An Examination Of How Product Involvement Affects Brand Loyalty

A thesis submitted to Auckland University of Technology in partial fulfilment of the degree of Master of Business

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Attestation of authorship
I hereby declare that this submission is my own work and that to the best of my knowledge and belief it contains no material previously published or written by another person, nor material to a substantial extent has been accepted for the qualification of any other degree or diploma of a University or other institution of higher learning, except where due acknowledgement is made in the acknowledgements.

__________________________
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Abstract

David Aaker (1992) suggests that brand loyalty leads to brand equity, which leads to business profitability. Brand loyalty makes a critically valuable contribution to competitive advantage. Marketing costs render it expensive to introduce new customers and loyal customers are less likely to switch brands. High brand loyalty is an asset that lends itself to extension, high market share, high return on investment and ultimately high brand equity (Gounaris & Stathakopoulos, 2004). Understanding the drivers for brand loyalty is the first step to understanding how to influence them and thus increase profitability.

The wider body of literature (Iwasaki & Havitz, 1998; LeClere & Little, 1997; Park 1996) suggests that product involvement, particularly high product involvement is a critical antecedent to brand loyalty. Traylor (1983) and Martin (2004) argue that low involvement products are also significant. Quester and Lim (2003) published a paper that empirically tested the relationship between product involvement and brand loyalty. They hypothesized that high involvement would lead to high brand loyalty and vice versa but their research showed that low involvement products could have high brand loyalty too. Further analysis of the literature shows support for product involvement as an antecedent to brand loyalty but still the nature and scope of this relationship remains uncertain. Therefore this research sets out to replicate and extend Quester and Lim’s study.

To extend the body of literature this research selected cars and batteries from Mittal’s (1989a) predetermined list of product categories to represent high and low involvement products. The research then sourced Kapferer and Laurent’s (1985b) seminal Consumer Involvement Profile as a basis for the product involvement scale for the survey. The CIP scale breaks product involvement down to five antecedents; interest, pleasure, sign, risk probability and risk importance. Similarly, Dick and Basu’s (1994) work formed the basis of the scales as they related to brand loyalty. Dick and Basu suggest that brand loyalty consists of both behavioural and attitudinal components, which in turn consist of cognitive, affective and conative antecedents. These variables formed the basis of the survey used for empirical testing.
Data was collected and analysed using factor and multiple regression analysis. Data analysis returned five factors for product involvement for cars and four for product involvement for batteries where Quester and Lim (2003) only returned four factors for both categories. This research also returned all three factors for cars and two for batteries, suggesting that the subjects of this research were able to discern the subtleties of the antecedents to brand loyalty where Quester and Lim’s were not.

Finally, the research tested these factors for regression correlations to identify links between pleasure, sign and risk probability and brand loyalty for cars and interest/pleasure, sign, risk probability and risk importance for batteries. The analysis shows that these findings explained more than 53% of the variances for batteries and more than 71% of the variances for cars suggesting that product involvement makes a significant contribution to brand loyalty.

While these findings lend support for product involvement as an antecedent to brand loyalty, sign value is the only construct that shows a consistent correlation. Thus there is still an opportunity for more academic research. For marketers the message is clear, sign value or ego involvement shows a clear correlation with brand loyalty. Any attempt to grow brand loyalty must at least acknowledge this issue.
Chapter 1: Introduction

1.1 Problem Orientation

This research explores the relationship between product involvement and brand loyalty. Brand loyalty is important because it is a key driver of repeat purchase behaviour (Bennett & Rundle-Thiele, 2002) and repeat purchases generate long term value. It is difficult and expensive to gain new customers, thus brand loyal customers hold consummate appeal to marketers.

However, it is becoming increasingly difficult for marketers to garner brand loyal customers. Nelson (2002) suggests that more open and competitive markets, greater fragmentation, individualisation and increased spending power have vastly increased the range of choices available to people. The scale and complexity of choice is the result of exponential growth that has taken consumers into a new landscape, where choices stretch beyond the horizon, inhibiting our ability to survey and select.

In order to deal with this overwhelming plethora of choices, consumers develop evoked sets of brands (Mittal, 1989a). Factors that affect these sets include the value of a consumer's time, the enjoyment of the process or experience of choosing, the consumer's previous experience, the perceived risk of engaging in choice at all, where a habitual preference or current provider exists, or where alternative choices have unstable pricing (e.g. interest rates) or unknown quality and finally the perceived differential between products or services in a sector. These factors can broadly be described as product involvement.

Essentially we have come to realise that product involvement is a key antecedent to brand loyalty. Pascale Quester and Ai Lin Lim (2003) recently developed a paper that supported the general consensus that higher involvement products are likely to lead to higher levels of loyalty. Others (Iwasaki & Havitz, 1998; LeClerc & Little, 1997; Park, 1996) identify support for loyalty from low involvement products. This paper starts where Quester and Lim left off, extending their methodologies to further explore and elucidate the relationship between product involvement and brand loyalty.
This first section of this thesis provides an overview of the research. The second section considers the body of literature as it relates to this topic. The third section details the methodology for the research, which is analysed in the fourth section. The fifth and final section draws conclusions from the research, identifies implications for marketers and practitioners and areas for further research.

1.1 Background
Brand loyalty makes a critically valuable contribution to competitive advantage. Marketing costs render it expensive to introduce new customers and loyal customers are less likely to switch brands. High brand loyalty is an asset that lends itself to extension, high market share, high return on investment and ultimately high brand equity. (Gounaris & Stathakopoulos, 2004) The challenge for marketers is how to influence loyalty.

Iwasaki suggests that marketers can influence loyalty through social-situational, personal and involvement antecedents. (Iwasaki & Havitz, 1998) Much has been written about the social-situational and personal antecedents, but not so with product involvement. Quester and Lim (2003) published a paper that empirically tested the relationship between purchase involvement and brand. They hypothesized that high involvement would lead to high brand loyalty and vice versa but their research showed that low involvement products could have high brand loyalty too.

The concept of involvement has played an increasingly important role in explaining consumer behaviour. It has been shown to mediate effects of media exposure, response to persuasion message, depth of processing advertising, extensiveness of decision-making process, and on-going product-related behaviours such as word-of-mouth communication (Batra & Ray, 1986; Kapferer & Laurent, 1985b; A. A. Mitchell & Olson, 1981; Mittal, 1989a).

1.2 Justification for the research
This paper re-examines the links between product involvement and brand loyalty in an attempt to build on the research conducted by Quester and Lim.
Quester and Lim (2003) suggest that product involvement and brand loyalty are two important concepts believed to explain a significant proportion of consumer purchase choices. Loyal customers reduce marketing costs and generate a greater return on investment (Gounaris & Stathakopoulos, 2004).

Mittal (1989b) suggests that high involvement products lead to high brand loyalty but Quester and Lim’s findings link low involvement products with high brand loyalty. Iwasaki (1998) also linked low involvement purchases and high brand loyalty. Clearly the literature is ambiguous, creating an opportunity to replicate Quester and Lim’s research to determine the scope and nature of the influence product involvement does in fact have on brand loyalty and how marketers may be able to control it.

1.3 Research problem and hypotheses

1.3.1 Research Question

The purpose of this research is to determine the nature and relationship between brand loyalty and product involvement.

A review of the literature indicates that high product involvement is generally considered a precondition to brand loyalty. (Chaudhuri & Holbrook, 2002; Mittal & Lee, 1989; Quester & Lim, 2003) On the other hand, Traylor (1983) and Iwasaki (1998) argued that combinations of inverse relationships e.g. low product involvement and high brand loyalty and vice versa, are also possible.

Quester and Lim (2003) certainly found support for their high involvement product, sports shoes/sneakers as an antecedent to brand loyalty but they also found support for their low involvement product, ball-point pens.

There seems to be no question that involvement plays a contributing role to brand loyalty but exactly what that role is remains uncertain. Thus the research question is:

How does product involvement affect brand loyalty?
1.3.2 Hypotheses
Kapferer and Laurent (1985a) maintain that product involvement is a significant mediating variable of consumer behaviour. They also observe that involvement is the antecedent for an overwhelming range of consequences. They conclude that this is because involvement itself is antecedent by a number of variables. They developed a model called the consumer involvement profile (CIP) that incorporates these variables; interest, pleasure, sign, risk probability and risk importance.

Interest refers to the personal interest a person has in a product category, its personal meaning or importance. Pleasure is the hedonic value of the product, its ability to provide pleasure and enjoyment. The sign value of the product is the degree to which it expresses the person’s individuality. Risk importance is the perceived importance of the potential negative consequences associated with a poor choice of the product. Risk probability is the perceived probability of making a poor choice.

Quester and Lim (2003) adopted this model as the basis of their research relating to product involvement and in particular their hypotheses. In order to replicate their study this research will do the same. Therefore the hypotheses are stated as follows:

H1. Product involvement is positively associated with brand loyalty.
H1a. Interest is positively associated with brand loyalty.
H1b. Pleasure is positively associated with brand loyalty.
H1c. Sign is positively associated with brand loyalty.
H1d. Risk probability is positively associated with brand loyalty.
H1e. Risk importance is positively associated with brand loyalty.

1.4 Methodology
Quester and Lim (2003) used qualitative interviews of a convenience sample of students to identify ball-point pens as low involvement and sports shoes/sneakers as high involvement products on which they would base the body of their research. The research was then conducted in quantitative terms, using a mail-based survey to again research a convenience sample.
In order to replicate Quester and Lim’s research this study will also adopt their primary quantitative methodology. However, in an attempt to extend the body of literature this research sourced an empirically tested list of products (Mittal, 1989a) to determine suitable variables for testing. These products will be cars and batteries.

Again, in order to extend the body of literature, this research will be conducted using an electronic survey tool. In order to test the relationship between brand loyalty and product involvement as they relate to cars and batteries the research needs to access a population of people who own cars. Secondarily these people will need to have recently purchased batteries.

A database for this population will be obtained from Atlantis Marketing. The database will provide the sampling frame and the prospects will be qualified by asking them if they own a car and have recently purchased batteries. Those that have will remain in the frame, while those that have not, will be excluded.

The Consumer Involvement Profile scale of Kapferer and Laurent (1985b) will be used to measure product involvement in this research. The CIP scale comprises 16 Likert-type, five-point statements ranging from totally disagree to totally agree.

Quester and Lim (2003) developed a questionnaire to measure the two constructs of interest in their study, using multi-item measures. They used existing scales as a basis for scale construction, as the reliability and validity of these measures had already been established. In order to maintain validity, this research will use these scales too.

