, Masculinity, Long-Term Orientation, Uncertainty Avoidance Index, and Individualism/Collectivism) and the Independent Variable was ethnicity. A MANOVA test was employed and the results are shown in the tables below.

Table 79 presents the Hofstede cultural dimensions and the Ethnicity Box's Test.

Table 79: Hofstede cultural dimensions and Ethnicity Box's Test of Equality of Covariance Matrices

Box's Test of Equality of Covariance Matrices<sup>a</sup>

Box's M	1566.122
F	1.255
df1	900
df2	27345.440
Sig.	.136

Table 79 shows that the Box's Test of Equality of Covariance Matrices revealed an insignificant P < 0.136 which indicates there are no significant differences between the covariance matrices. The Levene's test of Equality of Error Variances provided insignificant P values for all dimensions and suggested that the assumption of homogeneity of variances was not violated. Further analyses were conducted using Wilks' Lambda test (Table 80).

Table 80: Hofstede cultural dimensions and ethnicity Multivariate Tests

				Hypothesis			Partial Eta
Effect		Value	F	df	Error df	Sig.	Squared
Intercept	Pillai's Trace	.951	348.408 <sup>b</sup>	24.000	435.000	.000	.951
	Wilks' Lambda	.049	348.408 <sup>b</sup>	24.000	435.000	.000	.951
	Hotelling's Trace	19.223	348.408 <sup>b</sup>	24.000	435.000	.000	.951
	Roy's Largest	19.223	348.408 <sup>b</sup>	24.000	435.000	.000	.951
	Root						
ethnicgroup	Pillai's Trace	.298	.958	144.000	2640.000	.623	.050
	Wilks' Lambda	.734	.961	144.000	2550.131	.613	.050
	Hotelling's Trace	.321	.965	144.000	2600.000	.602	.051
	Roy's Largest	.126	2.301 <sup>c</sup>	24.000	440.000	.001	.112
	Root						

a. Design: Intercept + ethnicgroup

Table 80 shows that Wilks'  $\Lambda=0.734$ , F=(435, 2550)=0.961, P=0.613 Partial Eta Squared ( $\eta^2$ ) = 0.050 These results suggested there was no significant difference between ethnic groups on the combined Dependent Variables (Power Distance Index, Uncertainty Avoidance Index, Masculinity, Long-term orientation and Individualism/Collectivism). Hence the cultural dimensions are not significantly different between different ethnic groups.

b. Exact statistic

c. The statistic is an upper bound on F that yields a lower bound on the significance level.

# 4.5.1.16 Hypothesis 3d: Hofstede cultural dimensions are not significantly different for individuals of different ages.

The dependent variables were the five dimensions of the 24 scale Hofstede Instrument (Power Distance Index, Masculinity, Long-Term Orientation, Uncertainty Avoidance Index, and Individualism/Collectivism) and the Independent Variable was age. MANOVA test was employed and the results are shown in the tables below.

Table 81: Hofstede cultural dimensions and Age Box's Test of Equality of Covariance Matrices

Box's Test of Equality of Covariance Matrices<sup>a</sup>

Box's M	831.954
F	1.190
df1	600
df2	46264.236
Sig.	.122

Table 81 shows that the Box's Test of Equality of Covariance Matrices revealed an insignificant P <0.122 which indicates there are no significant differences between the covariance matrices. The Levene's test of Equality of Error Variances provided insignificant P values for all dimensions and suggested there was homogeneity of variances. Further analyses were conducted using Wilks's Lambda test (Table 82).

Table 82: Hofstede cultural dimensions and Age Multivariate Tests

				Hypothesis			Partial Eta
Effect		Value	F	df	Error df	Sig.	Squared
Intercept	Pillai's Trace	.963	467.701 <sup>b</sup>	24.000	433.000	.000	.963
	Wilks' Lambda	.037	467.701 <sup>b</sup>	24.000	433.000	.000	.963
	Hotelling's Trace	25.923	467.701 <sup>b</sup>	24.000	433.000	.000	.963
	Roy's Largest	25.923	467.701 <sup>b</sup>	24.000	433.000	.000	.963
	Root						
agegroup	Pillai's Trace	.190	1.226	72.000	1305.000	.101	.063
	Wilks' Lambda	.821	1.224	72.000	1294.875	.102	.064
	Hotelling's Trace	.204	1.223	72.000	1295.000	.104	.064
	Roy's Largest	.094	1.700 <sup>c</sup>	24.000	435.000	.022	.086
	Root						

a. Design: Intercept + agegroup

Table 82 shows that Wilks's  $\Lambda=0.821$ , F=(433,1295)=1.224, P=0.102, Partial Eta Squared ( $\eta^2$ ) = 0.064. These results suggested that there was no significant difference between age groups on the combined Dependent Variables (Power Distance Index, Uncertainty Avoidance Index, Masculinity, Long-term orientation and Individualism/Collectivism). Hence the cultural dimensions of the Namibian Generation Y consumers are not significantly different for individuals of different ages.

b. Exact statistic

c. The statistic is an upper bound on F that yields a lower bound on the significance level.

# 4.5.1.17 Hypothesis 3e: Hofstede cultural dimensions are not significantly different for individuals who study in different Universities.

The dependent variables were the five dimensions of the 24 scale Hofstede Instrument (Power Distance Index, Masculinity, Long-Term Orientation, Uncertainty Avoidance Index, and Individualism/Collectivism) and the Independent Variable was the name of the University. A MANOVA test was employed and the results are shown in the tables below.

Table 83 presents Hofstede cultural dimensions and Name of University Box's Test.

Table 83: Hofstede cultural dimensions and Name of University Box's Test of Equality of Covariance Matrices

Box's Test of Equality of Covariance Matrices<sup>a</sup>

Box's M	942.919
F	1.445
df1	600
df2	333696.738
Sig.	.210

Table 83 shows that the Box's Test of Equality of Covariance Matrices revealed a significant P <0.210 which indicates that there are no significant differences between the covariance matrices. The Levene's test of Equality of Error Variances provided insignificant P values for the majority of the factors and suggested that the assumption of homogeneity of variances was not violated. Further analyses were conducted using Wilks' Lambda test (Table 84).

Table 84: Hofstede cultural dimensions and Name of University Multivariate Tests

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.715	45.220 <sup>b</sup>	24.000	433.000	.000	.715
	Wilks' Lambda	.285	45.220 <sup>b</sup>	24.000	433.000	.000	.715
	Hotelling's Trace	2.506	45.220 <sup>b</sup>	24.000	433.000	.000	.715
	Roy's Largest Root	2.506	45.220 <sup>b</sup>	24.000	433.000	.000	.715
university	Pillai's Trace	.720	1.814	192.000	3520.000	.000	.090
	Wilks' Lambda	.461	1.848	192.000	3314.446	.000	.092
	Hotelling's Trace	.837	1.879	192.000	3450.000	.000	.095
	Roy's Largest Root	.258	4.736 <sup>c</sup>	24.000	440.000	.000	.205

a. Design: Intercept + university

Table 84 shows that Wilks'  $\Lambda = 0.461$ , F = (433, 3314) = 1.848, P = 0.000, Partial Eta Squared ( $\eta^2$ ) = 0.094. These results suggested there was a significant difference between individuals who attended at different Universities on the combined Dependent Variables (Power Distance Index, Uncertainty Avoidance Index, Masculinity, Long-term orientation and Individualism/Collectivism). Hence the cultural dimensions of the Namibian Generation Y consumers are significantly different for individuals who studied in different Universities. In order to establish the specific Cultural Dimensions that differed between the Universities, an ANOVA test was employed. The results are depicted on table 85 a below.

b. Exact statistic

c. The statistic is an upper bound on F that yields a lower bound on the significance level.

Table 85: Hofstede cultural dimensions and Name of University ANOVA test

#### **ANOVA**

		Sum of Squares	df	Mean Square	F	Sig.
Power Distance	Between Groups	251.929	8	31.491	2.569	.009
	Within Groups	5969.619	487	12.258		
	Total	6221.548	495			
Individualism	Between Groups	204.307	8	25.538	2.635	.008
	Within Groups	4739.784	489	9.693		
	Total	4944.090	497			
Uncertainty Avoidance	Between Groups	496.019	8	62.002	5.044	.000
	Within Groups	6010.626	489	12.292		
	Total	6506.645	497			
Long-term orientation	Between Groups	212.593	8	26.574	2.358	.017
	Within Groups	5511.691	489	11.271		
	Total	5724.283	497			
Masculinity	Between Groups	315.574	8	39.447	2.868	.004
	Within Groups	6684.535	486	13.754		
	Total	7000.109	494			

Table 85 depicts the results of the ANOVA test, using an Alpha value at the significance of 0.05. The ANOVA test revealed that all five dimensions are significantly different for individuals who studied in different Universities. Thus, a closer look at the Descriptive statistics on Table 86, below, revealed the following specific differences:

#### **NUST**

**PDI:** NUST (M=17.9, SD= 3.31831, SE=.26399); reported slightly higher scores for this dimension as compared to IUM and UNAM.

**IDV:** NUST (M= 14.4654, SD=3.33334, SE=.26435) reported slightly higher scores for this dimension as shown here as compared to IUM and UNAM.

**UAI**: NUST (M=19.8491, SD= 3.75380, SE=.29770) reported slightly higher scores for this dimension as shown here followed by IUM and UNAM.

**LTO:** NUST (M= 19.4780, SD= 3.34103, SE=.26496) reported slightly higher scores for this dimension as shown here followed by UNAM and IUM.

**MAS:** NUST (M=18.7834, SD= 3.66781, SE=.29272) reported slightly higher scores for this dimension as shown here followed by UNAM and IUM.

Table 86: Hofstede cultural dimensions and Name of University Descriptive Statistics

### Descriptives

						95% Confidence I	nterval for Mean		
		N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
Power Distance	IUM	115	17.4696	3.78205	.35268	16.7709	18.1682	7.00	25.00
	NUST	158	17.9114	3.31831	.26399	17.3900	18.4328	7.00	24.00
	UNAM	206	16.3981	3.48891	.24308	15.9188	16.8773	5.00	25.00
Individualism	IUM	115	13.2087	3.13860	.29268	12.6289	13.7885	4.00	20.00
	NUST	159	14.4654	3.33334	.26435	13.9433	14.9875	4.00	20.00
	UNAM	206	13.2087	2.95001	.20554	12.8035	13.6140	4.00	20.00
Uncertainty Avoidance									
	IUM	115	18.2522	3.65351	.34069	17.5773	18.9271	6.00	25.00
	NUST	159	19.8491	3.75380	.29770	19.2611	20.4370	5.00	25.00
	UNAM	206	17.7233	3.26192	.22727	17.2752	18.1714	5.00	24.00
Long-term orientation									
	IUM	115	18.2783	3.58003	.33384	17.6169	18.9396	5.00	25.00
	NUST	159	19.4780	3.34103	.26496	18.9547	20.0013	7.00	25.00
	UNAM	206	18.1602	3.27720	.22833	17.7100	18.6104	5.00	25.00
Masculinity									
	IUM	115	17.1913	3.76012	.35063	16.4967	17.8859	5.00	25.00
	NUST	157	18.7834	3.66781	.29272	18.2052	19.3617	7.00	25.00
	UNAM	206	18.7621	3.73993	.26057	18.2484	19.2759	5.00	25.00

4.5.1.18 Hypothesis 3f: Hofstede cultural dimensions are not significantly different for Born Frees, Exiles and Remainees.

The Dependent Variables were the five dimensions of the 24 scale Hofstede Instrument (Power Distance Index, Masculinity, Long-Term Orientation, Uncertainty Avoidance Index, and Individualism/Collectivism) and the Independent Variable was age category (Born Frees, Exiles and Remainees). A MANOVA test was employed and the results are shown in the tables below.

Table 87 presents the results of the Hofstede cultural dimensions and Age Category Box's Test.

Table 87: Hofstede cultural dimensions and Age Category (Born Frees, Exiles and Remainees) Box's Test of Equality of Covariance Matrices

Box's Test of Equality of Covariance Matrices<sup>a</sup>

Box's M	72.644
F	1.122
df1	60
df2	16234.530
Sig.	.241

Table 87 shows that the Box's Test of Equality of Covariance Matrices revealed an insignificant P <0.241 which indicates that there are no significant differences between the covariance matrices. Table 88 presents the Levene's Test of Equality of Error Variances.

Table 88: Hofstede cultural dimensions and Age Category (Born Frees, Exiles and Remainees) Levene's Test of Equality of Error Variances

Levene's Test of Equality of Error Variances<sup>a</sup>

	F	df1	df2	Sig.
Power Distance	1.367	7	487	.217
Individualism	.858	7	487	.540
Uncertainty Avoidance	.964	7	487	.457
Long-term orientation	1.003	7	487	.428
Masculinity	1.107	7	487	.357

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

- a. Design: Intercept + N1aBornafterindependence + N1bBorninsideNamibia
- + N1cBornoutsideNamibia + N1aBornafterindependence \*

N1bBorninsideNamibia + N1aBornafterindependence \*

N1cBornoutsideNamibia + N1bBorninsideNamibia \*

N1cBornoutsideNamibia + N1aBornafterindependence \*

N1bBorninsideNamibia \* N1cBornoutsideNamibia

The Levene's test of Equality of Error Variances provided insignificant P values for all the factors and suggested that the assumption of homogeneity of variances was not violated (Table 88). Further analyses were conducted using Wilks' Lambda test (Table 89).

Table 89: Hofstede cultural dimensions and Age Category (Born Frees, Exiles and Remainees) Multivariate Test

							Partial Eta
Effect		Value	F	Hypothesis df	Error df	Sig.	Squared
Intercept	Pillai's Trace	.662	189.606 <sup>b</sup>	5.000	483.000	.000	.662
	Wilks' Lambda	.338	189.606 <sup>b</sup>	5.000	483.000	.000	.662
	Hotelling's Trace	1.963	189.606 <sup>b</sup>	5.000	483.000	.000	.662
	Roy's Largest Root	1.963	189.606 <sup>b</sup>	5.000	483.000	.000	.662
N1aBornafterindependence	Pillai's Trace	.006	.617 <sup>b</sup>	5.000	483.000	.687	.006
	Wilks' Lambda	.994	.617 <sup>b</sup>	5.000	483.000	.687	.006
	Hotelling's Trace	.006	.617 <sup>b</sup>	5.000	483.000	.687	.006
	Roy's Largest Root	.006	.617 <sup>b</sup>	5.000	483.000	.687	.006
N1bBorninsideNamibia	Pillai's Trace	.012	1.210 <sup>b</sup>	5.000	483.000	.303	.012
	Wilks' Lambda	.988	1.210 <sup>b</sup>	5.000	483.000	.303	.012
	Hotelling's Trace	.013	1.210 <sup>b</sup>	5.000	483.000	.303	.012
	Roy's Largest Root	.013	1.210 <sup>b</sup>	5.000	483.000	.303	.012
N1cBornoutsideNamibia	Pillai's Trace	.001	.072 <sup>b</sup>	5.000	483.000	.996	.001
	Wilks' Lambda	.999	.072 <sup>b</sup>	5.000	483.000	.996	.001
	Hotelling's Trace	.001	.072 <sup>b</sup>	5.000	483.000	.996	.001
	Roy's Largest Root	.001	.072 <sup>b</sup>	5.000	483.000	.996	.001

N1aBornafterindependence *	Pillai's Trace	.004	.372 <sup>b</sup>	5.000	483.000	.868	.004
N1bBorninsideNamibia	Wilks' Lambda	.996	.372 <sup>b</sup>	5.000	483.000	.868	.004
	Hotelling's Trace	.004	.372 <sup>b</sup>	5.000	483.000	.868	.004
	Roy's Largest Root	.004	.372 <sup>b</sup>	5.000	483.000	.868	.004
N1aBornafterindependence *	Pillai's Trace	.008	.786 <sup>b</sup>	5.000	483.000	.560	.008
N1cBornoutsideNamibia	Wilks' Lambda	.992	.786 <sup>b</sup>	5.000	483.000	.560	.008
	Hotelling's Trace	.008	.786 <sup>b</sup>	5.000	483.000	.560	.008
	Roy's Largest Root	.008	.786 <sup>b</sup>	5.000	483.000	.560	.008
N1bBorninsideNamibia *	Pillai's Trace	.013	1.259 <sup>b</sup>	5.000	483.000	.281	.013
N1cBornoutsideNamibia	Wilks' Lambda	.987	1.259 <sup>b</sup>	5.000	483.000	.281	.013
	Hotelling's Trace	.013	1.259 <sup>b</sup>	5.000	483.000	.281	.013
	Roy's Largest Root	.013	1.259 <sup>b</sup>	5.000	483.000	.281	.013
N1aBornafterindependence *	Pillai's Trace	.004	.421 <sup>b</sup>	5.000	483.000	.834	.004
N1bBorninsideNamibia *	Wilks' Lambda	.996	.421 <sup>b</sup>	5.000	483.000	.834	.004
N1cBornoutsideNamibia	Hotelling's Trace	.004	.421 <sup>b</sup>	5.000	483.000	.834	.004
	Roy's Largest Root	.004	.421 <sup>b</sup>	5.000	483.000	.834	.004

a. Design: Intercept + N1aBornafterindependence + N1bBorninsideNamibia + N1cBornoutsideNamibia + N1aBornafterindependence \* N1bBorninsideNamibia + N1aBornafterindependence \* N1cBornoutsideNamibia + N1bBorninsideNamibia \* N1cBornoutsideNamibia + N1aBornafterindependence \* N1bBorninsideNamibia \* N1cBornoutsideNamibia

b. Exact statistic

Table 89 depicts Wilks' Lambda test with the following results for each of the age category:

#### **Born after independence (Born Frees):**

Wilks'  $\Lambda = 0.994$ , F = (483, 483) = 0.617, P = .303, Partial Eta Squared ( $\eta^2$ ) = 0.006. These results suggested that there was no significant difference for the "Born frees" on the combined Dependent Variables (Power Distance Index, Masculinity, Long-Term Orientation, Uncertainty Avoidance Index, and Individualism). Hence the Hofstede cultural dimensions of Generation Y consumers in Namibia *are not significantly different* for "Born Frees" as compared to the other age categories.

### **Born inside Namibia (Remainees)**

Wilks'  $\Lambda = 0.988$ , F = (483, 483) = 1.240, P = 0.684, Partial Eta Squared ( $\eta^2$ ) = 0.012. These results suggested that there was no significant difference for "Remainees" on the combined Dependent Variables (Power Distance Index, Masculinity, Long-Term Orientation, Uncertainty Avoidance Index, and Individualism). Hence the Hofstede cultural dimensions of Generation Y consumers in Namibia *are not significantly different* for "Remainees" as compared to the other age categories.

