



**A critical evaluation of the congruence between brand image and
brand identity within the green marketing space**

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ABSTRACT

Globally, the market for green products and services is worth billions of dollars and is growing year on year at an increasing rate. The following study investigated the congruence between brand image and brand identity within the green marketing space, focusing specifically on Pick 'n Pay's Green Line of environmentally friendly household cleaning products.

Through interviewing Pick 'n Pay's brand manager for their Green Line and one hundred shoppers at Pick 'n Pay's on Nicol store in Bryanston, Johannesburg, South Africa, the brand identity and brand image were both respectively characterised. Data was also gathered from the shoppers to allow the brand loyalty and brand equity generated to be determined.

This research identified that for Pick 'n Pay's Green Line to generate positive brand loyalty and brand equity:

- A strong alignment between brand image and brand identity must be achieved;
- There must be a strong believability of the green claims made; and
- The credibility (trustworthiness) of the green claims must be sound.

A model designed specifically to illustrate and summarise the findings of the research is later presented with the aim of providing brand managers who oversee products with green credentials a quick and simple guide to ensure all is being done to ensure that brand loyalty and brand equity for their products may be maximised.

Keywords: Brand image, brand identity, green marketing, brand personality, congruence

DECLARATION

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

7 November 2012

William Robert Campbell

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1 DEFINITION OF PROBLEM AND PURPOSE

1.1 PROBLEM STATEMENT

Green marketing has been identified as being able to provide companies with the opportunity to “access new markets, increase their profitability and to enjoy more competitive advantages” (Chen, 2010, p. 316).

Recent research conducted by Chang (2011) to explore the key factors relating to successful green marketing identified that ambivalent consumers when exposed to advertisements with more pronounced or exaggerated green claims reacted by processing the elements presented in a greater detail than those not perceived to be exaggerated which resulted in the discounting of the believability of the claim. This consequential reduction in perceived brand image, quality and merit, was identified by Kemp and Bui (2011) to have a negative impact upon a consumer’s desire to purchase the product or service being deliberated over.

In researching what the essential components of strong brands were, Srivastava (2011) identified that brand identity and brand image were fundamental elements with Nandan (2005) highlighting that the gap between these must be reduced as much as possible in order to create brand strength.

The success of green marketing within South Africa has been highlighted recently by a number of organisations such as the Sunday Times who reported that “South African retail giant Pick ‘n Pay [recently] took first place at the Sunday Times Top Brands Awards for the third consecutive year, for being the brand that has done the most to promote ‘green’ awareness in South Africa” (Pick ‘n Pay, 2011).

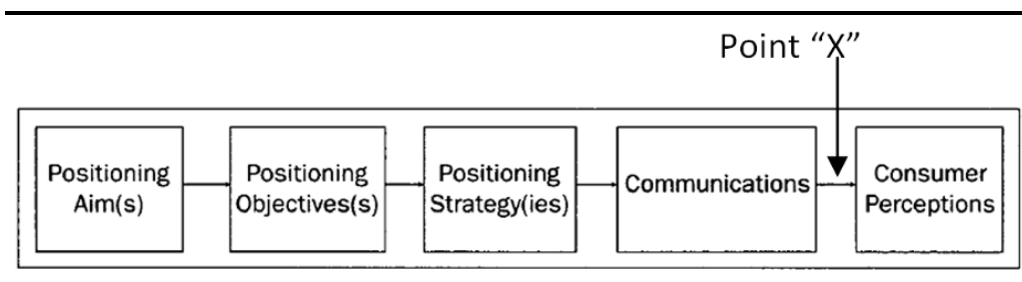
In the green marketing space, it would appear that there is a strong business case for ensuring congruence between brand identity and brand image for products or services which have green credentials (Delamus & Burbano, 2011).

1.2 REASONS FOR INVESTIGATING THE RESEARCH PROBLEM AND THE CONTRIBUTION WHICH THIS RESEARCH WILL MAKE

Successful brands have been identified to enjoy a positive alignment between their brand manager’s visions (brand identity) and their customer’s perceptions (brand image) (Kemp & Bui, 2011). Due to the difficulty in presenting a message which encapsulates the key attributes of a product in a manner which may be easily understood by a consumer, it is not uncommon for the brand identity and the brand image to become misaligned (Blankson & Kalafatis, 2007).

Were a misalignment to occur, its origins would appear to be located at point “X” in *Figure 1.1* which presents the five decisions and activities which comprise a composite positioning model (Blankson & Kalafatis, 2007, p. 86).

Figure 1.1 Five Decisions and Activities which Comprise a Composite Positioning Model



(Blankson and Kalafatis, 2007, p. 86)

Specifically, the research conducted by Blankson and Kalafatis (2007) was undertaken to investigate a gap identified by Piercy and Strong (2005) which recognised that marketing managers and advertising executives faced a problem in the positioning of their products. Whilst this research conducted by Blankson and Kalafatis (2007) was successful, it was limited to a specific sector within the United Kingdom services industry. Blankson and Kalafatis (2007) clearly state that future research is required to explore this issue of alignment within other sectors.

More recently, as a consequence of the widespread recognition of the importance of green marketing specifically, together with recognising some of its failings to date, Kotler proposes a reinvention of marketing to “manage the environmental imperative” (Kotler, 2011, p.132) and go further than simply addressing issues of alignment.

Following research conducted into “A New Measure of Brand Personality”, Geuens, Weijters and De Wulf (2009) propose that due to the importance of Corporate Social Responsibility (CSR), further research may be conducted into a “company’s responsible behaviour toward[s] its customers, employees and / or the environment” (p. 106) so that the brand’s responsibility dimension may be evaluated.

This research will identify the importance of effective green marketing and aims to contribute to the existing body of knowledge regarding the alignment of brand identity and brand image as identified by Piercy and Strong (2005) and Blankson and Kalafatis (2007) and will do so in the green marketing space.

Through assisting in managing this environmental imperative as identified by Kotler (2011), this research aims to evaluate which elements are most able to influence the levels of brand loyalty and brand equity which may be generated for products with green credentials so future green branding strategies may be more effective and create increased brand loyalty and brand equity as a result.

1.3 OVERVIEW OF RESEARCH CONDUCTED WITHIN THIS SECTOR PREVIOUSLY AND THE VALUE OF THE GREEN ECONOMY

Recent work undertaken to date has focused on the “drivers of green brand equity” (Chen, 2010, p. 307) in the information and electronics sector emanating from Taiwan which concluded by proposing four novel constructs which were “green brand image, green satisfaction, green trust and green brand equity” (Chen, 2010, p. 308).

This research sought to explore what relationships existed between these drivers of green brand equity and (green) brand image, satisfaction and trust. Due to the limits of the research conducted, it was stated that “further studies can focus on the purchase experience of other products in other countries and compare [them] with this study” (Chen, 2010, p. 316). Other recent and relevant work has evaluated how brand credibility, commitment and connection may be established for ‘healthy’ brands (Kemp & Bui, 2011).

The green economy encompasses brand’s such as Pick ‘n Pay’s Green Line (as presented within *Figure 1.2*) and is identified to be a rapidly growing marketplace where the value of green products, services and firms globally is projected to grow from

\$230 billion in 2009 to \$845 billion in 2015 (Delamus & Burbano, 2011). Given the significant value of this economy, an effective contribution is clearly required to identify the factors relating to the misalignment between a product's brand identity and brand image so they may be avoided in the future.

Figure 1.2 Pick 'n Pay's Green Line



1.4 BUSINESS RATIONALE FOR CONDUCTING THIS RESEARCH

Recognising the value of the green economy, Global Multi-National Corporations such as Procter and Gamble (P&G) and Unilever have identified 'sustainability' to be at the forefront of their future business strategies (Procter & Gamble, 2010 and Unilever, 2011). More locally to South Africa, the supermarket retailer Pick 'n Pay has devoted strong attention to the value which this (green) sector may bring (Pick 'n Pay, 2011, Green Business Guide, 2012).

Procter and Gamble (P&G) identified within its 2010 Sustainability Overview that from 2009 to 2010 it had delivered \$26.5 billion in sales of sustainable innovation products. The value of these sales was over half of the \$50 billion goal set in 2007 to be achieved by 2012 (figures on their current performance against the goal have not yet been released by the company) (Procter & Gamble, 2010).

P&G also identified three key pillars of the company's Future Friendly drive to be saving water, reducing waste and saving energy. From 2007 to 2001 P&G had succeeded in avoiding approximately 312,000 tonnes of packaging material being used due to successful waste reduction strategies (Procter and Gamble, 2010).

The belief in the continued future growth of this sector is highlighted by Pick 'n Pay's investment in their flagship 'green' store within Johannesburg which opened in 2010 (Pick 'n Pay, 2011) and is referred to directly within their 2011 Integrated Annual Report where they identify that to help "build a sound platform for future growth" they will look "to continue to drive sustainability with [a] focus on reduction in energy usage and waste" (Pick 'n Pay, 2011, p. 21). Within the store, the company-branded 'green' merchandise range offering was expanded (Pick 'n Pay, 2011). In 2011, through the increase in demand for these products and the extension of the range, the value of Pick 'n Pay's Green Line's sales increased by 266% (Pick 'n Pay, 2011, p. 26).

Another Global Multinational; Unilever, outlined within its Sustainable Living Plan which forms a subsection of the 2011 Annual Report, that:

1. "We will help 1 billion people improve their health and well-being;
2. We will halve the environmental footprint of our products; and
3. We will source 100% of agricultural raw materials sustainably".

(Unilever, 2011, p. 8)

Recently, whilst discussing HSBC's holistic brand alignment, Peopalove (the brand development company), identified that effective alignment was fundamental to eliminating brand confusion to a target audience and that to achieve strong brand consistency an effective brand alignment strategy was also fundamental (Peopalove, 2011).

Given the cost to companies such as HSBC, Unilever, P&G and Pick 'n Pay to achieve this necessary alignment between brand identity and brand image, concern has been raised by many at an industry level such as Shetil Rastogi and Benjamin Bidlack of Interbrand (Interbrand, 2007) if they weren't to achieve this positive alignment and generate brand equity. Anisimova (2010) draws upon the ever rising cost of advertising required to promote a brand as another element in the argument for the necessity to ensure positive alignment.

In a similar theme and also of high relevance to the business rationale for this research is captured in a quote provided by Jez Frampton (Interbrand's global Chief Executive Officer) in Interbrand's recent publishing of the Best Green Global Brands of 2012 (Interbrand, 2012). In this report, Mr Frampton identified that "sustainability has proven

to be a strategic and profitable aspect of business and a brand strengthening asset” (Interbrand, 2012, p. 1). Furthermore, one of the key focuses of Interbrand’s Best Global Green Brands Report evaluates “the gap that exists between corporate environmental practices and consumer perception of those practices” (Interbrand, 2012). This gap is exactly what Shetil Rastogi and Benjamin Bidlack (Interbrand, 2007) and more recently the brand development company Peopalove (2011) identify as being so important to generating positive brand equity.

In essence, the key metric which Interbrand is using to determine which global brand deserves the title of Best Green Global Brand of 2012 is that which this research is proposing to critically evaluate (the congruence between brand identity and brand image) so that the brand loyalty and brand equity generated may be maximised.

1.5 THE COST OF GOING GREEN

The value of the green economy as presented by (Delamus & Burbano, 2011) and the potential benefits of going green to capture some of this are clear and have been confirmed by P&G (2010), Pick ‘n Pay (2011), Unilever (2011) and Interbrand (2012).

However, the financial costs of going green may be considerable and due to the vast number of different industries, the many ways which each may choose to implement green practices and the degrees to which they may introduce these mean the costs of going green vary significantly from sector to sector.

As an example of the potential magnitude of the costs of going green, the cost to the United Kingdom of phasing out fossil fuel based electricity production in favour of cleaner energy production is identified to be approximately £100 billion over some 18 years (Telegraph, 2012) and the cost to British Petroleum (the energy company) for developing an alternative fuel business is identified to be approximately \$8 billion over approximately 10 years (MSNBC, 2012).

Whilst these are only two of many examples which highlight the costs associated with going green, it is clear that should these green products or services not be positioned correctly and not achieve sufficient levels of brand loyalty or brand equity, the potential for a negative return-on-investment is real and could well be severe.

2 THEORY AND LITERATURE REVIEW

Within this chapter, relevant theory will be presented from current literature and seminal works to provide a reference point for this research to assess the key themes which relate to the congruence between brand identity and brand image within the green marketing space.

Firstly, a broad overview of the notion of sustainability, examples of it, why people are identified to act in a sustainable manner and how it fits into people's daily lives will be presented from key literature.

Secondly, to outline the current nature and relevance of the subject, the concept of green marketing will be explained together with a brief historical overview, its current role in the present day together with an explanation of the concept of green washing.

Thirdly, the key differences concerning brand identity and brand image will be presented leading into a discussion surrounding brand personality. The dimensions of brand personality identified within Aaker's seminal work of 1997 will then be presented for discussion followed by a summary of brand personality scales concluding with a brief discussion relating to some recent criticisms of brand personality scales.

Finally, the absence of any significant literature relating to the relationship between green marketing and brand personality will be highlighted together with a brief overview of green brand personality.

2.1 SUSTAINABILITY

There are many definitions of sustainability though one which is most encompassing and captures its essence most succinctly is that provided within the Brundtland Report of 1987 which defines sustainability in terms of "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (United Nations, 1987, p. 37).

The concept of the triple bottom line was coined some years later in 1995 by the Economist John Elkington where an effective interplay and awareness between social,

economic and environmental fields was identified as fundamental to achieving sustainability (The Economist, 2009). The notion of the triple bottom line has been used frequently since originally proposed and continues to be quoted today (Giovanni, 2012).

A wealth of recent literature exists on the sustainability of brands whether they are a corporate entity or a purchasable item (Hartmann & Apaolaza-Ibanez, 2009). At its most granular level, the focus of this research is centred specifically on household cleaning products with green credentials. As these various green brands are bought millions of times each day globally, there is a strong business case for understanding what some of the motives are behind why consumers ultimately purchase these and not others without green credentials.

2.1.1 Examples of Sustainability

From a review of current literature regarding sustainability, three key themes regarding its applicability emerged. These related sustainability to the individual, corporate and government / countrywide organisational levels (Walker & Jones, 2012 and DEFRA, 2012).

At the individual level the World Watch Institute which was formed with a vision for a sustainable world primarily centres its suggestions to individuals on ways in which they may reduce their home water / gas / electricity use and reassess their purchasing and consumption behaviours (Worldwatch, 2012).

At the company level, recent research conducted by Walker and Jones (2012) identifies that manufacturing companies may achieve effective levels of sustainability by better managing their supply chains. The Florida Department of Environmental Protection suggests that non-manufacturing companies may look to recycling and better management of energy use to be more green (Florida US State Department, 2012).

At the governmental level in the United Kingdom for example, the Department for the Environment, Forestry and Regional Affairs (DEFRA, 2012) identifies the importance of embedding sustainable development into government policy such as evaluating departmental business plans with regard to sustainable development principles and introducing transparency and independent scrutiny so their actions may be

independently measured are practical and effective methods to achieve sustainable development may be delivered (DEFRA, 2012).

2.1.2 Why are People Sustainable?

Four primary theories exist as to why people act in a sustainable manner whether it be purchasing sustainable products (Dall’olmo Riley, Kohlbacher & Hofmeister, 2012) or using electric cars as opposed to fossil fuel powered automobiles (Moons & De Pelsmacker, 2012). These four theories as outlined by Kurz (2002) are identified to be;

1. Rational-economic theory, which is based on the premise that people act in a particular manner depending upon whether there is a financial incentive for them to do so;
2. Social dilemma theory, which assesses the process engaged in during resource consumption;
3. The attitude model of environmental behaviour, assesses pro-environmental attitudes influence decision making; and
4. Applied behavioural analysis, focuses upon the “antecedents and consequences of behaviour” (Kurz, 2002).

From a review of more current literature post Kurz (for example Wu, McKay & Hemphill, 2011), these theories would still appear to be applicable and useful though the context of the specific decision must be considered to ensure their relevance. Wu et al. (2011) identify that in the context of water consumption a levy is an effective preventer of excessive consumption which is an example of the rational-economic theory at play.

2.1.3 How Sustainability Fits into Everyone’s Daily lives

Elements of sustainability are now very much present in many areas of daily life at all age levels. For example, environmental education for sustainable development was officially sanctioned to be taught throughout schools within the Philippines from 1977 (Galang, 2010).

Sustainable reporting is now required within the annual statements of companies listed on the United Kingdom Stock exchange (Financial Director, 2010), Walmart (one of the world’s largest retailers) increasingly charges for previously ‘free’ plastic carrier bags within its stores to help achieve its sustainability targets (Walmart, 2011), cities such

as Paris are introducing electric car sharing schemes (BBC, 2012) and London has introduced bicycle stations (as illustrated within *Figure 2.1*) throughout the city which may be rented by the half hour (Transport for London, 2012).

Figure 2.1 *Bicycle Station in London*



2.1.4 *Underlying Aims of Sustainability*

Nguyen and Slater (2010) identify that ultimately the aim of effective sustainability is hitting the “sustainability sweet spot” which is where social responsibility, environmental responsibility and financial / shareholder responsibility overlap.

This view would appear to be corroborated by the actions of the United States Environmental Protection Agency (USEPA) and the World Bank, both of which have respected global voices. The USEPA “aims to make sustainability the next level of environmental protection by drawing on advances in science and technology to protect human health and the environment, and promoting innovative green business practices” (USEPA, 2012, p. 1) with the World Bank striving to “achieve environmental best practice for all activities; make best use of resources; minimize waste in order to lessen our impact on the environment; and provide comfortable and healthy surroundings in which to work” (World Bank, 2012, p. 1).

In order to present the sustainable messages of the many companies and organisations such as Unilever and the World Bank, the field of green marketing has seen significant growth since its origins in the 1980's to the present day (Rettie, Burchell & Dall'olmo Riley, 2012).

2.2 GREEN MARKETING

Since its introduction in the 1980's, green marketing has been referred to in a wide variety of manners such as; "sustainable marketing", "environmental marketing", "ecological marketing", "eco-marketing", and "sustainable lifestyles marketing" (Rettie et al., 2012, p. 422).

From a review of recent and historical literature (for example: Rettie et al., 2012, McEachern and Carrigan, 2012 and Kotler, 2011), green marketing may be defined as the utilisation of marketing media to enable an exchange of information which is to the benefit of the human and / or physical environment.

2.2.1 History of Green Marketing

Some of the earliest research into green marketing occurred in the 1970's (Rivera-Camino, 2007). This initial foray was due mainly to marketing planners whose primary focus was on identifying "environmentally conscious purchase decisions, energy saving consumption decisions or domestic recycling practices" (Hartmann & Apaolaza-Ibanez, 2009, p. 673).