The literature generally concludes that loyalty should be broken down into the two constructs of attitude and behaviour and that true loyalty is attitudinal, while behavioural loyalty is merely a habit (Datta, 2003b; Iwasaki & Havitz, 1998). Jacoby and Kyner (1973) took this into consideration to develop the basis for the brand loyalty research used in this study by developing a scale, which encompassed the three components of attitudinal loyalty; cognitive, affective and conative. Most of the items in this scale were adapted from pre-existing scales separately measuring each attitudinal component.
Data will be collected in an electronically administered survey designed to follow best practice principles with a good introduction, instructions and guidance on how to fulfil the questionnaire, why and how long it will take. The survey will feature a clear and concise layout to make it easy for the respondents to follow. The survey will use a 5-point nominal Likert scale, as did Quester and Lim.

After data collection, the data will be imported into SPSS for analysis. Initially the data will be tested for normal distribution through mean, standard deviation, skewness and kurtosis. The data will then be consolidated into factors, tested for reliability and multivariate regression to test the hypotheses.

**1.5 Outline of the report**

This, the first chapter of this research introduces the core research problem, the relationship between brand loyalty and product involvement, states the research problem, hypotheses, methodology, delimitations and outlines the path towards the conclusion of the research.

Chapter two is a review and analysis of the literature. The chapter starts with an introduction to the area of research and background to Quester and Lim’s study. It then frames the research within its wider area of consumer behaviour before breaking it back down into more specific areas of brand loyalty and product involvement. The section on brand loyalty introduces the construct and considers key areas including the distinction between behavioural and attitudinal brand loyalty which it then breaks down again into cognitive, affective and conative loyalty for further discussion. The product involvement section considers the five antecedents; interest, pleasure, sign, risk probability and risk importance. The chapter endeavours to identify key issues and gaps in the literature as they relate to brand loyalty and product involvement to lay down a platform for primary research.

In chapter three the research methodology is introduced, starting with the research problem itself, its theoretical framework, then detailing the hypotheses for further testing. The chapter then moves on to discuss the research paradigm. In particular this section discusses and considers quantitative and qualitative ontologies to conclude
with a methodology detailed in the next section, which details the research method itself, sampling techniques, survey design, data collection and analysis. Finally the chapter discusses limitations and ethical considerations before moving onto the fourth chapter, analysis.

Chapter four starts by introducing the response rates then details the descriptive statistics and tests for normal distribution. The next section consolidates the data into factors. The factors are tested for reliability before the next section where the hypotheses are tested by multivariate regression.

The final chapter draws conclusions from this analysis and considers the issues as they pertain to each hypothesis followed by consideration to the research question itself. Implications for theory and practice are discussed followed by limitations and opportunities for further research.

### 1.6 Definitions
This section provides definitions for product involvement and brand loyalty.

#### 1.6.1 Product Involvement
There are many definitions of involvement starting with Cohen (1983) who views involvement as “A person’s activation level at a particular moment in time.”

Day, Stafford et al (1995a) described product involvement as “The general level of the centrality of the object or the centrality of the object to the person’s ego structure.”

Mitchell (2002b) defines involvement as “…an internal state variable that indicates the amount of arousal, interest or drive evoked by a particular stimulus or situation.”

The common denominator between these definitions is the degree of interest a person has in an object. With several papers published on the topic, Banwari Mittal (1989b) could be considered an authority and sums up the literature succinctly with his definition of product involvement, “The extent of interest and concern that a person brings to bear upon a purchase-decision task.”
1.6.2 Brand Loyalty
Jacob Jacoby is one of the early pioneers of research on brand loyalty. With David Kyner (1973) he defined brand loyalty as “The biased (i.e. non-random), behavioural response (i.e. purchase), expressed over time by some decision-making unit, with respect to one or more alternative brands out of a set of such brands, and is a function of psychological (decision-making, evaluative) processes.”

More recently Bennett and Rundle-Thiele (2002) assert that there is no consensus on a definition for brand loyalty, rather the literature generally supports two alternative approaches to the construct of brand loyalty.

The first one is concerned with “A consistent purchase behaviour of a specific brand over time.” This is a behavioural approach to brand loyalty and has been widely used to define the construct. The second one relies on “a favourable attitude towards a brand”. This distinction between behavioural and attitudinal loyalty is a key issue in the literature.

1.7 Delimitations of scope and key assumptions
This research is limited to consideration of New Zealand consumers aged 20-65 residing in New Zealand in February 2006. Additionally cars and batteries were selected from Mittal’s (1989a) list of products and their involvement index framing potential conclusions within these boundaries.

1.8 Conclusion
Researchers have identified product involvement as a critical antecedent to brand loyalty (Mitchell, 2002b; Mittal, 1989a; Quester & Lim, 2003).

Pascale Quester and Ai Lin Lim (2003) have empirically tested this construct, however while the literature generally concedes that high involvement is likely to lead to brand loyalty their findings also support the inverse. Therefore this research will attempt to extend the literature by replicating Quester and Lim’s study, further exploring the relationship between product involvement and brand loyalty.

This, the first chapter introduces the research followed by justification for the project. The next section introduced the research problem and hypotheses, followed by a brief
overview of the methodology designed to test them. Section 1.5 provided an overview of the report in its entirety followed by definitions to provide a platform for further research. This section concluded with delimitations before its conclusion into Chapter two, where the literature will be reviewed in detail.
Chapter 2: Literature Review

2.1 Introduction
This research replicates the work of Pascale Quester and Ai Lin Lim (2003) to explore the relationship between product involvement and brand loyalty and add new perspective to the body of literature. The first section reviews Quester and Lim’s research and considers its significance. The second section then moves on to explore the wider area of consumer behaviour and how the constructs fit in at a macro level. Section 2.4 then goes on to explore brand loyalty in detail, with consideration for behavioural and attitudinal loyalty and in turn cognitive, affective and conative attitudes. The final section reviews product involvement and its five antecedents before leading into Chapter 3.

2.2 Background
Quester and Lim (2003) used a convenience sample of two focus groups of university students to determine high or minimal involvement categories, resulting in the selection of sports shoes/sneakers and ball point pens. The authors then developed a questionnaire around Kapferer and Laurent’s (1985b) Consumer Involvement Profile (CIP) scale which breaks product involvement into five antecedents; interest, pleasure, sign, risk importance and risk probability, using 16, 5 point Likert scales. The questionnaire was pre-tested by submitting it to 5 academics from the University of Adelaide and 23 third-year University students. Comments and feedback were then integrated in the final questionnaire, which was completed by 253 respondents.

Quester and Lim (2003) found that respondents could not distinguish between interest and pleasure for sports shoes/sneakers, while sign and pleasure were viewed as being the same for ball-point pens. Additionally, and despite a large body of literature arguing that the attitudinal facet of brand loyalty consists of multi-dimensional constructs, the emergence of a single factor from their data shows that respondents did not distinguish between the cognitive, affective and conative components of the construct.

An examination of the $t$-values showed that, with respect to sports shoes/sneakers, out of the four facets of involvement only interest and pleasure and sign contributed
positively to the prediction of brand loyalty to the product, while risk probability and risk importance did not ($p < 0.05$).

Sign and pleasure and risk importance contributed positively to the prediction of brand loyalty in ball point pens but risk probability had a negative and significant relationship with brand loyalty ($p < 0.05$).

Quester and Lim (2003) found that risk probability and risk importance did not contribute to the prediction of brand loyalty for sports shoes/sneakers. On the contrary, the two risk facets contributed significantly to the prediction of brand loyalty for ball point pens ($p < 0.05$). This finding is quite unexpected. Ball point pens are typically thought of as a minimal involvement type of product because they are low in cost and inconsequential in nature.

On the other hand, sports shoes/sneakers are higher in cost and, generally, would involve a more complex purchase decision-making process. Accordingly, it would be reasonable to assume that there would be more risk involved in the purchase of sports shoes/sneakers in terms of both perceived probability of mistake and negative consequences of making a poor choice. However, this does not appear to be supported by the findings. Instead, risk factors emerge only for ball point pens.

One possible explanation may lie in the utilitarian nature of pens compared with the more symbolic character of sneakers. Hence, the only reason to become loyal to a pen is the assurance that it will perform its task, without leaking or failing to work in the middle of an exam, for example.

Alternatively, since sneakers tend to be used by the sample for non-athletic reasons, the risk attached to their failure to perform may be irrelevant, compared with the hedonistic or sign value aspects of the product.

Essentially, Quester and Lim (2003) found that while involvement is not the only determinant factor of brand loyalty, it does appear to play a significant role, regardless of the level of involvement associated by consumers with the product category in question.
Their results lend some support to previous findings that a relationship exists between product involvement and brand loyalty (Iwasaki & Havitz, 1998; LeClerc & Little, 1997). Nevertheless, as argued by Iwasaki and Havitz (1998), it does not show that the former construct precedes the latter. The survey method used in this study could not establish the temporal sequence of the constructs.

Iwasaki and Havitz (1998) found that high involvement does not necessarily translate to brand loyalty because individual characteristics and social-situational factors moderate the affects of involvement. The personal moderators reflect an individual's cognitive, affective, and/or behavioural characteristics. Moderators include attitude accessibility, the extent to which an attitude is articulated from memory, post purchase evaluation, satisfaction/dissatisfaction and other emotional factors, personal benefits and potential personal benefits, opportunity costs, that is, financial and emotional investments including equipment and membership owned, money invested, and length of training, switching costs, competence/skills and interpersonal constraints.

Brand loyalty is important because it is a key driver of repeat purchase behaviour (Bennett & Rundle-Thiele, 2002; Chaudhuri, 1995) and somewhat unsurprisingly, repeat purchases generate long term value. It is difficult and expensive to gain new customers, thus brand loyal customers hold consummate appeal.

The problem is that competitive markets, fragmentation, individualisation and increased spending power have vastly increased the range of choices available to people putting brand loyal consumers increasingly under pressure to try alternatives (Nelson, 2002).

While, clearly not the only solution to this problem, many researchers (Iwasaki & Havitz, 1998; LeClerc & Little, 1997; Park, 1996; Quester & Lim, 2003; Traylor, 1983) have identified a strong link between product involvement and brand loyalty.
Chaudhuri (1995) agrees that the link between product involvement and brand loyalty extends to aspects including risk, product class, perceived differences between brands and the ratio of hedonic to utilitarian value associated with the product category.