#### **Born outside Namibia (Exiles)**

Wilk's  $\Lambda=0.999$  F= (483, 483) = 0.072, P=.996 Partial Eta Squared ( $\eta^2$ ) = 0.001. These results suggested that there was no significant difference for "Exiles" on the combined Dependent Variables (Power Distance Index, Masculinity, Long-Term Orientation, Uncertainty Avoidance Index, and Individualism). Hence the Hofstede cultural dimensions of Generation Y consumers in Namibia *are not significantly different* for "Exiles" as compared to the other age categories.

## 4.5.1.19 Hypothesis 4a: The proposed 13 e-literacy statements are not applicable to the Namibian Generation Y consumers.

The Dependent Variable was e-literacy which comprised of the 13 e-literacy statements and the Independent Variable was name of University. Cronbach's alpha was used to measure the reliability of the 13 item scale. Principal components analysis through FA with Varimax rotation was conducted and the scale was found to be suitable. Kaiser-Meyer-Olkin Measure of sampling adequacy of 0.862 indicated sufficient items for each factor, thus the 13 e-literacy were found to be applicable to the Namibian Generation Y consumers.

The e-literacy distribution among the Namibian Generation Y consumers can be described as follows in order of importance:

- 1. Statement # 13: My ICT literacy negatively affects purchasing decisions (0.85)
- 2. Statement # 1: Ability to respond to large volumes of media (0.78)
- 3. Statement # 8: Comfortable with social media such as FB, Whatsapp, Instagram, etc. (0.77)
- 4. Statement # 2: Ability to access information from all sources including internet (0.73)
- 5. Statement # 3: Use search engines effectively (0.72)
- 6. Statement # 9: Can send media content such as videos/images through internet(0.72)
- 7. Statement # 4: Use ICT devices to share information (0.68)
- 8. Statement # 10: Can compose and send emails (0.65)
- 9. Statement # 11: Can join chat rooms/social media (0.63)
- 10. Statement # 12: Can download materials from the Internet (0.55)

- 11. Statement # 5: Aware of ICT issues (0.53)
- 12. Statement # 6: Ability to create simple webpage (0.49)
- 13. Statement #7: Know how to keep records of a favourite websites (**0.49**)

The above finding suggests that the lack of ICT competencies negatively affects the Namibian Generation Y consumer decision making. However, the findings also suggest that Namibian Generation Y consumers have the ability to respond to large volumes of media and are comfortable with social media such as FB, Whatsapp, Instagram and other ICT skills.

4.5.1.20 Hypothesis 4b: The e-literacy distribution is not significantly different between males and females.

The Dependent Variables were the 13 e-Literacy statements and the Independent Variable was gender. A MANOVA test was employed and the results are shown in the tables below.

Table 90 presents the e-Literacy distribution and Gender Box's Test.

Table 90: e-Literacy distribution and Gender Box's Test of Equality of Covariance Matrices

Box's Test of Equality of Covariance Matrices<sup>a</sup>

Box's M	415.125
F	1.580
df1	234
df2	24708.401
Sig.	.210

The Box's Test of Equality of Covariance Matrices (Table 90) revealed an insignificant P < 0.210 which indicates that there are no significant differences between the covariance matrices.

Table 91: e-Literacy distribution and Gender Levene's Test of Equality of Error Variances

# Levene's Test of Equality of Error Variances<sup>a</sup>

Levelle 3 Test	or Equant	y OI LIIOI	v ai iai ices	
	F	df1	df2	Sig.
Aware of ICT issues	.899	3	464	.441
Use ICT devices to share	.094	3	464	.963
information				
Ability to access information	.813	3	464	.487
from all sources including				
internet				
Ability to respond to large	1.551	3	464	.201
volumes of media				
Use search engines	1.171	3	464	.320
effectively				
Ability to create simple	1.054	3	464	.368
webpage				
Can download materials	.507	3	464	.677
from internet				
Can compose and send	.192	3	464	.902
emails				
Can join chat rooms/social	.466	3	464	.706
media				
Can send media content	.442	3	464	.723
such as videos/images				
through internet				
Comfortable with social	.646	3	464	.586
media such as FB,				
Whatsapp, Instagram, etc.				
Know how to keep records	1.317	3	464	.268
off a favourite websites				

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + agegroup

Levene's test of Equality of Error Variances (Table 91) also provided insignificant P values for all dimensions which suggested that the assumption of homogeneity of variances is not violated. Further analyses were then conducted using Wilks's Lambda test (Table 92).

Table 92: e-Literacy distribution and Gender Multivariate Tests

	Multivariate Tests <sup>a</sup>									
				Hypothesis			Partial Eta			
Effect		Value	F	df	Error df	Sig.	Squared			
Intercept	Pillai's Trace	.964	1020.633 <sup>b</sup>	12.000	453.000	.000	.964			
	Wilks' Lambda	.036	1020.633 <sup>b</sup>	12.000	453.000	.000	.964			
	Hotelling's Trace	27.037	1020.633 <sup>b</sup>	12.000	453.000	.000	.964			
	Roy's Largest	27.037	1020.633 <sup>b</sup>	12.000	453.000	.000	.964			
	Root									
agegroup	Pillai's Trace	.085	1.103	36.000	1365.000	.311	.028			
	Wilks' Lambda	.917	1.102	36.000	1339.167	.313	.028			
	Hotelling's Trace	.088	1.100	36.000	1355.000	.315	.028			
	Roy's Largest	.043	1.647 <sup>c</sup>	12.000	455.000	.076	.042			

a. Design: Intercept + agegroup

Table 92 shows that Wilks'  $\Lambda$  = 0.917, F= (453, 1339) =1.102, P=0.313, Partial Eta Squared ( $\eta^2$ ) = 0.028. These results suggested that there was no significant difference between the genders on the combined Dependent Variables (13 e-Literacy statements). Hence the e-Literacy distribution of the Namibian Generation Y consumers is not significantly different between males and females.

b. Exact statistic

c. The statistic is an upper bound on F that yields a lower bound on the significance level.

4.5.1.21 Hypothesis 4c: The e-literacy distribution is not significantly different for individuals who come from different ethnic groups.

The Dependent Variables were the 13 e-Literacy statements and the Independent Variable was ethnicity. A MANOVA test was employed and the results are shown in the tables below.

Table 93: e-Literacy distribution and Ethnicity Box's Test of Equality of Covariance Matrices

Box's Test of Equality of Covariance Matrices<sup>a</sup>

Box's M	589.483
F	1.599
df1	312
df2	26087.657
Sig.	.136

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups. a. Design: Intercept + ethnicgroup

The Box's Test of Equality of Covariance Matrices (Table 93) revealed an insignificant P <0.000 which indicates that there are no significant differences between the covariance matrices. Table 94 presents the Levene's Test of Equality of Error Variances.

Table 94: e-Literacy distribution and Levene's Test of Equality of Error Variances

Levene's Test of Equality of Error Variances<sup>a</sup>

	F	df1	df2	Sig.
Aware of ICT issues	.369	6	466	.899
Use ICT devices to share information	1.292	6	466	.259
Ability to access information from all sources including internet	1.046	6	466	.395
Ability to respond to large volumes of media	1.858	6	466	.086
Use search engines effectively	.991	6	466	.431
Ability to create simple webpage	.902	6	466	.493
Can download materials from internet	1.148	6	466	.333
Can compose and send emails	1.002	6	466	.423
Can join chat rooms/social media	.800	6	466	.570
Can send media content such as videos/images through internet	1.808	6	466	.096
Comfortable with social media such as FB, Whatsapp, Instagram, etc.	2.293	6	466	.034
Know how to keep records off a favourite websites	1.089	6	466	.368

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + ethnicgroup

The Levene's test of Equality of Error Variances (Table 94) provided insignificant P values for most of the dimensions except for three which suggested that the assumption of homogeneity of variances is not violated to any great degree. Further analyses were then conducted using the Wilks' Lambda test (Table 95).

Table 95: e-Literacy distribution and Ethnicity Multivariate Tests

#### Multivariate Tests<sup>a</sup>

		•	i aiti vai it	10010			
				Hypothesis			Partial Eta
Effect		Value	F	df	Error df	Sig.	Squared
Intercept	Pillai's Trace	.952	754.831 <sup>b</sup>	12.000	455.000	.000	.952
	Wilks' Lambda	.048	754.831 <sup>b</sup>	12.000	455.000	.000	.952
	Hotelling's Trace	19.908	754.831 <sup>b</sup>	12.000	455.000	.000	.952
	Roy's Largest	19.908	754.831 <sup>b</sup>	12.000	455.000	.000	.952
	Root						
ethnicgroup	Pillai's Trace	.122	.798	72.000	2760.000	.892	.020
	Wilks' Lambda	.883	.801	72.000	2481.272	.888	.021
	Hotelling's Trace	.128	.804	72.000	2720.000	.883	.021
	Roy's Largest	.066	2.520 <sup>c</sup>	12.000	460.000	.003	.062
	Root						

a. Design: Intercept + ethnicgroup

Table 95 shows that Wilks'  $\Lambda=0.883$ , F=(455,2481)=0.801, P=0.888, Partial Eta Squared ( $\eta^2$ ) = 0.021. These results suggested that there was no significant difference between ethnic groups on the combined Dependent Variables (13 e-Literacy statements). Hence the e-Literacy distribution of the Namibian Generation Y consumers is not significantly different between the different ethnic groups.

b. Exact statistic

c. The statistic is an upper bound on F that yields a lower bound on the significance level.

4.5.1.22 Hypothesis 4d: The e-literacy distribution is not significantly different for individuals of different ages.

The Dependent Variables were the 13 e-Literacy statements and the Independent Variable was age. A MANOVA test was employed and the results are shown in the tables below.

Table 96 presents the e-Literacy distribution and Age Box's Test.

Table 96: e-Literacy distribution and Age Box's Test of Equality of Covariance Matrices

Box's Test of Equality of Covariance Matrices<sup>a</sup>

Box's M	415.125
F	1.580
df1	234
df2	24708.401
Sig.	.212

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups. a. Design: Intercept + agegroup

The Box's Test of Equality of Covariance Matrices (Table 96) revealed an insignificant P <0.212 which indicates that there are no significant differences between the covariance matrices. Table 97 presents the Levene's Test of Equality of Error Variances.

Table 97: e-Literacy distribution and age Levene's Test of Equality of Error Variances

Levene's Test of Equality of Error Variances<sup>a</sup>

Levelle 5 Test	or Equant	y OI EIIOI	variances	
	F	df1	df2	Sig.
Aware of ICT issues	.899	3	464	.441
Use ICT devices to share	.094	3	464	.963
information				
Ability to access information	.813	3	464	.487
from all sources including				
internet				
Ability to respond to large	1.551	3	464	.201
volumes of media				
Use search engines	1.171	3	464	.320
effectively				
Ability to create simple	1.054	3	464	.368
webpage				
Can download materials	.507	3	464	.677
from internet				
Can compose and send	.192	3	464	.902
emails				
Can join chat rooms/social	.466	3	464	.706
media				
Can send media content	.442	3	464	.723
such as videos/images				
through internet				
Comfortable with social	.646	3	464	.586
media such as FB,				
Whatsapp, Instagram, etc.				
Know how to keep records	1.317	3	464	.268
off a favourite websites				

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + agegroup

The Levene's test of Equality of Error Variances (Table 97) provided insignificant P values for all 13 statements which suggested that the assumption of homogeneity of variances is not violated. Further analyses were then conducted using Wilks' Lambda test (Table 98).

Table 98: e-Literacy distribution and age Multivariate Tests

#### Multivariate Tests<sup>a</sup>

	mativariate 100to								
				Hypothesis			Partial Eta		
Effect		Value	F	df	Error df	Sig.	Squared		
Intercept	Pillai's Trace	.964	1020.633 <sup>b</sup>	12.000	453.000	.000	.964		
	Wilks' Lambda	.036	1020.633 <sup>b</sup>	12.000	453.000	.000	.964		
	Hotelling's Trace	27.037	1020.633 <sup>b</sup>	12.000	453.000	.000	.964		
	Roy's Largest	27.037	1020.633 <sup>b</sup>	12.000	453.000	.000	.964		
	Root								
agegroup	Pillai's Trace	.085	1.103	36.000	1365.000	.311	.028		
	Wilks' Lambda	.917	1.102	36.000	1339.167	.313	.028		
	Hotelling's Trace	.088	1.100	36.000	1355.000	.315	.028		
	Roy's Largest	.043	1.647 <sup>c</sup>	12.000	455.000	.076	.042		
	Root								

a. Design: Intercept + agegroup

Table 98 shows that Wilks'  $\Lambda$  = 0.917, F= (453, 1339) = 0.917, P=0.313, Partial Eta Squared ( $\eta^2$ ) = 0.028. These results suggested that there was no significant difference between age groups on the combined Dependent Variables (13 e-Literacy statements). Hence the e-Literacy distribution of the Namibian Generation Y consumers is not significantly different for individuals of different ages.

b. Exact statistic

c. The statistic is an upper bound on F that yields a lower bound on the significance level.

4.5.1.23 Hypothesis 4e: The e-literacy distribution is not significantly different for individuals who study in different Universities.

The Dependent Variables were the 13 e-Literacy statements and the Independent Variable was name of University. A MANOVA test was employed and the results are shown in the tables below.

Table 99 depicts the e-Literacy distribution and Name of University Box's Test.

Table 99: e-Literacy distribution and Name of University Box's Test of Equality of Covariance Matrices

Box's Test of Equality of Covariance Matrices<sup>a</sup>

Box's M	309.994
F	1.909
df1	156
df2	387615.856
Sig.	.351

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.

a. Design: Intercept + university

The Box's Test of Equality of Covariance Matrices (Table 99) revealed an insignificant P <0.351 which indicates that there are no significant differences between the covariance matrices. Levene's test of Equality of Error Variances (Table 100) provided insignificant P values for most of the statements which suggested that

the assumption of homogeneity of variances is not violated to a certain degree. Further analyses were then conducted using Wilks's Lambda test (Table 101).

Table 100: e-Literacy distribution and Name of University Levene's Test of Equality of Error Variances

## Levene's Test of Equality of Error Variances<sup>a</sup>

	F	df1	df2	Sig.
Aware of ICT issues	1.625	8	464	.115
Use ICT devices to share information	1.661	8	464	.106
Ability to access information from all sources including internet	1.875	8	464	.062
Ability to respond to large volumes of media	2.627	8	464	.008
Use search engines effectively	1.989	8	464	.046
Ability to create simple webpage	2.135	8	464	.031
Can download materials from internet	1.368	8	464	.208
Can compose and send emails	1.888	8	464	.060
Can join chat rooms/social media	1.201	8	464	.297
Can send media content such as videos/images through internet	1.664	8	464	.105
Comfortable with social media such as FB, Whatsapp, Instagram, etc.	2.786	8	464	.005
Know how to keep records off a favourite websites	2.215	8	464	.025

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + university

Table 101: e-Literacy distribution and Name of University Multivariate Tests

#### Multivariate Tests<sup>a</sup>

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.684	81.696 <sup>b</sup>	12.000	453.000	.000	.684
	Wilks' Lambda	.316	81.696 <sup>b</sup>	12.000	453.000	.000	.684
	Hotelling's Trace		81.696 <sup>b</sup>	12.000	453.000	.000	.684
	Roy's Largest Root	2.164	81.696 <sup>b</sup>	12.000	453.000	.000	.684
university	Pillai's Trace	.289	1.439	96.000	3680.000	.004	.036
	Wilks' Lambda	.740	1.460	96.000	3061.856	.003	.037
	Hotelling's Trace	.314	1.478	96.000	3610.000	.002	.038
	Roy's Largest Root	.124	4.747 <sup>c</sup>	12.000	460.000	.000	.110

a. Design: Intercept + university

Table 101 shows that Wilk's  $\Lambda$  =0 .740, F= (453, 3061.856) = .1.460, P=0.003, Partial Eta Squared ( $\eta^2$ ) = 0.037. These results suggested that there was a significant difference between the Universities attended on the combined Dependent Variables (13 e-Literacy statements). Hence the e-Literacy distribution of the Namibian Generation Y consumers is significantly different for individuals who studied in different Universities. In order to establish the specific e-Literacy distribution that differed between the Universities, an ANOVA test was employed. The results are depicted in Tables 102 and 103 below.

b. Exact statistic

c. The statistic is an upper bound on F that yields a lower bound on the significance level.