Peattie and Crane (2005) identify that after the initial research of the 1970's, the main green marketing drive occurred towards the late 1980's which was then focused around increasing purchase rates for green products (Peattie & Crane, 2005). Later on during the 1990's, the volume of green marketing was even more significant and driven by what (Nguyen & Slator, 2010) identified to be some 92% of European multinationals claiming changes were implemented to their product offerings due to green sentiment.

The green marketing which was offered during this period was identified by many such as Rettie et al. (2012) and Peattie and Crane (2005) to be ineffective. One of the key reasons proposed for its ineffectiveness is identified as the unclear messages which were being promoted on products with questionable green credentials (Nkamnebe, 2011). When coupled with the general low level of public education as to what

constituted a green product, the marketing served to confuse the market (Nkamnebe, 2011).

This ineffectiveness combined with products with questionable green credentials caused somewhat of a backlash and in a large part the widespread consumer disenfranchisement with green advertising (Delamus & Burbano, 2011).

2.2.2 Green Marketing in the Present Day

Today, there is a growing movement which recognises the need for effective green marketing to ensure that the products or services which it promotes are presented effectively and ethically and received successfully by consumers (Kotler, 2011, Chen, 2010, Hartmann & Apaolaza-Ibanez, 2009, Rettie et al., 2012 and McEachern & Carrigan, 2012).

Recently, Kotler's article of 2011 entitled "Reinventing Marketing to Manage the Environmental Imperative" identified various areas focused around the infamous 'four P's' (product, price, place and promotion) which would require attention to ensure that sustainability was given a more heightened status (Kotler, 2011).

Other recent work such as that by Hartmann & Apaolaza-Ibanez (2009) has focused on the practicality of ensuring that a product with green credential's message is effectively conveyed through a study of the different persuasion processes which may be employed. Within their research, two models were studied which were the elaboration likelihood model and the affect-reason-involvement model (Hartmann & Apaolaza-Ibanez, 2009).

Each model identified deals with two separate methods of influence. The first, being central modes of persuasion and the second, rational and emotional processes (Hartmann and Apaolaza-Ibanez, 2009). It is seen that within both these models, "stronger emotional involvement leads to a deeper emotional elaboration" (Hartmann & Apaolaza-Ibanez, 2009, p. 719).

Behaving in a green manner (for example, acting sustainably and purchasing environmentally friendly products) is not perceived by many to be the norm (Dangelico & Pontrandolfo, 2009). A fundamental shift is presented by Dangelico and Pontrandolfo (2009) which identifies that green behaviour must become the standard.

Some of the recent research in this field has centred on the concept of how to 'normalise' green behaviour (Rettie et al., 2012). In essence this seeks to identify how to position a green offering in a manner which identifies it as being 'normal' (and therefore more likely to be accepted and purchased) as opposed to its current state of being more 'abnormal' (and therefore less likely to be accepted and purchased) (Rettie et al., 2012).

Perhaps another dimension to green marketing is the concept of trust which was researched in detail by Chen (2010). Due to the legacy effects of the greenwashing of the 1990's and its current persistence (Delamus & Burbano, 2011), for green marketing to truly be effective, the consumer trust which was lost through greenwashing must be rebuilt (Chen, 2010). Crucially, Chen (2010) identified that trust is one of the key elements needed to deliver green brand equity.

2.2.3 Greenwashing

One of the negative aspects of inappropriate green marketing is that of greenwashing. Greenwashing is the over emphasis or misrepresentation of a product's green credentials (Delamus & Burbano, 2011). From the birth of green marketing, greenwashing has been present (Delamus & Burbano, 2011, Peattie & Crane, 2005 and Rettie et al., 2012 and has caused much bad sentiment amongst the consumer (Delamus & Burbano, 2011).

Terrachoice (the environmental marketing firm) proposed the "Six Sins of Greenwashing" in 2007 which were identified as "the sin of the hidden trade-off, the sin of no proof, the sin of vagueness, the sin of irrelevance, the sin of fibbing and the sin of the lesser of two evils" (Terrachoice, 2007, p. 1). In 2009 when the company conducted a study of 2,219 products which claimed to have green credentials, Terrachoice identified that 98% were guilty of at least one sin of greenwashing (Terrachoice, 2009).

Action to address the issue of greenwashing was identified by governments such as the United Kingdom's in 2009 (Challen, 2009). In this instance, the United Kingdom's Environmental Audit Committee requested that a labelling system be introduced which marked products with an easily recognisable symbol identifying the environmental credentials of the product (Challen, 2009).

2.3 **BRANDS**

Chernatony and Dall'olmo Riley summarised a brand as one or more of the following; “a legal instrument, a logo, a company, an identity system, an image in consumers' mind, a personality, a relationship, adding value and as an evolving entity” (Chernatony & Dall'olmo Riley, 1997, p. 90).

Whether a specific brand functions as one or many of these elements, it is clear that through their ability to have a personality, a relationship and an identity system, their interaction with a consumer may be intense (Chen, 2010).

It is through the consumer's interaction with one or many of these different brand concepts that a level of positive or negative brand equity is created (Maehle & Supphellen, 2011).

2.3.1 **Brand Loyalty and Brand Equity**

Oliver (1999) defined brand loyalty to be “a deeply held commitment to rebuy or repatronise a preferred product / service consistently in the future, thereby causing repetitive same-brand or same-brand set purchasing, despite situational influences and marketing efforts having the potential to cause switching behaviours” (p. 34).

In the same vein though more recently, brand loyalty has been defined by Kabiraj and Shanmugan (2011) as “the consumer's conscious or unconscious decision, expressed through intention or behaviour, to repurchase a brand continually” (p. 286).

Both these definitions of loyalty imply the repeated purchasing of a product or service Oliver (1999) and Kabiraj and Shanmugan (2011) and it is this repeated behaviour which companies such as Procter and Gamble or Pick 'n Pay seek to achieve through the initial design and subsequent marketing and advertising of their products or services to ensure their competitiveness (Kotler, 2011).

The brand equity which is generated by products is also identified to be of high competitive importance to companies (Kotler, 2011) and has been identified by Bick (2009) to be a major marketing driver “for organisations operating in mass markets and through distribution channels, such as Coca-Cola in the fast-moving consumer goods market” (p. 118). Brand equity is identified by Stahl, Heitmann, Lehmann, and Neslin (2012) to be “rooted in the hearts and minds of consumers” (p. 44).

Brand equity is broadly defined to be the “benefits a product achieves through the power of its brand name” (Stahl et al., 2012, p. 45). Many different methods exist for measuring brand equity, one of these which has been used by Young and Rubicam to measure over 50,000 brands in over 50 countries (Stahl et al., 2012) draws upon what Stahl et al. (2012) identify to be the “four ‘pillars’ that capture the awareness / familiarity and brand association constructs encompassed by Keller’s theory” (p. 45) which are:

- “Knowledge: The extent to which customers are familiar with the brand;
- Relevance: The extent to which customers find the brand to be relevant to their needs;
- Esteem: The regard customers have for the brand’s quality, leadership, and reliability; and
- Differentiation: The extent to which the brand is seen as different, unique, or distinct.”

(Stahl et al., 2012, p. 45)

2.3.2 Brand Identity and Brand Image

Nadan (2005) defines brand identity to be the different inter-organisational elements responsible for creating a brand with the brand image being the consumer’s interpretation of this. Essentially, brand identity is the company’s internal view of a brand whilst brand image is the consumer’s external perception of the brand (Nadan, 2005).

In 1999, Chernatony presented a model which drew upon work conducted by Kapferer (1997) which presented and illustrated the interplay between the six primary elements responsible for a brand’s identity. These six primary elements were identified as; “presentation, positioning, personality, brand vision, culture and relationships” (Chernatony, 1999, p. 166).

Ultimately, one of the main aims for illustrating this interplay was to demonstrate that a brand’s identity is comprised of many different elements, each of which is intrinsically linked to the overall identity of the brand (Chernatony, 1999).

Recent work conducted by Louis and Lombart (2010) sought to evaluate the impact which a brand’s personality may have upon a consumer’s trust, attachment and

commitment to a brand. The work performed by Louis and Lombart (2010) identified that there was a clear relationship between the brand’s personality and its ability to develop trust, attachment and commitment with a consumer.

One of the stated reasons for conducting the research was that Louis and Lombart (2010) proposed that “for a consumer to be considered truly loyal to a brand he should not only buy that brand in a repeated manner, he should also have developed positive attitudes towards it” (Louis & Lombard, p. 114, 2010). The conceptual framework which is later proposed within this research is that through trust in the brand, an attachment to the brand is generated which is followed ultimately with a commitment to the brand. Crucially, the interaction of the brand’s personality is fundamental throughout the journey from trust to commitment.

Nadan (2005) identified that to increase the loyalty which a brand may command, its identity and image must be strongly aligned. Given the different elements of a brand’s identity as highlighted by Chernatony (1999) and the differences between these and brand image as presented by Nadan (2005) in *Table 2.1*, achieving congruence may be time consuming, challenging and costly and should not be taken for granted (Nadan, 2005).

Table 2.1 *The Key Differences Between Brand Identity and Brand Image*

Brand Identity	Brand Image
Source/company focused	Receiver/target audience focused
Created by managerial activities	Created by perceptions of the consumer
Encoded by ‘brand originator’	Decoded by ‘brand receiver’
Identity is sent	Image is received/perceived

(Nadan, 2005, p. 268)

Recent work by Srivastava (2011) concurs with both Chernatony (1999) and Nadan’s (2005) definition of brand identity and brand image and highlights that it is through brand identity that uniqueness may be communicated. Srivastava (2011) concurs with Chernatony (1999) and Nadan’s (2005) views in that she also identifies that a strong congruence between brand identity and image are fundamental for a strong brand.

The time taken to develop congruence between brand image and brand identity may be achieved rapidly if an individual is able to quickly identify a clear association with the

values that a brand represents, or it may take a significant amount of time for them to evolve if this alignment is not forthcoming (Lencastre & Corte-Real, 2010).

In order to effectively reduce the time taken for an alignment between brand image and brand identity to occur, the different areas which affect a brand's identity must not only be understood but tailored to the target market and this may only practically be achieved through an evaluation of the brand's identity (Ross & Harradine, 2011).

2.3.3 Brand Personality

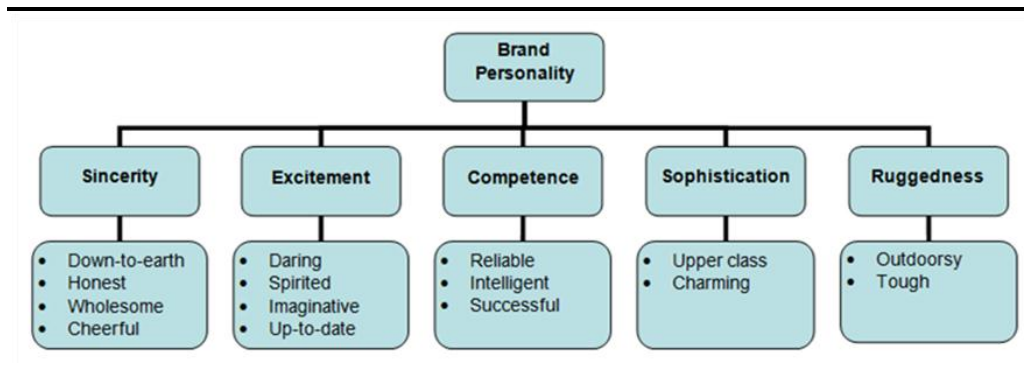
Brands are frequently referred to as having personalities (Aaker, 1997, Maehle & Supphellen, 2011, Cian, 2011 and Christodoulides & de Chernatony, 2010) which are ultimately formed in the mind of the consumer (Parker, 2009). Parker (2009) identifies that "associating human personality characteristics with a brand is possible because people anthropomorphize, that is, transfer human characteristics to inanimate objects on a regular basis" (Parker, 2009, p. 177). Examples of this can be seen when people name their cars or sports equipment and refer to them affectionately.

It is with this in mind that a brand has been conceptualised to have a "body" and "soul" (Das, Stenger & Ellis, 2009, p. 30). Das et al. (2009) identify the body of the brand to comprise of functional properties with an image such as a Volvo car representing safety (Motor Trend, 2012) or Colgate toothpaste signifying good oral hygiene (Brush night and day, 2011).

Aaker's seminal work on the Dimensions of Brand Personality (1997) develops a scale with which to measure the dimensions of a brand's personality. These dimensions, coined as the 'Big Five', are identified to be; "sincerity, excitement, competence, sophistication and ruggedness" (Aaker, 1997, p. 347).

To measure the five dimensions of a brand's personality, Aaker (1997) proposed a scale which identified 42 traits to enable this assessment. These traits were summarised to relate to one of fifteen facet names as presented within *Figure 2.2*.

Figure 2.2 Aaker's Five Primary Dimensions of Brand Personality



(Aaker, 1997, p. 352)

The dimensions of a brand's personality as proposed by Aaker certainly form an important foundation to this research as it is the personality of a brand which is crucially evaluated by the consumer when determining whether they may or may not form a positive identity or trust with that brand (Parker, 2009 and Maehle & Supphellen, 2011).

Following its initial acceptance, the work conducted by Aaker has been evaluated in various different lights with the most relevant to this research being the generality of the scale proposed (Austin, Siguaw, & Mattila, 2003, Azoulay & Kapferer, 2003 in Maehle & Supphellen, 2011) based upon its applicability for evaluating different kinds of products (Hosany et al., 2006 and Beldona & Whysong, 2007 in Maehle & Supphellen, 2011).

One key theme emanating from Aaker's work which is identified as fundamental to the brand personality debate is that of congruence. Congruence refers to the degree of alignment between two different states (Maehle and Shneor, 2010). Research conducted by Maehle & Shneor (2010) identified that "consumers prefer brands with personalities which match their own" (p. 44).

An important question which has also been researched recently by (Malär, Krohmer, Hoyer and Nyffenegger, 2011) takes the findings of Maehle and Shneor (2010) to the next level by asking "whether the brand's personality should match the consumer's actual self or the consumer's ideal self" (p. 1).

To test this theory, Malär et al. (2011) conducted research which reviewed 167 brands which were evaluated by two groups of consumers. Some of the key findings from the

research found that the applicability of self-congruence theory differs depending upon the level of association a consumer has with a product, the level of congruity between the consumer's actual or ideal self with the brand's personality was found to differ greatly and the greatest impact on emotional brand attachment was found to be self-congruence (Malär et al., 2011).

2.3.4 Brand Personality Scales

The brand personality scale proposed by Aaker in 1997 sought to characterise a brand's personality by assessing it against 42 traits as presented previously in *Figure 2.2*.

The time required to assess each of the 42 traits was however, identified to present a disadvantage to researchers due to the time taken to gather the necessary data as it is simply not practical to question an interviewee as to the applicability of each of the 42 traits for each of the products being evaluated (Rammstedt & John, 2007). Therefore, in order to enable the personality of the brand to be effectively measured within the time constraints, a new brand personality scale was sought.

In 2007, Rammstedt and John presented research which they conducted where they sought to evaluate the psychological personality of humans. During the course of their data collection where a previously accepted methodology utilising 44 traits was employed, Rammstedt and John identified that the average time taken (10 minutes) was simply too long to question an individual about their personality.

In order to provide a solution to this problem, they sought to develop a personality scale which was designed for use within *one minute or less*.

Whilst the personalities being measured by Rammstedt and John (2007) were those of humans, the time constraints are equally as real for a researcher collecting data to characterise a brand's personality when the number of traits (Rammstedt & John: 44, Aaker: 42) is considered.

Due to the potential deterioration in answer quality from a respondent should the time taken to interview them appear to be unnecessarily long, a more time efficient scale would serve to mitigate this consequence of a longer, more time intensive scale (Rammstedt & John, 2007).

In 2009, Geuens et al. presented a summary of criticisms cited by (amongst others) Azoulay and Kapferer, 2003, Bosnjak, Bochmann and Hufschmidt (2007) and Austin et al. (2003) which was directed at previously generated brand personality measures.

The criticism which is cited within Geuens et al.'s work is threefold and may be summarised as follows:

- 1) *Criticism 1*: the definition of brand personality is not firm and includes additional characteristics such as “age and gender” (p. 97) which are not related to personality specifically.

Impact: through introducing a “construct validity problem”, confusion may arise on the side of the researcher as to whether “the perceived brand personality (a sender aspect) or perceived user characteristics (receiver aspects)” (p. 97) are being measured.

- 2) *Criticism 2*: “non-generalisability of factor structure or analyses at respondent level” (p. 97).

Impact: it is reported that the framework is not able to effectively “generalise to situations in which analyses are required at the individual brand level and / or situations in which consumers are an element of differentiation” (p. 97).

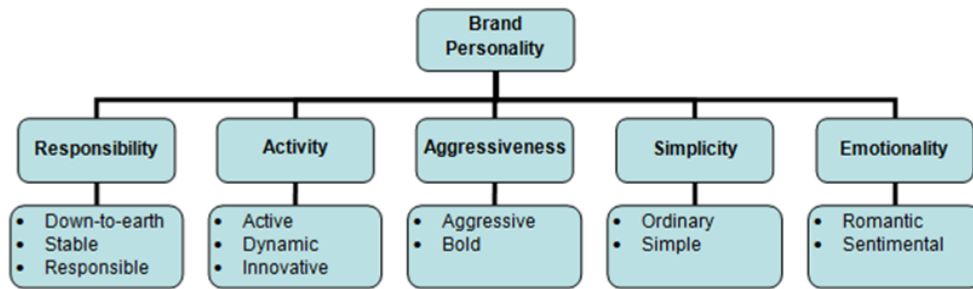
- 3) *Criticism 3*: “non-replicability of the five factors cross-culturally” (p. 97).

Impact: the scale developed is not effectively suited to cross-cultural (ergo country) studies which due to the international nature of brands has required country-specific brand scales to be developed.

(Geuens et al., 2009)

The result of the research is a new scale which proposes that 12 personality traits be utilised as opposed to Aaker's original 42. These 12 personality traits are presented within *Figure 2.3*.

Figure 2.3 The New Brand Personality Measure



(Geuens et al., 2009, p. 103)

Following its publishing, the scale proposed by Geuens et al. has been utilised by many such as Goldsmith and Goldsmith (2012) who recently employed the scale to research how brands' personalities may be "reliably and validly operationalized" (Goldsmith & Goldsmith, 2012, p. 11). Within the study, Goldsmith and Goldsmith also "sought to assess the ability of the scale itself to provide a unique profile of a brand with which some consumers are engaged" (Goldsmith & Goldsmith, 2012, p. 11).