LeClerc and Little (1997) also agree that product involvement interacts with brand loyalty. However, they also found that repeat purchase behaviour for a high involvement product was an indicator of brand loyalty but repeat purchase for a low involvement product was simply habitual purchase behaviour.

Iwasaki and Havitz (1998) found that there was a link between high levels of product involvement and high levels of brand loyalty. They also acknowledged that individual and social-situational factors, such as personal values or beliefs, social and cultural norms, influenced the loyalty.

Alternatively, Traylor (1983) advocates that product involvement is generally not directly related to brand commitment. Traylor illustrates cases where high involvement is associated with low commitment and low involvement with high brand commitment. Traylor rationalises this by suggesting that product involvement and brand loyalty are consumer-defined, rather than product-defined phenomena.

Excluding this exception, the general convention in the literature suggests that involvement in a product class is directly related to commitment within that product class. Additionally, the more important a product class is to an individual’s ego or sense of identity, the stronger the psychological attachment they will exhibit to a particular brand within that product class. Consumers who are more involved with a particular brand are also more committed and hence more loyal to that brand. It has also been generally agreed that high involvement is a prerequisite to loyalty. This is the central premise of this research. Quester and Lim’s study will provide the platform for replication and extension to explore the nature and scope of the relationship between brand loyalty and product involvement. This chapter discusses these constructs as they relate to the issue but before considering product involvement and brand loyalty we must first frame them within the wider area of consumer behaviour.
2.3 Consumer behaviour

Gordon (2004) suggests that the purchase decision making process remains one of the great undiscovered secrets of marketing. Provocatively, she posits that this is because we spend too much effort in attempting to understand “human doing” rather than “human being.” Essentially she is suggesting that humans are largely irrational and our decision-making processes do not always follow logical and rational sequences of behaviour.

In a subsequent piece co authored with Virginia Valentine and winning the best new thinking piece of the year, Gordon (2000) extends this thinking citing Rene Descartes famous dictum “I think, therefore I am” as a precursor to the modern consumer. Basically, the authors suggest that the modern consumer is actually a subject, perpetually reinventing themselves depending on the occasion. This philosophy resonates with Jacques Lacan’s two states of subjectivity. The first is consumer stability, where the consumer sees themselves clearly in a moment of identity. In the second, consumer mutability, the consumer remains in a state of flux between identities. To regain stability they must go through a discourse where they identify with the messages they receive from a brand. Gordon calls this the moment of identity, the ever-shifting point in time when a consumer identifies with a brand.

Foxall (1993) agrees that consumer behaviour is erroneously based on a history of the cumulative effect of rewarding and punishing outcomes of past behaviour. It represents the personal factors influencing consumer choice and primes the consumer's approach or avoidance responses. State variables, such as mood states, ability to pay, health and deprivation, also influence momentary purchase and consumption.

Supporting and extending these arguments Nelson (2002) suggests that more open and competitive markets, greater fragmentation, individualisation and increased spending power have vastly increased the range of choices available to people. The scale and complexity of choice is the subject of exponential growth that has taken consumers into a new landscape, where choices now stretch beyond the horizon, dwarfing our ability to survey and select.
At every level we have many more choices to make in our lives (Nelson, 2002). The movement towards economic equality and independent consumption within households has seen the role of 'specialist' consumer for the whole household become less likely to be the domain of one family member. Even where one person is still responsible for household shopping, wider social trends make life more difficult. With the democratisation of the family has come an individualisation of consumption, making the family shopping all the more complicated. The end result is that consumers are handling impossibly demanding choice situations with selective attention and preconceived choice strategies, because they have better things to spend time on than the minutiae of product information and the mathematics of value. Trusted brands obviously play a very important role here, and they will continue to do so. Nelson’s respondents pointed to various ways in which they 'self-limited' the choices on offer to them. Routine repurchasing (brand loyalty) was the most obvious way of doing this. We can see a parallel between this and the widespread use of what Nelson calls 'the ostrich technique' for managing choice in markets where choice is relatively new - consumers simply ignore it altogether.

Nelson makes reference to one consumer that mentioned buying organic food as a way she managed the choice on offer: “I only eat organic food - that makes it a bit easier - at least I don't have to think with that ... I used to end up with a trolley piled high with things, now if I just go for organic I buy less.” Another said that his habit of only buying reduced items was as much about not having to think about what to buy as it was about price savings.

Consequently, there have been numerous models developed in endeavours to resolve some of these issues but as Gordon (2004) advocates these models date to circa 40 years old. Hansen mediates that these models all have value but agrees that the modern consumer is complex and decisions are made under a myriad of influences. Accordingly, he endeavoured to amalgamate various constructs in a new model, which he empirically tested. Hansen’s model incorporated constructs from the Consumer Decision Process Model (Blackwell et al., 2001) the Howard and Sheth model (1969), the theory of reasoned action (Ajzen & Fishbein, 1975) and the Zeithaml model (1988).
First published in 1968, the often cited CDP (Blackwell et al., 2001) model sees consumer decision making as a problem solving task involving five key steps; need recognition, search, evaluation, purchase and post purchase evaluation. This model has been criticised for being too cognitive, particularly in relation to information processing and memory factors. The Howard Sheth (1969) model is similar, following on from the CDP model with 5 key steps in a cognitive paradigm. The theory of reasoned action (Ajzen & Fishbein, 1975) and the theory of planned behaviour (Ajzen, 1985) also reflect attempts to model consumer behaviour and also fail to incorporate emotional evaluative perspective. 20 years on from the development of the CDP model, Ziethaml (1988) developed a model linking internal (E.g. colour and ingredients) and external (E.g. price and advertising) product characteristics to perceived consequences (E.g. quality and value) and ultimately buying intention.

Hansen (2005) broke these models down to their basic constructs which he then used to reconstruct in a new hybrid consumer decision making model incorporating involvement, consumer perceptions of price and quality, emotional response attitude and purchase intention (Figure 2.1).

![Figure 2.1 Hansen’s model of consumer decision making](image)

Testing identified support for all of the constructs except price – buying intention and emotion - attitude and emotion – buying intention. However, price was found to indirectly affect buying intention via quality and attitude.

The lack of support for emotion as an antecedent to buying intention may be explained by Mitchell (2002a) who points out that we may not even know or understand ourselves (which is why we sometimes employ counsellors or psychotherapists) and often what we say to researchers (and to ourselves) is different
to what we actually do. Additionally, every consumer is unique and unpredictable, making this task exceedingly difficult.

In summary, this section reviewed the overarching concept of consumer behaviour. Starting with Wendy Gordon (2004) consumer decision making was framed as “One of the great undiscovered secrets of marketing.” Gordon substantiated this by suggesting that consumer decision-making research was out of touch with the contemporary consumer and introduced theories on subjectivity and consumer mutability and stability, which led to moments of identity. Foxall (1993) agreed that consumer decision making research was outdated, also agreeing that “state variables” affected consumer choice. Nelson (2002) suggested that consumer choice was the single most significant factor influencing consumer decision making in the twenty first century. Finally, Hansen (2005) attempted to resolve these issues by developing a contemporary model of consumer decision making. Testing did not find support for emotion as an antecedent to buying intention but it did find support for price, quality, involvement and attitude. Bennett and Rundle-Thiele (2002) suggest that attitude is one of the two antecedents to brand loyalty. Thus the relationship between attitude, brand loyalty and involvement in the context of consumer behaviour becomes apparent as the subjects of further investigation in the next two sections of this study.

2.4 Brand Loyalty
Datta (2003a) suggests that brand loyalty is a fundamental concept in strategic marketing. Companies plan marketing strategies to increase brand loyalty to maintain a strong market share and garner higher profits. Brand loyalty can also lead to other marketing advantages such as word of mouth referral and greater competitive resistance. Consistent with Nelson (2002) cited earlier, Datta notes that consumers are increasingly bombarded with competitive claims. Not only does this make consumer decision making more difficult but it can also become very expensive for a company to maintain brand loyalty amongst existing customers. Therefore it has become more important for marketers to understand the factors that influence a consumer to become and remain loyal to a brand.
Jacoby and Kyner (1973) characterise brand loyalty as “The biased (i.e. non-random), behavioural response (i.e. purchase), expressed over time by some decision-making unit, with respect to one or more alternative brands out of a set of such brands, and is a function of psychological (decision-making, evaluative) processes.”

Pritchard and Howard (1997) extend these understandings, defining brand loyalty as “A network where the construct's root tendency, resistance to change, is maximized by the extent to which individuals are motivated to seek informational complexity and consistency in the cognitive schema behind their preference, able to freely initiate choices that are meaningful and willing to identify with important values and self-images that are associated with that preference.” Pritchard and Howard extended the definition to different degrees of loyalty: undivided loyalty, divided loyalty, unstable loyalty and no loyalty.

Chaudhuri and Holbrook (2002) talk about brand loyalty in terms of trust and commitment. They say that brand commitment is a critical relational variable that encourages the respective partners in a relationship to work at preserving the relationship, to avoid alternative relations with other partners, and to reduce the perception of risk in the environment. Brand commitment reduces uncertainty and saves a customer the cost of seeking new relational exchanges with other brands. They also identified a positive and significant contribution between these constructs and market share.

Fournier (1998) notes that these interpersonal relationships with brands are stronger with women so to develop these theories she used phenomenological interviewing techniques with 3 women in traditional, transitional and post modern life stages. She found that these life stages had a significant bearing on brand loyalties with the traditionalist being the most loyal, to the post modernist being least loyal. Fournier concluded that consumers are involved with a number of brands that add meaning to their lives, some of which are functional (or utilitarian) and some of which are psychosocial, emotional or perhaps even hedonistic. Consistent with Boote (2003) and Nelson (2002), Fournier says that while some of these decisions are rational and some are not, all are ego based and therefore of great significance to those engaging
them. The processes of meaning provision, manipulation, incorporation and pronouncement authenticate the notion of relationship in the consumer-brand domain.

Similarly, Chaudhuri and Holbrook (2002) say that brand loyalty is greatest under conditions of high-perceived differences (or high involvement) among brands in a product class. This is rationalised by greater differences, leading to greater risk, strengthening brand loyalty.