Table 102: e-Literacy distribution and Name of University ANOVA Test

# ANOVA

		Sum of		Mean		
		Squares	df	Square	F	Sig.
Aware of ICT issues	Between	15.467	8	1.933	2.271	.022
	Groups					
	Within	414.654	487	.851		
	Groups					
	Total	430.121	495			
Use ICT devices to share information	Between	17.232	8	2.154	3.283	.001
	Groups					
	Within	320.161	488	.656		
	Groups					
	Total	337.392	496			
Ability to access information from all	Between	19.931	8	2.491	3.032	.002
sources including internet	Groups					
	Within	396.898	483	.822		
	Groups					
	Total	416.829	491			
Ability to respond to large volumes of	Between	18.278	8	2.285	2.573	.009
media	Groups					
	Within	429.783	484	.888		
	Groups					
	Total	448.061	492			
Use search engines effectively	Between	26.976	8	3.372	3.544	.001
	Groups					
	Within	462.446	486	.952		
	Groups					
	Total	489.422	494			
Ability to create simple webpage	Between	16.492	8	2.062	1.405	.192
	Groups					
	Within	705.632	481	1.467		
	Groups					
	Total	722.124	489			
Can download materials from internet	Between	11.729	8	1.466	1.697	.097
	Groups					
	Within	416.381	482	.864		
	Groups					
	Total	428.110	490			

Can compose and send emails	Between	13.058	8	1.632	1.821	.071
	Groups					
	Within	437.364	488	.896		
	Groups					
	Total	450.423	496			
Can join chat rooms/social media	Between	4.616	8	.577	.531	.833
	Groups					
	Within	527.800	486	1.086		
	Groups					
	Total	532.416	494			
Can send media content such as	Between	5.814	8	.727	.895	.520
videos/images through internet	Groups					
	Within	394.456	486	.812		
	Groups					
	Total	400.271	494			
Comfortable with social media such as FB,	Between	16.058	8	2.007	2.649	.007
Whatsapp, Instagram, etc.	Groups					
	Within	369.793	488	.758		
	Groups					
	Total	385.851	496			
Know how to keep records of a favourite	Between	25.864	8	3.233	3.263	.001
websites	Groups					
	Within	482.579	487	.991		
	Groups					
	Total	508.444	495			

The results of the ANOVA test in Table 112 above reveals significant differences in the distribution of e-Literacy among individuals who studied at different Universities in the following e-literacy competencies:

- I'm Aware of ICT issues
- I'm able to use ICT devices to share information
- I have the ability to access information from all sources including internet
- I have the ability to respond to large volumes of media
- I have the ability to use search engines effectively
- I'm comfortable with social media such as Facebook, Whatsapp, Instagram, etc.
- I know how to keep records of favourite websites

Table 103: e-Literacy distribution and Name of University Descriptive Statistics

**Descriptives** 

				Descripti	VCS				
						95% Confidence I	nterval for Mean		
		N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
Aware of ICT issues									
	IUM	113	4.09	.751	.071	3.95	4.23	3	5
	NUST	159	4.32	.970	.077	4.17	4.47	1	5
	UNAM	206	3.96	.967	.067	3.83	4.09	1	5
Use ICT devices to share									
information	IUM	113	4.29	.636	.060	4.17	4.41	3	5
	NUST	159	4.41	.773	.061	4.29	4.53	2	5
	UNAM	207	4.00	.922	.064	3.88	4.13	1	5
Ability to access information									
from all sources including	IUM	113	4.17	.801	.075	4.02	4.32	1	5
internet	NUST	158	4.23	.888	.071	4.09	4.37	2	5
	UNAM	204	3.83	.980	.069	3.69	3.96	1	5
Ability to respond to large									
volumes of media	IUM	113	3.90	.845	.079	3.75	4.06	2	5
	NUST	156	3.97	.915	.073	3.83	4.12	1	5
	UNAM	206	3.59	1.007	.070	3.45	3.73	1	5
Use search engines effectively									
	IUM	112	3.65	.867	.082	3.49	3.81	1	5
	NUST	159	3.89	.994	.079	3.73	4.04	1	5

	UNAM	206	3.46	1.000	.070	3.32	3.60	1	5
Comfortable with social media									
such as FB, Whatsapp,	IUM	113	4.41	.798	.075	4.26	4.56	1	5
Instagram, etc.	NUST	159	4.28	.887	.070	4.14	4.42	1	5
	UNAM	207	4.36	.907	.063	4.23	4.48	1	5
Know how to keep records off a									
favourite websites	IUM	113	4.21	.881	.083	4.05	4.38	1	5
	NUST	158	4.33	.947	.075	4.18	4.48	1	5
	UNAM	207	3.83	1.091	.076	3.68	3.98	1	5

Table 103 above depicts the mean difference between the Universities as follows:

- I'm Aware of ICT issues: NUST revealed the highest mean score distribution for this statement followed by IUM.
- I'm able to use ICT devices to share information: NUST revealed the highest mean score distribution for this statement followed by IUM.
- I have the ability to access information from all sources including internet: NUST revealed the highest mean score distribution for this statement followed by IUM.
- I have the ability to respond to large volumes of media: NUST revealed the highest mean score distribution for this statement followed by IUM.
- I have the ability to use search engines effectively: NUST revealed the highest mean score distribution for this statement followed by IUM.
- I'm comfortable with social media such as Facebook, Whatsapp,
   Instagram, etc.: IUM revealed the highest men score distribution for this statement followed by UNAM.
- I know how to keep records of a favourite websites: NUST revealed the highest mean score distribution for this statement followed by IUM.

4.5.1.24 Hypothesis 4f: The e-literacy distribution is not significantly different for Born Frees, Exiles and Remainees.

The Dependent Variables were the 13 e-Literacy statements and the Independent Variable was age category (Born Frees, Exiles, and Remainees).

MANOVA test was employed the results are shown in the tables below.

Table 104 presents the e-Literacy distribution and Age Category Box's Test.

Table 104: e-Literacy distribution and Age Category (Born Frees, Exiles and Remainees) Box's Test of Equality of Covariance Matrices

Box's Test of Equality of Covariance Matrices<sup>a</sup>

Box's M	546.920
F	1.404
df1	312
df2	12468.529
Sig.	.244

The Box's Test of Equality of Covariance Matrices (Table 104) revealed an insignificant P <0.244 which indicates that there are no significant differences between the covariance matrices. Table 105 presents the Levene's Test of Equality of Error Variances.

Table 105: e-Literacy distribution and Age Category (Born Frees, Exiles and Remainees) Levene's Test of Equality of Error Variances

Levene's Test of Equality of Error Variances<sup>a</sup>

	F	df1	df2	Sig.
Aware of ICT issues	1.952	6	466	.071
Use ICT devices to share information	1.734	6	466	.111
Ability to access information from all sources including internet	2.076	6	466	.055
Ability to respond to large volumes of media	1.953	6	466	.071
Use search engines effectively	1.241	6	466	.284
Ability to create simple webpage	1.305	6	466	.253
Can download materials from internet	2.707	6	466	.014
Can compose and send emails	.937	6	466	.468
Can join chat rooms/social media	2.368	6	466	.029
Can send media content such as videos/images through internet	.735	6	466	.621
Comfortable with social media such as FB, Whatsapp, Instagram, etc.	2.571	6	466	.018
Know how to keep records of a favourite websites	1.806	6	466	.096

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

The Levene's test of Equality of Error Variances (Table 105) provided insignificant P values for most e-Literacy statements which suggested that the assumption of homogeneity of variances is not violated. Further analyses were then conducted using Wilks' Lambda test (Table 106).

# Table 106: e-Literacy distribution and Age Category (Born Frees, Exiles and Remainees) Multivariate Tests

## **Multivariate Tests**<sup>a</sup>

	WIUI	tivaria	te Tests	5			
							Partial
				Hypothesis			Eta
Effect		Value	F	df	Error df	Sig.	Squared
Intercept	Pillai's	.702	89.154 <sup>b</sup>	12.000	455.000	.000	.702
	Trace						
	Wilks'	.298	89.154 <sup>b</sup>	12.000	455.000	.000	.702
	Lambda						
	Hotelling's	2.351	89.154 <sup>b</sup>	12.000	455.000	.000	.702
	Trace						
	Roy's	2.351	89.154 <sup>b</sup>	12.000	455.000	.000	.702
	Largest						
	Root						
N1aBornafterindependence	Pillai's	.005	.198 <sup>b</sup>	12.000	455.000	.999	.005
	Trace						
	Wilks'	.995	.198 <sup>b</sup>	12.000	455.000	.999	.005
	Lambda						
	Hotelling's	.005	.198 <sup>b</sup>	12.000	455.000	.999	.005
	Trace						
	Roy's	.005	.198 <sup>b</sup>	12.000	455.000	.999	.005
	Largest						
	Root						
N1bBorninsideNamibia	Pillai's	.013	.495 <sup>b</sup>	12.000	455.000	.918	.013
	Trace						
	Wilks'	.987	.495 <sup>b</sup>	12.000	455.000	.918	.013
	Lambda						
	Hotelling's	.013	.495 <sup>b</sup>	12.000	455.000	.918	.013
	Trace						
	Roy's	.013	.495 <sup>b</sup>	12.000	455.000	.918	.013
	Largest						
	Root						
N1cBornoutsideNamibia	Pillai's	.021	.796 <sup>b</sup>	12.000	455.000	.655	.021
	Trace						
	Wilks'	.979	.796 <sup>b</sup>	12.000	455.000	.655	.021
	Lambda						
	Hotelling's	.021	.796 <sup>b</sup>	12.000	455.000	.655	.021
	Trace						

	Roy's Largest Root	.021	.796 <sup>b</sup>	12.000	455.000	.655	.021
N1aBornafterindependence * N1bBorninsideNamibia	Pillai's Trace	.033	1.304 <sup>b</sup>	12.000	455.000	.212	.033
	Wilks'	.967	1.304 <sup>b</sup>	12.000	455.000	.212	.033
	Hotelling's Trace	.034	1.304 <sup>b</sup>	12.000	455.000	.212	.033
	Roy's Largest Root	.034	1.304 <sup>b</sup>	12.000	455.000	.212	.033
N1aBornafterindependence * N1cBornoutsideNamibia	Pillai's Trace	.004	.134 <sup>b</sup>	12.000	455.000	1.000	.004
	Wilks' Lambda	.996	.134 <sup>b</sup>	12.000	455.000	1.000	.004
	Hotelling's Trace	.004	.134 <sup>b</sup>	12.000	455.000	1.000	.004
	Roy's Largest Root	.004	.134 <sup>b</sup>	12.000	455.000	1.000	.004
N1bBorninsideNamibia * N1cBornoutsideNamibia	Pillai's Trace	.016	.601 <sup>b</sup>	12.000	455.000	.842	.016
	Wilks' Lambda	.984	.601 <sup>b</sup>	12.000	455.000	.842	.016
	Hotelling's Trace	.016	.601 <sup>b</sup>	12.000	455.000	.842	.016
	Roy's Largest Root	.016	.601 <sup>b</sup>	12.000	455.000	.842	.016
N1aBornafterindependence * N1bBorninsideNamibia *	Pillai's Trace	.000	b	.000	.000		
N1cBornoutsideNamibia	Wilks'	1.000	b	.000	460.500		
	Hotelling's Trace	.000	, b	.000	2.000		
	Roy's Largest Root	.000	.000 <sup>b</sup>	12.000	454.000	1.000	.000

 $a.\ Design:\ Intercept + N1aBornafter independence + N1bBornins ideNamibia + N1cBornout sideNamibia + N1aBornafter independence \\ \star \\$ 

N1bBorninsideNamibia + N1aBornafterindependence \* N1cBornoutsideNamibia + N1bBorninsideNamibia \* N1cBornoutsideNamibia +

The results of Table 106 are discussed below:

## **Born after independence (Born Frees):**

Wilks'  $\Lambda = 0.995$ , F = (455, 455) = 0.198, P = 0.999, Partial Eta Squared ( $\eta^2$ ) = 0.005. These results suggested that there was no significant difference for the "Born frees" on the combined Dependent Variables (13 e-Literacy statements). Hence the distribution of e-Literacy of Generation Y consumers in Namibia *is not significantly different* for the "Born Frees" as compared to the other age categories.

## **Born inside Namibia (Remainees)**

Wilks'  $\Lambda = 0.987$ , F = (455, 455) = 0.495, P = 0.918, Partial Eta Squared ( $\eta^2$ ) = 0.013. These results suggested that there was no significant difference for the "Remainees" on the combined Dependent Variables (13 e-Literacy statements). Hence the distribution of e-Literacy of Generation Y consumers in Namibia is *not* significantly different for "Remainees" as compared to the other age categories.

## Born outside Namibia (Exiles)

Wilks'  $\Lambda = 0.979$  F= (455, 455) = 0.796, P=0.655, Partial Eta Squared ( $\eta^2$ ) = 0.021. These results suggested that there was no significant difference for the "Exiles" on the combined Dependent Variables (13 e-Literacy statements). Hence the distribution of e-Literacy of Generation Y consumers in Namibia is *not significantly different* for "Exiles" as compared to the other age categories.

4.5.1.25 Hypothesis 5a: There is no significant relationship between the learning styles and consumer decision-making styles of the Generation Y consumers in Namibia.

In order to establish if there is a relationship between learning styles and consumer-decision making styles of Generation Y consumers in Namibia, a Pearson Correlation analysis was conducted.

Table 107 depicts the results of the Pearson's correlation analysis.

Table 107: Pearson Correlation between Learning Styles and Consumer Decision-making Styles Generation Y consumers in Namibia

## Correlations

									ſ	ſ							
			Factor 2			Factor 5											
			– Brand	Factor 3		– Price	Factor	Factor	Factor								
		Factor 1 –	Conscio	-		Conscio	6 –	7 –	8 –	ist	şç	ng	Ve	<del>a</del>	۵	ntial	<u> </u>
		Perfectionis	us,	Novelty-	Factor 4 –	us,	Impulsi	Confus	Habitu	Activist	Reflector	Sensing	Intuitive	Visual	Verbal	Sequential	Global
		tic, High-	"Price	Fashion	Recreatio	"Value	ve,	ed by	al,	٩	ž	S	7			Se	
		Quality	Equals	Conscio	nal,	for	Careles	Over	Brand								
		Conscious	Quality"	us	Hedonistic	Money"	s	choice	Loyal								
Factor 1 –	Pearson																
Perfectionis	Correlati	1	.392**	.462**	.302**	.146**	.337**	.230**	.203**	047	.045	132 <sup>**</sup>	.132**	-	.077	065	.045
tic, High-	on													.071			
Quality	Sig. (2-																
Conscious	tailed)		.000	.000	.000	.001	.000	.000	.000	.300	.327	.004	.003	.118	.091	.155	.318
	N	487	475	476	478	480	478	478	477	487	487	487	487	487	487	487	487
Factor 2 –	Pearson													-	*		
Brand	Correlati	.392**	1	.500**	.494**	.135**	.383**	.401**	.389**	053	.044	216 <sup>**</sup>	.214**	.129	.125*	116 <sup>*</sup>	.096*
Conscious,	on													**			
"Price	Sig. (2-																
Equals	tailed)	.000		.000	.000	.003	.000	.000	.000	.242	.335	.000	.000	.005	.006	.010	.035
Quality"	N	475	485	476	475	479	479	479	478	485	485	485	485	485	485	485	485

Table 107 (Continues)

Factor 3 – Novelty- Fashion	Pearson Correlati	.462 <sup>**</sup>	.500 <sup>**</sup>	1	.357**	.179 <sup>**</sup>	.331**	.261 <sup>**</sup>	.424**	042	.047	196 <sup>**</sup>	.201**	.048	.055	086	.088
Conscious	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000	.353	.303	.000	.000	.291	.225	.057	.051
	N	476	476	488	479	482	480	481	481	488	488	488	488	488	488	488	488
Factor 4 – Recreation al,	Pearson Correlati on	.302**	.494**	.357 <sup>**</sup>	1	.253 <sup>**</sup>	.334**	.329 <sup>**</sup>	.340**	018	.020	126 <sup>**</sup>	.136 <sup>**</sup>	- .138 **	.147 <sup>*</sup>	004	.012
Hedonistic	Sig. (2- tailed)	.000	.000	.000		.000	.000	.000	.000	.687	.666	.005	.003	.002	.001	.922	.790
	N	478	475	479	490	484	483	482	481	490	490	490	490	490	490	490	490
Factor 5 – Price Conscious,	Pearson Correlati on	.146 <sup>**</sup>	.135 <sup>**</sup>	.179 <sup>**</sup>	.253 <sup>**</sup>	1	.387**	.200 <sup>**</sup>	.079	013	.015	105 <sup>*</sup>	.107 <sup>*</sup>	.100 .*	.099 <sup>*</sup>	.035	027
"Value for Money"	Sig. (2- tailed)	.001	.003	.000	.000		.000	.000	.082	.767	.745	.020	.017	.026	.027	.440	.549
	N	480	479	482	484	494	486	486	486	494	494	494	494	494	494	494	494

Table 107 (Continues)

Factor 6 – Impulsive, Careless	Pearson Correlati on	.337**	.383 <sup>**</sup>	.331 <sup>**</sup>	.334**	.387**	1	.430 <sup>**</sup>	.311**	- .112 <sup>*</sup>	.094 <sup>*</sup>	209**	.196**	.093	.082	009	007
	Sig. (2- tailed)	.000	.000	.000	.000	.000		.000	.000	.013	.038	.000	.000	.038	.068	.843	.880
	N	478	479	480	483	486	492	484	484	492	492	492	492	492	492	492	492
Factor 7 – Confused by Over	Pearson Correlati on	.230 <sup>**</sup>	.401 <sup>**</sup>	.261 <sup>**</sup>	.329**	.200 <sup>**</sup>	.430 <sup>**</sup>	1	.309**	034	.019	135 <sup>**</sup>	.118**	- .171 **	.168*	001	009
choice	Sig. (2- tailed)	.000	.000	.000	.000	.000	.000		.000	.447	.678	.003	.009	.000	.000	.990	.844
	N	478	479	481	482	486	484	492	484	492	492	492	492	492	492	492	492
Factor 8 – Habitual, Brand	Pearson Correlati on	.203 <sup>**</sup>	.389 <sup>**</sup>	.424 <sup>**</sup>	.340**	.079	.311**	.309**	1	060	.058	028	.038	.090	.093*	031	.037
Loyal	Sig. (2- tailed)	.000	.000	.000	.000	.082	.000	.000		.181	.200	.534	.406	.045	.040	.493	
	N	477	478	481	481	486	484	484	491	491	491	491	491	491	491	491	491

Table 107 (Continues)

Activist	Pearson Correlati on	047	053	042	018	013	112 <sup>*</sup>	034	060	1	867 <sup>**</sup>	.257**	.133 <sup>**</sup>	.341	.229 <sup>*</sup>	.273**	.133 <sup>*</sup>
	Sig. (2- tailed)	.300	.242	.353	.687	.767	.013	.447	.181		.000	.000	.003	.000	.000	.000	.003
	N	487	485	488	490	494	492	492	491	505	505	505	505	505	505	505	505
Reflector	Pearson Correlati on	.045	.044	.047	.020	.015	.094 <sup>*</sup>	.019	.058	.867**	1	123 <sup>**</sup>	.249**	.204	.317 <sup>*</sup>	138 <sup>**</sup>	.264*
	Sig. (2- tailed)	.327	.335	.303	.666	.745	.038	.678	.200	.000		.006	.000	.000	.000	.002	.000
	N	487	485	488	490	494	492	492	491	505	505	505	505	505	505	505	505
Sensing	Pearson Correlati on	132 <sup>**</sup>	216 <sup>**</sup>	196 <sup>**</sup>	126 <sup>**</sup>	105 <sup>*</sup>	209 <sup>**</sup>	135 <sup>**</sup>	028	.257**	123 <sup>**</sup>	1	.870**	.323	- .212 <sup>*</sup>	.266 <sup>**</sup>	.129 <sup>*</sup>
	Sig. (2- tailed)	.004	.000	.000	.005	.020	.000	.003	.534	.000	.006		.000	.000	.000	.000	.004
	N	487	485	488	490	494	492	492	491	505	505	505	505	505	505	505	505

Table 107 (Continues)

Intuitive	Pearson Correlati on	.132 <sup>**</sup>	.214 <sup>**</sup>	.201 <sup>**</sup>	.136 <sup>**</sup>	.107*	.196 <sup>**</sup>	.118 <sup>**</sup>	.038	.133 <sup>**</sup>	.249**	870 <sup>**</sup>	1	.201	.311*	144 <sup>**</sup>	.267*
	Sig. (2- tailed)	.003	.000	.000	.003	.017	.000	.009	.406	.003	.000	.000		.000	.000	.001	.000
	N	487	485	488	490	494	492	492	491	505	505	505	505	505	505	505	505
Visual	Pearson Correlati on	071	129 <sup>**</sup>	048	138 <sup>**</sup>	100 <sup>*</sup>	093 <sup>*</sup>	171 <sup>**</sup>	090 <sup>*</sup>	.341**	204 <sup>**</sup>	.323**	- .201 <sup>**</sup>	1	.896 <sup>*</sup>	.123**	003
	Sig. (2- tailed)	.118	.005	.291	.002	.026	.038	.000	.045	.000	.000	.000	.000		.000	.006	.942
	N	487	485	488	490	494	492	492	491	505	505	505	505	505	505	505	505
Verbal	Pearson Correlati on	.077	.125**	.055	.147**	.099 <sup>*</sup>	.082	.168 <sup>**</sup>	.093 <sup>*</sup>	- .229 <sup>**</sup>	.317 <sup>**</sup>	212 <sup>**</sup>	.311 <sup>**</sup>	.896	1	010	.122 <sup>*</sup>
	Sig. (2- tailed)	.091	.006	.225	.001	.027	.068	.000	.040	.000	.000	.000	.000	.000		.817	.006
	N	487	485	488	490	494	492	492	491	505	505	505	505	505	505	505	505

Table 107 (Continues)

Sequential	Pearson Correlati on	065	116 <sup>*</sup>	086	004	.035	009	001	031	.273**	138 <sup>**</sup>	.266 <sup>**</sup>	- .144 <sup>**</sup>	.123	010	1	.822*
	Sig. (2- tailed)	.155	.010	.057	.922	.440	.843	.990	.493	.000	.002	.000	.001	.006	.817		.000
	N	487	485	488	490	494	492	492	491	505	505	505	505	505	505	505	505
Global	Pearson Correlati on	.045	.096 <sup>*</sup>	.088	.012	027	007	009	.037	.133 <sup>**</sup>	.264 <sup>**</sup>	129 <sup>**</sup>	.267 <sup>**</sup>	.003	.122 <sup>*</sup>	822 <sup>**</sup>	1
	Sig. (2- tailed)	.318	.035	.051	.790	.549	.880	.844	.419	.003	.000	.004	.000	.942	.006	.000	
	N	487	485	488	490	494	492	492	491	505	505	505	505	505	505	505	505

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed).