Through their use of the scale, Goldsmith and Goldsmith (2012) were able to effectively demonstrate "that brand personality is related to brand engagement for a specific brand" (p. 19) and with regard to Geuens et al.'s scale stated that "the findings clearly support its usefulness in assessing this brand's personality" (p. 19).

Prior to its use by Goldsmith and Goldsmith in 2012, the scale was subjected to a critical evaluation by Alpatova and Dall'Olmo Riley in 2011 in conjunction with Aaker's scale of 1997 with the aim of assessing the scales' ability to:

1. "discriminate between brand users' and nonusers' brand personality ratings;
2. reduce the number of neutral responses; and
3. elicit clearer differences between the personalities of competing brands".

(Alpatova & Dall'Olmo Riley, 2011, p. 1)

The key findings from this research were that it found "support [for] Geuens et al.'s proposition of their measure's superiority over its earlier alternative [Aaker's of 1997]" in that "Geuens et al. demonstrated the appropriateness and reliability of their own scale for between brand and between-respondent within-category comparisons", (Alpatova & Dall'Olmo Riley, 2011, p. 1).

The research also identified that “it can also be inferred that since the dimensions and traits which compose Geuens et al.’s measure are a closer reflection of ‘Big Five’ personality traits, they are more generalisable across sectors and markets... ..the use of more generalisable personality traits resulted in the increased propensity by respondents to express distinguishable opinions about the brands” (Alpatova & Dall’Olmo Riley, 2011, p. 5).

Importantly, in support of the scale proposed by Geuens et al., the research concludes by stating that “Geuens et al.’s measure can be successfully adopted for use in the marketing practice. Furthermore, its application may improve the quality and efficiency of personality research in strategic brand management”, (Alpatova & Dall’Olmo Riley, 2011, p. 5).

Clearly this reduction in the number of traits whilst aiming to and being reported to provide a more relevant measure of a brand’s personality has also delivered a reduction in the time taken to characterise it significantly.

2.3.5 Factor Based Brand Personality Models

Work published by Avis in 2011, critically evaluated a number of factor based brand personality models including those created by Aaker (1997) and Geuens et al. (2009). Three key problems were identified within the research on factor based models which were: “the category confusion problem, the domain adjustment problem and the descriptor selection problem” (Avis, 2011, p. 91).

1. The *category confusion problem* was identified by Levy (1999) (in Avis, 2011) that when questioned as to the attributes of certain brands, it was the category itself and not the brand which was found to have the strongest impact upon the brand’s personality. Avis (2011) identified that Batra, Lenk and Wedel (2010) recently conducted research which confirmed that “the category does indeed have a significant impact on consumer brand perceptions” (Batra et al., 2010, p. 91).
2. The *domain adjustment problem* stems from the issue that words used to describe particular brands by consumers may be used to describe different elements depending upon the domain with which they are referring (Avis, 2011).

3. The *descriptor selection problem* is identified as the influence of differing categories which when selected by a researcher may likely impact upon the outcome of a brand's researched personality. Specifically, Avis identifies that "each scale is not a generalised BP [brand personality] scale but a scale that is skewed to the associations with the categories that are the subject of the scale development" (Avis, 2011, p. 93).

In light of these three key areas which may negatively affect the value of the data generated when using factor based models, Avis (2011) proposes that the following efforts should be made in order to most effectively mitigate their impact:

1. To mitigate the *category confusion problem*, the personality of the category must first be excluded allowing that of the brand to be measured specifically (Avis, 2011);
2. To mitigate the *domain adjustment problem*, the different connotation which words inherently possess when describing different fields must be eliminated by providing meta-language so the specific meaning per product class may be conceptualised and understood (Avis, 2011); and
3. To mitigate the *descriptor selection problem*, further research is proposed to determine what "brand personality traits actually mean to consumers when applied to different categories and why the traits may be salient for consumers in each category" (Avis, 2012, p. 95).

2.3.6 Green Marketing & Brand Personality / Positioning Congruence

No recent or relevant research was identified by the Author which specifically evaluated the role of green marketing with that of green brand personality. Research was identified by Hartmann, Apaolaza-Ibáñez and Sainz (2005) which indicated that for products with green credentials there was "an overall positive influence of green brand positioning on brand attitude" (p. 9) however, the personality of the brand was not a focus of the research.

Given the importance identified by Srivastava (2011) of a strong congruence between brand identity and brand image being fundamental to a strong brand, it is likely that in

green marketing, congruence between brand identity and brand image are also of a high significance.

2.3.7 Green Brand Personality

From a review of Aaker's (1997) and more recently Parker's (2009) works on brand personality when reviewed in light of Chen's (2010) findings on the drivers of green brand equity, and Delamus and Burbano (2011) who alluded to the factors concerning greenwashing, it is clear that sincerity must be a fundamental element of a green brand's personality. Aaker (1997, p. 351) identified that "domestic, honest, genuine and cheerful" were the traits which had the highest relationship to the sincerity of a brand's personality.

Arora and Stoner (2009) underscore the importance of effectively conveying the personality of a brand when they highlight within their research on brand personalities that due to many of the brands which they measured having multiple product lines, should factors pertaining to greenwashing be associated with one product generate negative brand equity, this may easily (negatively) impact the many other co-branded products within the range.

2.4 SUMMARY OF LITERATURE REVIEW

The literature reviewed has presented a targeted overview of the key themes relating to this research. The concept of sustainability was first presented to provide a background and context to the field of green marketing identifying how it fits into people's everyday lives.

The relevance of green marketing was then discussed with an insight provided into the concept of green washing and the negative impacts which it may have.

A detailed insight into the importance of the concept of a brand, brand identity (the company's internal view of a brand) and brand image (the consumer's view) was then presented. The work conducted by Aaker (1997) and Geuens et al. (2009) regarding the methods to assess a brand's personality were then introduced, discussed and critically evaluated due to their importance to this research.

A very brief discussion was then presented regarding the seeming absence of literature on green brand personality where the key point identified was that should a brand be identified to have engaged in greenwashing and that brand be housed within a stable of other brands (essentially part of a branded house as opposed to a house of brands), the negative brand equity generated by it could likely have a negative impact upon the other brands within the stable.

3 PROPOSED RESEARCH

3.1 RESEARCH AREA

From the literature reviewed within *Chapters 1* and *2*, the key factors which were identified to have a strong influence upon creating brand loyalty and brand equity were reported to be:

- The level of congruence between brand identity and brand image Geuens et al., 2009 and Srivastava (2011);
- The degree of trust which may be generated between a product's green claims and the consumer (Chen, 2010, Parker, 2009 and Maehle & Supphellen, 2011); and
- The credibility or trustworthiness which the consumer holds for the green claims (Delamus & Burbano, 2011).

Within *Chapter 2*, a gap was identified within the existing literature that whilst the personalities of brands had been researched in a wide array of sectors from Aakers work in 1997 to more recent work by Geuens et al. in 2009, it had not researched the personalities of brands with green credentials. Furthermore, whilst the congruence between brand image and brand identity had been researched by many (for example Srivastava, 2011; Nadan, 2005 and Chernatony, 1999), it had not previously focused on products within the green marketing space.

3.2 DEVELOPMENT OF RESEARCH PROPOSITIONS AND RESEARCH PROPOSITIONS

In order to address the gap within the existing body of knowledge in light of what were identified to be areas of key importance with regards to generating brand loyalty and brand equity, the six research propositions presented below were developed.

To evaluate the level of congruence between brand identity and brand image (Srivastava, 2011 and Geuens et al., 2009) and the impact which this congruence may have upon generating brand loyalty (Oliver, 1999) and brand equity (Stahl et al., 2012), the following two propositions are presented:

1. A greater congruence between a brand's identity and its image will generate increased positive brand loyalty; and
2. A greater congruence between a brand's identity and its image will generate increased positive brand equity.

To assess the impact which a consumer has in the believability of a products' green claims (Chang, 2011) and how this may impact upon the brand loyalty (Oliver, 1999) and brand equity (Stahl et al., 2012) generated, the following two propositions are presented:

1. The greater the believability a consumer has in a brand's green claim's; the greater the brand loyalty which will be generated; and
2. The greater the believability a consumer has in a brand's green claim's; the greater the brand equity which will be generated.

To evaluate the impact on generating brand loyalty (Oliver, 1999) and brand equity (Stahl et al., 2012) from a consumer's perception of the credibility (trustworthiness) of a product's green claims (Chen, 2010), the following two propositions are presented:

1. The greater the credibility (trustworthiness) a consumer has in a brand's green claims; the greater the brand loyalty which will be generated; and
2. The greater the credibility (trustworthiness) a consumer has in a brand's green claims; the greater the brand equity which will be generated.

4 METHODOLOGY AND DESIGN

4.1 INTRODUCTION

This chapter describes the research design and methodology which was selected to evaluate the congruence between brand image and brand identity within the green marketing space. Where limitations of the research design and methodology were identified, they are presented for discussion within *Section 4.13*.

4.2 RATIONALE FOR PROPOSED METHOD

From the literature reviewed within *Chapter 2*, a strong congruence between brand image and brand identity was reported to result in increased brand equity and loyalty. Furthermore, in the case of the green marketing sector, where the product is identified to have believable green claims and a high degree of credibility to these claims, increased brand equity and loyalty were also reported to follow.

This research aims to critically evaluate the congruence between brand image and brand identity within the green marketing space. Due to the numerous different markets within which green marketing plays an important role, this research will focus specifically upon household cleaning products which are identified to have green credentials as of all the product classes which are identified to also have green credentials, the household cleaning product cleaning sector unlike eco-friendly cars or other high end goods, are products which are relatively affordable and purchased on a relatively frequent basis. Through a critical evaluation of the congruence between brand image and brand identity, the key elements relating to brand loyalty and brand equity maximisation are aimed to be found.

4.3 BRAND PERSONALITY

As the business case for establishing positive alignment between brand image and brand identity was presented within *Chapter 2*, the brand's personality and the equity and loyalty generated was evaluated with the aim of establishing whether there was indeed a correlation between a strong brand image / brand identity congruence and a resultant increase in brand equity and / or loyalty for the products within this sector.

4.3.1 Brand Personality Scale

From the articles and information reviewed on personality scales within *Chapter 2*, it was identified that since Aaker's seminal work of 1997, a concerted effort has been made to characterise a brand's personality more accurately and more quickly during an interview process (Geuens et al., 2009).

In seeking to characterise a brand's personality more accurately, Geuens et al. focused their efforts on eliminating factors relating to non-personality traits. The number of factors used to characterise a brand were sought to be reduced by Geuens et al. (2009) in order that its characterisation may be more quickly obtained.

The research published by Geuens et al. (2009) claimed that the scale they developed was indeed able to effectively characterise a brand's personality across a wide range of product classes. For example, in their study, banks, cars, mobile phones, politicians and some twenty other categories were assessed.

In light of the positive findings from the research conducted recently by Alpatova & Dall'Olmo Riley in 2011 when assessing Geuens et al.'s new brand personality measure as presented within *Chapter 2* and their statement that "Geuens et al.'s measure can be successfully adopted for use in the marketing practice. Furthermore, its application may improve the quality and efficiency of personality research in strategic brand management" (Alpatova & Dall'Olmo Riley, 2011, p. 5), it is this scale which will be utilised to characterise the personality of Pick 'n Pay's Green Line for this research.

4.3.2 Brand Loyalty Scale

In 2004, a scale to measure brand loyalty was proposed by Harris and Goode (in Bruner, 2009). Whilst the scale was initially developed to assess brand loyalty amongst online stores, it was reported to be acceptable for use in other areas also.

4.3.3 Brand Equity Scale

The brand equity scale was first proposed by Yoo, Donthu, and Lee in 2000 where a total of 18 items were utilised. One of the conclusions of their research was that 14 of the items "did not significantly contribute to the scale's reliability" (from Yoo, Donthu, and Lee, 2000 in Bruner, 2009, p. 264) and so were not further utilised. It is the four

items which were identified to contribute to the scale's reliability which were used within this research.

4.4 RESEARCH DESIGN

The research design of this investigation was descriptive. Through the use of Geuens et al.'s modified brand personality scale which was proposed in 2009, the congruence between the personality of the brand image and brand identity of the Pick 'n Pay Green Line was critically evaluated.

The personality scales presented within *Chapter 2* were utilised in the form of a questionnaire to generate primary data.

4.5 RESEARCH METHODOLOGY

Zigmund (2003) and Saunders and Lewis (2012) broadly define research which is undertaken to clarify and characterise the nature of a problem as exploratory research. A problem identified previously by Srivastava (2011) and Nandan (2005) was that as brand identity and brand image are essential components of strong brands, when they are not sufficiently aligned, a strong brand will not be formed and worse, a reduction in brand equity and loyalty may occur. As this research sought to clarify and characterise this, it was deemed to be exploratory in its nature.

4.6 SAMPLE COLLECTION METHOD

A wide variety of sample collection methods are identified by Zikmund (2003) to collect primary data. The interview based survey method specifically was identified to provide a "quick, inexpensive, efficient and accurate means of assessing information about the population" (Zikmund, 2003, p. 175). Because it was identified by Zikmund (2003) to be quick, inexpensive, efficient and accurate, the interview survey method was employed to collect the data required for this research.

The methodology selected for this research was identified to have been used by Cian (2011) when themes regarding both brand image and brand identity were explored. When conducting that research, Cian approached the data collection for brand image and brand identity also utilising the interview survey method.

In addition, when researching a brand's identity Srivastava (2011) conducted a number of in-depth interviews with the respective brand managers over the course of a number of weeks. This enabled a deep understanding of the aims and values which the company held for the brand to be gained. When evaluating the brand's image, Srivastava (2011) interviewed 1,000 customers utilising a simple questionnaire structured around the Likeart method for rating and quantifying responses.

Due to the successful nature of Srivastava (2011) and Cian's (2011) research and given the similarity in objectives between those and that of the author's, a similar methodology was employed.

4.7 PROPOSED RESEARCH PROCESS

As outlined, the research process which was utilised to gather information on the brand's image and its identity were similar in that both revolved around the interview format however, the implementation differed slightly. These two structurally different approaches are presented within *Section 4.7.1* and *4.7.2*.

4.7.1 Brand Image Research Process

The brand image was characterised by interviewing one hundred shoppers at Pick 'n Pay's on Nicol store in Bryanston, Johannesburg, South Africa as detailed within *Section 4.8*.

4.7.2 Brand Identity Research Process

Research conducted by Balmer (2012) into corporate brand alignment identified that within the product brand sector, the overall management responsibility and functional responsibility for a brand was discharged by the brand manager and marketing department respectively. The Author contacted Pick 'n Pay directly in order to determine who the brand manager was and who within their marketing department would be the most relevant point of contact.

Upon gaining confirmation that the brand manager and marketing department were indeed responsible for the management and functional responsibilities respectively, correspondence was commenced with them. Again, this was all conducted by the

Author to ensure continuity where possible throughout. The structure and questions posed to the brand manager are presented within *Table 4.1*, *Table 4.2* and *Table 4.3*.

4.7.3 Sample Collection Methodology

The sample collection method which was utilised to gather the data required to critically evaluate the research propositions presented within *Chapter 3* was the Likert scale which is identified by Zikmund (2003) to be qualitative in its approach. This method was applied to both the brand manager and the consumer. For the purposes of this explanation, ‘interviewee’ will be used to represent both the brand manager and the consumer. The methods which were used are presented within *Section 4.8.4*.

4.7.4 Sample Collection Instruments

Firstly, to evaluate the congruence between the reliability or trustworthiness of the product’s claims, the credibility (trustworthiness) scale as presented within Bruner’s Marketing Scales Handbook was employed (Bruner, 2009). This scale was selected as it was reported to have a reliability or internal consistency measured using Chronbach’s Alpha (α) which ranged between $\alpha = 0.71$ (Lohse & Rosen 2001 in Bruner, 2009) and $\alpha = 0.95$ (Till & Busler 2000 in Bruner, 2009). Internal consistency ratings at this level are identified by George and Mallery (2003) to be “acceptable” and “excellent” respectively (p. 231).

The scale is presented is presented as *Table 4.1*.

Table 4.1 The Scale Selected to Assess the Credibility (Trustworthiness) of the Product’s Claims

Are the claims made this product...	1	2	3	4	5
...sincere?					
...dependable?					
...credible?					
...not biased?					
...believable?					
...untruthful?					
...convincing?					
...not at all expert?					
...true?					
1 = Strongly disagree, 2 = disagree, 3 = undecided, 4 = agree, 5 = strongly agree					

(Bruner, 2009, p. 372)

Secondly, the product's green claims were evaluated utilising questions developed by Chang (2011, p. 22) which are presented within *Table 4.2*. This combination of questions was reported to enable the effective measurement of the construct (green claims) and the internal consistency for the previous study was reported with a high α of 0.81 which is identified by George and Mallery (2003) to be "good" (p. 231).

Table 4.2 The Scale Selected to Assess the Green Claims of the Product

The green claims are...	1	2	3	4	5
... not believable?					
... exaggerated?					
... misleading?					
... real?					

1 = Strongly disagree, 2 = disagree, 3 = undecided, 4 = agree, 5 = strongly agree
 (Chang, 2012, p. 22)

Thirdly, to evaluate the personality of the product, the scale developed and utilised by Geuens et al. (2009) was employed. Geuens et al. reported that the scale they developed had a "high test-retest reliability and cross-cultural validity in the United States and nine other European countries" Geuens et al. (2009, p. 97) and was reported to have varying degrees of reliability depending upon the factor being measured which ranged between $\alpha = 0.616$ and $\alpha = 0.848$. Internal consistency ratings at this level are identified by George and Mallery (2003, p. 231) to be "questionable" and "good" respectively.

This scale was selected over that proposed earlier by Aaker (1997) following the review of literature presented within *Chapter 2* by Alpatova & Dall'Olmo Riley in 2011. Alpatova & Dall'Olmo Riley (2011) subjected the scale created by Aaker (2009) and Geuens et al. (2009) to a critical evaluation and found "support [for] Geuens et al.'s proposition of their measure's superiority over its earlier alternative [Aaker's of 1997]" in that "Geuens et al. demonstrated the appropriateness and reliability of their own scale for between brand and between-respondent within-category comparisons", (Alpatova & Dall'Olmo Riley, 2011, p. 1).

These findings by Alpatova & Dall'Olmo Riley (2011) are important for this research as it is "between brand and between-respondent within-category comparisons" (p. 1) which will be made by the shoppers when they are characterising the brand's personality.