While investigating the major factors that influence consumers' loyalty towards their brands, Datta (2003a) found that the performance of the brand is thought to be one of the most important factors. If consumers have a positive usage experience then they may develop a tendency to use the brand again. Datta’s (2003a) research revealed that the major factors that influence brand loyalty are the product performance, the satisfaction of customers, price, habit, the history of brand usage, brand names, and consistent with Chaudhuri and Holbrook (2002), the level of risk and involvement of the consumer. Datta describes involvement as “A general term that can be defined as the degree of personal relevance of an object or product or service to a customer.” Datta says that high involvement may lead to an extensive information search and if the consumer is satisfied with the product, it might lead to repeat purchases and ultimately brand loyalty. Low involvement may lead to brand loyalty through habitual purchasing.

2.4.1 Habitual and attitudinal loyalty

The distinction between habitual and attitudinal brand loyalty is prevalent in the literature. A leading authority on brands, David Aaker (1992) notes that one of the brand assets at the source of value, brand loyalty implies both a consistent pattern of purchase of a specific brand over time and a favourable attitude towards a brand. Following Aaker’s lead, the literature generally supports two alternative approaches to the construct of brand loyalty. The first one is concerned with “A consistent purchase behaviour of a specific brand over time.” This is a behavioural approach to brand loyalty and has been widely used to define the construct. The second one relies on “a favourable attitude towards a brand”.

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Bennett and Rundle-Thiele (2002) agree that there are two aspects to brand loyalty, attitudinal and behavioural. Therefore they suggest that you can’t use one all encompassing measurement. Rather you should apply a different model according to the set of variables in context. Eg It is difficult to measure behavioural aspects of brand loyalty as they relate to consumer durables with long purchase cycles because the infrequency of purchase really means that there simply isn’t a pattern of behaviour to consider. They also suggest that brand loyalty could be strongly related to personality traits. Some people have a strong propensity to attitudinal loyalty, which they say is directly related to risk avoidance. However, if this stood true it stands to reason that other aspects of loyalty could be due to personality traits too? Eg behaviourally loyal consumers may be so because they are also attuned to risk avoidance, in fact they could just be lazy.

In contrast, Fournier (1998) cites research to suggest that there is no such thing as brand loyalty, just repeat purchases motivated by inertia. She does, however agree that consumers like to assign humanistic personalities to brands and look for a dyadic relationship from brands. Fournier suggests that brands can be even be animated by associations with people that endorse them, use them or give them. E.g. Going to Nana’s house and receiving barley sugars… The brand assumes the animism transferred from that experience given by that person, in that environment.

It is perhaps the behavioural side of loyalty, consistent purchase behaviour that Fournier sees as innate but others (Chaudhuri & Holbrook, 2002) rationalise as brand trust. Fournier agrees that this is a concept most likely to be associated with utilitarian or low involvement products, where the purchase is more rationally motivated. E.g. In purchasing washing powder, there is low perceived difference between brands, a brand is purchased and trialed, and if it works the purchaser continues to buy it. There is nothing self-expressive about this purchase; it merely has to work on a physiological level.

Chaudhuri and Holbrook (2002) suggest that brand loyalty requires some degree of commitment toward the quality of a brand and indicate that brand loyalty is a function of both positive attitudes and repetitive purchases. Perceptibly, Chaudhuri and
Holbrook define brand commitment as a consumer's long term, behavioural and attitudinal disposition toward a brand.

Dick and Basu (1994) agree that brand loyalty requires both behavioural and attitudinal commitment. Additionally, they break attitudinal loyalty into three constructs, cognitive, conative and affective. Greenwald, Brock et al (1968) also suggest that these constructs play a significant role in defining attitude. Consequently, Quester and Lim (2003) incorporated these constructs into their research as it relates to brand loyalty, however contrary to the literature, their respondents seemed unable to distinguish the differences. The next three sections explore these constructs further.

2.4.2 Affective loyalty
Chaudhuri and Holbrook (2002) identified a link between brand trust and habitual purchase behaviour but they also found a strong correlation between hedonic value, risk and brand affect, antecedent to brand commitment. They also agree that brand affect is one of three key constructs that contribute to attitudinal brand loyalty. Chaudhuri and Holbrook (2002) define brand affect as “The potential in a brand to elicit a positive emotional response in the average consumer as a result of its use.” The strength of a relationship between a brand and its consumers depends on the level of positive affect generated by that brand. Strong and positive affective responses will be associated with high levels of brand commitment.

Similarly, Dick and Basu (1994) propose that brand loyalty would be greater under conditions of greater positive emotional mood or affect. Thus, brands that make consumers happy will be associated with greater commitment. While feelings of love may not be prevalent in supplier-buyer relationships, Chaudhuri and Holbrook (2002) suggest that positive emotional feelings such as happiness, joy or even love are very much a part of the relationship that brands have with consumers. Hence, brand commitment increases as brand affect increases.

Fournier (1998) stretches this even further to identify love or passion at the centre of a committed brand relationship. Fournier identified the strength of brand relationships as love and passion, self-connection, interdependence, commitment, intimacy and
brand/partner quality. Of paramount relevance to this research, Fournier also says that meaningful relationships are formed not on symbolic vs. functional lines or in terms of high vs. low involvement but by the perceived ego significance of the brand. She concludes that the interaction between brand and consumer leads to brand relationship quality, which leads to relationship strength or loyalty. Consequently you can see that even though Fournier decries the concept of brand loyalty, she supports the attitudinal notion of brand affect, an emotional connection between brand and consumer, the ultimate in which is love. It would seem that this connection might be driven by hedonic/utilitarian motivations, which are inherently linked to product involvement. E.g. a can of Coke may be inexpensive but can carry huge ramifications in a sense of self-expression, thus it has high hedonic value, high involvement and probably a high degree of brand affect and loyalty.

2.4.3 Cognitive Loyalty
While brand affect addresses the emotional aspect of brand loyalty, cognitive loyalty is more rational. Dick and Basu (1994) suggest that cognitive loyalty consists of four antecedents; accessibility, confidence, centrality and clarity. Accessibility is the ease with which an attitude can be retrieved from memory. Attitudinal confidence is the level of certainty associated with an attitude or evaluation. The degree to which an attitude toward a brand is related to the value system of an individual indicates its centrality and an attitude is well defined when an individual finds alternative attitudes to a brand objectionable.

2.4.4 Conative Loyalty
Although typically associated with attitudinal loyalty, Dick and Basu (1994) describe conation as a “behavioural disposition.” They identify three distinct aspects; switching costs, sunk costs and expectations. Switching costs are the one off costs of switching from one brand to another E.g. The cost to buy a new razor when switching from Gillette to Schick. Sunk costs refer to costs already invested and thus generating loyalty for customers who endeavour to maximise the value of their investment. Using the same example, if you have already “invested” in a Gillette razor you may be reluctant to switch to Schick even though you may come to prefer their blades. Finally future expectations, you may expect Schick to introduce a new model in the
short term and therefore hold out with your current Gillette to maximise your return on investment before switching to the new brand.

2.5 Product Involvement

In the literature, the term involvement has been used diversely (Cohen & Miniard, 1983), however, the field seems to have recently progressed towards more compatible understandings of involvement (Mittal & Lee, 1989).

Starting with the pioneers of consumer behaviour, Blackwell, Miniard et al (2001) and later adopted by Zaichowsky (1985) and Celsi and Olson (1988), Involvement is said to “Reflect the extent of personal relevance of the decision to the individual in terms of her basic values, goals, and self-concept.”

Similarly, Greenwald and Leavitt (1984) conclude their literature review by stating that “there is a consensus that high involvement means (approximately) personal relevance or importance”.

Adopted by Bloch (1983), Chakravati et al (1979, 1981) suggest that Involvement is “An internal state variable that indicates the amount of arousal, interest, or drive evoked by a particular stimulus or situation”

Banwari Mittal has studied the area of product involvement extensively. Together with Myung-Soo Lee he (1989) describes involvement as “A motivational state of mind of a person with regard to an object or activity. It reveals itself as the level of interest in that object or activity. It may be defined as a goal-directed arousal capacity.”

Day, Stafford et al (1995b) described Involvement “as the general level of the centrality of the object or the centrality of the object to the person’s ego structure.

Cohen and Miniard (1983) view involvement as a person’s activation level at a particular moment in time.
According to Miller and Marks (1996) and Gordon et al (1998) product involvement involves an ongoing commitment on the part of the consumer with regard to thoughts, feelings, and behavioural response to a product category.

Consumer involvement also suggests a continuum of consumer interest. Vaughn (1980) adds that products that are high in cost, ego support, social value, newness and risk require more information and attention to process. On the other hand, low involvement products engage little interest, are less risky and thus require less purchase information and effort.

Iwasaki and Havitz (1998) define involvement as “An unobservable state of motivation, arousal or interest toward an activity or product.”

The common denominator between these definitions is that involvement is the degree of a interest a person has in an object (Mittal, 1989b). Thus Mittal offers up a definition of purchase decision involvement – “The extent of interest and concern that a person brings to bear upon a purchase-decision task.”

2.5.1 The five antecedents of product involvement

In order to measure the extent of this degree of interest, Kapferer and Laurent (1985b) developed the Consumer Involvement Profile (CIP) scale. This model was based on the assumption that involvement was determined by five antecedents; pleasure, interest, sign, risk probability and risk importance.

In 1993 Rogers and Schneider (1993) empirically tested Kapferer and Laurent’s CIP scale and found that while the scale was generally consistent, consumers could not distinguish the difference between interest and pleasure.

Mittal (1989b) also maintains that there are flaws in Kapferer and Laurent’s model. Kapferer and Laurent combine product importance and perceived risk, which are two different concepts and thus inherently flawed. Mittal suggests that the concepts of hedonic and sign value are related to product involvement and not purchase decision involvement. He also says that risk probability and perceived risk are both factors of
perceived risk, which is antecedent to purchase decision involvement rather than integral.

Consequently, Mittal (1989b) went on to develop his own purchase decision model. After pretesting this model was pared down to four questions and consistent with Quester and Lim and Zaichowsky (1985) was measured against a convenience sample of students. Mittal tested a number of products to develop a scale of product involvement. Spectacles and insurance deemed to be high, wine and beer were in the middle and salt and pencils were at the bottom. Intuitively, logic would seem to support these findings and also supports the notion that different uses determine different involvement. Eg Purchasing wine for a special occasion will derive more scrutiny than a regular purchase.

McWilliam (1997) agrees that the conditions associated with involvement generally involve perceived risk (financial, physical, psycho-social, or time-generated risk), the expression of one’s own personality or mood (usually referred to as value-expressiveness or self-concept. Sign in the CIP model), the perceived importance and the hedonic value of the stimulus or object.