Table 107 shows the Pearson correlation results as follows:

## Factor 1 – Perfectionistic, High-Quality Conscious

There was a negative correlation between Factor 1 – Perfectionistic, High-Quality Conscious and **Sensing Style** (r= -0.132, n = 487, p =0 .004) and **Intuitive Style** (r=-0.132, n = 487, p = 0.000) respectively, which were statistically significant. This suggests that as the Intuitive and Sensing learning styles behaviour of the Namibian Generation Y consumers increase, their Perfectionistic High-Quality Conscious behaviour decreases.

## **Factor 2 – Brand Conscious, Price Equals Quality:**

There were both negative and positive correlations between Factor 2 – Brand Conscious, Price Equals Quality and learning styles. The negative correlations were with **Sensing style**(r=-0.216, n = 485, p = 0.000), **Intuitive Style**(r = -0.214, n = 485, p = 0.000) and **Sequential Style**(r = -0.116, n = 485, p = 0.010) while the positive correlations were with **Visual Style**(r = 0.129 n = 485, p = 0.005), **Verbal Style**(r = 0.125., n = 485, p = 0.006) and **Global Style**(r = 0.096, n = 485, p = 0.035). All these were statistically significant. This suggests that as the Sensing, Intuitive and Sequential learning styles behaviours increase, their Brand Conscious, Price Equals Quality behaviour decreases, whereas as the Visual, Verbal, and Global Styles behaviours increase, the Brand Conscious, Price Equals Quality behaviour also increases.

## **Factor 3 – Novelty -Fashion Conscious:**

There were both negative and positive correlations between Factor 3 – Novelty -Fashion Conscious and learning styles. The negative correlation was with **Sensing Style**(r = -0.196, n = 488, p = 0.000) and the positive correlation was with **Intuitive Style**(r = 0.201, n = 488, p = 0.000). Both of these were statistically significant. This

suggests that as the Sensing learning styles behaviour of the Namibian Generation Y consumers increases, their Novelty-Fashion Conscious behaviour decreases whereas when the Intuitive learning style increases, their Novelty-Fashion Conscious behaviour also increases.

### Factor 4 – Recreational, Hedonistic

There were both negative and positive correlations between Factor 4 – Recreational, Hedonistic and **Sensing Style, Intuitive Style, Visual Style and Verbal Style**, which were statistically significant. These were (r=-0.129, n = 490, p = 0.005), (r = 0.136, n = 490, p = 0.003), (r = 0.138, n = 490, p = 0.002), (r = 0.147, n = 490, p = 0.001) respectively. This suggests that as the Sensing learning styles behaviour of the Namibian Generation Y consumers increases, their Recreational, Hedonistic behaviour decreases, whereas as the Intuitive, Visual and Verbal learning styles behaviours of the Namibian Generation Y consumers increase, their Recreational, Hedonistic behaviour also increases.

## **Factor 5 – Price Conscious, Value for Money:**

There were both negative) and positive correlations between Factor 5 – Price Conscious, Value for Money and **Sensing Style, Intuitive Style, Visual Style and Verbal Style**, which were statistically significant. These were (r=-0.105, n = 494, p = 0.020), (r = 0.107, n = 494, p = 0.017), (r = 0.100, n = 494, p =0 .026), (r = 0.099, n = 494, p =0 .027) respectively. This suggests that as the Sensing learning style behaviour of the Namibian Generation Y Consumers increases, their Price Conscious, Value for Money behaviour decreases, whereas as the Intuitive, Visual and Verbal learning styles behaviours of the Namibian Generation Y consumer increase, their Price Conscious Value for Money behaviour also increases.

### **Factor 6 – Impulsive, Careless:**

There were both negative and positive correlations between Factor 6 – Impulsive, Careless and Activist Style, Reflector Style, Sensing Style, Intuitive Style and Visual Style, which were statistically significant. These were (r=-0.112, n = 492, p = 0.013), (r = 0.094, n = 492, p = 0.038), (r = -0.209, n = 492, p = 0.000), (r = 0.196, n = 492, p = 0.000), (r = -0.093, n = 492, p = 0.038), respectively. This suggests that as the Activist, Sensing and Visual learning styles behaviours of the Namibian Generation Y consumers increase, their Impulsive, Careless behaviour decreases, whereas as the Reflector and Intuitive learning styles behaviours of the Namibian Generation Y consumers increase, their Impulsive, Careless behaviour also increases.

## Factor 7 – Confused by over choice:

There were both negative and positive correlations between Factor 7 – Confused by Over choice and **Sensing Style, Intuitive Style, Visual Style and Verbal Style,** which were statistically significant. These were (r=-0.135, n = 492, p = 0.003), (r = 0.118, n = 492, p = 0.009), (r = 0.171, n = 492, p = 0.000), (r = 0.168, n = 492, p = 0.000) respectively. This suggests that as the Sensing learning style behaviour of the Namibian Generation Y consumers increases, their Confused by over choice behaviour decreases whereas as the Intuitive, Visual and Verbal learning styles behaviours of the Namibian Generation Y consumers increase, their Confused by over choice behaviour also increases.

## Factor 8 – Habitual Brand Loyal

There were both negative and positive correlations between Factor 8 – Habitual Brand Loyal and **Visual Style** and **Verbal Style**, which were statistically significant (r=-0.90, n = 491, p = 0.045) and (r = 0.093, n = 491, p= 0.040)

respectively. This suggests that as the Visual learning style behaviour of the Namibian Generation Y consumers increases, their Habitual Brand Loyal behaviour decreases, whereas as the Verbal learning style behaviour of the Namibian Generation Y consumers increases, their Habitual Brand Loyal behaviour also increases.

4.5.1.26 Hypothesis 5b: There is no significant relationship between culture dimensions and consumer decision-making styles of the Generation Y consumers in Namibia.

In order to establish if there is a relationship between culture dimensions and consumer-decision making styles of Generation Y consumers in Namibia, a Pearson Correlation analysis was conducted.

Table 108 depicts the results of the Pearson's correlation analysis.

Table 108: Pearson Correlation between culture dimensions and consumer decision-making styles of the Generation Y consumers in Namibia

#### Correlations

					Correlatio									
		Factor 1 – Perfectionistic, High-Quality Conscious	Factor 2 – Brand Conscious, "Price Equals Quality"	Factor 3 – Novelty- Fashion Conscious	Factor 4 – Recreational, Hedonistic	Factor 5 – Price Conscious, "Value for Money"	Factor 6 – Impulsive, Careless	Factor 7 – Confused by Over choice	Factor 8 – Habitual, Brand Loyal	Uncertainty Avoidance Index	Individualism	Longterm orientation	Power Distance Index	Masculinity
Factor 1 – Perfectionistic,	Pearson Correlation	1	.392**	.462**	.302**	.146**	.337**	.230**	.203**	.232**	.181**	.223**	.084	.168**
High-Quality Conscious	Sig. (2- tailed)		.000	.000	.000	.001	.000	.000	.000	.000	.000	.000	.070	.000
	N	487	475	476	478	480	478	478	477	481	476	482	470	473
Factor 2 – Brand Conscious, "Price	Pearson Correlation	.392**	1	.500**	.494**	.135**	.383**	.401 <sup>**</sup>	.389**	.219 <sup>**</sup>	.204**	.194**	.236**	.169**
Equals Quality"	Sig. (2-tailed)	.000		.000	.000	.003	.000	.000	.000	.000	.000	.000	.000	.000
	N	475	485	476	475	479	479	479	478	479	474	479	469	471

Table108 (Continues)

Factor 3 – Novelty-Fashion	Pearson Correlation	.462 <sup>**</sup>	.500**	1	.357**	.179**	.331 <sup>**</sup>	.261 <sup>**</sup>	.424**	.218**	.077	.173**	.100 <sup>*</sup>	.127**
Conscious	Sig. (2- tailed)	.000	.000		.000	.000	.000	.000	.000	.000	.095	.000	.030	.006
	N	476	476	488	479	482	480	481	481	482	478	482	474	474
Factor 4 – Recreational,	Pearson Correlation	.302**	.494**	.357**	1	.253**	.334 <sup>**</sup>	.329**	.340**	.213 <sup>**</sup>	.180**	.211 <sup>**</sup>	.250**	.172**
Hedonistic	Sig. (2- tailed)	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	478	475	479	490	484	483	482	481	484	479	485	473	477
Factor 5 – Price Conscious,	Pearson Correlation	.146 <sup>**</sup>	.135 <sup>**</sup>	.179 <sup>**</sup>	.253**	1	.387**	.200 <sup>**</sup>	.079	.110 <sup>*</sup>	.066	.057	.100 <sup>*</sup>	.028
"Value for Money"	Sig. (2- tailed)	.001	.003	.000	.000		.000	.000	.082	.015	.147	.205	.029	.540
	N	480	479	482	484	494	486	486	486	488	483	488	477	480

Table 108 (Continues)

Factor 6 –	Pearson	.337**	.383**	.331**	.334**	.387**	1	.430**	.311**	.258**	.157**	.198**	.160**	.104*
Impulsive,	Correlation	.557	.505	.551	.004	.507	'	.430	.511	.200	.107	.100	.100	.104
Careless	Sig. (2-													
	tailed)	.000	.000	.000	.000	.000		.000	.000	.000	.001	.000	.000	.023
	N	478	479	480	483	486	492	484	484	486	481	486	475	478
Factor 7 –	Pearson													
		.230**	.401**	.261**	.329**	.200**	.430**	1	.309**	.217**	.103 <sup>*</sup>	.117*	.212**	.086
Confused by	Correlation											ľ		
Over choice	Sig. (2-	.000	.000	.000	.000	.000	.000		.000	.000	.024	.010	.000	.059
	tailed)	.000	.000	.000	.000	.000	.000		.000	.000	.024	.010	.000	.000
	N	478	479	481	482	486	484	492	484	486	481	486	476	478
Factor 8 –	Pearson													
Habitual, Brand	Correlation	.203**	.389**	.424**	.340**	.079	.311 <sup>**</sup>	.309**	1	.162**	.084	.193**	.099*	.182**
Loyal														
Loyai	Sig. (2-	.000	.000	.000	.000	.082	.000	.000		.000	.065	.000	.032	.000
	tailed)													
	N	477	478	481	481	486	484	484	491	485	480	485	474	477

Table 108 (Continues)

Uncertainty Avoidance Index	Pearson Correlation	.232	.219 <sup>**</sup>	.218 <sup>**</sup>	.213 <sup>**</sup>	.110	.258**	.217**	.162**	1	.417 <sup>**</sup>	.488**	.440**	.339**
	Sig. (2- tailed)	.000	.000	.000	.000	.015	.000	.000	.000		.000	.000	.000	.000
	N	481	479	482	484	488	486	486	485	495	487	492	481	485
Individualism	Pearson Correlation	.181 <sup>⊷</sup>	.204**	.077	.180**	.066	.157 <sup>**</sup>	.103 <sup>*</sup>	.084	.417**	1	.368**	.471**	.231**
	Sig. (2- tailed)	.000	.000	.095	.000	.147	.001	.024	.065	.000		.000	.000	.000
	N	476	474	478	479	483	481	481	480	487	490	487	477	479
Long-term orientation	Pearson Correlation	.223 <sup>**</sup>	.194**	.173	.211 <sup>**</sup>	.057	.198 <sup>**</sup>	.117*	.193 <sup>™</sup>	.488 <sup>**</sup>	.368**	1	.368**	.496 <sup>**</sup>
	Sig. (2- tailed)	.000	.000	.000	.000	.205	.000	.010	.000	.000	.000		.000	.000
	N	482	479	482	485	488	486	486	485	492	487	495	481	485

Table 118 (Continues)

Power Distance Index	Pearson Correlation	.084	.236 <sup>**</sup>	.100*	.250**	.100 <sup>*</sup>	.160 <sup>**</sup>	.212**	.099 <sup>*</sup>	.440**	.471**	.368**	1	.275**
	Sig. (2- tailed)	.070	.000	.030	.000	.029	.000	.000	.032	.000	.000	.000		.000
	N	470	469	474	473	477	475	476	474	481	477	481	484	476
Masculinity	Pearson Correlation	.168 <sup>**</sup>	.169**	.127**	.172 <sup>**</sup>	.028	.104 <sup>*</sup>	.086	.182**	.339 <sup>**</sup>	.231**	.496 <sup>**</sup>	.275**	1
	Sig. (2- tailed)	.000	.000	.006	.000	.540	.023	.059	.000	.000	.000	.000	.000	
	N	473	471	474	477	480	478	478	477	485	479	485	476	487

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed).

Table 108 presents the following results:

### Factor 1 – Perfectionistic, High-Quality Conscious

There were positive correlations between Factor 1 – Perfectionistic, High-Quality Conscious and **Uncertainty Avoidance, Individualism, Long-Term Orientation and Masculinity**, which were statistically significant. These were] (r= 0.232, n = 481, p = 0.000) and (r = 0.181, n = 476, p = 0.000), and (r = 0.223, n = 482, p = 0.070), and (r = 0.168, n = 473, p = 0.000) respectively. This suggests that as the Uncertainty Avoidance, Individualism, Long-Term Orientation and Masculinity behaviours of the Namibian Generation Y consumers increase, their Perfectionistic, High-Quality Conscious behaviour also increases.

### **Factor 2 – Brand Conscious, Price Equals Quality:**

There were positive correlations between Factor 2 – Brand Conscious, Price Equals Quality and Uncertainty **Avoidance, Individualism, Long-Term Orientation, Power Distance and Masculinity**, which were statistically significant. These were (r= 0.219, n = 479, p = 0.000), (r = 0.204, n = 474, p = 0.000), (r = 0.194, n = 479, p = 0.000), (r = 0.236, n = 469, p = 0.000) and (r = 0.169, n = 471, p = 0.000) respectively. This suggests that as the Uncertainty Avoidance, Individualism, Long-Term Orientation, Power Distance and Masculinity behaviours of the Namibian Generation Y consumers increase, their Perfectionistic, Brand Conscious, Price Equals Quality behaviour also increases.

# **Factor 3 – Novelty -Fashion Conscious:**

There were positive correlations between Factor 3 – Novelty -Fashion Conscious and **Uncertainty Avoidance, Long-Term Orientation, Power Distance** and **Masculinity,** which were statistically significant. These were (r = 0.218, n = 482, p)

= 0.000), (r = 0.173, n = 482, p = 0.000), and (r = 0.100, n = 474, p = 0.030) and (r = 0.127, n = 474, p = 0.006) respectively. This suggests that as the Uncertainty Avoidance, Long-Term Orientation, Power Distance and Masculinity behaviours of the Namibian Generation Y consumers increase, their Novelty, Fashion Conscious behaviour also increases.

#### Factor 4 – Recreational, Hedonistic

There were positive correlations between Factor 4 – Recreational, Hedonistic and Uncertainty Avoidance, Individualism, Long-Term Orientation, Power Distance and Masculinity, which were statistically significant. These were (r= 0.213, n = 484, p = 0.000), (r = 0.180, n = 479, p = 0.000), (r = 0.211, n = 485, p = 0.000), (r = 0.250, n = 473, p = 0.000) and (r = 0.172, n = 477, p = 0.000) respectively. This suggests that as the Uncertainty Avoidance, Individualism, Long-Term Orientation, Power Distance and Masculinity behaviours of the Namibian Generation Y consumers increase, their Recreational Hedonistic behaviour also increases.

#### Factor 5 – Price Conscious, Value for Money:

There were positive correlations between Factor 5 – Price Conscious, Value for Money and **Uncertainty Avoidance**, and **Power Distance**, which were statistically significant. These were (r= 0.110, n = 488, p = 0.015), and (r = 0.100, n = 477, p = 0.029) respectively. This suggests that as the Uncertainty Avoidance, and Power Distance behaviours of the Namibian Generation Y consumers increase, their Price Conscious, Value for Money behaviour also increases.

# **Factor 6 – Impulsive, Careless:**

There were positive correlations between Factor 6 – Impulsive, Careless and Uncertainty Avoidance, Individualism, Long-Term Orientation, Power Distance and Masculinity, which were statistically significant. These were (r= 0.258, n = 486, p = 0.000), (r = 0.157, n = 481, p =0 .001), (r =0 .198, n = 486, p = 0.000), (r = 0.160, n = 475, p = 0.000) and (r = 0.104, n = 478, p = 0.023) respectively. This suggests that as the Uncertainty Avoidance, Individualism, Long-Term Orientation, Power Distance and Masculinity behaviours of the Namibian Generation Y consumers increase, their Perfectionistic, High-Quality Conscious behaviour also increases.