Following the successful outcome from this critical evaluation, Geuens et al.'s scale was recently reported to have been used successfully by Goldsmith and Goldsmith in 2012. The questions taken from Geuens et al.'s scale to assess the brand's personality are presented within *Table 4.3*.

Table 4.3 The Scale Selected to Assess the Brand's Personality

The product is...	1	2	3	4	5
...down-to-earth?					
...responsible?					
...stable?					
...consistent?					
...reliable?					
...trustworthy?					
...steady?					
...rational?					
...honest?					
...genuine?					

1 = very un-characteristic, 2 = un-characteristic, 3 = undecided, 4 = characteristic, 5 = very characteristic

(Geuens et al., 2009, p. 101)

Fourthly, to evaluate the level of brand equity generated, a brand equity scale sourced from the Bruner's Marketing Scales Handbook was employed (Bruner, 2009) as presented within *Table 4.4*. The reliability of the scale was identified to have a high α of 0.93 by Yoo, Donthu, and Lee (2000) within Bruner (2009). An internal consistency at this level is identified by George and Mallery (2003, p. 231) to be "excellent".

Table 4.4 The Scale Selected to Assess the Brand Equity Generated

	1	2	3	4	5
It makes sense to buy _____ instead of any other brand, even if they are the same. Even if another brand has the same features as _____, I would prefer to buy _____.					
If there is another brand as good as _____, I prefer to buy _____.					
If another brand is not different from _____ in any way, it seems smarter to purchase _____.					

1 = Strongly disagree, 2 = disagree, 3 = undecided, 4 = agree, 5 = strongly agree

(Bruner, 2009, p. 264)

Finally, to evaluate the level of brand loyalty for the product, a brand loyalty scale as detailed within Bruner's Marketing Scales Handbook and presented within *Table 4.5*

was utilised (Bruner, 2009). The reliability of the scale was reported to vary between $\alpha = 0.74$ and $\alpha = 0.78$ in two studies conducted by Harris and Goode in 2004 (in Bruner, 2009). Internal consistency ratings at these levels are identified by George and Mallery (2003, p. 231) to be “acceptable”.

Table 4.5 The Scale Selected to Assess the Brand Equity Generated

	1	2	3	4	5
I would always continue to choose _____ before others.					
I will always continue to choose the features of _____ before others.					
I would always continue to favour the offerings of _____ before others.					
I will always choose to use _____ in preference to competitor firms.					

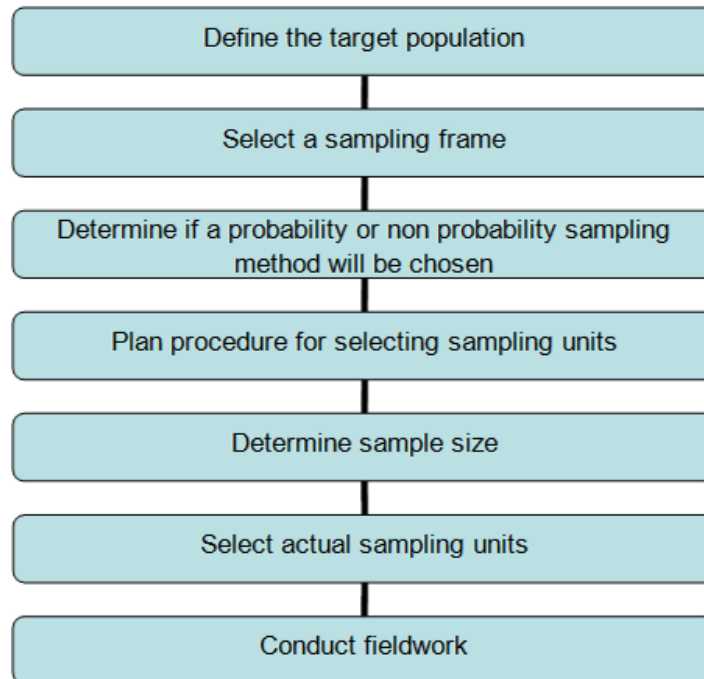
1 = Strongly disagree, 2 = disagree, 3 = undecided, 4 = agree, 5 = strongly agree

(Bruner, 2009, p. 593)

4.8 SAMPLE SELECTION

Zikmund (2003) identifies seven stages in the selection of a sample as presented within *Figure 4.1*. This methodology was utilised by the Author as presented within *Sections 4.8.1 to 4.8.6* to select the sample.

Figure 4.1 The Seven Stages in the Selection of a Sample



(Zikmund, 2003, p. 372)

4.8.1 Define the Target Population

The target population was defined as current or potential purchasers of household cleaning products with green credentials.

4.8.2 Select a Sampling Frame

A sample frame is defined by Zikmund to be a “list of elements from which the sample may be drawn” (Zikmund, 2003, p. 373). For the purposes of this research, the elements which will comprise the brand’s sample frame were as follows:

- The brand must be readily available within South Africa;
- The brand must be well known; and
- The brand must have green credentials which are either commonly associated with the brand or have been advertised as such.

As it met with all these elements, Pick ‘n Pay’s Green Line was selected to be the specific brand which was researched.

The elements which were selected to comprise the sample frame for the consumer were as follows:

- The consumer must be present within South Africa at the time of the research being conducted; and
- The consumer must be a frequent or infrequent purchaser of products within this class.

Sampling Frame Error

It is possible for a sampling frame error to occur when “certain sample elements are excluded or when the entire population is not accurately represented in the sampling frame” (Zikmund, 2003, p. 375).

Whilst this research focused upon Pick ‘n Pay’s Green Line, a number of other products which meet the criteria presented by the Researcher above also exist and are stocked by some of the non Pick ‘n Pay retail outlets within South Africa. Due to the constraints posed by the scope of this research, these products weren’t actively identified nor were they researched which may likely have introduced a degree of sampling error.

In defining the sample frame for the consumer by the particular elements listed within *Section 4.7.2*, every attempt has been made not to exclude any sector of the population. However, by virtue of the fact that only approximately 7.7% of South African’s population lives within Johannesburg (Statistics South Africa, 2012) (the location where the research was conducted) and due to South Africa’s imbalanced social structure where approximately 60% of people are not able to shop for the products being researched, a significant sector of the population was excluded.

4.8.3 Determine if a Probability or Non Probability Sampling Method will be Chosen

Zikmund (2003) identifies a number of sample selection methodologies which may be suited to a range of different purposes. For this research, quota sampling was utilised to extract a sample from the brand’s sample frame.

Quota sampling is a form of non-probability sampling which guarantees the selected sample contains attributes which are chosen by the researcher (Saunders & Lewis, 2012).

The sample selection which was employed to extract a sample from the consumer's sample frame was conducted utilising simple random quota sampling. The methodology utilised to select the shoppers is presented within *Section 4.8.4*.

Advantages and Disadvantage of Non-probability Quota Sampling

One of the advantages of non-probability quota sampling is identified by Zikmund (2003) as the introduction of some population stratification and the absence of any population list requirement. This advantage was certainly beneficial to the research as accessing a current and accurate population list would be impractical for the purposes of the research and through stratifying the population, a more targeted sector who are likely to be current or potential purchasers of the brand being studied was likely to be gained.

However, a number of disadvantages are also identified which were reported as follows:

1. The introduction of bias within the classification of the researcher's subjects;
2. Error from the population may not be estimated due to non-random selection; and
3. Data projection outside the sample is unsuitable.

Zikmund (2003)

4.8.4 Plan Procedure for Selecting Sampling Units

In order to select shoppers at the identified Supermarket, the following procedure for randomly selecting each shopper to be interviewed was employed:

1. The consumers were identified at random from persons frequenting a branch of South Africa's Pick 'n Pay super market utilising a list of randomly generated numbers from 1 to 5 by means of Microsoft Excel's random number generator function;
2. Prior to requesting the first interview, the Author identified the first randomly selected number (which was number 3);
3. The Author then counted off that number of shoppers before asking the third whether they would like to participate in the study;
4. If they accepted, they were interviewed and the process of counting down to the next consumer to be questioned was conducted; and

5. If the consumer declined to be interviewed, the author repeated the process until 100 consumers had been interviewed.

The questionnaire utilised is presented as *Appendix A*.

Selecting Pick 'n Pay as the location to conduct the interviews at effectively ensured a large volume of potential interviewees. The consumers were accessed within the aisle where Pick 'n Pay's Green Line was on sale as were many other household cleaning products.

4.8.5 Determine Sample Size

In order to estimate the sample size, Zikmund (2003) states that the Researcher must:

1. "Estimate the standard deviation of the population;
2. Make a judgement about the acceptable magnitude of error; and
3. Determine a confidence level".

(Zikmund, 2003, p. 425)

The practicalities of conducting research on this scale and with no data relating to the standard deviation of the shopper population prior to conducting research were such that it was not possible to follow Zikmund's prescribed methodology for determining the sample size. Instead, to ensure that a statistically significant sample size was selected the figure of one hundred shoppers was set as this provided a population three times greater than that required for a statistically significant population for statistics to be conducted on (Zikmund, 2003).

4.8.6 Select Actual Sampling Units

The sample unit will be the individual shopper questioned as to their views on the brand's personality, its green claims and their view of the green claims' credibility (trustworthiness) as presented within Chapter 3.

4.9 UNIVERSE / POPULATION

The universe is that of brands which are readily available within South Africa and have green credentials.

4.10 RELIABILITY OF DATA

It was identified that it is important for the researcher to be aware of the reliability between the different items on a scale from which inferences may subsequently be drawn (Hair, Black, Babin & Anderson, 2010). The reliability between different items on a scale may be effectively measured by performing a Cronbach's Alpha test. The output from this test provides a value which relates to the internal consistency (reliability) of the items assessed. The formula for calculating the Cronbach's Alpha for two or more elements within a construct is presented as *Figure 4.2*.

Figure 4.2 Formula for Calculating Cronbach's Alpha

$$\alpha = \frac{K\bar{c}}{(\bar{v} + (K - 1)\bar{c})}$$

Where:

' α ' = Cronbach's Alpha;

K = number of components (K-items or testlets)

\bar{v} = the average variance; and

\bar{c} = the average of all covariances between the components across the current sample of persons.

From calculating a Cronbach's Alpha using the formula presented in *Figure 4.2*, a value between 0 and 1 is generated. The reliability of the Cronbach's Alpha output is characterised as ranging from excellent ($\alpha \geq 0.9$) to unacceptable ($0.5 > \alpha$) as presented within *Table 4.6*.

Table 4.6 Chronbach's Alpha Values and Respective Internal Consistency Rating

Cronbach's Alpha	Internal consistency
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

(George & Mallery, 2003, p. 231)

In order to measure the reliability of the data generated, the Cronbach's Alpha values were calculated utilising the formula presented within *Figure 4.2* with each value then reviewed for its reliability utilising the reliability scale presented within *Table 4.6*.

4.11 BIAS

The potential for sampling bias to manifest itself and affect the outcome of each proposition which was evaluated due to the sample collection methods proposed were identified and are presented as follows:

Firstly, when evaluating the product's green claims a positive or negative prior association with the brand on the part of the consumer for reasons not related to the product's green claims may result in bias (Zikmund (2003) and Saunders and Lewis (2012)).

Secondly, through sampling the customers frequenting Pick 'n Pay only was not identified as representative of the shopper population within South Africa as outlined within *Section 4.2*.

Finally, in addition to these two areas for potential bias, the research presented by Avis (2011) identifies three key areas for potential bias when utilising factor based brand personality models. These were identified to be:

1. The category confusion problem;
2. The domain adjustment problem; and
3. The descriptor selection problem.

4.12 METHOD'S EMPLOYED TO REDUCE IDENTIFIED BIAS

In order to address the potential sources of sampling bias identified, the following actions were employed:

Firstly, to address a consumer's preconceived positive or negative views regarding the attributes of a product other than that within Pick 'n Pay's Green Line, when questioned, the consumer was asked to focus solely on the Green Line and the specific

claims made by it or the credentials of these green claims and were requested not to let prior conceptions cloud their assessment.

Whilst some bias could be perceived to be introduced by interviewing customers from a supermarket (in this instance Pick 'n Pay) as opposed to another outlet, by default it is these customers who are most likely to be purchasing this category of goods and therefore for the purposes of providing valid recommendations from an interpretation of the results, it was not considered to be problematic.

Secondly, in order to reduce the bias imposed through the use of a factor based brand personality model as proposed by Avis (2011) the following was undertaken:

1. To mitigate the *category confusion problem*, the interviewee was requested to provide answers which related specifically to the product and not the category within which the product lay;
2. To mitigate the *domain adjustment problem*, only one category was evaluated (household cleaning products with green credentials) so that no adjustments between domains had to be made by the interviewee thus preventing problems of adjustment between domains; and
3. To mitigate the *descriptor selection problem*, the brand personality scale which was used was taken from that proposed by Geuens et al. (2009) and was optimised for its use in evaluating products with green credentials through selecting the most applicable traits and factors which (in line with the literature reviewed) sought to evaluate products with green credentials.

4.13 RESEARCH LIMITATIONS

A number of limitations were identified with regards to the research design and the methodology employed. The three primary limitations may be summarised as follows:

Firstly, due to the practical time constraints involved with research of this nature, as a finite number of interviews could be conducted with brand managers' the resultant number of brands researched had to be limited. Whilst this was ultimately limited to one (Pick 'n Pay's Green Line), the value of the data generated and the quality of the input from the brand manager provided a deep and rich qualitative and quantitative dataset with which to work.

Secondly, as Pick 'n Pay's Green Line is specific to the household cleaning sector it is possible that subtle or potentially stark differences may be observed were other product classes / categories to be studied.

Finally, being exploratory in its nature, this research aimed to provide a valuable insight into the evaluation of the congruence between brand image and brand identity within the green marketing space. However, due to its exploratory nature, it may not be practical to apply the findings which are specific to Pick 'n Pay's Green Line, directly to other products or categories.

An outline of the impacts which these limitations had upon the findings of the research is presented within *Chapter 6*.

5 RESULTS AND DESIGN

This Chapter presents the data which was collected in accordance with the methodology presented within *Chapter 4*. Within the first half of this chapter a factual presentation of the results from the interviews conducted with Pick 'n Pay's brand manager Kym Wright are presented together with an overview and summary of the results obtained from the consumers interviewed. These include consumer demographics such as sex and age and later a factual discussion regarding the responses to each of the constructs being assessed is presented.

Within the second section of this chapter from *Section 5.7* onwards, in order quantitatively evaluate the propositions stated within *Chapter 3*, a range of statistical tests such as the Spearman's Rho test for correlation and multiple linear regression were performed utilising the International Business Machines' (IBM) statistical software program "Statistical Packages for the Social Sciences" (SPSS) for later discussion within *Chapter 6*.

The results presented within this Chapter have been obtained from the data collected through interviewing Kym Wright, the Brand Manager for Pick 'n Pay's Green Line and through one hundred interviews conducted with shoppers at Pick 'n Pay's on Nicol store. The data collected from the brand manager and consumer interviews are presented as *Appendix B*.

5.1 PICK AND PAY'S GREEN LINE BRAND MANAGER

In a bid to identify the relevant parties within Pick 'n Pay, the Author contacted Neil Cook who is Pick 'n Pay's Corporate Brand Buyer. After a brief discussion, Neil proposed that Kym Wright was the most appropriate person to discuss Pick 'n Pay's Green Line with.

Kym has worked exclusively on Pick 'n Pay's Green Line for approximately one and a half years. As a result of Kym's work, she is well versed with the values of Pick 'n Pay as a whole and its Green Line specifically. These values equate to and constitute the brand's identity (Nadan, 2005).

Initial correspondence with Kym was conducted by electronic mail so a better understanding of the Green Line could be gained. Following receipt of Kym's responses to the interview questions and a review of these and those gained from the consumer interviews, an exploratory interview was arranged by the Author in a bid to interrogate and understand some of the key findings. The interview was conducted with Kym on 9 October 2012 at Pick 'n Pay's on Nicol branch and lasted for approximately one and a half hours. After receiving permission from Kym, the interview was recorded with a transcript presented as *Appendix C*. Following the interview's reproduction, it was reviewed by Kym and approved for publication as per the signed confirmation at the beginning of *Appendix C*.

5.2 CONSUMER'S INTERVIEWED

Over the course of a two week period in August 2012, approximately 400 shoppers were approached by the Author at Pick 'n Pay's on Nicol store and asked whether they would be willing to participate in the survey. Of the approximately 400 approached shoppers, one hundred agreed to be interviewed.

Following a review of the responses provided by the 100 shoppers, three provided a high non response rate to a variety of the constructs and so in line with best practice as identified by Hair et al. (2010), the responses for these shoppers were removed from the population reducing it to a total of 97. All data presented and discussed within this and the following chapters relates to the data generated by these 97 shoppers.

5.2.1 Consumer and Brand Manager Demographics - Age

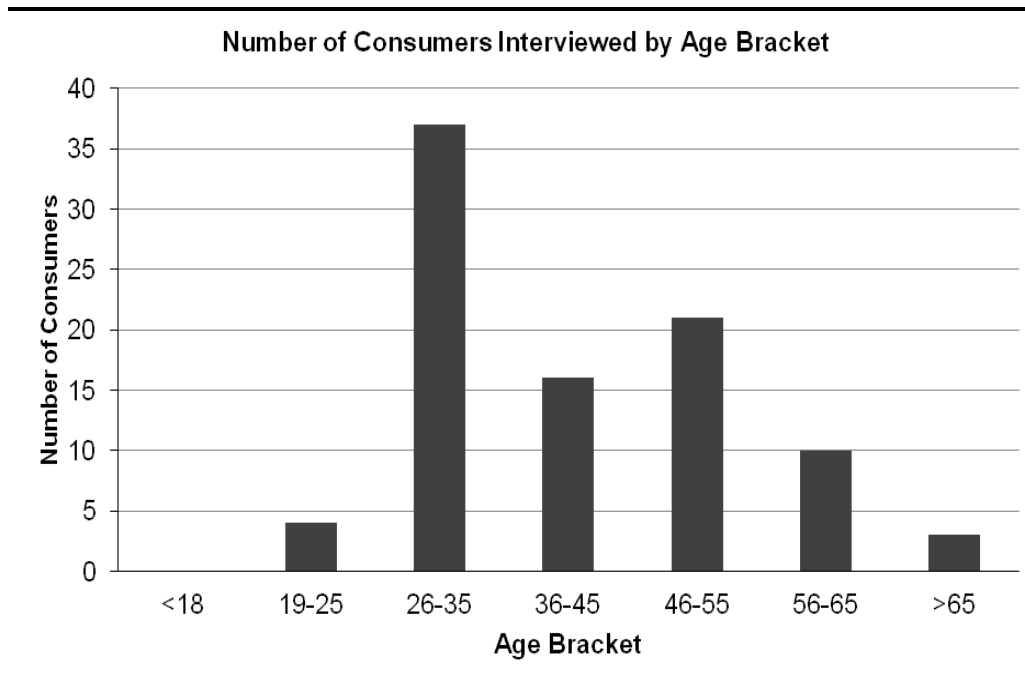
Consumers were asked to identify out of seven age brackets which ranged from less than 18 to over 65 years of age, which was applicable to them. *Table 5.1* and *Figure 5.1*, present the breakdown by age bracket of the consumers interviewed. Of the 97 consumers interviewed, six did not provide their age. Pick 'n Pay's brand manager Kym, recorded her age as being within the 36 – 45 year age bracket.