Iwasaki and Havitz (1998) believe that the antecedents of involvement consist of two primary factors: individual characteristics and social-situational influences. Individual characteristics that have been suggested and/or found to be antecedents of involvement include; values or beliefs, attitudes, motivation, needs or goals, initial formation of preference, initial behavioural experiences and competence. They also propose that intrapersonal constraints or anticipation of personal benefits and/or initial gain of personal benefits such as satisfaction and health may be personal antecedents of involvement. High levels of intrapersonal constraints are likely to be associated with low involvement, whereas anticipated personal benefits and/or initial gain of personal benefits tend to result in high involvement. The social-situational antecedents reflect both micro and macro social-cultural influences, including; social support from significant others, situational incentives, social and cultural norms, interpersonal and structural constraints, anticipation of social benefits and/or initial gain of social benefits such as friendships and family solidarity. Iwasaki and Havitz use the example of a golfer to demonstrate these antecedents influence on
involvement. If the golfer’s social circle becomes disinterested in golf then he may too. The difficulty of assessing these antecedent effects is that they rarely increase or decrease congruently with each other in terms of direction or intensity. Increased popularity, a new course and rising income may increase our golfers tendencies to the game but his friends urge to pull him towards other pursuits may be stronger than the combination of the other three variables. Iwasaki and Havitz also operationalise involvement as a multidimensional construct including five facets; attraction, sign, centrality to lifestyle, risk probability and risk consequence. Attraction refers to the perceived importance or interest in an activity or a product, and pleasure or hedonic value derived from participation or use. Sign value is the unspoken statement that purchase or participation conveys about the person. Centrality to lifestyle encompasses both social contexts such as friends and families centred around activities and the central role of the activities in an individual's life. Risk probability is the perceived probability of making a poor choice and risk consequence is the perceived importance of negative consequences in the case of a poor choice.

Nelson (2002) extends this by illustrating some of the factors affecting choice: First, the value of a consumer's time. Second, there is the enjoyment of the process or experience of choosing. Third, the consumer's previous experience. Fourth, the perceived risk of engaging in choice at all, where a habitual preference or current provider exists, or where alternative choices have unstable pricing (e.g. interest rates) or unknown quality. Last, there is the perceived differential between products or services in a sector. Supporting the theories that relate to habitual brand loyalty, Nelson says that generally, where perceived differences are low, a choice will not command much value, consumers may be more inclined to delegate choice to a trusted (or merely familiar) brand for that very reason. Where perceived differences are higher, the rewards for being a choice manager will be that much higher.

2.5.1.1 Interest
Nelson (2002) is pointing to the first of the five antecedents to product involvement, interest. Richins and Bloch (1986) note that consumers with high product involvement would find the product(s) interesting and this would occupy the consumers’ thoughts without the stimulus of an immediate purchase. Such interest in
the product category may arise from the consumer’s perception that the product class meets important values and goals.

2.5.1.2 Pleasure
Similarly, Chaudhuri and Holbrook (2002) state that emotions and feelings of enjoyment or pleasure are key components in purchase decisions. They propose that there are two broadly different types of products - primarily utilitarian products with tangible, objective features that offer functional benefits, and primarily hedonic products with subjective, non tangible features that produce enjoyment or pleasure. More recently, other researchers have attempted to measure these hedonic and utilitarian aspects of consumption and have broadly concluded that a ratio of emotion to reason complements the role of involvement in a variety of product categories. The authors argue that products may be placed on a hedonic/utilitarian continuum ranging from high to low in their potential for pleasurable versus functional benefits. In fact Chaudhuri and Holbrook suggest that hedonism is most likely to lead to brand affect and brand commitment or brand loyalty. In context, they suggest that product involvement is symptomatic rather than causal. E.g. it is more important to determine whether the product has high utilitarian/hedonistic value than high/low purchase involvement.

2.5.1.3 Sign
Closely related to these concepts of pleasure and hedonism is sign, self image or ego. In a study of Australian beer drinkers Pettigrew (2002) found that the primary concern of those drinking beer was image management. In this context image management refers to the activities undertaken by drinkers that communicate their membership of specific groups, that develop and reinforce their self-concepts, and that maximise the outcomes of the stereotyping activities of others to enhance self-esteem. The main purpose of image management among beer drinkers is to promote a satisfactory sense of self and to stave off feelings of inadequacy and insecurity. This process involves consumers experiencing both positive and negative feelings during the course of their image management activities. Pettigrew found that it was apparent that much of this function occurred beyond consciousness, with informants subconsciously working towards the attainment of a self-image that they have been conditioned to desire by the culture and subcultures to which they belong. Respondents attributed their own beer consumption behaviours to perceived rational explanations such as personal
taste, while they tended to attribute image management as a primary source of motivation for others. Pettigrew also noted that drinkers frequently chose more expensive brands to consume in public and less expensive brands to consume in private. This may be also closely related to risk probability and consequence.

2.5.1.4 Risk probability
Galloway (1999) introduced the notion of risk probability to product involvement with “the width of the zone of tolerance,” which he suggests is inversely proportional to the degree of involvement.

Chaudhuri and Holbrook extend this thinking (2002) breaking risk into two categories, inherent and handled. Inherent risk relates to the product category and handled risk relates to brands within the category. Handled risk is a consequence of perceived differences among brands and is a determinant of brand trust and brand affect, the habitual and attitudinal aspects of brand loyalty. There are five types of brand choice risk within this category; financial, social, psychological, physical and performance which can also be grouped into two predominant types: functional and emotional. Specifically, functional brand-choice risk refers to risky aspects of choosing a brand in a product class where brands differ in their financial aspects (e.g. cost), physical safety (e.g. healthiness) or other tangible characteristics (e.g. performance). By contrast, emotional brand-choice risk refers to risky aspects of choosing among brands that differ in their psychological consequences (e.g. self-image) or in their social implications (e.g. status). Consistent with many others (Bennett & Rundle-Thiele, 2002; Datta, 2003a; Gordon & Valentine, 2000; Hansen, 2005; Mitchell, 2002a; Nelson, 2002), Chaudhuri and Holbrook also suggest that social and psychological dimensions of risk may be especially relevant in our present-day environment of parity products where very few brands can command true long-term technological superiority in terms of actual tangible product features. Rather, perceptions of differences in social, psychological, emotional or non-tangible risk may be more operative for brands in many or most product classes today.

Chaudhuri (2002) discusses rational and experiential types of decision-making and their relationships with hedonistic and utilitarian product types, e.g. those that provide the most pleasure and those that provide the most benefit. Hedonistic purchases are
often influenced by experiential or irrational decisions whereas utilitarian purchases may be more likely to be influenced by more rational decisions. Chaudhuri cites Televisions as a product that sits somewhere in the middle, not only with high utilitarian value but also with high hedonistic value. Chaudhuri suggests that this is where consumers are most likely to seek the highest degree of both rational and irrational knowledge, which leads to the greatest degree of risk. Products and services that are capable of providing enjoyment are also associated with an accompanying sense of diminished risk concerning the consequences of hedonistic fulfilment, which Chaudhuri suggests is an important finding for public policy issues because it suggests that hedonistic experiences with products such as cigarettes and alcohol may lead to lessened awareness of the risk associated with such products. This may provide an explanation for the finding that certain warning labels are ignored by consumers of these products and suggests that risk is related to positive or negative emotions rather than rational information.

Zeithaml (1988) also reminds us that consumer perception is in fact reality. Gordon (2000) suggests decision making at the moment of identity is often subjective. Mitchell (2002a) says that we may not even know or understand ourselves so it’s no surprise that Chaudhuri (2002) found that emotion explained the variance in perceived risk beyond the risk perceived from rational influences. While strongly debated Chaudhuri cited compelling anecdotal and scientific evidence, which indicates that rational factors may not account for all of the consumption experience with respect to the perception of risk in products and services. He used a 'fear of flying' as an example. A fear of flying cannot be overcome by rational argument. No amount of reassurance can dispel that visceral feeling as the 'plane accelerates down the runway… In fact, Chaudhuri found that rational thoughts were not even remotely related to perceived risk.

Chaudhuri (2002) also notes that the finding that emotions leads to perceptions of risk holds important implications for managers in terms of brand loyalty. A brand that reduces perceived risk in a 'high anxiety' product category should engender greater acceptance. Continuing with the airline example, Chaudhuri demonstrates with 'Ultra Air' who promotes itself as 'the least annoying airline'. He goes on to note that these
days marketing increasingly attempts to alleviate consumers' feelings of depression, nervousness and mistrust.

Even in areas of low involvement and more rational decision making, consumers still exhibit emotional, irrational behaviour. Nelson (2002) used the utility market as an example because of the lack of difference between the services. More than 20 per cent of people who changed their supplier mentioned friendly or persuasive salespeople as a reason for change. 51 per cent made their own price comparisons - the rest took the promotional material of their new supplier on trust. The vast majority of those that had come across pricing information were dependent on current or prospective suppliers. Although 27 per cent had seen pricing information in the media, a mere 5 per cent had consulted an independent source of comparisons. Clearly, utilities consumers rarely seek impartial advice suggesting that switching decisions were made largely for emotive reasons.

2.5.1.5 Risk Importance
Following on from this thought and linking variables within the wider context of involvement, Chaudhuri and Holbrook (2002) also suggest that the effect of perceived differences on functional brand-choice risk is higher for products high in hedonic or sign value because perceptions of differences between brands and the consequences of choosing the wrong brand may be heightened for products with a highly involving level of motivation due to their potential for greater hedonic value as opposed to more mundane products that are used on a regular basis. Typically, high hedonic products are not 'everyday' products but products that are used occasionally and, thus, cherished more by most consumers (e.g. luxury goods or delicacies). Some of these products are high in price so that perceptions of financial and functional risk are likely to be magnified if perceptions of differences are also high. Similarly, such products may be high not only on their pleasure potential but also on their 'pain' potential in terms of the physical dangers (functional disadvantage) present in choosing the wrong brand. Thus, even low-priced but highly pleasurable products (e.g., ice cream) can have undesirable consequences if you choose the wrong brand. Similarly, perfumes, fashion wear, sweets and alcohol not only provide potential pleasure, but may also have the potential for undesirable functional consequences. These products may be closely associated with the consumer's self-concept and social identity, so that
perceived differences in quality among brands may translate into greater risk in the social and psychological consequences of choosing the wrong brand, strongly supporting Pettigrew’s (2002) findings in her research with beer drinkers.