# **Factor 7 – Confused by over choice:**

There were positive correlations between Factor 7 – Confused by Over choice and **Uncertainty Avoidance, Individualism, Long-Term Orientation** and **Power Distance**, which were statistically significant. These were (r = 0.217, n = 486, p = 0.000), (r = 0.103, n = 481, p = 0.024), (r = 0.117, n = 486, p = 0.010) and (r = 0.212, n = 476, p = 0.000) respectively. This suggests that as the Uncertainty Avoidance, Individualism, Long-Term Orientation and Power Distance behaviours of the Namibian Generation Y consumers increase, their Confused by over choice behaviour also increases.

# **Factor 8 – Habitual Brand Loyal**

There were positive correlations between Factor 8 – Habitual Brand Loyal and Uncertainty Avoidance, Long-Term Orientation, Power Distance and Masculinity, which were statistically significant. These were (r = 0.162, n = 485, p = 0.000), (r = 0.193, n = 485, p = 0.000), (r = 0.099, n = 474, p = 0.032) and (r = 0.182, n = 477, p = 0.000) respectively. This suggests that as the Uncertainty Avoidance,

Long-Term Orientation, Power Distance and Masculinity behaviours of the Namibian Generation Y consumers increase, their Habitual Brand Loyal Conscious behaviour also increases.

4.5.1.27 Hypothesis 5c: There is no significant relationship between e-literacy and consumer decision-making styles of the Generation Y consumers in Namibia.

In order to establish if there is a relationship between e-literacy and consumerdecision making styles of Generation Y consumers in Namibia, a Pearson Correlation analysis was conducted.

Table 109 depicts the results of the Pearson's correlation analysis.

Table 109: Pearson Correlation - relationship between e-literacy and consumer decision-making styles of the Generation Y consumers in Namibia

# Correlations

				Ourici						
		Factor 1 – Perfectionistic, High-Quality	Factor 2 – Brand Conscious, "Price Equals	Factor 3 – Novelty- Fashion	Factor 4 – Recreational,	Factor 5 – Price Conscious, "Value for	Factor 6 – Impulsive,	Factor 7 – Confused by	Factor 8 – Habitual, Brand	e-
	-	Conscious	Quality"	Conscious	Hedonistic	Money"	Careless	Over choice	Loyal	Literacy
Factor 1 – Perfectionistic,	Pearson Correlation	1	.392 <sup>**</sup>	.462**	.302**	.146 <sup>**</sup>	.337**	.230**	.203**	.286**
High-Quality Conscious	Sig. (2- tailed)		.000	.000	.000	.001	.000	.000	.000	.000
	N	487	475	476	478	480	478	478	477	459
Factor 2 – Brand Conscious, "Price	Pearson Correlation	.392 <sup>**</sup>	1	.500 <sup>**</sup>	.494**	.135 <sup>**</sup>	.383**	.401 <sup>**</sup>	.389 <sup>**</sup>	.161 <sup>**</sup>
Equals Quality"	Sig. (2- tailed)	.000		.000	.000	.003	.000	.000	.000	.001
	N	475	485	476	475	479	479	479	478	456
Factor 3 – Novelty-Fashion	Pearson Correlation	.462 <sup>**</sup>	.500 <sup>**</sup>	1	.357**	.179 <sup>**</sup>	.331 <sup>**</sup>	.261 <sup>**</sup>	.424**	.266**
Conscious	Sig. (2- tailed)	.000	.000		.000	.000	.000	.000	.000	.000
	N	476	476	488	479	482	480	481	481	461

Table 109 (Continues)

Factor 4 – Recreational,	Pearson Correlation	.302**	.494**	.357**	1	.253 <sup>**</sup>	.334**	.329**	.340**	.171**
Hedonistic	Sig. (2- tailed)	.000	.000	.000		.000	.000	.000	.000	.000
	N	478	475	479	490	484	483	482	481	461
Factor 5 – Price Conscious, "Value	Pearson Correlation	.146**	.135 <sup>**</sup>	.179 <sup>**</sup>	.253 <sup>**</sup>	1	.387**	.200**	.079	.143 <sup>**</sup>
for Money"	Sig. (2- tailed)	.001	.003	.000	.000		.000	.000	.082	.002
	N	480	479	482	484	494	486	486	486	465
Factor 6 – Impulsive,	Pearson Correlation	.337 <sup>**</sup>	.383**	.331**	.334**	.387**	1	.430**	.311 <sup>**</sup>	.159 <sup>**</sup>
Careless	Sig. (2- tailed)	.000	.000	.000	.000	.000		.000	.000	.001
	N	478	479	480	483	486	492	484	484	463
Factor 7 – Confused by Over	Pearson Correlation	.230	.401 <sup>**</sup>	.261 <sup>**</sup>	.329**	.200**	.430**	1	.309**	.098
choice	Sig. (2- tailed)	.000	.000	.000	.000	.000	.000		.000	.034
	N	478	479	481	482	486	484	492	484	462

Table 109 (Continues)

Factor 8 –	Pearson	**		**	**			**		
Habitual, Brand	Correlation	.203**	.389 <sup>**</sup>	.424**	.340 <sup>**</sup>	.079	.311 <sup>**</sup>	.309**	1	.097*
Loyal	Sig. (2- tailed)	.000	.000	.000	.000	.082	.000	.000		.037
	N	477	478	481	481	486	484	484	491	463
e-Literacy	Pearson Correlation	.286**	.161 <sup>**</sup>	.266 <sup>**</sup>	.171**	.143 <sup>**</sup>	.159 <sup>**</sup>	.098*	.097*	1
	Sig. (2- tailed)	.000	.001	.000	.000	.002	.001	.034	.037	
	N	459	456	461	461	465	463	462	463	471

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed).

Table 109 presents the following results:

# Factor 1 – Perfectionistic, High-Quality Conscious

There was a positive correlation between Factor 1 – Perfectionistic, High-Quality Conscious and e-literacy, which was statistically significant (r= 0.286, n = 459, p = 0.000). This suggests that as the e-literacy distribution of the Namibian Generation Y consumers increases, their Perfectionistic, High-Quality Conscious behaviour also increases.

#### Factor 2 – Brand Conscious, Price Equals Quality:

There was a positive correlation between Factor 1– Brand Conscious, Price Equals and e-literacy, which was statistically significant (r = 0.161, n = 456, p = 0.001). This suggests that as the e-literacy distribution of the Namibian Generation Y consumers increases, their Brand Conscious, Price Equals Quality behaviour also increases.

### **Factor 3 – Novelty -Fashion Conscious:**

There was a positive correlation between Factor 3 – Novelty -Fashion Conscious and e-literacy, which was statistically significant (r = 0.266, n = 461, p = 0.000). This suggests that as the e-literacy distribution of the Namibian Generation Y consumers increases, their Novelty-Fashion Conscious behaviour also increases.

# Factor 4 – Recreational, Hedonistic

There was a positive correlation between Factor 4 – Recreational, Hedonistic and e-literacy, which was statistically significant (r = 0.171, n = 461, p = 0.000). This suggests that as the e-literacy distribution of the Namibian Generation Y consumers increases, their Recreational, Hedonistic behaviour also increases.

# **Factor 5 – Price Conscious, Value for Money:**

There was a positive correlation between Factor 5 – Price Conscious, Value for Money and e-literacy, which was statistically significant (r = 0.143, n = 465, p = 0.002). This suggests that as the e-literacy distribution of the Namibian Generation Y consumers increases, their Price, Hedonistic behaviour also increases.

# **Factor 6 – Impulsive, Careless:**

There was a positive correlation between Factor 6 – Impulsive, Careless and eliteracy, which was statistically significant (r = 0.159, n = 463, p = 0.001). This suggests that as the e-literacy distribution of the Namibian Generation Y consumers increases, their Impulsive, Careless behaviour also increases.

# **Factor 7 – Confused by over choice:**

There was a positive correlation between Factor 7 – Confused by Over choice and e-literacy, which was statistically significant (r = 0.098, n = 462, p = 0.034). This suggests that as the e-literacy distribution of the Namibian Generation Y consumers increases, their Confused by over choice behaviour also increases.

#### Factor 8 – Habitual Brand Loyal

There was a positive correlation between Factor 8 – Habitual Brand Loyal and e-literacy, which was statistically significant (r = 0.097, n = 463, p = 0.037). This suggests that as the e-literacy distribution of the Namibian Generation Y consumers increases, their Habitual Brand Loyal behaviour also increases.

Through Pearson's Correlation the study found correlations between CSI and ILS, Hofstede Cultural Dimensions and e-Literacy [CSI = f (ILS + f Hofstede Cultural Dimension + f e-Literacy)]. In order to assess the strength of the relationships, Canonical Correlation was performed. It is common to use Canonical Correlations based on multivariate F-tests to establish if the canonical relationship is statistically significant as well to assess the canonical loadings or the structure

correlations. Table 110 presents the results of the tests of Significance for CSI using unique sums of squares source of variation.

Table 110: Tests of Significance for CSI using Unique Sums of Squares Source of Variation – Canonical Correlation

	SS	DF	MS	F	Sig of F
WITHIN CELLS	212670.73	3 491	433.14		
REGRESSION	31482.33	3	10494.11	24.23	.000
CONSTANT	3034.68	1	3034.68	7.01	.008
(Corrected Model)	31482.33	3	10494.11	24.23	.000
(Corrected Total)	244153.06	494	494.24		

Table 110 provides significant p-values suggesting that the null hypotheses of all canonical correlations are zero. The hypothesis being tested here is: *There is no significant relationship between the learning styles, cultural dimensions, e-literacy and consumer decision-making styles of the Generation Y consumers in Namibia.* 

The significant p-values depicted on Table 110 suggest that there is a relationship between the Dependent Variable (CSI) and the Independent Variables ILS, Hofstede Cultural Dimensions, and e-Literacy. This supports the Pearson's correlation tests results above. The squared correlations between the covariates and the Dependent Variable were as follows: ILS (0.33) which is weak but acceptable; Hofstede Cultural Dimensions (0.73) is good and e-Literacy 0(.53) moderate. This suggests that CSI is a factor of ILS, Hofstede Cultural Dimensions and e-Literacy but

Hofstede Cultural Dimensions have the greatest influence on the Namibian Generation Y consumer decision-making followed by e-Literacy and ILS.

#### 4.6 Conclusion

The results of the data analysis related to the research questions are presented in this chapter. A total of 505 respondents took part in this study. Apart from a Demographic questionnaire, the Study made use of the Consumer Styles Inventory (CSI), the Index of Learning Styles Questionnaire (ILS), the Hofstede Cultural Dimensions Questionnaire and an e-Literacy Questionnaire. These were found to be reliable and were validated by this study through Principal Component Factor Analysis. Furthermore, statistical techniques such, ANOVA, MANOVA and Pearson correlation were employed to assess the data adequately and to test the hypotheses. SPSS 22.0 was used. The summary of the statistical test results to the research questions are as follows:

The eight (8) profiles of consumer decision-making were found to be applicable to the Namibian Generation Y consumers. It was found that consumer decision-making styles were significantly different when comparing Genders, Age, and the University studied, whereas for the other variables under review, namely Age category, and Ethnicity, the decision-making styles were not significantly different.

The distribution of learning styles among Namibian Generation Y consumers were found to be mild Activist, moderate Sensing, moderate Visual and mild Sequential. And learning styles differences were found between the different ethnic groups and the University attended; as far as the other variables under review were

concerned (Age, Age category and Gender), the learning styles were not significantly different.

In terms of the three most significant cultural dimensions, Namibian

Generation Y consumers are Long Term Oriented, accept Power Distances and are

Risk averse. No significant cultural dimensions differences were found among
individuals based on their Age, Age category, Gender, or Ethnicity. However,
significant cultural dimensions differences were found among individuals who studied
at different Universities.

In terms of e-Literacy the Generation Y consumers in Namibia seem to have adequate ICT skills, although significant differences were found in the e-Literacy distribution of individuals who studied at different Universities. There were no significant differences in the e-literacy distribution among individuals based on their Age, Age category, Ethnicity, or Gender.

The study also found correlations between consumer decision-making styles and learning styles (with the exception of the Global learning style factor), cultural dimensions and e-literacy; hence suggesting that the decision-making styles of the Namibian Generation Y consumers are influenced by their learning styles, their cultural dimensions and e-literacy. It was further established that Hofstede Cultural Dimensions had the most significant impact on the Namibian Generation consumer decision-making followed by e-Literacy and Learning Styles.

### 5. Chapter 5: Discussion

#### 5.1 Introduction

This chapter presents the discussions of the results and the implications thereof. The central objective of this study was to profile the Namibian Generation Y consumers with respect to their decision-making styles, learning styles, cultural dimensions and e-literacy, as well as to establish the relationships, if any between these decision-making styles, learning styles, cultural dimensions and e-literacy.

Given that few studies have assessed these key constructs (decision -making styles, learning styles, culture and e-literacy) in a single study, this study has added value to the body of knowledge on consumer decision-making styles. The study found significant results that are a potential aid to marketers, entrepreneurs, educators and policy makers in decision-making and strategy formulation. This study also presents an opportunity for local researchers as well as international ones to create indigenous knowledge that relates to consumer behaviour, learning styles, culture and e-literacy.

The study established that CSI, ILS and the Hofstede Cultural Dimension

Instruments are applicable to the Namibian Generation Y consumers. One of the most important findings is that the study has classified the general consumer decision-making characteristics of the Namibian Generation Y consumers as well as classified its learning styles, cultural dimensions and e-literacy. In addition, as major findings, the study found both positive and negative correlations between the Namibian Generation Y consumer decision-making styles and their learning styles, it also found positive correlations between the Namibian Generation Y consumer decision-making

styles and their cultural dimensions, as well as positive correlations between the Namibian Generation Y consumer decision-making styles and their e-literacy distribution. The study found that the cultural dimensions of the Namibian Generation Y consumers had the most significant impact in their consumer decision-making, followed by e-literacy and their learning styles. Table 111 provides a summary of the hypothesis test results.

# **5.2 Summary of Hypothesis tests Results**

Table 111: Summary of the Hypothesis tests Results

Hypothesis	Results				
	Accept Null Hypothesis	Reject Null Hypothesis			
Hypothesis 1a: The CSI is not applicable to the Namibian		Reject			
Generation Y consumer decision-making.					
Hypothesis 1b: Consumer decision-making styles are not significantly different between males and females.		Reject			
Hypothesis 1c: Consumer decision-making styles are not significantly different for individuals who come from different ethnic groups.	Accept				
Hypothesis 1d: Consumer decision-making styles are not significantly different for individuals of different ages.	Accept				
Hypothesis 1e: Consumer decision-making styles are not significantly different for individuals who study in different Universities.		Reject			
Hypothesis 1f: Consumer decision-making styles are not significantly different for Born Frees, Exiles and Remainees.	Accept				

Hypothesis 2a The ILS is not applicable to the Namibian		Reject
Generation Y consumers.		
Hypothesis 2b: Learning styles are not significantly different	Accept	
between males and females		
Hypothesis 2c: Learning styles are not significantly different for		Reject
individuals who come from different ethnic groups.		
Hypothesis 2d: Learning styles are not significantly different for		Reject
individuals of different ages.		
Hypothesis 2e: Learning styles are not significantly different for		Reject
		Reject
individuals who study in different Universities.		
Hypothesis 2f: Learning styles are not significantly different for	Accept	
Born Frees, Exiles and Remainees.		
Hypothesis 3a The Hofstede cultural dimensions are not		Reject
applicable to the Namibian Generation Y consumers.		
Hypothesis 3b: Hofstede cultural dimensions are not	Accept	
significantly different between males and females.		
Hypothesis 3c: Hofstede cultural dimensions are not	Accept	
significantly different for individuals who come from different	•	
ethnic groups.		
etinic groups.		
Hypothesis 3d: Hofstede cultural dimensions are not	Accept	
significantly different for individuals of different ages.		
Hypothesis 3e: Hofstede cultural dimensions are not		Reject
significantly different for individuals who study in different		
Universities.		
Hypothesis 3f: Hofstede cultural dimensions are not	Accept	

significantly different for Born Frees, Exiles and Remainees.		
Hypothesis 4a: The 13 e-literacy statements are not applicable to		Reject
the Namibian Generation Y consumers.		
Hypothesis 4b: The e-literacy distribution is not significantly	Accept	
different between males and females.		
Hypothesis 4c: The e-literacy distribution is not significantly	Accept	
	Песері	
different for individuals who come from different ethnic groups.		
Hypothesis 4d: The e-literacy distribution is not significantly	Accept	
different for individuals of different ages.		
Hypothesis 4e: The e-literacy distribution is not significantly		Reject
different for individuals who study in different Universities.		
Hypothesis 4f: The e-literacy distribution is not significantly	Accept	
different for Born Frees, Exiles and Remainees.		
		7
Hypothesis 5a: There is no significant relationship between the		Reject
learning styles and consumer decision-making styles of the		
Generation Y consumers in Namibia.		
Hypothesis 5b: There is no significant relationship between		Reject
		Reject
culture dimensions and consumer decision-making styles of the		
Generation Y consumers in Namibia.		
Hypothesis 5c: There is no relationship between e-literacy and		Reject
consumer decision-making styles of the Generation Y consumers		- J
in Namibia.		

Table 111 depicts the summarised results of the hypothesis tests which are now discussed under 5.2.1.

#### 5.2.1 Discussion

Applicability of the CSI to the Namibian Generation Y consumer decision-making:

Hypothesis 1a was rejected; the eight (8) factors or Profiles of consumer decision-making styles were found applicable to the Namibia Generation Y consumers in Namibia in the following order of importance: Factor 5 - Price Conscious, "Value for Money", Factor 3 - Novelty-Fashion Consciousness, Factor 2 -Brand Conscious, "Price Equals Quality", Factor 6 - Impulsive Careless, Factor 8-Habitual, Brand Loyal, Factor 1 - Perfectionistic High-Quality Consciousness, Factor 4 - Recreational, Hedonistic, and Factor 7 - Confused by Over choice. Hence, the three main profiles or characteristics of the Namibian Generation Y consumers can described as follows: Factor 5: Price Conscious, "Value for Money" – a characteristic identifying those consumers who look for sale prices and are conscious of lower prices. They are concerned with getting the best value for their money, and are likely to be comparison shoppers; **Factor 3:** Novelty Fashion Conscious Consumer- this is a characteristic indicating consumers who are fashion and novelty conscious, and seek out new things; for them it is important to be up-to-date with styles; Factor 2: Brand Conscious Consumer- this is a characteristic identifying those consumers who buy more expensive, well-known national and international brands. They believe that a higher price means better quality, and prefer best-selling advertised brands.