Table 5.1 Age Demographic of Consumers Interviewed

AGE	<18	19-25	26-35	36-45	46-55	56-65	>65	Total
Count	0	4	37	16	21	10	3	91
%	0	4	41	18	23	11	3	100

Note: not all respondents provided their age hence, the total count of respondents by age does not total 97

Figure 5.1 Age Demographic of all Consumers Interviewed

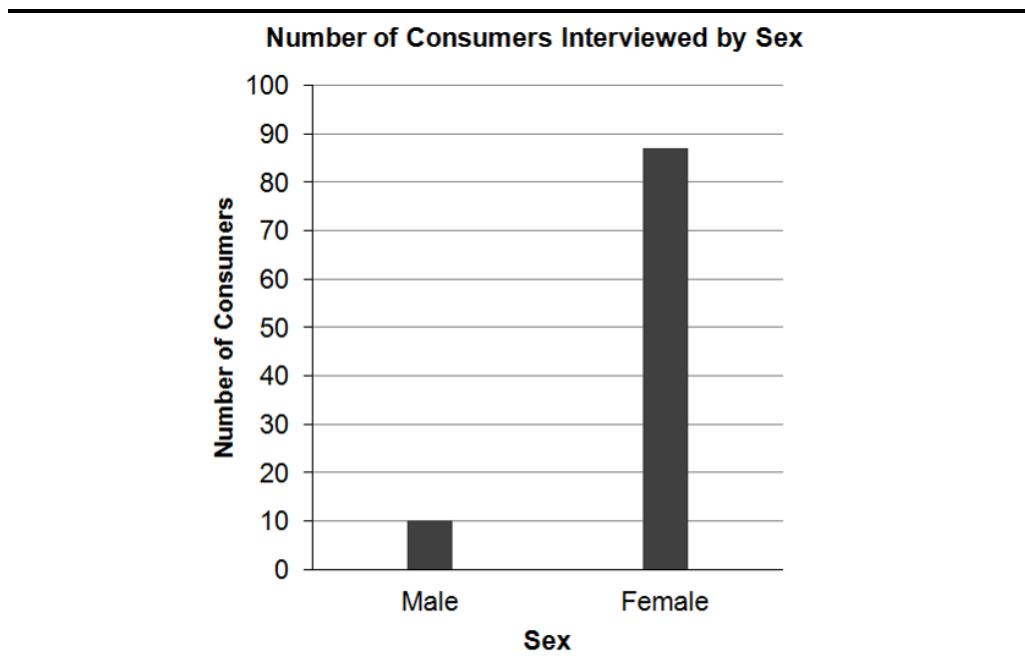


A review of the data presented within *Table 5.1* and *Figure 5.1* indicates that the mode average or majority of the respondents (41%) were aged within the 26-35 year age bracket with the second most populous group (23%) being within the 46-55 year age bracket. 80% of the population was between the ages of 26 and 55 (age brackets 26-35, 36-45 and 46-55). None of the respondents questioned were below 18 years of age.

5.2.2 Consumer and Brand Manager Demographics - Sex

Of the 97 consumers interviewed, 87 respondents were female and 10 were male as presented within *Figure 5.2*. Pick 'n Pay's brand manager Kym, is female.

Figure 5.2 Age Demographic of all Consumers Interviewed



5.3 PICK 'N PAY 'ON NICOL'

The Pick 'n Pay 'on Nicol' store is located within the suburb of Bryanston in Johannesburg, South Africa. The suburb of Bryanston is identified by the independent, country wide realtor Pam Golding Properties to be a wealthy and upper class suburb (Pam Golding Properties, 2012). From discussion with Kym Wright of Pick 'n Pay, the typical shopper at this branch is identified to be well off and upper class.

This store is identified by Pick 'n Pay to be their flagship green store (Pick 'n Pay, 2012) and was opened in October 2010. From discussion with Kym, the store has continued to thrive from the day of its opening to the present day.

5.4 PICK 'N PAY'S GREEN LINE

From information provided by Pick 'n Pay, sourced by the Author utilising the internet and from the interview with Kym, the following background information relating to Pick 'n Pay's Green Line was gained:

- Pick 'n Pay's Green Line has been sold by Pick 'n Pay through their Pick 'n Pay on Nicol store since 2010, for approximately two years;

- When the line was first introduced, 18 products were offered within the range which comprised a broad range of household cleaning products such as washing detergents and carpet cleaners. ;
- In 2011 the range was expanded to incorporate a more diverse range of household cleaning products totalling 26;
- The total sales revenue generated from the Green Line during the years following its introduction are presented within *Table 5.2*.

Table 5.2 Total Sales Revenue Generated by Pick ‘n Pay’s Green Line from its Introduction to Date

Year	Sales Revenue (Rand)
2010 ^a	8,111,267
2011 ^a	10,817,047
2012 ^b	11,955,869

a - Calendar year (January to December)
 b - January - August

5.4.1 Pick ‘n Pay’s Green Line Brand Personality, Green Claims and Green Claim Credibility (Trustworthiness)

The data for each of the three constructs; brand personality, green claims and green credibility (trustworthiness), were collected utilising the questions presented within *Chapter 4*. A copy of the questionnaire is presented as *Appendix A*. The data collected which relates to the Green Line’s brand personality, the green claims made by it and the credibility of its claims are presented within *Table 5.3*, *Table 5.4* and *Table 5.5* respectively.

Table 5.3 Brand Personality (Identity) of Pick ‘n Pay’s Green Line

Pick ‘n Pay’s Green Line is...	1	2	3	4	5
...down-to-earth				X	
...responsible					X
...stable				X	
...consistent				X	
...reliable					X
...trustworthy					X
...steady				X	
...rational				X	
...honest					X
...genuine					X

1 = very un-characteristic, 2 = un-characteristic, 3 = undecided, 4 = characteristic, 5 = very characteristic

Of the ten items, Pick 'n Pay identified that 'responsible, reliable, trustworthy, honest and genuine' were the items which it was 'very characteristic'.

Table 5.4 Assessment of Green Claims

The green claims are...	1	2	3	4	5
...not believable		X			
...exaggerated		X			
...misleading		X			
...are not real		X			

1 = Strongly disagree, 2 = disagree, 3 = undecided, 4 = agree, 5 = strongly agree

Within *Table 5.4*, the suggestion that the green claims may not be believable, exaggerated etc, is refuted with all of the claims being upheld.

The credibility of the green claims are presented within *Table 5.5*.

Table 5.5 Assessment of Credibility (Trustworthiness)

Are the claims made by Pick 'n Pay's Green Line...	1	2	3	4	5
...sincere?				X	
...dependable?				X	
...credible?				X	
...not biased?				X	
...believable?				X	
...untruthful?		X			
...convincing?				X	
...not at all expert?		X			
...true?				X	

1 = Strongly disagree, 2 = disagree, 3 = undecided, 4 = agree, 5 = strongly agree

5.5 INTERNAL CONSISTENCY

To determine the internal consistency within a construct which is measured utilising more than one question, a Chronbach's Alpha test may be conducted. A Chronbach's Alpha test evaluates the internal consistency between each of the responses for the construct (Zikmund, 2003). The Alpha (α) reported by the test may range from 0 to 1 with a lower value representing a lower degree of internal consistency.

Table 5.6 presents the commonly assigned ratings which relate to the Chronbach's Alpha outputs

Table 5.6 Chronbach’s Alpha Values and Respective Internal Consistency Rating

Cronbach’s Alpha	Internal consistency
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

(George & Mallery, 2003, p. 231).

The Chronbach’s Alpha for each of the five constructs (brand personality, green claims, credibility (trustworthiness), brand equity and brand loyalty) was calculated using SPSS with the results reported presented within *Table 5.7*.

Table 5.7 Chronbach’s Alpha Values by Construct

Construct	Cronbach’s Alpha	Internal consistency	Number of Items
Brand Personality	0.877	Good	10
Green Claims (all 4)	0.608	Questionable	4
Green Claims (3; 1x removed)	0.648	Questionable	3
Credibility (trustworthiness)	0.749	Acceptable	9
Brand Equity	0.753	Acceptable	5
Brand Loyalty	0.925	Excellent	4

The lowest Chronbach’s Alpha reported was 0.608 measuring the construct of green claims which is identified as “questionable” (George & Mallery, 2003, p. 231). Following the removal of one of the responses relating to the construct for green claims as is explained within *Section 5.6.2*, the Alpha was reported to improve to a level of 0.648 though was still identified to be “questionable” (George & Mallery, 2003, p. 231).

The Alpha’s reported for the remaining four constructs were reported between a level of 0.749 and 0.925 and were rated as either “acceptable”, “good” or “excellent” as presented within *Table 5.7*.

5.6 RESULTS – SHOPPER (BRAND IMAGE)

The data collected during the interviews with the shoppers at Pick ‘n Pay are presented by variable type and construct as outlined within *Table 5.8*.

Table 5.8 Independent and Dependent Variables

Section	Variable	Construct
5.6.1	Independent	Brand Personality
5.6.2		Green Claims
5.6.3		Credibility (trustworthiness)
5.6.4	Dependent	Brand Equity
5.6.5		Brand Loyalty

5.6.1 Brand Personality

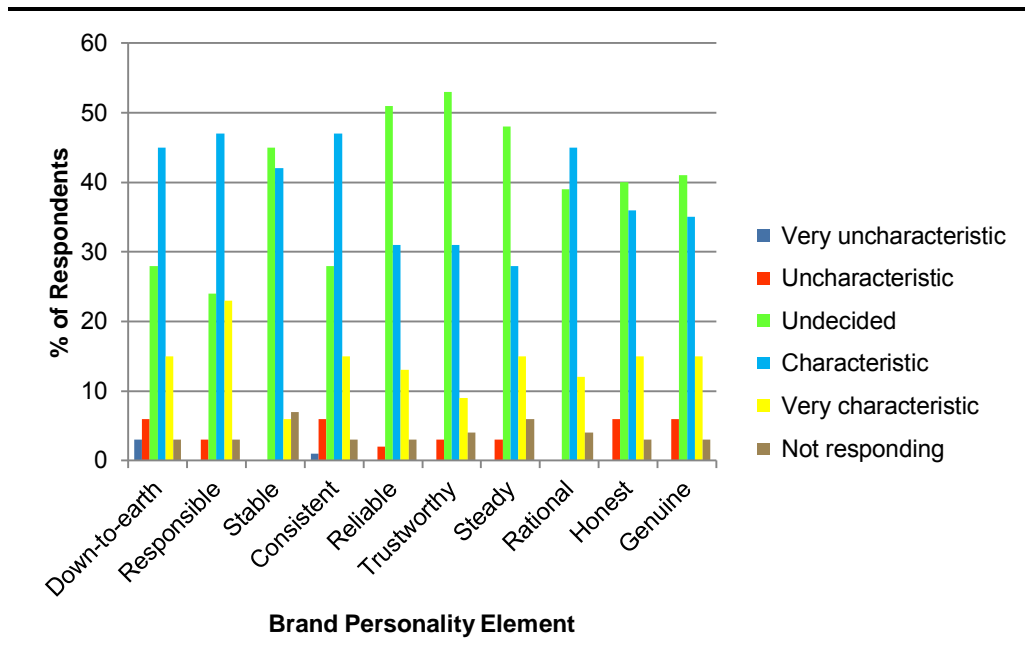
The internal consistency of the responses assessing the brand personality of Pick ‘n Pay’s Green Line was reported with a Cronbach’s Alpha of 0.877 which identifies the degree of internal consistency representing the construct to be “good” (George & Mallery, 2003, p. 231). The questions selected to assess brand personality were sourced from two previous studies where this combination of questions had not previously been used together.

Whilst no direct comparison may be made between the collective quality of these questions’ ability to assess the green credentials of a brand’s personality, the two previous studies utilised to source questions to assess the green credentials of the brand’s personality in this instance were reported with Chronbach’s Alphas of 0.93 (in the case of Aaker’s 1997 research) and those which ranged between 0.613 and 0.753 in the case of the research published by Geuens et al. (2009).

Whilst the Chronbach’s Alpha reported by Aaker is significantly higher than that identified in this research, in light of the similar degrees of internal consistency reported between those reported by Geuens et al. (2009) and the fact that internal consistency for this collection of questions was rated as being “good” it is proposed that these questions may be effectively utilised to measure the green elements of a brand’s personality.

The results from the interviews conducted are presented within *Figure 5.3*.

Figure 5.3 Assessment of Brand Personality



Whilst the majority of respondents did identify the majority of items to be applicable to the brand’s personality, each of the items elicited large proportions on each occasion which were undecided. This was especially the case for the elements of reliability and trustworthiness. As presented within *Figure 5.3*, the number of respondents selecting not decided, ranged from between 24% to 28% for down-to-earth, responsibility, consistency, steadiness, irrationalness and genuineness to its stability and honesty (45%) and its reliability (51%) and trustworthiness (53%).

Neither of the 10 items generated any significantly polarised views. The highest percentage of respondents identifying an item to be strongly uncharacteristic of the brand was 3% for both down-to-earth and steadiness.

In adding together the percentage of respondents who identified the various items to be characteristic or strongly characteristic of the brand, responsibility (70%), consistency (62%) and down-to-earthiness (60%) were identified to be most aligned to it.

5.6.2 Green Claims

The internal consistency of the responses assessing the green claims associated with Pick ‘n Pay’s Green Line was reported with a Cronbach’s Alpha of 0.608 which

identifies the degree of internal consistency representing the construct as being “questionable” (George & Mallery, 2003, p. 231).

When the shoppers were questioned as to their perception of the Green Line’s green claims, the majority of respondents identified that the claims were believable, not exaggerated, not misleading and were real as presented within *Table 5.9*.

Table 5.9 Assessment of Green Claims

The green claims are...	% Responding					No answer
	1	2	3	4	5	
...not believable	14	55	22	6	0	3
...exaggerated	7	47	28	9	2	7
...misleading	7	59	27	1	2	4
...are real	4	44	43	2	1	6

1 = Strongly disagree, 2 = disagree, 3 = undecided, 4 = agree, 5 = strongly agree

An observation was that the majority of the shoppers interviewed when responding to these questions picked up one of the products and read the detailed information relating to the product on its reverse which typically contained one or more of the following pieces of information (as presented upon Pick ‘n Pay’s website):

- “Once used, the contents will biodegrade;
- Non-toxic to humans, animals, plants and aquatic life;
- Contains no sodium lauryl sulphate, ammonia or chlorine;
- Contains no volatile organic compounds (VOCs);
- Non-corrosive; and
- Recyclable packaging”.

(Pick ‘n Pay, 2012)

Between 22% and 27% of respondents neither agreed nor disagreed that the green claims were not believable, exaggerated or misleading. However, 43% responded that they neither agreed nor disagreed that the green claims were real. The significant increase in number not providing an opinion as to their acceptance or rejection of this statement is surprising given their responses to the previous three statements.

Three of the four statements (the three which generated the highest agreement with the validity of the green claims) were phrased in the negative. Interestingly, as presented within *Table 5.9*, these three statements generated a greater degree of

disagreement (indicating that the green claims were identified to be believable / not exaggerated and not misleading) as opposed to the final statement relating to the green claims which presented that they are 'real'.

It is perhaps likely that the positive structuring of the question confused a number of the respondents and resulted in them selecting neither agree nor disagree so they wouldn't have to answer one way or the other. Certainly, a number of the shoppers sought to confirm the meaning of this question before they answered.

In light of the observed confusion caused to some of the respondents, the internal consistency of the responses was recalculated omitting the data representing the 'realness' of the claims to determine to what degree this may have impacted upon the assessment of the construct. The internal consistency was subsequently reported with a Cronbach's Alpha of 0.648 which whilst still being classified as "questionable" (George & Mallery, 2003, p. 231) increased and does acknowledge the confusion encountered surrounding it. The absence of a stronger congruence between these statements will be explored in more detail within *Chapter 6*.

5.6.3 Credibility (trustworthiness)

The internal consistency of the responses assessing the credibility (trustworthiness) of Pick 'n Pay's Green Line was reported with a Cronbach's Alpha of 0.749 which identifies the degree of internal consistency representing the construct to be "acceptable" (George & Mallery, 2003, p. 231).

As presented within *Table 5.10*, the credibility or trustworthiness of Pick 'n Pay's Green Line was identified by the majority of respondents to be sincere (68%) and believable (73%).

Table 5.10 Assessment of Credibility (Trustworthiness)

Are the claims made by Pick 'n Pay's Green Line...	% Responding					
	1	2	3	4	5	not responding
...sincere?	1	4	24	60	8	3
...dependable?	0	7	28	52	7	6
...credible?	1	5	37	48	5	4
...not biased?	6	13	35	30	6	10
...believable?	0	3	12	60	13	12
...untruthful?	0	3	39	40	13	5
...convincing?	1	15	20	52	5	7
...not at all expert?	4	11	35	38	9	3
...true?	1	0	47	43	4	5

1 = Strongly disagree, 2 = disagree, 3 = undecided, 4 = agree, 5 = strongly agree

The dependability, credibility, truthfulness and convincingness of the claims were all identified with over half of the respondents agreeing or strongly agreeing. Interestingly less than half the respondents identified the claims not to be biased (36%) with the majority identifying them either to be biased (19%) or undecided (35%).

This response will be explored in detail within *Chapter 6* in a bid to identify whether these responses are perhaps representative of some lack of empathy towards green products per se. Perhaps tellingly, whilst 47% of the respondents agreed with the truth of the claims, 47% neither agreed nor disagreed with the statement, with 1% strongly disagreeing.

5.6.4 Brand Equity

The internal consistency of the responses assessing the brand equity generated by Pick 'n Pay's Green Line was reported with a Cronbach's Alpha of 0.753 which identifies the degree of internal consistency representing the construct to be "acceptable" (George & Mallery, 2003, p. 231).