2.6 Conclusion
This research explores the relationship between brand loyalty and product involvement. The research uses the study by Quester and Lim (2003) as a foundation for replication and extension. Quester and Lim used a convenience sample of 253 students to test the relationship between product involvement and brand loyalty with ball point pens and sports shoes/sneakers. Their research found support for interest/pleasure and sign for sports shoes/sneakers and sign/pleasure and risk importance for ball point pens. Risk probability had a negative and significant relationship with brand loyalty for this product. The merging of interest and pleasure on sports shoes/sneakers was consistent with findings from others (Y. Iwasaki & Havitz, 1998) but the merging of sign/pleasure for ball point pens and the risk relationships for both products was at odds with the wider body of literature. These inconsistencies could be rationalised through sampling techniques and product characteristics and create an opportunity for validation through further research.

Gordon, Nelson, Hansen and Foxall (1993, 2000, 2005, 2002) all agree that there are a number of inconsistencies that relate to this and the wider are of consumer behaviour. They suggest that this is caused by the complexity of the topic and the lack of contemporary research in this area. In particular Nelson notes that contemporary consumer choices have snowballed exponentially beyond those available when early models of consumer decision-making were developed. Hansen endeavoured to address this with a new model of consumer behaviour that he developed in 2005. This new model incorporated constructs from earlier models by Blackwell et al (2001), Howard and Sheth (1969), Fishbein and Ajzen (1969) and Zeithaml (1988) including attitude and involvement, topics that relate specifically to the subject matter of this research, brand loyalty and product involvement.

Brand loyalty in particular is critically important because as Datta identifies it has been strongly associated with high market share and profitability. Many researchers
(Aaker, 1992; Bennett & Rundle-Thiele, 2002; Chaudhuri & Holbrook, 2002; Fournier, 1998; Iwasaki & Havitz, 1998; Jacoby & Kyner, 1973; Pritchard & Howard, 1997) agree that brand loyalty should be deconstructed into the two operational constructs of attitudinal and habitual loyalty although they also agree to disagree as to whether or not habitual loyalty actually constitutes real commitment. Consequently most of the research focuses on attitudinal loyalty, which in turn has been broken down to cognitive, conative and affective dimensions of loyalty. Cognitive loyalty is generally understood to sit at the more rational end and affective the more emotional end of the continuum. There is also a number of comparisons drawn with these constructs and those of hedonistic or utilitarian purchase decisions which are directly associated with product involvement.

Product involvement was probably pioneered in the research by Kapferer and Laurent who developed the Consumer Improvement Profile scale (Kapferer & Laurent, 1985a). Most definitions of involvement are centred around the degree of interest in a product but Kapferer and Laurent’s model identifies interest as only one of the five antecedents of product involvement, the others being pleasure, sign, risk importance and risk probability. As with brand loyalty the research is it relates to product involvement is inconclusive. Mittal (1989a) and Iwasaki and Havitz (1998) developed their own models of involvement and some researchers have found that consumers could not distinguish between interest and pleasure. Quester and Lim (2003) found that their research with sports shoes/sneakers merged in this dimension but ball point pens did not. And while most researchers agree that high involvement is likely to lead to high brand loyalty Traylor (1983) offers findings that support the opposite. All things considered, there are a number of contradictions in the research to justify replication of Quester and Lim’s study. Because of these contradictions, this research will start at the beginning, using all five facets most commonly agreed to be antecedent to product involvement; interest, pleasure, sign, risk probability and risk importance to retest the relationship with brand loyalty with a different sample using different products and different methodology, detailed in the next section.
Chapter 3: Research Methodology

3.1 Introduction
Chapter two analysed the literature that relates to product involvement and brand loyalty to provide a frame for this chapter to develop the hypotheses and associated research methodology to test the hypotheses. This chapter details the methodology.

Chapter two identified five constructs antecedent to product involvement; interest, pleasure, sign, risk probability and risk importance. The chapter also identified three types of brand loyalty; cognitive, affect and conative. This chapter details the rationale behind the methodology determined to examine the relationship between these constructs relative to the precedent set by Quester and Lim (2003).

The chapter begins by detailing the research problem and subsequent research question. From there, the theoretical framework and hypotheses are developed. The third section considers the research design including consideration of quantitative and qualitative methodologies. The fourth section details specific methods employed including sampling, survey design, data collection and analysis. The next two sections consider the limitations and ethical considerations. The final section concludes the chapter and leads into the fourth chapter, “Analysis.”

3.2 Research Problem
This section explains the research question and theoretical framework and it details the hypotheses.

3.2.1 Research Question
Nelson (2002) frames the problem for this research in the Chapter 2. He points to more open and competitive markets, greater fragmentation, individualisation and increased spending power increasing the range of choices available to consumers. This scale and complexity of choice has inhibited our ability to survey and select. In order to deal with this overwhelming plethora of choices Nelson (2002) suggests consumers develop evoked sets of brands. One of the key factors that affect these
choices can be described as product involvement. Essentially we have come to realise that product involvement is a key antecedent to brand loyalty. Quester and Lim’s (2003) central premise is that higher involvement products are likely to lead to higher levels of loyalty. Others (Iwasaki & Havitz, 1998; Martin, 2004; Traylor, 1983) identify support for brand loyalty from low involvement products. Ultimately, the literature agrees that product involvement affects brand loyalty. However the nature of this effect is inconclusive. E.g. Do both high and low involvement purchases affect brand loyalty and if so are they positive or negative effects? Thus the research question is:

How does product involvement affect brand loyalty?

3.2.2 Theoretical Framework

A theoretical framework details the relationships between the variables of the problem and provides a foundation for the research. It details the relationship between the dependent and independent variables to provide a framework for the hypotheses (Sekaran, 2003). In this research, the primary dependent variable is “Brand Loyalty.” The independent, influential variable is “Product Involvement,” however Quester and Lim have used Kapferer and Laurent’s (1985b) multidimensional construct of product involvement as the basis for their hypotheses. In order to replicate their study, this research does the same. The literature review shows that the five antecedents to product involvement and thus independent variables are interest, pleasure, sign, risk probability and risk importance.

Figure 3.1 Theoretical Framework
Essentially, this model suggests that the greater the interest, pleasure sign value, risk probability or consequence, the higher the brand loyalty.

3.2.3 Hypotheses
Quester and Lim (2003) originally hypothesised that the five independent variables; interest, pleasure, sign, risk probability and risk importance would have a positive influence on the dependent variable, brand loyalty. Through the course of their research the literature review shows that their sample could not distinguish between interest and pleasure so ultimately they ended up by combining interest and pleasure into one variable to formulate four hypotheses. There was some support for this in the literature (Iwasaki & Havitz, 1998; Mittal, 1989a; Traylor, 1983) but by no means is it conclusive, so this research will relitigate the hypotheses from the beginning with all five variables. The fundamental premise is that product involvement is positively associated with brand loyalty. Therefore the five antecedents to product involvement positively affect brand loyalty. Thus the hypotheses are:

\[ H1. \text{ Product involvement is positively associated with brand loyalty.} \]
\[ H1a. \text{ Interest is positively associated with brand loyalty.} \]
\[ H1b. \text{ Pleasure is positively associated with brand loyalty.} \]
\[ H1c. \text{ Sign is positively associated with brand loyalty.} \]
\[ H1d. \text{ Risk probability is positively associated with brand loyalty.} \]
\[ H1e. \text{ Risk importance is positively associated with brand loyalty.} \]

3.3 The research paradigm and justification for the research
This research replicates and extends Quester and Lim’s (2003) investigation into product involvement and brand loyalty. Replication research advances accepted wisdom by contributing salient validity, reliability and generalisability of empirical findings (Hubbard & Armstrong, 1994). Despite this, Hubbard and Armstrong (1994) found that less than two percent of 835 empirical papers, researched over a 15 year period had been replicated. Additionally, more than 60 percent of these papers did not support the previous work. Hubbard and Armstrong suggest that this is because of the
lack of perceived value and importance of this type of research yet the development of a replication tradition would only enhance marketing’s scientific status.

The literature review shows that Quester and Lim (2003) found support for interest and pleasure and sign for their high involvement product sports shoes/sneakers and sign and pleasure, risk probability and negative support for risk importance for their low involvement product ball point pens. Others before them (LeClerc & Little, 1997; Mittal & Lee, 1989) found that high involvement purchases affect brand loyalty and there are also some that found support for an affect on brand loyalty from low involvement purchases (Martin, 2004; Traylor, 1983). Obviously the literature is inconclusive.

Quester and Lim (2003) used a qualitative focus group to identify sports shoes/sneakers as their high involvement product and ball point pens as their low involvement product and fulfilled their quantitative research component with a convenience sample of students. There is a possibility that these methodologies may have contributed to an inconsistent result. In order to add validity, reliability and generalisability to the wider body of literature, this research seeks to replicate and extend Quester and Lim’s study.

In order to develop a robust research methodology we must first consider the research paradigm. Research Methodologies are grounded on philosophical assumptions of Ontology and Epistemology (Hawkins & Tull, 1994). Ontology is a branch of metaphysics concerned with the nature and relations of reality versus relativity. An orientation towards relativity and subjectivity leads to interpretivist, critical or qualitative methodologies. These methodologies suggest that knowledge is obtained through experiential engagement in social settings. Where quantitative methodologies are typified by numbers, qualitative methodologies are typified by words, however could be represented by images, impressions, gestures, or tones (O'Connor, 2004). Qualitative research uses deconstructed logic to get to the reality of what people actually do, not what they say they do (as in questionnaires). It is difficult to define qualitative research. Qualitative research is typified by a focus on quality, subjectivity and social practices. There are many methods of qualitative research, including participant observation, ethnography, case study, document analysis, grounded theory,
action, feminist, storytelling and interviews. Qualitative interviewing is commonly used to deliver situational questions, to provide depth and complexity to complement other methods or as a pilot or exploratory piece of research.

Quester and Lim (2003) used qualitative, exploratory interviews which led them to use sneakers and ball point pens as high and low involvement purchase items. Ultimately, ball point pens proved to have high risk importance and thus they had a much higher degree of purchase involvement than originally identified. There is a possibility that the methodology may have contributed to this bias. In order to eliminate such bias, this research will go to the literature review for empirical quantitative guidance.