Based on the above three main characteristics, it is worth noting that among others, the following items can be said to describe Generation Y consumer decision-making:

I buy as much as possible at sale prices

- The lower price products are usually my choice
- I look carefully to find the best value-for-money
- I usually have one or more outfits of the very newest style
- I keep my wardrobe up-to-date with the changing fashions
- Fashionable, attractive styling is very important to me
- To get variety, I shop different stores and choose different brands
- It's fun to buy something new and exciting
- The most advertised brands are usually very good choices

The two factor solution found in the PCA; seems to suggest that the Namibian

Generation Y consumers have two distinct purchasing orientations, namely

Product/Brand Sensitivity and Price/Impulsiveness Sensitivity.

The present study has classified the general consumer decision-making characteristics of the Namibian Generation Y consumers. Some similarities and differences both in factors as well as individual item loadings were found between the Namibian Generation Y consumers and other countries such as U.S., Korea, New Zealand, U.K., China, and South Africa.

The Namibian eight-factor model has confirmed all eight of the Sproles and Kendall (1986) characteristics. Thus, similar to previous studies, it has emerged from this study that the CSI is sensitive enough and is able to assess cultural differences and produce sensible results.

Since the eight factors of the CSI have been identified in every factor model, it would be interesting to use these factors separately or even as a scale to measure consumer decision making among other different demographics in Namibia. For example, one would compare let's say rural consumers vs. urban ones, uneducated consumers vs. educated ones, pensioners vs. young ones, house-wives vs working woman and so on. For example, it would be very interesting to find out which group of consumers between rural and urban consumers are more 'Confused by Overchoice' or more 'Impulsive' or more 'Habitual/Brand Loyal'. This would be particularly useful in order to reveal crucial information for marketing decision making.

Needless to say consumers scoring high on certain decision making characteristics will be having clear needs associated with those characteristics and thus, will enable marketers to target and segment them. For example, Factor 3 "Novelty Fashion Conscious Consumer" had the highest factor loading, indicating that Namibian Generation Y consumers are trendy and enjoy the latest fashion. Item # 16 "I Keep my wardrobe up to date with changing fashions" had a high factor

loading; this implies a high sense of fashion awareness and keenness to stay on top of fashion issues. Marketers, for instance, could create specific marketing strategies to target Namibian Generation Y consumers based on this characteristic.

In order to better explain the relationship between consumer decision making styles and learning styles, culture and e-literacy, this study has taken a step further by exploring these relationships and thus profiling the Namibian Generation Y consumer decision -making.

The profile of consumer decision-making has a broad application in the field of consumer education as well. Researchers can add these decision-making characteristics to their existing inventory of psychographic and lifestyle studies.

Academics can introduce the scale to students and the general public to enable them to assess their own personal styles in purchasing decision-making. This will aid in their own financial planning and purchasing goals.

### Consumer decision-making styles and Gender

Hypothesis 1b was rejected; there was evidence to suggest significant differences between males and females in terms of the eight Factors or Profiles of consumer decision-making styles. The ANOVA test revealed that Factor 3 – Novelty-Fashion Conscious and Factor 8 – Habitual, Brand Loyal were significantly different between males and females. Males presented slightly higher scores for Factor 3 – Novelty-Fashion Conscious whereas females had slightly higher scores for Factor 8 – Habitual, Brand Loyal. This suggests that males display the Novelty-Fashion Consciousness characteristic whereas females display the Habitual, Brand Loyalty characteristic. From a marketing point of view, this will require rethinking the marketing approaches used to target these segments by both the local and the international marketers. Meaning that males will likely purchase fashion and innovative items and that they will easily switch to new brands and products as compared to females who are thought to be reserved and likely to stick with existing brands and products. This also suggests that males will likely undertake extensive product information searches during the buying process as compared to females who are less likely to change brands and thus do not feel the need to make product information searches.

# Consumer decision-making styles and Ethnicity:

Hypothesis 1c was accepted; there is no significant difference in the consumer decision—making styles of the Namibian Y Generation consumers between the Afrikaners, Damara/Nama, Oshiwambo, OTjiherero, Silozi and other ethnic groups in Namibia. This knowledge presents a great advantage for marketing purposes as one would have expected the different ethnicities bringing about different styles in consumer decision making. For example, segmentation techniques such as the focus strategy, undifferentiated marketing could be used by marketers to address the Namibian Millennials throughout the country, regardless of ethnic origin.

# Consumer decision-making styles and Age:

The study found no significant difference for individuals of different ages on the eight Factors or Profiles of consumer decision-making styles. Hence Hypothesis 1d was accepted. Marketers can use this information to create undifferentiated segmentation strategies for Namibian Millennials.

#### Consumer decision-making styles and University:

The study found a significant difference for individuals who studied in different Universities on the eight Factors or Profiles of consumer decision-making styles. Hypothesis 1e was rejected; the following differences were found among the Universities:

Factor 1-Perfectionistic, High-Quality Conscious, individuals: NUST reported slightly higher levels of Perfectionistic-High Quality Conscious individuals

compared to IUM and UNAM in that order. This suggests that NUST Millennials would prefer high quality and innovative products. Niche Marketing would be an ideal marketing strategy for this group.

Factor 2 – Brand Conscious, "Price Equals Quality": IUM reported slightly higher levels of Brand Conscious – Price Equal Quality individuals compared to NUST and UNAM in that order. This suggests that IUM Millennials would prefer products of high quality since they are brand loyals. In order to ensure continued patronage, one would need to continue providing loyalty programmes and incentives to such a group.

Factor 3 – Novelty-Fashion Conscious: NUST reported slightly higher levels of Novelty Fashion Conscious individuals compared to IUM and UNAM in that order. Since these Millennials are perfectionistic and high quality conscious, it makes sense that they are also Novelty –Fashion Conscious consumers. Again, niche segmentation would be an attractive approach in targeting them. In line with this is the concept of positioning one's brand to be seen as novel, fashionable and of high quality in order to enlist positive association with this group.

**Factor 6 – Impulsive, Careless**: NUST reported slightly higher levels Impulsive, Careless individuals, compared to IUM and UNAM in that order. Although this seems to be a contrast, given that NUST Millennials are Perfectionistic, Novelty Fashion seekers, it makes sense that they buy on impulse. Buying on impulse here would means buying high quality and novelty products on impulse. This suggests that this group is a relatively easy target market.

**Factor 7 – Confused by over choice**: As mentioned above NUST reported slightly higher levels of Novelty Fashion Conscious individuals compared to IUM and UNAM in that order. Given that NUST Millennials are a relatively easy target market;

this tends to explain why they are confused by over choice. This can be an advantage to the marketers of innovative and fashionable items such as electronic gadgets, clothing, cosmetics and much more.

Consumer decision-making styles and Age category (Born Frees, Exiles and Remainees):

The study found no significant difference between the "Born Frees" the "Exiles" and the Remainees in terms of their decision-making styles, hence Hypothesis 1f was accepted. Although there seems to be a perception that Millennials born in exile were less privileged as compared to the other Millennials, the study found no evidence to support this notion. The fact that there is no significant difference in their consumer decision-making styles presents an opportunity for marketers as well as the local authorities in their effort to market goods and services to them, as well as to integrate them in the society.

# Applicability of ILS to the Namibian Generation Y consumers:

Hypothesis 2a was rejected; the four Factors or components Activist/Reflector [Act/Ref], Sensing/Intuitive [Sen/Int], Visual/Verbal [Vis/Vrb], Sequential/Global [Seq/Glo] that make up the 44-item ILS scale were found reliable and applicable to the Namibian Generation Y consumers

It was found that Namibian Generation Y Consumers reported mild preferences for [the] Activist Learning Style, moderate preferences for [the] Sensing Learning Style, moderate preferences for [the] Visual Learning Style, and mild preferences for [the] Sequential Learning Style. This suggests that, to a certain extent, they learn best by trying things out and enjoy working in groups, like to think with concrete and practical orientation toward facts and procedures, they learn with the

preference for visual presentations of presented materials, such as pictures, diagrams, and flow charts and they use a linear thinking process and learn in small incremental steps.

## Learning styles and gender:

The study found no significant difference between males and females on the combined Dependent Variables Activist/Reflector [Act/Ref], Sensing/Intuitive [Sen/Int], Visual/Verbal [Vis/Vrb], and Sequential/Global [Seq/Glo] of the ILS. Hence Hypothesis 2b was accepted; this demonstrates that Namibian Millennials, irrespective of gender, have similar learning styles. This serves as an advantage for marketers in the sense that learning forms the basis for repeat purchases as well as for consumer switching behaviours. If both males and females have similar learning styles, marketers can use undifferentiated marketing strategies for segmentation, targeting, advertising and retention as well as for Eduction Policy and academic Programme formulation.

# Learning styles and Ethnicity:

This Hypothesis was rejected; the study found that the Learning Styles of Generation Y consumers in Namibia are significantly different for individuals who come from different ethnic groups. The study further established that the Afrikaners, Damara/Nama, Oshiwambos, Silozi and Otjihereros displayed slightly higher scores for the Sequential Dimension - suggesting that they use a linear thinking process and learn in small incremental steps whereas the "Others" displayed a preference for the Global dimension - suggesting that they have a preference for a holistic thinking process and that they prefer learning in large leaps. The finding also suggests that the

"Sequential Learning Style" is the most common learning style among the dominant ethnic groups of the Namibian Generation Y consumers. This may explain why many Namibian Millennials seem to enjoy acquiring knowledge in incremental steps rather than holistically as they seem to appreciate the processes involved in acquiring such knowledge.

### Learning Styles and Age:

The Hypothesis test was rejected; the study found significant differences for individuals of different ages on the combined Dependent Variables (Activist/Reflector [Act/Ref], Sensing/Intuitive [Sen/Int], Visual/Verbal [Vis/Vrb], Sequential/Global [Seq/Glo] of the ILS). Hence the Learning Styles of Generation Y consumers in Namibia were significantly different for individuals of different ages. For instance, respondents between the ages of 25 and 29 appeared to have a higher mean score for the Activist learning styles whereas respondents between the ages of 30 and 34 had a higher mean score for the Sequential learning style.

# Learning Style and University attended:

The study found significant differences between individuals from different universities on the combined Dependent Variables (Activist/Reflector [Act/Ref], Sensing/Intuitive [Sen/Int], Visual/Verbal [Vis/Vrb], Sequential/Global [Seq/Glo] of the ILS). Hence the Learning Styles of Generation Y consumers in Namibia were significantly different for individuals who studied in different Universities. The following differences were found:

**Reflector, Intuitive:** IUM reported slightly higher preferences for the Reflector dimension compared to NUST and UNAM in that order. This suggests that

IUM Millennials prefer learning by thinking things through and prefer working alone. This style appeals to Passive learners; and the best way to reach them is to encourage participation. Hence marketers and educators alike need to engage this group of Millennials in order to achieve results, be it through interactive advertising, competitions, sales promotions or through interactive teaching and learning strategies. In addition, IUM Millennials have a preference for the Intuitive Learning Style which suggests a preference for thinking with abstract, conceptual, innovative orientation toward theories and underlying meanings. The best way to reach this group is through written content supported by theoretical background. Hence marketers can provide advertising materials that provide the underlying meaning or facts to support the message they present. The same principle can be used by educators when appealing to this group.

Activist, Sensing, Visual: UNAM reported a stronger preference for Activist Sensing and Visual learning compared to NUST and IUM. This suggests that UNAM Millennials have a preference for thinking with concrete and practical orientation toward facts and procedures and by trying things out and enjoy working in groups. The best way to reach them is through content and group networking. Marketers can appeal to this group through effective written materials such as written advertising, through newspapers, website, social media, sms, pamphlets and magazines, and such messages should be reinforced with concrete, real life situations and group interactive media such as Facebook. Academics can appeal to this group by providing written content materials supported with concrete evidence and group tasks.

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**Verbal:** NUST reported a slightly higher preference for the Verbal learning style compared to IUM and UNAM. This further suggests that NUST Millennials learn with preference for written and spoken explanations. Hence marketers can incorporate, not just written advertising, but interactive advertising such as that presented through interactive websites, videos, radio and face to face presentations supported by pamphlets or magazines. Academics can also appeal to this group through effective presentations.

It is important to stress at this junction that the learning styles should not be used as an indicator of strength or weakness in learning environments, but rather as reported preferences and tendencies that could help achieve diverse learning. Hence policy makers, administrators and marketers alike should be cognisant of the learning styles in order to devise appropriate policies, best practices in teaching and learning and in marketing strategy development.

# Learning Style and Age Category (Born Frees, Exiles, Remainees):

This Hypothesis was accepted; the study found no significant difference for the "Born Frees", "Exiles" and "Remainees" on the combined Dependent Variables of the four Dimensions of the ILS: Activist/Reflector [Act/Ref], Sensing/Intuitive [Sen/Int], Visual/Verbal [Vis/Vrb], Sequential/Global [Seq/Glo])). This means that there is no significant difference between the Learning Styles of the "Born Frees", the "Exiles" and the "Remainees" Generation Y consumers in Namibia. These consumer groups have similar learning styles preferences.

Applicability of the Hofstede cultural dimensions to the Namibian Generation Y consumers:

Hypothesis 3a was rejected; the five Dimensions of the Hofstede Cultural Instrument (Power Distance [PDI], Uncertainty Avoidance [UAI], Masculinity/Femininity [MAS], Individualism [IDV], Long-Term Orientation [LTO] were found suitable. Further, the study found three major cultural dimensions among Namibian Generation Y consumers: Long-Term Orientation, Power Distance and Uncertainty Avoidance. This is a significant finding. The dimension of long termorientation, reflects the extent to which a society exhibits a pragmatic future oriented perspective rather than a conventional historic or short term point of view. This suggests that the Namibian Generation Y consumers have thrift for investment and a long-term orientation both financially and psychologically. These consumers value long-term commitment towards organisations and their careers. Power distance, refers to the power inequality in societies or it refers to the degree of equality and inequality and the extent to which less powerful members expect and accept unequal power and wealth distribution within a society. This finding suggests that Namibian Generation Y consumers expect and accept unequal power and wealth distribution among themselves and the society at large. This may explain why the Namibian youth and Namibians at large are often peaceable, accepting and accommodating in their treatment of one another. The Uncertainty Avoidance dimension suggests that the Namibian Generation Y consumers are risk averse. This is a significant finding since this behaviour may limit their adoption rates of new products or services. Hence marketers should be aware of this behaviour and through marketing strategies such as awareness and trials and assurance elicit purchase and adoption.

### Hofstede cultural dimensions and gender:

This hypothesis was accepted; the study found no significant difference between genders on the combined Dependent Variables (Power Distance Index, Uncertainty Avoidance Index, Masculinity, Long-term orientation and Individualism). Hence the cultural dimensions are not significantly different between males and females. This finding presents an opportunity for marketers since they can use undifferentiated marketing strategies, as far as gender is concerned, to the Namibian Millennials. This important finding goes a long way to demonstrate that both males and females should be view as equal important members of a society given that they tend to uphold equal values.

### Hofstede cultural dimensions and ethnicity:

This hypothesis was accepted; the study found no significant difference between ethnic groups on the combined Dependent Variables (Power Distance Index, Uncertainty Avoidance Index, Masculinity, Long-term orientation and Individualism). Hence the cultural dimensions are not significantly different between different ethnic groups. Once again this presents an opportunity for undifferentiated marketing strategy implementation, as far as ethnicity is concerned to the Namibian Millennials.

### Hofstede cultural dimensions and age:

This hypothesis was accepted. The study found no significant difference between age groups on the combined Dependent Variables (Power Distance Index, Uncertainty Avoidance Index, Masculinity, Long-term orientation and Individualism).

Hence the cultural dimensions of the Namibian Generation Y consumers are not significantly different for individuals of different ages. This finding again presents an opportunity for marketers as stated above.

### Hofstede cultural dimensions and University attended:

This hypothesis was rejected; the study found significant differences between individuals who attended different Universities on the combined Dependent Variables (Power Distance Index, Uncertainty Avoidance Index, Masculinity, Long-term orientation and Individualism). Hence the cultural dimensions of the Namibian Generation Y consumers are significantly different for individuals who studied in different Universities. The study further established that that all five dimensions are significantly different for individuals who studied in different Universities as follows:

**PDI:** NUST and IUM reported slightly higher scores for this dimension. This suggests that NUST and IUM Millennials are more willing to accept power inequality and wealth distribution within the society. Hence Millennials in this category are likely to accept and be accommodating to differences in status, wealth and disparity in income. They will likely not feel neglected if marketers use strategies such as premium, skimming or segmented pricing strategies even though they are not directly benefiting from such strategies.

**IDV:** NUST reported slightly higher scores for this dimension as compared to IUM and UNAM. This suggests that NUST Millennials have higher individualistic values than the others and tend to care about self-actualization and career. This also suggests that they strive to excel at what they do. Hence high quality and innovative products are likely to appeal to this group.

**UAI**: NUST reported slightly higher scores for this dimension. This suggests that NUST Millennials are the least tolerant of ambiguity and are more rule-oriented. It suggests they are less willing to take risks associated with new methods and procedures associated with the new application and will be particularly resistant to change.

LTO: NUST reported slightly higher scores for this dimension. This suggests that NUST Millennials are likely to have high thrift for investment and a long-term orientation both financially and psychologically and that they are likely to also value long-term commitment towards organisations and career.

MAS: NUST reported slightly higher scores for this dimension. This suggest that NUST Millennials are likely to exhibit a masculine view of society in which males are expected to be assertive, tough and focused on material success, and females are expected to be tender and focused on quality of life and to be in subjection to men. In masculine cultures, advertising messages using male voices and appeals are likely to yield many positive results.

#### Hofstede cultural dimensions and Born Frees, Exiles and Remainees:

The study found no significant difference for the "Born frees", "Remainees" and "Exiles" on the combined Dependent Variables (Power Distance Index, Masculinity, Long-Term Orientation, Uncertainty Avoidance Index, and Individualism/Collectivism). Hence the Hofstede cultural dimensions of Generation Y consumers in Namibia are not significantly different for Born Frees, Remainees and Exiles. Although they have been born and raised in different environments, these groups have similar cultural values – this is an important finding; this knowledge is

crucial for their social integration in the country through the different facets of their lives.

### E-Literacy distribution among the Namibian Generation Y consumers:

There was evidence to conclude that the e-literacy distribution among Namibian Generation Y consumers is adequate since they have the ability to respond to large volumes of media and are comfortable with social media such as FB, Whatsapp, and Instagram and have other ICT skills although they have agreed that the lack of ICT competencies negatively affected their decision-making. For example, the e-literacy distribution among the Namibian Generation Y consumers can be described as follows in order of importance: 1. Statement # 13: My ICT literacy negatively affects purchasing decisions (0.85); 2. Statement # 1: Ability to respond to large volumes of media (0.78); 3. Statement #8: Comfortable with social media such as FB, Whatsapp, Instagram, etc. (0.77); 4. Statement # 2: Ability to access information from all sources including the Internet (0.73); 5. Statement # 3: Use search engines effectively (0.72); 6. Statement # 9: Can send media content such as videos/images through internet (0.72); 7. Statement # 4: Use ICT devices to share information (0.68); 8. Statement # 10: Can compose and send emails (0.65); 9. Statement # 11: Can join chat rooms/social media 0(.63); 10. Statement # 12: Can download materials from internet (0.55); 11. Statement # 5: Aware of ICT issues (0.53); 12. Statement # 6: Ability to create simple webpage (0.49); 13. Statement #7: Know how to keep records of a favourite websites (0.49).