As presented within *Table 5.11*, the levels of brand equity which would appear to have been generated within the respondent group do not appear to be particularly significant for only marginally more respondents identified that if another brand is not different from Pick 'n Pay's Green Line in any way; "it seems smarter to purchase Pick 'n Pay's Green Line".

The majority of respondents either disagreed or strongly disagreed (25% - 28%) or were ambivalent (24% - 44%) that it either:

- Makes sense to buy Pick 'n Pay's Green Line instead of any other brand, even if they are the same; or
- Even if another brand has the same features as Pick 'n Pay's Green Line I would prefer to buy Pick 'n Pay's Green Line; or
- If there is another brand as good as Pick 'n Pay's Green Line, I prefer to buy Pick 'n Pay's Green Line.

Table 5.11 Assessment of Brand Equity

	% Responding					No response
	1	2	3	4	5	
It makes sense to buy Pick 'n Pay's Green Line instead of any other brand, even if they are the same.	3	22	25	40	5	5
Even if another brand has the same features as Pick 'n Pay's Green Line I would prefer to buy Pick 'n Pay's Green Line.	5	23	30	33	4	5
If there is another brand as good as Pick 'n Pay's Green Line, I prefer to buy Pick 'n Pay's Green Line.	4	21	44	22	6	3
If another brand is not different from Pick 'n Pay's Green Line in any way, it seems smarter to purchase Pick 'n Pay's Green Line.	2	20	24	46	4	4
Average	4	22	31	35	5	4

1 = Strongly disagree, 2 = disagree, 3 = undecided, 4 = agree, 5 = strongly agree

5.6.5 Brand Loyalty

The internal consistency of the responses assessing the level of brand loyalty developed by Pick 'n Pay's Green Line was reported with a Cronbach's Alpha of 0.925 which identifies the degree of internal consistency representing the construct to be "excellent" (George & Mallery, 2003, p. 231).

Table 5.12 presents the responses evaluating the loyalty generated by Pick 'n Pay's Green Line.

Table 5.12 Assessment of the Brand Loyalty developed by Pick ‘n Pay’s Green Line

I would always continue to choose...	% Responding					No response
	1	2	3	4	5	
...Pick ‘n Pay’s Green Line before others.	5	25	37	21	8	4
...the features of Pick ‘n Pay’s Green Line before others.	3	29	36	22	6	4
...the offerings of Pick ‘n Pay’s Green Line before others.	5	27	32	24	6	6
...to use Pick ‘n Pay’s Green Line in preference to competitor firms.	8	23	38	23	4	4
Average of all elements	5	26	36	23	6	5

1 = Strongly disagree, 2 = disagree, 3 = undecided, 4 = agree, 5 = strongly agree

As presented within *Table 5.12*, whilst a level of brand loyalty has been developed by Pick ‘n Pay’s Green Line, only 29% of the respondents would choose to purchase one of the line’s products over its competitors with the majority on each occasion either identifying that they were ambivalent or would not purchase one of the products from Pick ‘n Pay’s Green Line.

Whilst the majority of respondents do not identify that they would purchase the product, in the context of a product category where approximately 20 alternatives are offered at similar price points, the level of respondents confirming that they would purchase the product could be interpreted as high.

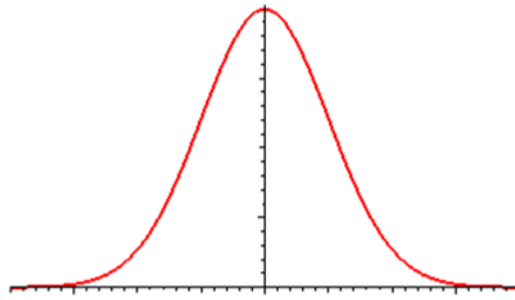
The key reasons for the levels of brand equity which are reported to have been developed will be discussed in more detail within *Section 6.4* together with the response provided by Kym Wright, Pick ‘n Pay’s Green Line brand manager.

5.7 DESCRIPTIVE STATISTICS

This section presents a range of descriptive statistics which have been selected specifically to enable the propositions presented within *Chapter 3* to be critically evaluated. The descriptive statistics which were utilised are presented as follows:

- *Normality* – to determine whether the dataset was normally distributed (essentially whether it followed a bell curve distribution as presented within *Figure 5.4*) so that the most appropriate statistical tests for correlation may be determined;

Figure 5.4 Example of a Normally Distributed Population



- *One sample T-Test* – to allow an assessment of the congruity between views of the brand manager (brand identity) and the consumer's questioned (brand image) regarding the brand's personality;
- *Spearman's Rho test of correlation* – to assess the strength of the correlation between the dependent variables (brand loyalty and brand equity) against the independent variables (green claims and the brand's credibility (trustworthiness)); and
- *Multiple linear regression* – to attempt to assess the degree of a relationship between either of the two explanatory variables being green claims and the brand's credibility (trustworthiness) and the dependent variables brand loyalty and brand equity.

5.7.1 Assessment of Normality by Construct Utilising a Kolmogorov-Smirnov Test

A Kolmogorov-Smirnov test to determine whether the data were normally distributed for each of the independent and dependent variables presented within *Table 5.13* was conducted to assist in selecting the most suitable statistical method for evaluating the correlation between the independent and dependent variables.

Table 5.13 Kolmogorov-Smirnov Test for Normality

	Kolmogorov-Smirnov ^a		
	Statistic	df	Sig.
Average of Green Claims	0.172	97	0.000
Average of Credibility	0.125	97	0.001
Average of Brand Equity	0.098	97	0.023
Average of Brand Loyalty	0.147	97	0.000

a. Lilliefors Significance Correction

Pallant (2005) identifies that should a significance level be reported below 0.05, assumptions regarding normality may not be made relating to the population. As presented within *Table 5.13*, the significance levels were all reported below the threshold of 0.05 indicating that the data for each of the constructs is not normally distributed.

5.7.2 Assessment of Statistical Difference Between Brand Identity and Brand Image Utilising a One Sample T-Test by Construct

As outlined within *Chapter 4*, a one sample T-Test may be utilised to determine whether the difference between a population's mean and a specific value is statistically significant or not (Zikmund, 2003). To determine to what degree a statistically significant congruence existed between the brand identity (the vision of Pick 'n Pay's Green Line brand manager Kym Wright) and the brand image (the shopper population) of Pick 'n Pay's Green Line brand personality, one sample T-Tests were conducted for each of the ten elements utilised to assess it. The results from the ten one sample T-Tests performed are presented within *Table 5.14*.

Table 5.14 One sample T-Tests Conducted to Assess the Congruence Between the Brand Identity and Brand Image of Pick 'n Pay's Green Line Brand Personality

Pick 'n Pay's Green Line is...	Brand Manager (Brand Identity)	Consumer Population Mean (Brand Image)	T value	Degrees of Freedom	Sig. (2-tailed) ("P" Value)	Mean Difference	95% Confidence Interval of the Difference	
							Lower	Upper
Brand Personality	4	3.649	-3.733	96	0.0003	-0.351	-0.537	-0.164
	5	3.928	-13.528	96	0.0000	-1.072	-1.229	-0.915
	4	3.581	-6.590	92	0.0000	-0.419	-0.546	-0.293
	4	3.711	-3.380	96	0.0010	-0.289	-0.458	-0.119
	5	3.567	-18.850	96	0.0000	-1.433	-1.584	-1.282
	5	3.479	-20.972	95	0.0000	-1.521	-1.665	-1.377
	4	3.585	-5.058	93	0.0000	-0.415	-0.578	-0.252
	4	3.719	-4.077	95	0.0001	-0.281	-0.418	-0.144
	5	3.619	-16.549	96	0.0000	-1.381	-1.547	-1.216
	5	3.608	-16.644	96	0.0000	-1.392	-1.558	-1.226

Pallant (2005) states that to interpret the results of a one sample T-Test, the “p-value” reported must be reviewed to determine its level of significance. As presented within Table 5.15, SPSS provides three levels of significance to assess the p-value against.

Table 5.15 p-Value Significance Levels

p-Value	Level of Significance
p-value < 0.1	Marginally significant
p-value < 0.05	Moderately significant
p-value < 0.01	Highly significant

As presented within Table 5.15, all of the p-values reported from the one sample T-Tests conducted were at a level less than 0.01 which SPSS identifies to be highly significant. As the assumption presented within SPSS (the statistical software utilised to conduct the assessment) identifies the null hypothesis to be that the populations are not congruent, the highly statistically significant results reported indicates that there is no statistical congruence between the brand identity and brand image for the personality of Pick ‘n Pay’s Green Line.

To provide a greater depth to the research, the congruence between the brand identity and brand image for the lines’ green claims and credibility (trustworthiness) were also conducted and are presented within Table 5.16 and Table 5.17.

Table 5.16 Green Claims

	The green claims are...	Brand Manager (Brand Identity)	Consumer Population Mean (Brand Image)	T value	Degrees of Freedom	Sig. (2-tailed) ("P" Value)	Mean Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Green Claims	...not believable	4	3.793	-2.662	96	0.0091	-.2061856	-0.359	-0.052
	...exaggerated	4	3.516	-5.459	92	0.0000	-.4838710	-0.659	-0.307
	...are misleading	4	3.708	-4.027	95	0.0001	-.2916667	-0.435	-0.147
	...not real	4	3.511	-7.103	93	0.0000	-.4893617	-0.626	-0.352

Table 5.17 Credibility (Trustworthiness)

	Are the claims made by Pick 'n Pay's Green Line...	Brand Manager (Brand Identity)	Consumer Population Mean (Brand Image)	T value	Degrees of Freedom	Sig. (2-tailed) ("P" Value)	Mean Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Credibility (trustworthiness)	...sincere?	4	3.722	-3.818	96	0.0002	-0.278	-0.423	-0.134
	...dependable?	4	3.628	-4.925	93	0.0000	-0.372	-0.522	-0.222
	...credible?	4	3.531	-6.337	95	0.0000	-0.469	-0.616	-0.322
	...not biased?	1	3.189	20.908	89	0.0000	2.189	1.981	2.397
	...believable?	4	3.943	-0.820	87	<u>0.4142</u>	-0.057	-0.194	0.081
	...truthful?	5	3.663	-17.317	94	0.0000	-1.337	-1.490	-1.184
	...convincing?	4	3.484	-5.738	92	0.0000	-0.516	-0.695	-0.337
	...expert?	5	3.381	-16.756	96	0.0000	-1.619	-1.810	-1.427
	...true?	4	3.516	-7.450	94	0.0000	-0.484	-0.613	-0.355

As presented within *Table 5.16*, a highly statistically significant absence of congruence was reported between the brand image and brand identity for the green claims made by Pick 'n Pay's Green Line. The assessment conducted to identify whether congruence existed between the brand identity and brand image of the credibility (trustworthiness) of the line as presented within *Table 5.17* reported that the only congruence existed relating to the question which focused upon the believability of the Green Line's claims ('are the claims made by Pick 'n Pay's Green Line believable?'). All other elements were reported with no statistically significant congruence between the brand's identity and its image.

5.7.3 Assessment of Correlation Between Independent and Dependent Variables Utilising the Spearman's Rho Test

In light of the data not being normally distributed, in line with best practice as identified by Zikmund (2003), the test performed to assess the correlations between the independent variables green claims and credibility (trustworthiness) and the dependent variables brand loyalty and brand equity was a Spearman's rho test. The correlation coefficients reported from this assessment are presented within *Table 5.18*.

Table 5.18 Construct Correlations Utilising the Spearman’s Rho Test

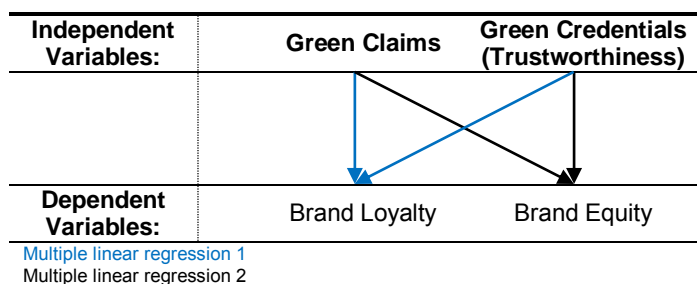
			Independent Variables		Dependent Variables	
			Green Claims	Credibility	Brand Equity	Brand Loyalty
Independent Variables	Green Claims	Correlation Coefficient	1.000	0.700	0.360	0.411
		Sig. (2-tailed)	-	0.000	0.000	0.000
		N	97	97	97	97
Independent Variables	Credibility	Correlation Coefficient	0.700	1.000	0.385	0.341
		Sig. (2-tailed)	0.000	-	0.000	0.001
		N	97	97	97	97
Dependent Variables	Brand Equity	Correlation Coefficient	0.360	0.385	1.000	0.724
		Sig. (2-tailed)	0.000	0.000	-	0.000
		N	97	97	97	97
Dependent Variables	Brand Loyalty	Correlation Coefficient	0.411	0.341	0.724	1.000
		Sig. (2-tailed)	0.000	0.001	0.000	-
		N	97	97	97	97

** SPSS reports the correlation is significant at the 0.01 level (2-tailed)

5.7.4 Assessment of the Relationship Between Independent and Dependent Variables Utilising Multiple Linear Regression

Multiple linear regressions were conducted to assess the collective ability of the independent variables; green claims and green credentials to explain the variance in the dependent variables; brand loyalty and brand equity respectively as presented within *Table 5.19*.

Table 5.19 Multiple Linear Regressions Conducted



Brand Loyalty

The results from the multiple linear regression assessing the ability of the independent variables; green claims and green credentials to explain the dependent variable brand loyalty are presented within *Table 5.20*, *Table 5.21* and *Table 5.22*. The results from the multiple linear regression assessing the ability of the independent variables; green claims and green credentials to explain the dependent variable brand equity are presented within *Table 5.23*, *Table 5.24* and *Table 5.25*.

Table 5.20 Regression Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.455 ^a	0.207	0.190	0.813
a. Predictors: (Constant), AverageofCredibility, GREENCLAIMSAVERAGE			
b. Dependent Variable: BrandLoyaltyAverage			

The adjusted R Square value presented within *Table 5.20* indicates the variability within the dependent variable brand loyalty. The figure of 0.19 indicates that the independent variables green claims and credibility (trustworthiness) are able to explain 19% of the variability within the dependent variable brand loyalty.

The ANOVA or analysis of variance, is presented within *Table 5.21*.

Table 5.21 ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	16.280	2	8.140	12.292	0.000 ^b
Residual	62.251	94	0.662	-	-
Total	78.531	96	-	-	-
a. Dependent Variable: BrandLoyaltyAverage					
b. Predictors: (Constant), AverageofCredibility, GREENCLAIMSAVERAGE					

As presented within *Table 5.21*, the significance value was reported to be 0.000 which being less than 0.05 is statistically very significant. The low F value indicates the variance between the means of the sample population is low.

Table 5.22 Coefficients

Model	Unstandardised Coefficients		Standardised Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-0.272	0.722	-	-0.377	0.707
Green Claims Average	0.621	0.225	0.355	2.759	0.007
Credibility Average	0.280	0.278	0.130	1.007	0.316
a. Dependent Variable: BrandLoyaltyAverage					

The beta values reported within *Table 5.22* identify that the independent variable which has the most impact upon the dependent variable brand loyalty is the green claims (at

0.355) as it is more than twice as influential as that reported for credibility (trustworthiness) (at 0.130). In essence, this reports that each single unit of increase for green claims equates to a 0.355 unit increase in brand loyalty generated.

Brand Equity

Table 5.23 Regression Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.402 ^a	0.161	0.144	0.663

a. Predictors: (Constant), AverageofCredibility, GREENCLAIMSAVERAGE
 b. Dependent Variable: BrandEquityAverage

The adjusted R Square value presented within *Table 5.23* indicates a low variability within the dependent variable brand equity at 0.144. This value indicates that the independent variables green claims and credibility (trustworthiness) are able to explain 14% of the variability within the dependent variable brand equity.

The ANOVA or analysis of variance is presented within *Table 5.24*.

Table 5.24 ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	7.954	2	3.977	9.043	0.000 ^b
Residual	41.338	94	0.440	-	-
Total	49.291	96	-	-	-

a. Dependent Variable: BrandEquityAverage
 b. Predictors: (Constant), AverageofCredibility, GREENCLAIMSAVERAGE

As presented within *Table 5.24*, the significance value was reported to be 0.000 which being less than 0.05 is statistically significant. The low F value indicates the variance between the means of the sample population is low.

Table 5.25 Coefficients

Model	Unstandardised Coefficients		Standardised Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.685	0.588	-	1.165	0.247
Green Claims Average	0.154	0.183	0.111	0.839	0.404
Credibility Average	0.540	0.226	0.316	2.388	0.019

a. Dependent Variable: BrandEquityAverage

The beta values reported within *Table 5.25* identify that the independent variable which has the most impact upon the dependent variable brand loyalty is the credibility (trustworthiness) (at 0.316) (the opposite to that which has the greatest impact upon brand loyalty) as it is more than twice as influential as that reported for green claims (at 0.111). The beta reported at 0.316 for credibility (trustworthiness) indicates that for a single unit of increase for credibility (trustworthiness), a corresponding increase of 0.316 units of brand equity will be generated as a result.

6 **DISCUSSION OF RESULTS**

Within this chapter, the research questions proposed within *Chapter 3* will be answered and discussed in light of the data presented within *Chapter 5*. The findings will be critically evaluated in light of the relevant literature presented and discussed within *Chapter 2*.

The six research questions which will form the subheadings to this chapter as proposed within *Chapter 3* are as follows:

- A greater congruence between a brand's identity and its image will generate increased positive brand loyalty;
- A greater congruence between a brand's identity and its image will generate increased positive brand equity;
- The greater the believability a consumer has in a brand's green claim's; the greater the brand loyalty which will be generated;
- The greater the believability a consumer has in a brand's green claim's; the greater the brand equity which will be generated;
- The greater the credibility (trustworthiness) a consumer has in a brand's green claim's; the greater the brand loyalty which will be generated; and
- The greater the credibility (trustworthiness) a consumer has in a brand's green claim's; the greater the brand equity which will be generated.

6.1 **A GREATER CONGRUENCE BETWEEN A BRAND'S IDENTITY AND ITS IMAGE WILL GENERATE INCREASED POSITIVE BRAND LOYALTY**

The degree of congruence between the brand's identity and its image was assessed by conducting a one sample T-Test on the results collected from the interviews with the brand manager and the consumers which sought to establish the personality of the brand. The p-values generated from conducting the one sample T-Test as presented previously within *Chapter 5* are summarised within *Table 6.1* for information.