Quantitative research methodologies are typically used to provide information for critical decision-making (Sekaran, 2003). They are based on an orientation towards reality and objectivity and positivism. These methodologies suggest that knowledge is obtained through empirical data collection and testing and are primarily concerned with objectivity versus subjectivity, or Epistemology. They are typified by purposiveness, rigor, testability, replicability, precision, objectivity, and confidence.

In order for the research to have purpose it must have a definitive objective (Sekaran, 2003). Rigorous research is typified by sound methodology. If the data and hypothesis can be statistically tested, the research is said to have testability. This research has already discussed replicability where independent research would draw similar conclusions. If the findings of a research sample are close to “reality” and there is a high degree of confidence that estimations are correct, then the research is said to have precision and confidence. Objective findings are based on actual data not suppositions and generalisable findings can be applied to other settings. If the phenomenon is simplistic the research is said to have parsimony. Additionally, quantitative research is typified by the hypothetico-deductive method that follows a process of observation, preliminary information gathering, theory formulation, hypothesising, further scientific data collection, data analysis and deduction. Data is generally collected for statistical analysis through personal interviews, phone, mail or e surveys. For these reasons, this research will also use quantitative methodologies to
replicate and extend Quester and Lim’s study in an endeavour to advance the literature with a valid, reliable and generalisable contribution.

3.4 Research Design
This section discusses specific methods employed to develop this body of research. It considers the research method, sampling technique, survey design, data collection and analysis.

3.4.1 Methodology
As discussed in the research paradigm, qualitative research is often used to identify parameters for quantitative empirical testing. Quester and Lim (2003) used exploratory qualitative interviews to identify ball point pens as low involvement and sports shoes/sneakers as high involvement products on which they would base the body of their research. This empirical, subsequent phase of their research was conducted in quantitative terms, using a mail based survey to research a convenience sample of students, resulting in conclusions that were only partially consistent with the wider body of literature.

Most significantly Quester and Lim (2003) found that Sign and Pleasure values loaded onto one factor demonstrating a positive relationship with brand loyalty for their low involvement product. They also noted that the risk variables did not demonstrate a positive relationship with brand loyalty and acknowledged themselves that this was probably due to the product itself, ball point pens, identified by qualitative exploratory interviewing and the convenience sampling methodologies.

In order to extend these findings, this research uses quantitative data analysis to identify suitable high and low involvement products. In 1989 Banwari Mittal (1989) conducted an empirical study that identified an involvement continuum for a range of products. Cars and batteries emerged from this selection as the most accessible product groupings. More than 90 percent of all people over the age of 20 in New Zealand own or drive a car (Nielsen, 2006) and the prolific use of high drain electronic devices means high demand for batteries, therefore this research will use cars to represent high involvement products and batteries to represent low involvement products.
The second and primary piece of research is also quantitative and survey based. Quester and Lim (2003) delivered a mail based survey to a convenience sample of 253 students. The problem with mail based surveys is that they are slow to deliver and collect, expensive, easy for respondents to ignore and slow and expensive to code.

Telephone interviewing is popular with professional researchers because of its speed. However, the verbal nature of this method limits the suitability of certain types of questions. For example it is difficult for respondents to select from long lists of choices and semantic scales delivered verbally. Telephone interviewing is also expensive.

Intercept surveys, either personal interviews or survey based also provide quick and relatively easy access to respondents, although it can be difficult to motivate respondents to participate due to increased time pressure in this environment. This methodology is also likely to lead to a high degree of accuracy because interviewers have the ability to explain issues that respondents fail to understand. Intercepting respondents is also inexpensive but is time consuming to code.

At 87 percent of all people over 15, New Zealand has the highest incidence of Internet access in the World (Nielsen, 2006). Due to this comprehensive access, speed and cost efficiency the Internet is now being recognized as a superior tool for research distribution. It also has the advantage of anonymity and easy time management. The technology makes coding instant and accurate. In New Zealand, AC Nielsen (2006) recently shifted its monthly Omnibus from Computer Aided Telephone Interviewing (CATI) to esurvey distribution and collection methodology. The potential negatives associated with the Internet are lack of tech savviness and the difficulty of delivering a survey. Because of the ease of access, privacy protocols are fiercely maintained and email databases are difficult to obtain. This research will ideally use this Internet based survey methodology. The next section addresses sampling issues.

3.4.2 Sampling technique
Quester and Lim’s (2003) study found that ball point pens had a much higher risk importance, which lead to a higher level of involvement than they anticipated. Some
researchers (Sternthal et al., 1994) maintain that using a homogeneous sample (eg students) increases the likelihood of observing causal relationships when they exist, however Quester and Lim acknowledged themselves that this unexpected result was probably symptomatic of their convenience sample of students. As opposed to many other demographic groups, students were largely concerned about their pens failing during exams, thus they had a high propensity to risk consequence. This contributed to a higher level of involvement, which may have caused bias in their research.

In order to resolve some of these issues, this research will use qualitative data analysis to identify high and low involvement products suitable for testing. The population will be linked to the high involvement product because the low involvement product is a subset of this group. Eg all people that drive cars, use batteries but not vice versa. Potential sampling frames are the licensing or registration databases from the LTSA but privacy laws restrict their access. Weekly car fairs attract thousands of car owners to one place during the weekends. Sellers typically have a lot of spare time waiting to engage with prospects. Essentially, car fairs may provide an efficient way to access car owners with a spare ten minutes to complete a survey. Assuming the organizers approve access, car fairs will provide an excellent sampling frame for intercept distribution of paper surveys.

Additionally, 90% of all people aged over 20 have sole or joint ownership of a car (Nielsen, 2006). Access to a generic population of respondents with opt-in email addresses, segmented to this demographic will also provide a suitable sampling frame for an Internet based survey. With a database of over 100,000 records, SmileCity is the pre-eminent specialist in this area but at a minimum cost of $3000, they are expensive. There are also a number of independent list brokers that can furnish a list of this nature. This research will obtain a list from one such broker, Atlantis Marketing who have indicated that they will furnish up to 1000 records for this project at no cost.

Previous experience (Bozzard, 2006) suggests that an incentivised survey of this type is likely to yield a sample of around 20% of the sampling frame. This would equate to a sample of around 200 records. Quester and Lim (2003) researched a sample of 253 students so to replicate and extend, this research would benefit from a bigger sample.
Sekaran (2003) suggests that most samples could sit between 30 and 500 depending on the desired degree of precision and confidence. Thus a sample between 253-500 would provide a greater degree of confidence and precision.

3.4.3 Survey design
The survey will be designed to follow best practice principles with a comprehensive introduction, instructions and guidance on how to fulfil the questionnaire, its purpose and how long it will take to complete. Respondents will be given an option to address the researcher and supervisors with any issues they may have and their confidentiality will be assured. Both paper and electronic versions of the survey will feature clear and concise layouts to make it easy for the respondents to follow.

There has been some debate over the optimal number of categories for a Likert scale (Jacoby & Matell, 1971) If the scale is too small you may lose some distinction but if it is too large respondents may struggle to discriminate. Green and Rao (1970) suggest that six or seven points is optimal but Ghiselli (1955) and Guilford (1954) argue that the scale should be developed empirically for each individual set of circumstances. Regardless, they suggest that the reliability of the data varies little in relation to the size of the scale. Jacoby and Matell (1971) empirically tested this theory to support it. Quester and Lim (2003) used five point nominal Likert scales. In order to make for effective comparison this research will do the same.

With established measures of validity and reliability, Quester and Lim used existing scales as a basis for their survey (Table 3.2). In order to maintain validity, this research will also follow the precedent set in these scales.
Table 3.2 Adapted measurement scale items and related sources

<table>
<thead>
<tr>
<th>Construct</th>
<th>Scale items as in final questionnaire</th>
<th>Original purpose of scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product involvement</td>
<td>Items 1 to 16</td>
<td>To identify the involvement profile of consumers using the consumer involvement profile (CIP) where the profile is inferred from observed measurements on the five proposed dimensions/facets of involvement (Rodgers &amp; Schneider, 1993)</td>
</tr>
<tr>
<td>Brand loyalty</td>
<td>Items 1, 3, 6, 10, 12</td>
<td>Measure the cognitive resources such as attention and concentration that a person reports bringing to bear on a recently completed consumption-related choice activity (Cooper-Martin, 1993)</td>
</tr>
<tr>
<td></td>
<td>Items 4, 16</td>
<td>To measure the degree to which a person expresses loyalty to a brand of soft drink (Beatty &amp; Kahle, 1988)</td>
</tr>
<tr>
<td></td>
<td>Item 9</td>
<td>To measure a consumer’s general tendency to buy the same brands over time rather than switching around to try other brands. (Lichtenstein et al., 1990)</td>
</tr>
<tr>
<td></td>
<td>Item 14</td>
<td>To measure the degree to which a person reports being loyal to what he/she has been using rather than trying something new and/or different (Raju, 1980)</td>
</tr>
<tr>
<td></td>
<td>Items 2, 8, 11</td>
<td>To measure the degree to which one likes some stimulus and perceives it to be “good” (Holbrook, 1986)</td>
</tr>
<tr>
<td></td>
<td>Items 5, 7, 15</td>
<td>To measure the degree of affect (positive and negative) that one has toward some specified stimulus (Mano &amp; Oliver, 1993)</td>
</tr>
</tbody>
</table>

Quester and Lim (2003) used Kapferer and Laurent’s (1985) Consumer Involvement Profile (CIP, Table 3.3) to measure product involvement. The English translated version by Rodgers and Schneider (1993) of the original French version of the CIP was used. The current CIP scale comprises 16 Likert-type, five point statements ranging from totally disagree to totally agree.
Table 3.3 Kapferer CIP Scale