This is a significant finding from the point of view that marketers, educators and policy makers can use this information in order to create strategies that exploit

this segment's digital and computer skills. For example e-marketing strategies to target Namibian Millennials could include email marketing, social media marketing, web marketing, to mention but a few. On the other hand, educators could introduce online courses and platforms that allow interactive online or blended teaching and learning modes.

#### E-Literacy and gender:

This hypothesis was accepted. The study found no significant difference between genders on the combined Dependent Variables (13 e-Literacy statements). Hence the e-Literacy distribution of the Namibian Generation Y consumers is not significantly different between males and females. This suggests that both male and female Namibian Millennials have similar ICT competencies. This finding is critical for marketers when targeting this cohort through technology such as social media, web marketing, and so on. This also presents an advantage for educators for curriculum development, and even for employment agencies and prospective employers in general when devising recruitment strategies.

### E-Literacy and ethnicity:

This hypothesis was accepted; the study found no significant difference between ethnic groups on the combined Dependent Variables (13 e-Literacy statements). Hence the e-Literacy distribution of the Namibian Generation Y consumers is not significantly different between the different ethnic groups. Once again this is an opportunity for marketers, and educators, employment agencies and prospective employers, for the reasons stated above.

# E-Literacy and age

This hypothesis was accepted; the study found no significant difference between age groups on the combined Dependent Variables (13 e-Literacy statements). Hence the e-Literacy distribution of the Namibian Generation Y consumers is not significantly different for individuals of different ages.

### E-Literacy and University:

This hypothesis was rejected; the study found significant differences between the Universities attended on the combined Dependent Variables (13 e-Literacy statements). Hence the e-Literacy distribution of the Namibian Generation Y consumers is significantly different for individuals who studied in different Universities. Furthermore, the study established significant differences in the distribution of e-Literacy among individuals who studied at different Universities as follows:

- I'm Aware of ICT issues: NUST revealed the highest mean score distribution for this statement followed by IUM.
- I'm able to use ICT devices to share information: NUST revealed the highest mean score distribution for this statement followed by IUM.
- I have the ability to access information from all sources including internet: NUST revealed the highest mean score distribution for this statement followed by IUM.
- I have the ability to respond to large volumes of media: NUST revealed the highest mean score distribution for this statement followed by IUM.
- I have the ability to use search engines effectively: NUST revealed the highest mean score distribution for this statement followed by IUM.

- I'm comfortable with social media such as Facebook, Whatsapp,
   Instagram, etc.: IUM revealed the highest men score distribution for this statement followed by UNAM.
- I know how to keep records of favourite websites: NUST revealed the highest mean score distribution for this statement followed by IUM.

NUST Millennials seemed to exhibit higher scores for e-literacy distribution on the above statements followed by IUM Millennials.

#### E-Literacy and Born Frees, Exiles and Remainees:

This hypothesis was accepted; the study found no significant difference for the "Born frees", "Remainees" and "Exiles" on the combined Dependent Variables (13 e-Literacy statements). Hence the distribution of e-Literacy of Generation Y consumers in Namibia is not significantly different for the Born Frees, Remainees and Exiles.

Relationship between learning styles and decision–making styles of Generation Y consumers in Namibia:

The study found in some instances positive correlations and in other instances negative correlations between the Namibian Generation Y consumer decision-making styles and their learning styles with exception of the Global learning style. This means that the Namibian Generation Y consumer decision making styles are influenced by their learning styles both positively and negatively. This significant finding supports existing literature on learning styles and on the consumer decision making process which suggests that consumers go through steps while making a purchasing decision. The decisions made at each step are often a result of how consumers acquire and use knowledge; the knowledge is acquired and demonstrated

by consumers through their learning styles which influence their consumer behaviour towards products and services, both negatively and positively. Hence it is imperative that marketers take advantage of this knowledge in order to maintain a specific set of conditions and strategies to their advantage.

Relationship between cultural dimensions and consumer decision-making styles of the Generation Y consumers in Namibia:

The study found positive correlations between the eight factors or profiles of consumer decision-making style and the five cultural dimensions. Hence consumer decision making styles are a function of the cultural dimensions. In fact, the study found that the cultural dimensions have the greatest influence on the Namibian Generation Y consumers decision-making. Thus a consumer's predisposition to buying is positively influenced by their culture. This is a significant finding, as marketers can use this to create strategies that facilitate segmentation and targeting and positioning of their products and services to the Namibian Millennials based on these cultural dimensions, to their advantage.

Relationship between e-literacy and consumer decision-making styles of the Generation Y consumers in Namibia:

The study found a significant positive correlation between the Namibian Generation Y consumer decision-making styles and their e-literacy distribution. This finding suggests that as the e-literacy distribution of the Namibian Generation Y consumers increases, so does the quality of the decision-making styles of the Namibian Generation Y consumers. In fact, e-literacy was found to be the second most important factor of the three that affected consumer decision-making. This

significant finding supports existing literature on the notion that e-literacy influences consumer decision making process. The information age in which we live today, requires that careful attention is placed on the planning, execution, monitoring and evaluation of ICT, hence Policy makers, administrators and marketers alike are urged to be part and parcel of ICT integration and to take advantage of it. For example, given that the Namibian Millennials exhibit adequate e-literacy skills, marketers can devise strategies to reach them through electronic marketing tools such as the web, social media, and mobile marketing. Educators can device student-centred approaches using the Internet, and electronic devices that support their teaching and learning Philosophy.

#### **5.3 Conclusion**

The study found significant evidence to conclude that the CSI is applicable to the Namibian Generation Y consumer decision making. It further concluded that female Millennials (Generation Y) in Namibia are more brand loyal than their male counterparts who often go for novelty and fashion items or products irrespective of ethnicity, age and age category (whether or not they are Born Free, Exile or Remainees). It is a significant finding that individuals who studied in different Universities have different consumer decision-making styles. For instance NUST Millennials reported Perfectionistic-High quality consciousness while at the same time reported slightly higher levels of Novelty Fashion Conscious individuals and slightly higher levels of Impulsive, Careless, compared to IUM and UNAM in that order. These combinations of consumer decision-making styles make them a very intricate target for marketing strategies in terms of new products, innovative services

and technologies. IUM Millennials would ideally be brand loyal and remain with the marketer. UNAM Millennials however seem to prefer the status quo in terms of these profiles and would require more persistent marketing strategies to convince them to change, as compared to NUST and IUM Millennials.

The study also concluded that ILS is applicable to the Namibian Generation Y consumers. It found no differences between gender and age category (Born Frees, Exiles and Remainees) for the four Index of Learning Styles, but found differences between ethnic, age groups and the University for the four Learning styles. This is a significant finding in support of the notion that ethnicity as well as demographic variables influences learning preferences.

The study also concluded that Hofstede cultural dimensions were applicable to the Namibian Generation Y consumers. It found no significant differences between gender, age, ethnicity and age category (Born Frees, Exiles and Remainees) among the Namibian Generation Y consumers on the five Hofstede cultural dimensions, but found significant differences between Universities on the five Hofstede cultural dimensions.

The study further concluded that the e-literacy distribution of the Namibian Generation Y consumers is adequate. It found no significant differences between gender, age, ethnicity and age category (Born Frees, Exiles and Remainees) among the Namibian Generation Y consumers on the e-literacy distribution, but found significant differences between Universities on e-literacy distribution.

Furthermore, the study found positive and negative correlations between consumer decision-making styles of the Namibian Generation Y consumers and their learning styles. It also found positive correlations between the Namibian Generation Y consumer decision- making styles and their Hofstede cultural dimensions as well as

positive correlations between the Namibian Generation Y consumer decision-making styles and their e-literacy distribution. It was found that cultural dimensions had the highest impact on the Generation Y consumer's decision making, followed by e-literacy and learning styles.

#### 6. Chapter 6: Conclusions and Recommendations

#### **6.1 Introduction**

This study profiled Namibian Generation Y consumer decision-making styles as well as investigated the relationship between consumer decision-making styles and individual learning styles, culture and e-literacy among Generation Y consumers in Namibia. This chapter provides the conclusions and the recommendations.

### **6.2 Demographic Profile of the Respondents**

The demographic variables included age, age category, gender, ethnicity, language spoken, University attended, current year of Programme, marital status, education level of Mother and Father, monthly disposable income and whether or not the respondent owned a cell phone, tablet, laptop or a PC of any other sort.

In total, 505 undergraduate students aged between 18 and 34 years participated in the study, divided between three Namibian Generation Y categories namely; the Born Frees the Exiles and the Remainees. The majority of the respondents (52.3%) were between the ages of 20 and 24, of which 55.1% were females and 48.6% were males. The majority of the participants (67%) were from the Oshiwambo ethnic group, followed by the OTjiherero and Other with 10% and 7% respectively. UNAM's participants represented 42%, followed by 32% from NUST and 23% from IUM; the remaining 3% did not state the University they attended. The majority of the participants (93%) were single. 40.6% of the participants' monthly disposable income was between N\$ 1000 and N\$ 6000 whereas 36.0% had a monthly disposable

income of less than N\$ 1000. 90.9% of the participants owned a cell phone, 14.7% owned a tablet, 41.4% owned a laptop and 15% owned some sort of a PC.

#### **6.3 Conclusions**

This study focused on the decision-making styles among Generation Y consumers in Namibia. Through Sproles and Kendall's Consumer Style Inventory (CSI), Felder-Soloman Index of Learning Styles (ILS), Hofstede Cultural Dimensions and e-Literacy questionnaires, the study profiled the Namibian Generation Y consumer decision-making styles as well as its learning styles, cultural dimensions and e-literacy distribution. Furthermore, the study explored the relationship between the Namibian Generation Y consumers' decision-making style, learning style, cultural dimensions and e-literacy.

#### **6.3.1 Namibian Generation Y Consumers' Decision-Making Styles**

As a major finding and a significant contribution, the study has classified the general consumer decision-making characteristics of the Namibian Generation Y consumers and found that Kendall & Sproles (1986) eight (8) basic mental characteristics of consumer decision-making and Consumer Styles Inventory are applicable to Namibian Millennials. The study found that the consumer decision-making styles are significantly different between males and females and between individuals who studied in different Universities but found no significant differences between individuals who come from different ethnic groups, age groups and age categories (Born Frees, Exiles and Remainees). It was interesting to note that other than gender, the university attended by an individual may influence his/her consumer

decision-making styles. This supports the belief that the type of education received by an individual has the potential to nurture his/her faculty of reasoning and choices.

In terms of consumer decision-making, the Namibian Generation Y consumers were found to be predominantly Price Conscious "Value for Money", suggesting that they look for sale prices and are conscious of lower prices. In order to get the best value for their money they would compare prices when shopping. On the other hand, this generation was also found to be Novelty Fashion Conscious - suggesting that they seek out new things and give high importance to being up-to-date with styles. In addition, although they were found to be price conscious, they were also found to display Brand Conscious behaviour; implying that they would buy more expensive, well-known national brands, as they tend to believe that a higher price means better quality, and) they would prefer best-selling advertised brands.

## 6.3.2 Namibia Generation Y Consumers' Index of Learning Styles

Another significant finding is that Felder-Solomon's Index of Learning Styles with its 44 items and 4 dimensions namely Activist/Reflector [Act/Ref],
Sensing/Intuitive [Sen/Int], Visual/Verbal [Vis/Vrb], Sequential/Global [Seq/Glo] was found applicable to the Namibian Generation Y consumers. The study found that the Namibian Generation Y Consumers have mild preferences for Activist, moderate preferences for Sensing, moderate preferences for Visual, and mild preferences for Sequential learning styles. The study found that the learning styles are significantly different for individuals who come from different ethnic groups, age groups, and for individuals who studied in different Universities but found no significant differences between genders, and age category (Born Free, Exiles and Remainees). The fact that different ethnic groups, age groups and individuals from different Universities have

different learning styles is quite profound and significant in the sense that this knowledge may lead marketers and institutions to re-think the way they develop marketing communication strategies and education curricula to address the needs of the different ages and ethnicities they are targeting.

#### 6.3.3 Namibian Generation Y Consumers' Culture Dimensions

The study found that the five (5) Dimensions of the Hofstede Cultural Instrument, Power Distance [PDI], Uncertainty Avoidance [UAI], Masculinity [MAS], Individualism [IDV], and Long-Term Orientation [LTO] were applicable to the Namibian Generation Y consumers. The Namibian Generation Y consumers were found to be predominantly long-term oriented, suggesting that they plan for the future and that they like investments. In addition, they were found to be risk averse and they accepted power inequalities within the society. The study found that the cultural dimensions were significantly different for individuals who studied in different Universities but found no significant differences between gender, ethnic groups, ages or age category (Born Frees, Exiles and Remainees). Once again, the type of University attended by an individual has proven to be a key driving force of one's behaviour as it is believed to impact one's culture. This is another significant finding which suggests that Universities have the power to transform societies and are catalysts of change. Hence, it is expected that policy makers including government, donors and higher education leadership ought to work together towards sustainable Higher Eduction practices aimed at enhancing societal welfare.

#### 6.3.4 Namibia Generation Y Consumers' e-Literacy

The study found that the Namibian Generation Y consumers have acceptable e-literacy skills or capabilities and that their e-literacy skills are as follows:

- Ability to respond to large volumes of media
- Ability to use social media such as FB, Whatsapp, Instagram, etc.
- Ability to access information from all sources including internet
- Ability to use search engines effectively
- Ability to send media content such as videos/images through internet
- Ability to use ICT devices to share information
- Ability to send media content such as videos/images through internet
- Ability to keep records of a favourite websites
- Ability to compose and send emails
- ability to download materials from internet
- Ability to join chat rooms/social media
- Ability to use search engines effectively

Furthermore, the study found that the e-literacy distribution is significantly different for individuals who studied in different Universities but found no significant differences between genders, ethnic groups, ages and age category (Born Frees, Exiles, and Remainees). The study found that the respondents from NUST had the highest e-literacy skills compared to UNAM and IUM.

It is also important to stress that there was no difference among the age categories (Born Frees, Exiles and Remainees) in terms of consumer decision making styles, learning styles, cultural dimensions and e-literacy. This is significant since in

most cases, the "exiles" were considered less privileged or disadvantaged compared to their counterparts. In light of this, marketers and local authorities may provide inclusive goods and services to these groups without necessarily considering one group to be inferior to the others, as they all were found to display similar consumer behaviours.

# 6.3.5 Namibia Generation Y Consumer Decision-Making Styles, Learning Styles, Cultural Dimensions and e-Literacy

The study found correlations (both positive and negative) between the eight (8) profiles or characteristics of the Namibian Generation Y consumer decision-making styles and their learning styles with exception of the Global learning style. It also found correlations between the eight factors or profiles of consumer decision-making style and the five cultural dimensions. Suggesting that as the cultural dimensions increase, so does the nature of decision-making styles. Furthermore, the study found correlations between the Namibian Generation Y consumer decision-making styles and their e-literacy distribution. This suggests that as the e-literacy distribution of the Namibian Generation Y consumers increases, so does the quality of their decision-making styles.

Compared to the other factors under investigation, the cultural dimensions had the most significant influence on the Namibian Generation Y consumers' decision-making styles followed by e-literacy and their learning styles. This is yet another important findings that goes a long way to prove that culture determines how people consume products and services and that with the advent of technology, it is particularly important that organisations offer their goods and services through the

medium of technology in order to maximise awareness and use. Although the least in terms of impact, learning styles do have the ability to influence the way consumers perceive and make choices, hence it is critical that organisations have this holistic view on how the Namibia Generation Y consumers make purchasing decisions.

#### **6.4 Recommendations**

Based on the findings of this study, the following Recommendations are proposed:

#### 6.4.1 Recommendations for Further Research

- 1. This study focused on Generation Y consumers, future studies could consider administering similar questionnaires to a representative sample of the adult working population to determine whether or not the profiles of consumer decision making styles are applicable to such a population.
- 2. Further studies could investigate the association between consumer decision-making styles and other interesting variables, for instance perception, service quality and customer satisfaction.
- 3. Further investigations could be done to investigate the relationship between Maslow Hierarchy of Needs and consumer decision-making styles. This would be in order to establish if consumer decision-making styles are influenced by the stage of the Maslow Hierarchy of Needs that the consumer has reached.
- 4. A future study could investigate whether differences exist in how students would be likely to respond to the Consumer Styles Inventory based on their

parents' educational background, and on their own field of study and access to technology.

- 5. Future studies may consider regrouping the items on the CSI and ILS instrument to match specific cultural and language needs.
- 6. Future studies may consider investigating the relationship between CSI, ILS, Culture, e-literacy and marketing communication strategies.
- 7. Future studies could further investigate the proportion of the Cultural Dimensions displayed by the Namibian youth, and the adult population in terms of gender.
- 8. Future studies could further assess the specific e-literacy rates of the Namibian youth, the adult population and the factors that impact the e-literacy rates of such populations.
- 9. The use of a student sample has posed a limitation with regards to the generalisability of the findings and therefore, future studies could use a random sample of the general public to address this limitation issue.

#### **6.4.2 Recommendations for Practice and Policy**

1. Female millennials (Generation Y) in Namibia tend to be more brand loyal then males, who often go for novelty and fashion items or products, irrespective of ethnicity, age or age category (whether or not born free, exile or remainees). Marketers should exploit this segment with consistent marketing communication strategies to appeal to their brand loyalty behaviours. Given that males tended to be more Perfectionistic-High quality conscious, Novelty Fashion Conscious and Impulsive or Careless consumers, they are a potential target for, innovative products, services and technologies. Hence local and international organisations should see this

as a potential market for mobile phones, luxury technological gadgets, high quality personal products and designer clothing.