Table 6.1 *p-values Reported in the Assessment of the Congruence between the Brand Identity and Brand Image of Pick ‘n Pay’s Green Line’s Brand Personality*

	Pick ‘n Pay’s Green Line is...	Sig. (2-tailed) ("P" Value)
Brand Personality	...down-to-earth	0.0003
	...responsible	0.0000
	...stable	0.0000
	...consistent	0.0010
	...reliable	0.0000
	...trustworthy	0.0000
	...steady	0.0000
	...rational	0.0001
	...honest	0.0000
	...genuine	0.0000

Following a review of the ten p-values generated (as presented within *Table 6.1*), as they were all reported at levels below 0.01 which is the level of significance reported by SPSS to be highly significant, the following null hypothesis was not rejected at a highly significant level:

H_0 There is no correlation between the brand identity and brand image of Pick ‘n Pay’s Green Line’s brand personality.

As the null hypothesis was not rejected there is no statistically significant congruence between the brand’s identity and its image. Interestingly, the resultant level of brand loyalty generated by Pick ‘n Pay’s Green Line amongst the sample population was low with only 29% either strongly agreeing or agreeing that they would choose the brand in a number of different scenarios.

The first proposition which stated that a greater congruence between a brand’s identity and its image will generate increased positive brand loyalty is therefore partly borne out by the data. Whilst it may not be confirmed that an increase in congruence between a brand’s identity and its image will generate positive brand loyalty as no statistically significant congruence was identified, the opposite may be proved as the absence of congruence was identified at a highly statically significant level.

As presented within *Chapter 2*, Nadan (2005) identifies that to develop brand loyalty, a strong congruence between brand image and brand identity is fundamental. It perhaps comes as no surprise therefore, that the level of brand loyalty observed for Pick ‘n

Pay's Green Line is low in light of the absence of any statistically significant congruence between brand image and identity.

One point for discussion could be that the personality scale utilised was not effective at capturing the true essence of the brand and therefore any assessment of the congruence between its image and identity may be invalid. However, the scale was recently reported by Alpatova & Dall'Olmo Riley (2011) as one which due to its construction "resulted in the increased propensity by respondents to express distinguishable opinions about the brands" (p. 5) and "may improve the quality and efficiency of personality research in strategic brand management" (p. 5).

As it was the scale created by Geuens et al. (2009) which was used to characterise the personality of the brand, it is proposed that in light of the findings and the support presented recently by Alpatova & Dall'Olmo Riley in 2011 for the effectiveness of the scale, that the scale was effective in characterising the brand's personality.

Perhaps then, whilst as a positioning attribute, the notion of the greenness of the product is important (as has been identified by Hartmann et al., 2005), the significance of the other elements which make up the brand's overall personality should not be underestimated.

In order to try and identify the reason for the seeming lack of congruence between the brand identity and brand image, the Author discussed this point with Kym Wright, the line's brand manager. During the meeting which was held on 9 October 2012, it was identified that one of the reasons for the lack of congruence reported was perhaps due to the differing levels of information which each party would hold due to its differing availability to each. For example, Kym has a very in-depth knowledge of the brand and all of the different elements which constitute it as a consequence of her having worked with it since its inception.

However, the information which is available to the consumer even if they were to read all of the information presented on each product for the entire line is be significantly less. As the different attributes of the product will impact upon its personality to varying degrees, the differences in information available could be responsible for the absence of brand identity and brand image congruence reported.

6.2 A GREATER CONGRUENCE BETWEEN A BRAND'S IDENTITY AND ITS IMAGE WILL GENERATE INCREASED POSITIVE BRAND EQUITY

As identified within *Section 6.1*, the degree of congruence between the brand's identity and its image was assessed by means of a one sample T-Test, the p-values reported from which identified that the null hypothesis H_0 There is no correlation between the brand identity and brand image of Pick 'n Pay's Green Line's brand personality was not rejected at a highly significant level.

The resultant level of brand equity generated by Pick 'n Pay's Green Line amongst the sample population was low as it was identified that between 49% and 72% of consumers questioned either disagreed (or strongly disagreed) or were ambivalent that they would purchase Pick 'n Pay's Green Line in a number of different scenarios.

When this absence of congruence is viewed in light of recent literature published by Chen in 2010 which identified that a positive correlation between green brand image and equity existed, in line with the literature reviewed (Chen, 2010), the level of equity generated in the absence of any congruence was low.

The second proposition which stated that a greater congruence between a brand's identity and its image will generate increased positive brand equity is therefore also partly borne out by the data. Whilst it may not be confirmed that an increase in congruence between a brand's identity and its image will generate positive brand loyalty (as no statistically significant congruence was identified), the opposite may be proved as the absence of a congruence was identified at a highly statically significant level as to was the absence of significant brand equity.

When the specific differences between the responses of the brand manager are contrasted with those of the consumers, the highest degree of incongruence is identified within the two elements of reliability and trustworthiness. Whilst elements relating to trust will be explored in more detail when the notion of credibility (trustworthiness) is explored when proposition five is discussed, given the importance as identified by Chen (2010) of these dimensions in generating green brand equity, a significant detrimental impact upon the ability of the brand to generate equity may have resulted.

The question which must then be answered is why there is such a lack of congruence between the brand image and brand identity of Pick 'n Pay's Green Line brand personality.

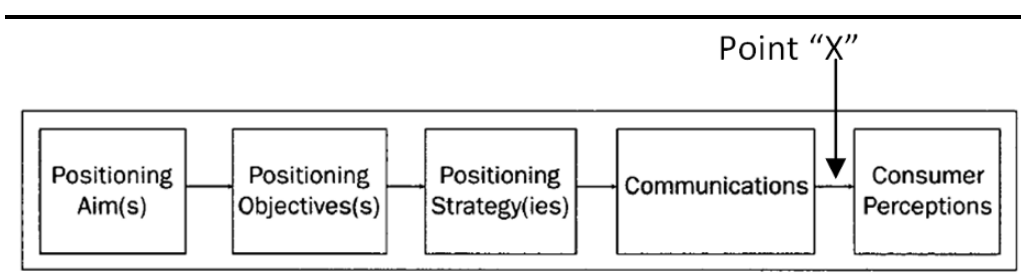
One of the interesting features regarding Pick 'n Pay's Green Line is that beyond the word Green, on the front of the packaging as presented within *Figure 1.2*, there is no mention of how this product *is* green. Whilst the reverse of the package may identify these criteria, in the aisle where it was displayed, approximately twenty five other brands of cleaning products were also presented.

Given the short time that people tend to spend shopping for such products as observed by the Author whilst conducting the research, it is therefore very unlikely that the average consumer would have read the reverse of the packaging thus identifying whether the green claims were true or not and in turn be able to identify positively with the brand's image.

This insight of the brand manager is perhaps what is to be expected as is that of the consumer given the limited information available to them and it is proposed that this misalignment may have occurred due to what may be seen as a failure to effectively communicate the green credentials of the Green Line and in turn not to allow the consumer to be in a position to perceive them favourably.

The work conducted by Blankson and Kalafatis in 2007 and presented in Chapter 2, identifies that the point at which the misalignment occurs is following the communication from the organisation before it is received by the consumer (as indicated within *Figure 6.1* at point "X").

Figure 6.1 Five Decisions and Activities which Comprise a Composite Positioning Model



(Blankson and Kalafatis, 2007, p. 86)

Whilst misalignment has been demonstrated not to have been favourable in this instance, as may be seen within *Figure 6.1*, prior to the point at which misalignment is identified to occur, four separate phases exist which may (in this instance) be reviewed to ensure future alignment. Suggestions as to how this alignment may be improved for the future are presented and discussed within *Chapter 7*.

6.3 THE GREATER THE BELIEVABILITY A CONSUMER HAS IN A BRAND'S GREEN CLAIM'S; THE GREATER THE BRAND LOYALTY WHICH WILL BE GENERATED

In order to determine whether a correlation existed between the extent to which customers believed the green claims made by Pick 'n Pay's Green Line and the brand loyalty generated as a result, a Spearman's rho test of correlation was conducted between the aggregate of each consumer's assessment of the brand's green claims and the assessment of the brand loyalty generated.

The correlation which was reported by the Spearman's rho correlation test was 0.411 which is classified within the data output by SPSS (the statistical software program used to perform the assessment) as highly significant (as reported within *Table 5.18*). This strong correlation identifies that there a highly significant statistical relationship between the believability a consumer has in the green claims of Pick 'n Pay's Green Line which has a corresponding increase in generating brand loyalty.

The third proposition which was stated as the greater the believability a consumer has in a brand's green claim's; the greater the brand loyalty which will be generated, is confirmed.

The positive relationship between the green claims and brand loyalty generated concurs with relevant literature presented within *Chapter 2* whereby Terrachoice (the environmental marketing firm) proposed the "Six Sins of Greenwashing" in 2007. These six sins were identified as "the sin of the hidden trade-off, the sin of no proof, the sin of vagueness, the sin of irrelevance, the sin of fibbing and the sin of the lesser of two evils" (Terrachoice, 2007, p. 1).

As this product is not guilty of any of these 'sins', from the data presented by Terrachoice where it was reported that 98% of its study of 2,219 products was guilty of

committing at least one of these sins, there is evidently a clear endorsement that claims of Pick 'n Pay's Green Line are believable.

6.3.1 Why is the Correlation Not Higher?

Whilst the correlation was identified to be highly statistically significant, it would appear that due to the level of internal consistency which was reported at an α of 0.648 (following the removal of one construct) for the green claims and an α of 0.925 was reported for the internal consistency measured for brand loyalty, the message which is being communicated to the consumer is not as focused as perhaps it could be.

Recent research conducted by Rettie et al. (2012) identified that during the 1990s, the green marketing which was typically prevalent was ineffective. Nkamnebe (2011) proposed that one of the key reasons for this ineffectiveness was that unclear messages were being promoted on products with questionable green credentials. In this instance, the low levels of believability reported for the product line's green claims suggests that the claims for and benefits of the line are not being clearly communicated to the consumers. Whilst the credibility of the green credentials are not being questioned, when the product is given a quick, cursory glance as a shopper might, there is certainly no mention of what these claims actually are. The packaging simply identifies the products within the line to be 'Green' with no backup or detail of these claims.

A number of the consumers were observed in detail when completing the questionnaire who had not previously had any interaction with the Green Line. The majority of these consumers when answering the questions relating to the products' green claims picked them up and read the information on the reverse in detail. Interestingly, having read the reverse of the packaging, they expressed genuine surprise at what they thought were very authentic claims. However, from their first assessment of its front they appeared unaware of any notion that the line had any notable green credentials. Perhaps this absence of clearly visible credentials may lead to a lower commitment from the consumer as to whether they actually believe the claims or not quite simply as they have no reference point for this on the product.

6.3.2 Why isn't the Believability Higher?

Given that a strong correlation between the believability of Pick 'n Pay's Green Line's green claims and the brand loyalty generated as a result has been established, an

important question to raise is why the believability of the line's claims isn't higher. Currently 56% of the consumers questioned responded that they identified the green claims to be either believable or strongly believable. Or more importantly, 44% of the consumers questioned didn't respond that they identified the products' green claims to be believable.

The first point to note in this regard is one which was raised within *Section 6.3*: that the green claims made by Pick 'n Pay's Green Line are very low key with no mention of how the range is green on the front of the product beyond the "green" brand name.

Dangelico and Pontrandolfo (2009) identified that acting in a green or sustainable manner was not perceived by many consumers to be the norm. Certainly within the domestic cleaning product sector which Pick 'n Pay's Green Line serves, upon the shelves within the supermarket, there was a notable absence of alternative products which were promoted with green credentials.

The work published by Dangelico and Pontrandolfo (2009) sought to identify how to normalise green behaviour so it could become more accepted and brand loyalty would increase for products with such credentials. Importantly in explaining the relationship between the green claims of Pick 'n Pay's Green Line and the brand loyalty generated, perhaps the bland nature in which the green message is being promoted does not normalise the product (at all) and through not clearly characterising the credentials of the product so they are clearly visible for the consumer to see, these claims may further be challenged by the consumer as being questionable.

6.4 THE GREATER THE BELIEVABILITY A CONSUMER HAS IN A BRAND'S GREEN CLAIM'S; THE GREATER THE BRAND EQUITY WHICH WILL BE GENERATED

In order to determine whether a correlation existed between the believability a consumer had for the green claims made by Pick 'n Pay's Green Line and the brand equity generated as a result, a Spearman's rho test of correlation was conducted between the aggregate of each consumer's assessment of the brand's green claims and the assessment of the brand equity generated.

The correlation which was reported by the Spearman's rho correlation test was 0.360 which is classified within the data output by SPSS (the statistical software program

used to perform the assessment) as highly significant (as reported within *Table 5.18*). This strong correlation identifies that there is a highly significant statistical relationship between the believability a consumer has in the green claims of Pick 'n Pay's Green Line which has a corresponding increase in generating brand equity.

The fourth proposition which was stated as the greater the believability a consumer has in a brand's green claim's; the greater the brand equity which will be generated is confirmed.

The credibility of the green claims which were identified for Pick 'n Pay's Green Line would seek to strengthen the work conducted by Kemp and Bui (2011) which evaluated the brand equity generated for healthy brands. With Proctor and Gamble's (P&G) 2010 annual report, three pillars were presented for the company which as presented within *Chapter 1*, were identified to be the saving of water, reducing of waste and saving of energy.

Interestingly, when the credentials of the line are reviewed, it is seen that through the recyclable packaging utilised, each of the three pillars promoted by P&G are addressed. Furthermore, its non-toxic ingredients and absence of Volatile Organic Compounds (VOCs) address one of Unilever's points presented within their 2011 Annual Report through improving people's health and wellbeing.

The nature of the relationship between the line's green claims and an increase in equity generated as a result would appear to have met the call for effective green marketing as identified by many such as Kotler (2011) and Rettie et al. (2012). Could it be that the heightened status of sustainability which Kotler (2011) identifies is required in marketing to manage the environmental imperative is delivered within this Green Line?

It would appear that certainly some elements which Kotler (2011) refers to under the four broad headings of product, price, place and promotion (commonly referred to as the four Ps) are effectively addressed in that green equity is being generated however, due to the levels of equity generated (only 56% of the consumers identified the green claims to be either believable or strongly believable), it would appear that further work may be undertaken to address these four Ps in light of the green claims made to generate an increase in the brand equity in future.

6.5 THE GREATER THE CREDIBILITY (TRUSTWORTHINESS) A CONSUMER HAS IN A BRAND'S GREEN CLAIM'S; THE GREATER THE BRAND LOYALTY WHICH WILL BE GENERATED

In order to determine whether a correlation existed between the believability a consumer had for the green credibility (trustworthiness) of Pick 'n Pay's Green Line and the brand loyalty generated as a result, a Spearman's rho test of correlation was conducted between the aggregate of each consumer's assessment of the brand's credibility (trustworthiness) and the assessment of the brand loyalty generated.

The correlation which was reported by the Spearman's rho correlation test was 0.341 which is classified within the data output by SPSS (the statistical software program used to perform the assessment) as highly significant (as reported within *Table 5.18*). This strong correlation identifies that there is a highly significant statistical relationship between the perceived credibility (trustworthiness) a consumer has in the Pick 'n Pay's Green Line and the brand loyalty generated as a result.

The fifth proposition which was stated as the greater the credibility (trustworthiness) a consumer has in a brand's green claim's; the greater the brand loyalty which will be generated is confirmed.

The positive correlation between the credibility of Pick 'n Pay's Green Line and the brand loyalty generated as a result validates and strengthens the research conducted by Delamus and Burbano (2011) which identified that the green marketing sector needed to acquire greater consumer trust to be effective.

Whilst some countries (such as the United Kingdom) have sought to address the absence of an effective labelling system so the consumer may correctly identify the legitimate green credentials of products by introducing a labelling system with clear metrics (Challen, 2009), this is not the case in South Africa (Adams and Adams, 2012). The Environmental marketing firm Terrachoice identified six sins of greenwashing which are presented within *Section 2.2.3* one of which is relevant in this discussion being the sin of no proof.

Given the identification of the correlation between the credibility of Pick 'n Pay's Green Line's green claims and brand loyalty, it is interesting to learn that whilst some of the elements such as sincerity and believability were agreed or strongly agreed to be

representative of Pick 'n Pay's Green Line at 68 %and 73% respectively, the construct as a whole was only identified by 55% to be representative of the Line.

Given the correlation which has been established between the credibility of the green claims of Pick 'n Pay's Green Line and the brand loyalty generated, barely more than half of all consumers questioned identified that they found the claims to be credible, causing a significant loss of brand loyalty.

In order to establish whether this perception of the Line's credibility was held by the consumers only, a one sample T-Test was performed to determine the congruence between Kym Wright, the brand manager's view of the brand's green claims and the consumer's perceptions of its identity to establish whether or not there was alignment between the two. Interestingly, of all the nine elements (sincerity, dependability, credibility, biasedness, believability, truthfulness, convincingness, expertness and trueness) which were utilised to assess the credibility of the brand's green claims, a statistically significant congruence between brand image and brand identity was only identified for the believability of the brand's green claims.

The absence of a congruence between brand image and brand identity in the case of the brand's green claims could perhaps be explained by what Levy (1999) identified to be the category confusion problem. As outlined within *Section 2.3.5*, the category confusion problem is that the category, rather than the brand, has the strongest influence on the brand's personality (Avis, 2011). Whilst measures were taken to try and negate any such impact by the Author (before the consumers completed the questionnaire they were instructed specifically to consider only Pick 'n Pay's Green Line and no other household cleaning products) given that consumers were targeted within the aisle selling primarily household cleaning products and Pick 'n Pay's Green Line was the only visibly identifiable range with green credentials, a degree of impact could have occurred.

The extent to which the category confusion problem may have impacted the consumer's perceptions of the believability of the claims surrounding Pick 'n Pay's Green Line cannot be quantified within this study however, given the conclusions drawn by Batra et al. in 2010 when researching this very problem, it was identified that the category confusion problem did indeed have a significant impact on consumer brand perceptions and therefore its impact on this study could be equally significant.

6.6 THE GREATER THE CREDIBILITY (TRUSTWORTHINESS) A CONSUMER HAS IN A BRAND'S GREEN CLAIM'S; THE GREATER THE BRAND EQUITY WHICH WILL BE GENERATED

In order to determine whether a correlation existed between the extent to which consumers believed the claims for Pick 'n Pay's Green Line and the brand equity generated as a result, a Spearman's rho test of correlation was conducted between the aggregate of each consumer's assessment of the brand's credibility (trustworthiness) and the assessment of the brand equity generated.

The correlation which was reported by the Spearman's rho correlation test was 0.385 which is classified within the data output by SPSS (the statistical software program used to perform the assessment) as highly significant (as reported within *Table 5.18*). This strong correlation identifies that there is a highly significant statistical relationship between the perceived credibility (trustworthiness) a consumer has for Pick 'n Pay's Green Line and the brand equity generated as a result.