- 2. The profiles of learning styles found in this study could assist the Institutions of Higher Education to devise teaching, learning and assessment strategies to take advantage of the identified learning styles of the Namibia Generation Y consumers. This is important because effective classification of student learning styles is often associated with effective teaching and pass throughput. In this case, institutions could devise specific student-centred approaches that will enlist the desired academic and skills development results.
- 3. The findings from the Demographic, CSI, ILS, Hofstede Cultural Dimensions and e-literacy Survey can assist marketers, policy makers and administrators, counsellors and educators to formulate policies to benefit the industry, as well as to strive to create conducive environments for consumers, students, businesses and Institutions.
- 4. Although differences were found based on an individuals' ethnicity, the University attended and their gender, in some cases, it is worth noting that consumer decision making styles and learning styles of the age categories (Born Frees, Exiles and Remainees) were not different. This suggests that all consumers, irrespective of their status, displayed similar consumer decision-making styles and learning styles. This finding presents an opportunity for marketers, entrepreneurs as well as for Education Institutions and Government to equip/satisfy this young generation by devising equitable product offerings and training opportunities for them.
- 5. Since consumer decision-making styles correlate to learning styles, best practices, in terms of marketing strategies, consumer education, awareness,

consumer socialisation, customer intimacy, customer care retention and loyalty strategies are deemed important to nurture and cement, in order to facilitate these relationships from a marketing point of view.

- 6. Since consumer decision making styles have a positive correlation with cultural dimensions, organisations need to constantly study these relationship dynamics, so as to improve their service delivery.
- 7. Given that culture and e-literacy play crucial roles in consumer decision-making more efforts need to be made to fully understand the cultural intricacy of the Namibian Generation Y consumers and to keep up to date with the latest technology trends.
- 8. Finally, because consumer decision making styles are influenced by e-literacy, marketers and policy makers should form collaborations or smart partnerships in view of the worldwide technology trends, in order to channel the decision making processes in their favour. In fact, globalisation of markets often means globalisation of minds and practices. ICT is the "equaliser" if one is to be part and parcel of the global phenomenon. E-literacy provides a stepping stone to business growth and continued competitive advantage.

#### **APPENDIX 1**

Survey Introductory Letter & Consent Form

My name is Efigenia M.M Semente. I am a Doctoral student at the Namibian Business School at the University of Namibia. My Dissertation research will investigate the possible relationships between consumers' decision-making styles, individuals' learning styles, culture and e-literacy among the generation Y consumers in Namibia. The study targets undergraduate students from 18 -34 years of age.

Thank you for agreeing to take part in this survey. This study is divided into three sections and will take you approximately 10-20 minutes to complete. Participation in this study is voluntary and therefore you can withdraw from the study at any time. Your confidentiality is protected hence you are not required to write your name or identity, in addition, only the principal researcher will have access to all the information gathered. Please do not hesitate to contact the research by telephone if there are any questions concerning your participation in this study. Your signature below indicates that you understand the conditions and agree to participate in this research

Project Title: Consumer Decision-Making Styles among Generation Y Consumers in Namibia

Purpose of the Study: To investigate the possible relationships between consumers' decision-making styles and individual learning styles, culture and e-literacy among Generation Y consumers in Namibia

Principal Investigator: Efigenia	a M.M. Semente; NBS - University of Namibia
Phone:	+ 264 61 812790105
Email:	esemente@nust na
I have read the information prov	vided and agree to participate in this study.
Signature:	

Researcher's Signature

#### **APPENDIX 2**



23 October 2015

#### To whom it may concern

Ms Efigenia Semente of student number: 201209807 is registered for a Doctor in Business Administration at the University of Namibia through the Namibia Business School.

This letter serves to inform you that her research proposal was reviewed and successfully met the University of Namibia requirements.

The student has been granted permission to carry out postgraduate studies research. The University of Namibia has approved the research to be carried out by the student for purposes of fulfilling the requirements of the degree being pursued.

If you have any queries please do not hesitate to contact the Business School at the University of Namibia.

BUSINESS SCHO

Thank you so much in advance and many regards.

Yours sincerely

Albert Isaacs, PhD

Associate Dean

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## **APPENDIX 3 Demographic Questionnaire Section** 1. Year of birth: 19 a) I was born after Independence date of March 21, 1990 b) I was born inside Namibia before Independence date of March 21, 1990 b) I was born outside the country before Independence date of March 21, 1990 d) Is one of your parents Namibian No Yes Female\_\_\_\_\_ Male \_\_\_\_ 2. Gender \_\_\_\_\_ 3. Please tick your Ethnic Group: Afrikanner\_\_Oshiwambo\_\_\_OTjiherero\_\_Damara/Nama\_\_Silozi\_\_ 4. Hometown Language \_\_\_\_\_ 5. Residential area\_\_\_\_\_Telephone (optional) \_\_\_\_\_ 6. Name of University \_\_\_\_\_ Programme Registered for \_\_\_\_\_ Year \_\_\_\_ Single Married Divorced 7. Marital Status: 8. Educational Level of Parents (Tick/Cross) where applicable: **Educational Level** Mother Father Did not attend Primary School Did not attend Secondary School Completed Secondary School Attended University but did not Completed University Bachelor Degree Completed University Master Completed Doctoral Degree (Ph.D., DBA, other) 9. How much is your approximate monthly disposable income? (Tick/circle where appropriate)

THANK YOUR FOR COMPLETING THE DEMOGRAPHIC PART, PLEASE PROCEED TO THE NEXT PAGE.

10. Do you own a (Tick where applicable) Cell phone \_\_\_\_\_Tablet\_\_\_\_ Laptop \_\_\_\_\_ PC\_\_\_\_

(2) 1000 - 6000

(1) Below 1000

(3) 6001-12 000 (4) 12 001 - 20 000 (5) above 20 000

# APPENDIX 4 Consumer Styles Inventory (CSI) Questionnaire Section

Please cross/tick/circle/shade the box that best describes the statements below in relation to your purchasing behaviour. Choose only one answer for each question.

Item #	Questions	Strongly Disagree	Disagree	In Between	Agree	Strongly Agree
1	Getting very high or good quality products is very important to me.	1	2	3	4	5
2	When it comes to purchasing products, I try to make the very best or perfect choice.	1	2	3	4	5
3	In general, I usually try to buy the best overall quality.	1	2	3	4	5
4	I make special effort to choose the very best quality products.	1	2	3	4	5
5	I really don't give my clothing purchases much thought or care.	1	2	3	4	5
6	My standards and expectations for products I buy are very high.	1	2	3	4	5
7	I shop quickly, buying the first product or brand I find that seems good enough.	1	2	3	4	5
8	A product does not have to be perfect, or the best, to satisfy me.	1	2	3	4	5
9	The well-known national brands are best for me.	1	2	3	4	5
10	The more expensive brands are usually my choice.	1	2	3	4	5
11	The higher the price of a product, the better its quality.	1	2	3	4	5
12	Nice department and specialty stores offer me the best products.	1	2	3	4	5

Item #	Questions	Strongly Disagree	Disagree	In Between	Agree	Strongly Agree
13	I prefer buying the best-selling brands.	1	2	3	4	5
14	The most advertised brands are usually very good choices.	1	2	3	4	5
15	I usually have one or more outfits of the very newest style.	1	2	3	4	5
16	I keep my wardrobe up-to-date with the changing fashions.	1	2	3	4	5
17	Fashionable, attractive styling is very important to me.	1	2	3	4	5
18	To get variety, I shop at different stores and choose different brands.	1	2	3	4	5
19	It's fun to buy something new and exciting.	1	2	3	4	5
20	Shopping is not a pleasure activity to me.	1	2	3	4	5
21	Going shopping is one of the enjoyable activities of my life.	1	2	3	4	5
22	Shopping the stores wastes my time.	1	2	3	4	5
23	I enjoy shopping just for the fun of it.	1	2	3	4	5
24	I make my shopping trips fast.	1	2	3	4	5
25	I buy as much as possible at sale prices.	1	2	3	4	5
26	The lower price products are usually my choice.	1	2	3	4	5
27	I look carefully to find the best value-for-money.	1	2	3	4	5

28	I should plan my shopping more carefully than I do.	1	2	3	4	5
29	I am impulsive when purchasing.	1	2	3	4	5
30	I often make careless purchases I later wish I had not.	1	2	3	4	5

Item #	Questions	Strongly Disagree	Disagree	In Between	Agree	Strongly Agree
31	I take time to shop carefully for the buys.	1	2	3	4	5
32	I carefully watch how much I spend.	1	2	3	4	5
33	There are so many brands to choose from that I often feel confused.	1	2	3	4	5
34	Sometimes it is hard to choose which stores to shop at.	1	2	3	4	5
35	The more I learn about a product, the harder it seems to choose the best.	1	2	3	4	5
36	All the information I get on different products confuse me.	1	2	3	4	5
37	I have favourite brands I buy over and over.	1	2	3	4	5
38	Once I find a brand I like, I stick with it.	1	2	3	4	5
39	I got to the same stores each time I shop.	1	2	3	4	5
40	I change brands I buy regularly.	1	2	3	4	5

You have now completed Consumer Style Inventory (CSI) Questionnaire

THANK YOUR FOR COMPLETING THE CSI SECTION, PLEASE PROCEED TO THE NEXT PAGE.

## **APPENDIX 5**

# Index of Learning Styles (ILS) Questionnaire Section

For each of the 44 questions below select either "a" or "b" to indicate your answer. Please choose only one answer for each question. If both "a" and "b" seem to apply to you, choose the one that applies more frequently.

Item #	Questions	Choose your best option between a) and b) for each question					
1	I understand something better after I	a) try it out.	(b) think it through.				
2	I would rather be considered	(a) realistic.	(b) innovative				
3	When I think about what I did yesterday, I am most likely to get	a) a picture.	b) words.				
4	I tend to	(a) understand details of a subject but may be fuzzy about its overall structure.	(b) understand the overall structure but may be fuzzy about details.				
5	When I am learning something new, it helps me to		(b) think about it.				
6	If I were a teacher, I would rather teach a course	(a) that deals with facts and real life situations.	(b) that deals with ideas and theories.				
7	I prefer to get new information in	(a) pictures, diagrams, graphs, or maps.	(b) written directions or verbal information.				
8	Once I understand	(a) all the parts, I understand the whole thing.	(b) the whole thing, I see how the parts fit.				
9	In a study group working on difficult material, I am more likely to	(a) jump in and contribute ideas.	(b) sit back and listen.				
10	I find it easier	(a) to learn facts.	(b) to learn concepts.				
11	In a book with lots of pictures and charts, I am likely to	(a) look over the pictures and charts carefully.	(b) focus on the written text.				

12	When I solve math problems	(a) I usually work my way to the solutions one step at a time.	(b) I often just see the solutions but then have to struggle to figure out the steps to get to them.
13	In classes I have taken	(a) I have usually gotten to know many of the students.	(b) I have rarely gotten to know many of the students.
14	In reading nonfiction, I prefer	(a) something that teaches me new facts or tells me how to do something.	(b) something that gives me new ideas to think about.
15	I like teachers	(a) who put a lot of diagrams on the board.	(b) who spend a lot of time explaining.
16	When I'm analysing a story or a novel	(a) I think of the incidents and try to put them together to figure out the themes.	(b) I just know what the themes are when I finish reading and then I have to go back and find the incidents that demonstrate them.
17	When I start a homework problem, I am more likely to	(a) start working on the solution immediately.	(b) try to fully understand the problem first.
18	I prefer the idea of	(a) certainty.	(b) theory.
19	I remember best	(a) what I see.	(b) what I hear.
20	It is more important to me that an instructor	(a) lay out the material in clear sequential steps.	(b) give me an overall picture and relate the material to other subjects.
21	I prefer to study	(a) in a study group.	(b) alone.
22	I am more likely to be considered	(a) careful about the details of my work.	(b) creative about how to do my work.
23	When I get directions to a new place, I prefer	(a) a map.	(b) written instructions.

24	I learn	(a) at a fairly regular pace. If I study hard, I'll "get it."	(b) in fits and starts. I'll be totally confused and then suddenly it all "clicks."
Item #	Questions	Choose your best option question	between a) and b) for each
25	I would rather first	(a) try things out.	(b) think about how I'm going to do it.
26	When I am reading for enjoyment, I like writers to	(a) clearly say what they mean.	(b) say things in creative, interesting ways.
27	When I see a diagram or sketch in class, I am most likely to remember	(a) the picture.	(b) what the instructor said about it.
28	When considering a body of information, I am more likely to	(a) focus on details and miss the big picture.	(b) try to understand the big picture before getting into the details.
29	I more easily remember	(a) something I have done.	(b) something I have thought a lot about.
30	When I have to perform a task, I prefer to	(a) master one way of doing it.	(b) come up with new ways of doing it.
31	When someone is showing me data, I prefer	(a) charts or graphs.	(b) text summarizing the results.
32	When writing a paper, I am more likely to	(a) work on (think about or write) the beginning of the paper and progress forward.	(b) work on (think about or write) different parts of the paper and then order them.
33	When I have to work on a group project, I first want to	(a) have "group brainstorming" where everyone contributes ideas.	(b) brainstorm individually and then come together as a group to compare ideas.
34	I consider it higher praise to call someone	(a) sensible.	(b) imaginative.

35	When I meet people at a party, I am more likely to remember	(a) what they looked like.	(b) what they said about themselves.			
36	When I am learning a new subject, I prefer to	(a) stay focused on that subject, learning as much about it as I can.	(b) try to make connections between that subject and related subjects.			
Item #	Questions	Choose your best option between a) and b) for eacquestion				
37	I am more likely to be considered	(a) outgoing.	(b) reserved.			
38	I prefer courses that emphasize	(a) concrete material (facts, data).	(b) abstract material (concepts, theories).			
39	For entertainment, I would rather	(a) watch television.	(b) read a book.			
40	Some teachers start their lectures with an outline of what they will cover. Such outlines are	a) somewhat helpful to me.	(b) very helpful to me.			
41	The idea of doing homework in groups, with one grade for the entire group,	(a) appeals to me.	(b) does not appeal to me.			
42	When I am doing long calculations,	(a) I tend to repeat all my steps and check my work carefully.	(b) I find checking my work tiresome and have to force myself to do it.			
43	I tend to picture places I have been	(a) easily and fairly accurately.	(b) with difficulty and without much detail.			
44	When solving problems in a group, I would be more likely to	(a) think of the steps in the solution process.	(b) think of possible consequences or applications of the solution in a wide range of areas.			

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You have now completed the Index of Learning Styles (ILS )Questionnaire Section. Please proceed to the next Section.

## **APPENDIX 6**

# **Culture Dimensions Questionnaire Section**

## INDIVIDUALISM

Item #	Questions 1strongly disagr	1strongly disagree		5 Strongly a		
1	People choose their friends based on common likes/dislikes/interests	1	2	3	4	5
2	I am concerned only with my own rules and objectives	1	2	3	4	5
3	People are promoted based on competence, no matter their age	1	2	3	4	5
4	It is immoral for a boss to offer a job to a relative	1	2	3	4	5

## UNCERTAINTY AVOIDANCE INDEX

Item #	Questions 1strongly disagr	1strongly disagree		5	Stroi	ngly agree
1	Children must be taught to be organised and avoid ambiguity	1	2	3	4	5
2	High competent and expert leadership are appreciated in society	1	2	3	4	5
3	People should always have an ID	1	2	3	4	5
4	It is ok to show feelings in public, at the right place and time	1	2	3	4	5
5	There are some rules and customs that all people must respect	1	2	3	4	5

## LONG-TERM ORIENTATION

Item #	Questions 1strongly disagree 5 Stro				trongly	agree	
1	People embark on common goals without being so concerned with what is Good and what is Bad	1	2	3	4	5	
2	People think everything is relative and permanently changing	1	2	3	4	5	
3	Children must be taught to ask WHAT and HOW	1	2	3	4	5	
4	People project their actions into the future	1	2	3	4	5	
5	People can live with contradictory information they are presented	1	2	3	4	5	

# POWER DISTANCE INDEX

Item #	Questions 1strongly disagr	gree				5 Strongly agree		
1	Children should be taught to never question their parents' authority	1	2	3	4	5		
2	Children should be taught to accept the authority of older or important people	1	2	3	4	5		
3	All people in an organisation or company have clearly defined roles	1	2	3	4	5		
4	The boss takes all decisions, everybody in an organisation/company accept and respect him	1	2	3	4	5		
5	The most effective way to change a political system is to replace those in power through drastic means	1	2	3	4	5		

# **MASCULINITY**

Item #	Questions 1strongly disagr	1strongly disagree			5 Strongly agree		
1	I admire winners and think those who lose must be punished	1	2	3	4	5	
2	At work/School, I need to have clear objectives and an evaluation system for what I accomplish	1	2	3	4	5	
3	Conflict is positive and productive	1	2	3	4	5	
4	Men should be focused on material success and women must be concerned with the well- being of the others	1	2	3	4	5	
5	What I want most from my partner is support in difficult situations	1	2	3	4	5	

You have now completed the Culture Dimension Questionnaire Section. Please proceed to the next Section.

APPENDIX 7
E-LITERACY QUESTIONNAIRE SECTION: Please cross/tick/circle/shade the box that best describes the statements. Choose only one answer for each question.

I'm aware of information Communication Technology (ICT) issues (i.e. technology trend safety and ethical issues).  I'm able to use devices such as (i.e. tablet, mobile phone or a PC) to process, retrieve and share information  I have the ability to assess information from all kinds of sources including the internet  I have the ability to process and respond to larg volumes of multimedia very quickly  I have the ability to use search engines effectively  I have the ability to create a simple Web page	1	Disagree 2	S In Between	4 Agree	Strongly Agree
Technology (ICT) issues (i.e. technology trend safety and ethical issues).  2 I'm able to use devices such as (i.e. tablet, mobile phone or a PC) to process, retrieve and share information  3 I have the ability to assess information from all kinds of sources including the internet  4 I have the ability to process and respond to larg volumes of multimedia very quickly  5 I have the ability to use search engines effectively	1		3	4	5
mobile phone or a PC) to process, retrieve and share information  I have the ability to assess information from all kinds of sources including the internet  I have the ability to process and respond to larg volumes of multimedia very quickly  I have the ability to use search engines effectively					
kinds of sources including the internet  I have the ability to process and respond to larg volumes of multimedia very quickly  I have the ability to use search engines effectively		2	3	4	5
volumes of multimedia very quickly  I have the ability to use search engines effectively	1	2	3	4	5
effectively	e 1	2	3	4	5
6 I have the ability to create a simple Web page	1	2	3	4	5
	1	2	3	4	5
7 I can Download materials from the internet	1	2	3	4	5
I can Compose, edit and send emails or send media content	1	2	3	4	5
9 I can join chat rooms/Social Media	1	2	3	4	5
My ICT literacy negatively affects my purchasing decisions	1	2	3	4	5
I can send media content such as videos and images through the internet	1	2	3	4	5
I am comfortable with social media such as Facebook, What's up, Instagram and others	1	2	3	4	5
I know how to keep a record of favourite websites	1	2	3	4	5

THANK YOU FOR PARTICIPATING IN THIS RESEARCH

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