The sixth proposition which was stated as the greater the credibility (trustworthiness) a consumer has in a brand's green claim's; the greater the brand equity which will be generated is therefore confirmed. The confirmation of this proposition by the data collected concurs with the literature reviewed within *Chapter 2* by those such as Chen (2010) and Louis and Lombart (2010).

Given that brand equity is identified by Bick (2009) to be such a major marketing driver for organisations such as Pick 'n Pay and is identified by Stahl et al. (2012) to be "rooted in the hearts and minds of consumers" (p. 44), it is perhaps logical that the link between the credibility (trustworthiness) in the brands green claims and the resultant brand equity generated was identified to be so strong.

6.7 ASSESSMENT OF THE RELATIONSHIP BETWEEN THE EXPLANATORY VARIABLES UTILISING MULTIPLE LINEAR REGRESSION

Given the similar relationships which have been identified between both the independent variables (green claims and credibility (trustworthiness)) and the dependent variables they influence (brand loyalty and brand equity), multiple linear

regressions were conducted to determine the degree of the relationship between these independent and dependent variables.

6.7.1 *Green claims and credibility (trustworthiness) verses brand loyalty*

The first multiple regression sought to assess the ability of the independent variables; green claims and green credentials to explain the dependent variable brand loyalty. As presented within *Chapter 5*, the adjusted R Square value which is used to determine the ability of independent variables to explain the dependent variable was low at 0.19. This indicates that only 19% of the changes in the dependent variable may be explained by the independent variables.

Whilst the ability of the independent variables to explain the dependent variable is low, there is a highly statistical significance (as represented by the significance value being <0.05) in the importance of the green claim's ability to explain the levels of brand loyalty generated. Due to the significance level of 0.316 exceeding 0.05 for credibility (trustworthiness), this is an indication that this element of the model is corrupt and may not be relied upon explain the dependent variable.

The most important finding from this analysis is the level of the relationship between the ability of the green claims to generate brand loyalty as it is reported that for one unit increase in the acceptance of the line's green claims an increase of 0.355 units of brand loyalty will result.

Of the literature reviewed which highlights the necessity and importance of different elements such as trust and trustworthiness, none were identified to establish a ratio between the two as was reported by the multiple regression output.

6.7.2 *Green claims and credibility (trustworthiness) verses brand equity*

The second multiple regression sought to assess the ability of the independent variables; green claims and green credentials to explain the dependent variable brand equity. As presented within *Chapter 5*, the adjusted R Square value which is used to determine the ability of independent variables to explain the dependent variable was low at 0.144 indicating that only 14% of the changes in the dependent variable may be explained by the independent variables.

Although the ability of the independent variables to explain the dependent variable is low, there is a highly statistical significance (as represented by the significance value being <0.05) in the importance of the green claim's ability to explain the levels of brand loyalty generated. Due to the significance level of 0.404 exceeding 0.05 for green claims, this is an indication that this element of the model is corrupt and may not be relied upon to explain the dependent variable.

The key output from the multiple regression was again the indication of the ability of the independent variable to influence the dependent variable. Due to the beta value being 0.316, it is reported that for a single unit increase in the credibility (trustworthiness) of the consumer's perception of the Green Line, a corresponding 0.316 increase will be seen in the brand equity generated.

The outcome from both the multiple regressions when compared together was interesting in that the influence which the independent variables have upon the dependent variables is broadly similar albeit, they may not be compared collectively due to the corruption which was reported within the model. Illustrated graphically, the findings are presented within Table 6.2.

Table 6.2 Multiple Linear Regressions Conducted

Independent Variables:	Green Claims	Green Credentials (Trustworthiness)
	0.355	0.316
Dependent Variables:	Brand Loyalty	Brand Equity

Multiple linear regression 1
Multiple linear regression 2
Corruption within model preventing relationship from being determined

6.8 LIMITATIONS OF FINDINGS DUE TO RESEARCH DESIGN AND METHODOLOGY EMPLOYED

Within *Chapter 4*, three primary limitations to the research design and methodology were identified which were; time limitations resulting in only one brand being studied and a limited number of shoppers interviewed, the potential for subtle differences between the findings from Pick 'n Pay's Green Line and other products with green credentials and the exploratory nature of the research it may not be practical to apply

the findings which are specific to Pick 'n Pay's Green Line, directly to other products or categories.

Of the limitations presented, it is that relating to the time constraint which is identified to have the greatest potential impact upon the research findings and their scope. For it was as a direct result of the time limitations that the number of interviews conducted was limited to one brand manager and one hundred shoppers for the single product line researched at one Pick 'n Pay supermarket. The research findings would certainly be more representative of the population of South Africa geographically and ergo demographically were interviews conducted at additional Pick 'n Pay stores and for additional non Pick 'n Pay products and product classes.

As identified within *Chapter 5*, Zikmund identifies this limitation to be indicative of a sampling frame error when “certain sample elements are excluded or when the entire population is not accurately represented in the sampling frame” (Zikmund, 2003, p. 375). As no previous studies have researched Pick 'n Pay's Green Line or other brands in this specific manner, it is difficult to identify how much of an impact this limitation has had upon the findings.

However, as these limitations were correctly identified during the research design phase prior to the research being conducted, measures such as the random nature of selecting the sampling units (as detailed within *Section 4.8.4*) and the in depth interview conducted with Pick 'n Pay's brand manager were taken so as much as possible which could be done was done to minimise the impact which the research design and methodology ultimately had upon the research findings.

7 CONCLUSION

7.1 INTRODUCTION

This chapter provides a conclusion to the research conducted. It will summarise the aim of the research and revisit the research problem which was presented within *Chapter 1* and will then confirm how the research was achieved and what the key findings were from it.

The six research propositions initially presented within *Chapter 3* which were investigated by interviewing Pick 'n Pay's brand manager Kym Wright and 100 consumers at the Pick 'n Pay store 'on Nicol' will then be presented together with some of the key insights gained from interpreting the data reported within *Chapter 5*.

A model developed from the key insights drawn from *Chapter 6* is then presented and explained with the aim of illustrating what may be undertaken to increase brand loyalty and brand equity for each of the three key themes researched.

Recommendations will then be presented to Pick 'n Pay which, in line with the problem which this research sought to address, will identify, based directly upon the findings of the research, what practical measures may be taken to increase brand loyalty and brand equity.

Finally, some areas for future research will be proposed which are specifically identified to broaden and strengthen the body of knowledge relating to the congruence between brand image and brand identity within the green marketing space.

7.2 AIMS OF THE RESEARCH

During the course of an initial information collection session to explore areas for potential research, the Author identified an article by Delamus & Burbano from 2011 which indicated that the value of green products, services and firms globally was projected to grow from \$230 billion in 2009 to \$845 billion in 2015 (Delamus & Burbano, 2011).

Given this large global market for green products and services, further investigation was conducted into a number of global Multi-National Corporations such as Procter and Gamble (P&G) and Unilever. From a review of their recent annual reports it was identified that not only was 'sustainability' at the forefront of their future business strategies (Procter & Gamble, 2010 and Unilever, 2011) but that in the 12 months from 2009 to 2010, P&G alone had delivered \$26.5 billion in sales of sustainable innovation products globally.

The initial question which the Author sought to address was how could companies with products or services which have green credentials most effectively market these so that they may maximise the brand loyalty and brand equity generated from them.

The literature review which was subsequently conducted investigated areas such as why are people sustainable, what is the history of green marketing and how does it fit in the present day together with a specific focus on areas such as those relating to a brand's personality and the impact which an effective congruence between brand image and brand identity may have upon the brand loyalty and brand equity generated.

7.3 SUMMARY OF RESEARCH AND KEY FINDINGS

In conducting the research, the Author interviewed the brand manager for Pick 'n Pay's Green Line together with 100 consumers from Pick 'n Pay's 'on Nicol' store (located in the suburb of Bryanston, Johannesburg, South Africa) to provide information on their assessment of the Green Line's brand personality, the green claims which they thought it made, the credibility (trustworthiness) of the claims and the brand loyalty and brand equity which was generated as a result.

When the consumers were questioned as to the brand's personality, the majority identified eight of the ten different elements (which were down-to-earth, responsible, stable, consistent, steady, rational, honest and genuine) as forming part of its personality however, for two elements (reliability and trustworthiness) a strong neutral selection (greater than 50%) was reported.

The three elements which were identified to be the most characteristic or strongly characteristic of the brand were reported to be responsibility (70%), consistency (62%) and down-to-earth (60%).

When the congruence between the brand identity and brand image was assessed by means of a one sample T-Test, the null hypothesis (H_0 : there is no correlation between the brand identity and brand image of Pick 'n Pay's green sine's brand personality) was not rejected indicating that there is no statistically significant congruence between the brand's identity and its image.

The two propositions presented to evaluate the impact upon brand loyalty and brand equity from congruence between brand image and brand identity were:

- A greater congruence between a brand's identity and its image will generate increased positive brand loyalty;
- A greater congruence between a brand's identity and its image will generate increased positive brand equity;

These two propositions were partly borne out by the data in that whilst it could not be confirmed that an increase in congruence between a brand's identity and its image generated positive brand loyalty and equity as no statistically significant congruencies were identified, the opposite may be proved as the absence of congruence was identified at a highly statically significant level.

In assessing the green claims of the line, the majority of the shoppers who were questioned on their perceptions of the claims identified them to be believable (69%), not exaggerated (54%), not misleading (66%) and were real (48%).

The two propositions presented to assess the brand loyalty and brand equity generated as a result of the claims were:

- The greater the believability a consumer has in a brand's green claim's; the greater the brand loyalty which will be generated; and
- The greater the believability a consumer has in a brand's green claim's; the greater the brand equity which will be generated.

These two propositions were confirmed by the data collected.

When the credibility or trustworthiness of Pick 'n Pay's Green Line was assessed, it was identified to be sincere (68%) and believable (73%) by the majority of respondents.

Two propositions presented to assess the levels of brand loyalty and brand equity generated by the credibility (trustworthiness) were:

- The greater the credibility (trustworthiness) a consumer has in a brand's green claims; the greater the brand loyalty which will be generated; and
- The greater the credibility (trustworthiness) a consumer has in a brand's green claims; the greater the brand equity which will be generated.

These two propositions were confirmed by the data collected.

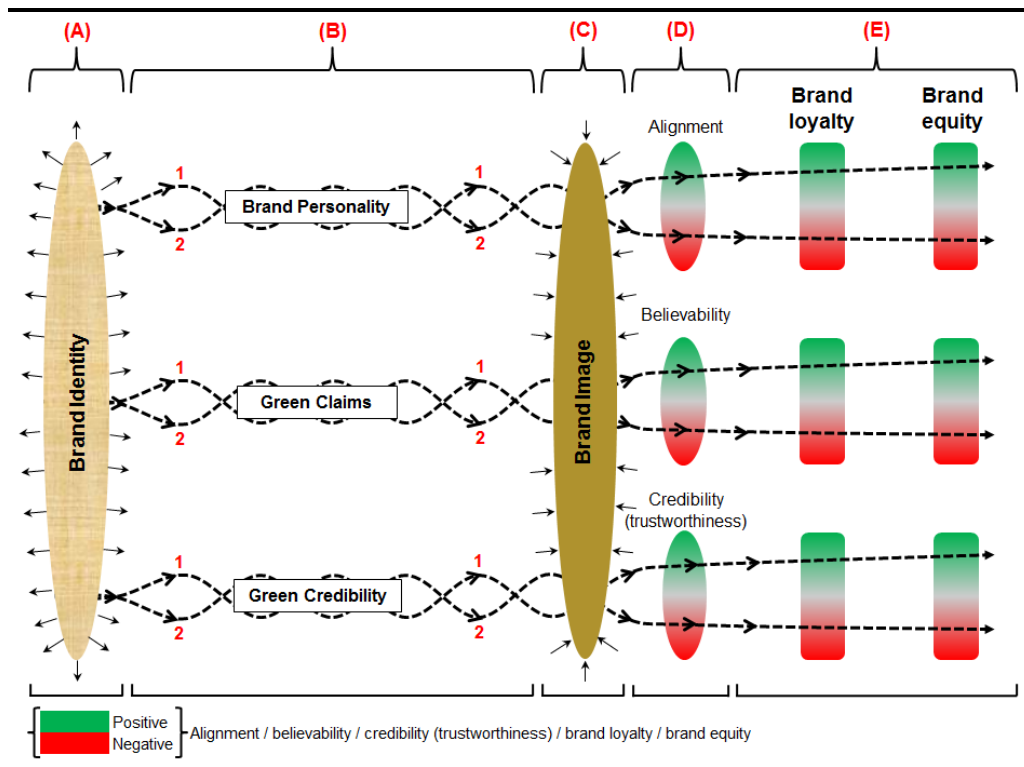
The levels of brand equity measured were not identified to be particularly significant with only a majority of consumers responding that they either agreed or strongly agreed that 'it seems smarter to purchase Pick 'n Pay's Green Line' whilst the remaining three propositions also assessing different elements of their likelihood to purchase the line was reported to either disagree or strongly disagree (25% - 28%) or were ambivalent (24% - 44%) to the statements.

Whilst a level of brand loyalty was identified to have been developed by Pick 'n Pay's Green Line, only 29% of the respondents would choose to purchase one of the line's products over its competitors with the majority on each occasion either identifying that they are ambivalent or would not purchase one of the products from Pick 'n Pay's Green Line.

7.4 MODEL TO ILLUSTRATE AND SUMMARISE THE KEY FINDINGS FROM THE RESEARCH

A model to illustrate and summarise the findings of the research is presented as *Figure 7.1*. This model has been developed with the aim of providing brand managers who oversee products with green credentials a quick and simple illustration to ensure they are doing all which may be undertaken to ensure that the brand loyalty and brand equity for their products may be maximised.

Figure 7.1 Model Illustrating How Brand Loyalty and Brand Equity may be Maximised Through Effective Management of Brand Personality, Green Claims and Green Credibility



Within the model, the three main themes which formed the basis of this research are presented. These were; the congruence between brand image and brand identity, the green claims made by the product and the assessment of the credibility (trustworthiness) of the claims. The model flows from left to right, starting at point 'A' and finishing at point 'E'.

At section 'A', as identified by Nadan (2005), the brand identity is characterised as the company view and was characterised within this research from the view of the brand manager which is subsequently transmitted and sent.

Section 'B' identifies the three themes which were transmitted and sent and which were researched within this study as being; brand personality, green claims and green credibility (trustworthiness). The continually crossing lines marked '1' and '2' which are transmitted for each of the three elements illustrate that the element may be perceived more or less positively depending upon the ability of the company to effectively transmit the message in addition to the actual underlying substance of the element.

At section 'C', the messages transmitted by the company are received by the consumer as identified by Nadan (2005).

At section 'D', the factors relating to the three elements (brand personality, green claims and credibility (trustworthiness) which were identified within this research to impact upon the brand loyalty or brand equity which these elements may generate are presented. For each of these, it is illustrated how the brand loyalty or brand equity for the respective element may be maximised. For example, it was identified that a greater congruence (identified in the model as an increasing intensity of the colour green) between brand image and brand identity resulted in an increased brand loyalty and brand equity generated (also identified in the model as an increasing intensity of the colour green).

Section 'E' illustrates the outcome of the marketing exercise and characterises a successful outcome as an increase in the positive brand loyalty or brand equity generated (identified as an increase in the intensity of the colour green) or a decrease in brand loyalty or equity generated (identified as an increase in the intensity of the colour red).

7.5 RECOMMENDATIONS FOR PICK 'N PAY

From the primary data collected and evaluated within this research and in light of the model presented as *Figure 7.1*, the following recommendations are proposed to Pick 'n Pay so that the findings from this research may enable them to increase the brand loyalty and brand equity generated from their Green Line:

1. So a stronger congruence between the brand identity and brand image of the Green Line may be achieved, it is recommended that the different elements relating to the line's personality which weren't identified to be characteristic or strongly characteristic (such as reliability and trustworthiness) be targeted in upcoming advertising literature and within the aisle where the products are sold;
2. In order that the green claims may be more easily identified by the consumer it is recommended that the primary green claims be displayed on the front of the product as opposed to on the reverse as is currently the case. More information regarding the green claims could also be provided on the reverse of the

packaging or within the aisle in the form of a small leaflet which consumers could take and read should they wish; and

3. To improve the consumers' view of the credibility (trustworthiness) of the green claims, in the short term it is recommended that Pick 'n Pay provide sound justification for each of the green claims made and identify how these various claims will contribute to the environment in a more sustainable manner so a more tangible link to the product may be formed with the consumer. In the longer term, it is proposed that Pick 'n Pay collaborate with other primary food retailers and the Department of Trade and Industry to develop a simple metric for household cleaning products and other products typically sold within the supermarket sector to independently rate any green claims made so the consumer may be assured of their credibility (trustworthiness) independently.

7.6 FUTURE AREAS FOR RESEARCH

This research collected primary data specifically on Pick 'n Pay's Green Line which provided an excellent case study as to how the three elements of; brand personality, green claims and credibility (trustworthiness) impacted on the brand loyalty and brand equity generated. However, it was limited in that the range only encompassed household cleaning products.

Further research could expand the body of existing literature through investigating how brand loyalty and brand equity may be increased for the many other product categories typically sold within supermarkets or in other retail outlets such as food stuffs or personal hygiene products.

As the focus of this research has been primarily on products, interesting research could be conducted into the many different 'green' services offered such as some of the new and innovative financial products to see how brand loyalty and brand equity may be increased in these fields.

7.7 CONCLUDING REMARKS

As has been identified, the market for green products and services is worth billions of dollars global and is reported to be growing in size at a phenomenal rate. In order to

identify how brand loyalty and brand equity may be increased for products with green credentials, Pick 'n Pay's Green Line was researched.

Three key elements which formed the basis of this research were the congruence between brand image and brand identity, the green claims made by the product line and the assessment of the credibility (trustworthiness) of the claims. From the data generated by interviewing the brand manager for Pick 'n Pay's Green Line and one hundred shoppers at Pick 'n Pay's on Nicol store in Bryanston, Johannesburg, South Africa, it was identified that to increase the brand loyalty and brand equity for these three elements, a strong alignment between brand image and brand identity must be achieved, the consumer must have a strong believability in the green claims made and the credibility (trustworthiness) of the green claims must be sound.

Through critically evaluating the congruence between brand image and brand identity, the green claims made and the assessment of the credibility (trustworthiness) of the claims, this research has identify how brand loyalty and brand equity may be increased for products with green credentials. It is clear that more work may be conducted in this field and this research aims to have helped assist with this process.

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