<table>
<thead>
<tr>
<th>Variable</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest</td>
<td>I attach great importance to ----</td>
</tr>
<tr>
<td></td>
<td>---- interests me a lot</td>
</tr>
<tr>
<td></td>
<td>---- leaves me totally indifferent</td>
</tr>
<tr>
<td>Pleasure</td>
<td>It would give me pleasure to purchase ----- for myself</td>
</tr>
<tr>
<td></td>
<td>When you buy ----- it is a bit like giving a gift to yourself</td>
</tr>
<tr>
<td></td>
<td>Having ---- is a pleasure for me</td>
</tr>
<tr>
<td>Sign</td>
<td>You can tell something about a person by the ---- they pick out</td>
</tr>
<tr>
<td></td>
<td>The ---- you buy tells a bit about you</td>
</tr>
<tr>
<td></td>
<td>The ---- I buy shows what type of person I am</td>
</tr>
<tr>
<td>Risk Probability</td>
<td>When you purchase ---- you are never certain you made the right choice</td>
</tr>
<tr>
<td></td>
<td>Whenever you buy ---- you never really know whether it is the one you should have bought</td>
</tr>
<tr>
<td></td>
<td>When I can select from several ---- I always feel at a bit of a loss in making my choice</td>
</tr>
<tr>
<td></td>
<td>Choosing ---- is rather complicated</td>
</tr>
<tr>
<td>Risk Importance</td>
<td>When you choose a ---- it is not a big deal if you make a mistake</td>
</tr>
<tr>
<td></td>
<td>It certainly is annoying to purchase ---- that doesn’t meet my needs</td>
</tr>
<tr>
<td></td>
<td>I would be really upset if, after I bought some ---- I found I had made a poor choice.</td>
</tr>
</tbody>
</table>

Finally, Jacoby and Kyner’s (1973) model (Table 3.4) formed the basis of Quester and Lim’s (2003) questionnaire as it related to brand loyalty. Most significantly, this scale considers Jacoby and Kyner (1973) and Dick and Basu’s (1994) argument for the importance of relative attitude. Their research attempted to address the measurement issue by developing a scale, which encompassed the three components of attitude (cognitive, affective and conative). Most of the items in this scale, with the exception of item 13, were adapted from pre-existing scales separately measuring each attitudinal component. The questionnaire was designed and worded in a manner to ask the respondents to keep brand comparisons in mind. Item 13 was developed based on the sixth condition of Jacoby and Kyner’s (1973), conceptual definition, which states that brand loyalty is a function of psychological processes. The final scale was made up of four items for the cognitive component, five items for the conative component and seven items for the affective component.
### Table 3.4 Jacoby and Kyner’s brand loyalty scale

<table>
<thead>
<tr>
<th>Item no</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The cognitive component: four items</strong></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I put in quite a great deal of effort when I made a decision about which brand of to buy among these brands</td>
</tr>
<tr>
<td>6</td>
<td>I always thought of this particular brand of ________ over the other brand(s) when I considered buying one</td>
</tr>
<tr>
<td>10</td>
<td>I considered brand to be very important in choosing a</td>
</tr>
<tr>
<td>12</td>
<td>I paid a lot of attention to this particular brand of ________ over the other brand(s)</td>
</tr>
<tr>
<td><strong>The affective component: seven items</strong></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Over the last few months/years, I have always bought the same brand of____ because I really liked the brand</td>
</tr>
<tr>
<td>5</td>
<td>I would be upset if I had to buy another brand of____ if this particular brand was not available</td>
</tr>
<tr>
<td>7</td>
<td>I was excited about getting this particular brand of ________ over the other brand(s)</td>
</tr>
<tr>
<td>8</td>
<td>I would continue to buy the same brand of ________ because I like the brand very much</td>
</tr>
<tr>
<td>11</td>
<td>I felt good about this particular brand of ________ over the other brand(s)</td>
</tr>
<tr>
<td>13</td>
<td>I felt very attached to this particular brand of ________ over the other brand(s)</td>
</tr>
<tr>
<td>15</td>
<td>I was interested in this particular brand of ________ over the other brand(s)</td>
</tr>
<tr>
<td><strong>The conative/behavioural component: five items</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>It was very important for me to buy this particular brand of ________ over (an)other brand(s)</td>
</tr>
<tr>
<td>4</td>
<td>Although another brand was on sale, I still bought this particular brand of ________</td>
</tr>
<tr>
<td>9</td>
<td>I always find myself consistently buying this particular brand of ________ over the other brand(s)</td>
</tr>
<tr>
<td>14</td>
<td>Once I have decided on a particular brand of ________ over other brands, I will stick by it</td>
</tr>
<tr>
<td>16</td>
<td>If this particular brand of ________ was not available at the store, I would rather not buy at all if I have to choose another brand</td>
</tr>
</tbody>
</table>

The completed survey will consist of a 64 question scale using these scales measuring the two dimensions of loyalty and involvement against cars and batteries based on precedents set by these models. (See appendix)

### 3.4.4 Data Collection

The online survey will be distributed via an electronic tool called Survey Monkey. The questions will be loaded onto the Internet and the email database will be uploaded into the online distribution model. Emails will be sent to respondents, giving them one week to complete the survey. A follow up will be sent half way into the week. At the end of this period the survey will be closed and became inaccessible. Data will be electronically downloaded into a .csv file, which will be imported into SPSS software for analysis.
3.4.5 Data Analysis
Replicating Quester and Lim’s (2003) study, this research will use regression analysis to test the hypotheses for correlations between the variables but before the regressions can be conducted preliminary analyses are required to check for accuracy and to provide credibility to the overall research. The mean and standard deviation will be initially calculated to illustrate the central tendency and dispersion of the variables. Skewness and Kurtosis will be tested for normal data distribution. The data will be tested for reliability using Cronbach’s Alpha. Factor analysis will be used to determine the number of factors that would account for the maximum variance in the data. Finally, the hypotheses will be tested, using regression analysis to identify correlations between the variables.

3.5 Limitations
Possible limitations include the research paradigm, sampling technique and collection methodologies.

The research assumes that everyone that owns a car and responds has purchased batteries, which may not be true. There is also potential for respondents to make an incorrect connection between cars and car batteries. Every attempt has been taken to eliminate this connection but that doesn’t necessarily mean that people won’t make it.

Additionally, the research may be limited by the data collection technique. Although whole heartedly adopted by highly credible research practitioners (Nielsen, 2006) some people believe that online surveys are too biased to the computer savvy.

3.6 Ethics
This research was approved (Approval number 05/140) to comply with AUTEC ethical principles ("AUT ethics handbook", 2004) designed to protect all the stakeholders involved in the research process. The first principle makes reference to informed and voluntary consent. Respondents will be asked in both intercept and online surveys for their voluntary participation. Respondents rights for privacy will be initially protected in the online environment by the list broker through their ethical and more importantly legal obligations to ensure that all respondents have opted in for this type of communication. The survey will maintain respondent’s confidentiality by
limiting their opportunity to be identified. All endeavours will be taken to minimise risk and communicate truthfully with respondents. The principles of the Treaty of Waitangi will be adhered to and provision will be made for social and cultural sensitivities. The research will be conducted professionally and all efforts will be made to avoid conflicts of interest. Respondent’s vulnerabilities and property will be treated with appropriate respect.

3.7 Conclusion
This research replicates Quester and Lim’s (2003) study to make a contribution to the body of literature that explores the relationship between product involvement and brand loyalty.

The research attempts to extend Quester and Lim's (2003) study by incorporating quantitative data analysis to determine suitable products for testing and using different sampling techniques to add rigour and generalisability.

Contemporary electronic methods of data collection will be employed to provide a comprehensive platform for factor and regression analysis.

The survey itself is based on models developed by Kapferer and Laurent (1985b) and Jacoby and Kyner (1973) and employed by Quester and Lim (2003).

All appropriate ethical considerations will be taken and every endeavour has been made to ensure that the analysis provided in the next section is robust.
Chapter 4: Analysis

4.1 Introduction
This chapter focuses on detailed analyses of the data and statistical results from the survey. The purpose of this survey is to contribute to the wider body of literature by replicating Quester and Lim’s (2003) study into the affect on brand loyalty by product involvement. The literature shows that product involvement consists of five independent variables, interest, pleasure, sign, risk probability and risk importance. Multiple regression (Hair, 1998) is the most appropriate method of analysis to determine the affect of these independent variables on the dependent variable, brand loyalty and thus answer the research problem by determining the affect of product involvement on brand loyalty. Before this analysis can be concluded, there are a number of tests required to determine normality, reliability and validity.

4.2 Response rate
This section details the response rate of the survey. Email was the preferred method for survey distribution however unforeseen difficulties were encountered when attempting to obtain a suitable database. The original supplier claimed they were unable to supply the database because of privacy laws so Atlantis Marketing was approached and they agreed to supply a consumer email list of 1000 people over the age of 20. AC Nielsen (2006) had identified that 90% of people over the age of 20 own or part own a car. 1000 emails were sent, 159 (16%) messages bounced and 234 (23%) respondents completed the survey. This response was a mere 19 short of Quester and Lim’s 253 completed responses, however this research sought a greater sample to extend Quester and Lim’s research. The email list was exhausted so it was decided to use intercept surveys at the car fair to extend the sample. While it provided an accurate sampling frame, this method had already been identified as secondary to email because it was more expensive, slower and more likely to incur coding errors. The owners of the car fair were contacted for permission to survey their customers, which they duly granted. On Sunday 5th of February, the researcher went to the car fair at Ellerslie race course and distributed 163 surveys. 30 (18%) refused to participate and of the remaining 133 distributed, 64 were completed for a response
rate of 48%. In total, the research had a sample of 298 completed responses, 55 more than Quester and Lim.

4.3 Preliminary data analysis
The mean and standard deviation were computed to illustrate the central tendency and dispersion of the variables. Skewness and Kurtosis were calculated to determine bell curve symmetry and to check for normal data distribution. A t-test was also conducted to identify any differences in data derived from the online sample as opposed to the intercept data.

The mean is simply the average for each variable. From the mean we can determine the standard deviation where almost all of the data scores will fall within 3 standard deviations of the mean. Skewness and kurtosis are terms that relate to the normal distribution of the data. When data is plotted it forms a bell curve. The kurtosis relates to the peak of the curve while the skewness relates to the symmetry around the mean. Data with a skewness between -1 and 1 are deemed to be of normal distribution, adding rigour to the research. The next section uses Cronbach’s Alpha to test for reliability and a t-test to ensure that data derived from different sampling methods did not produce bias. Data that returns a Cronbach’s alpha greater than 0.7 is deemed to be reliable and t-statistics close to 1 indicate consistency between the two variables being measured (Hair, 1998).

4.3.1 Descriptive statistics for cars and brand loyalty
On a five point Likert scale the means of the 16 variables relating to brand loyalty for cars ranged from 1.7 to 3.8 (Table 4.1) with standard deviations ranging from 0.8 to 1.0. The skewness and kurtosis scores indicated that only the variable that related to effort in decision-making skewed towards the positive side of the scale. This would indicate that respondents made an unusually committed effort when making a decision about buying a car. Otherwise the sample exhibited normal patterns of behaviour.
All of the results returned by the t-test were greater than 0.05 and thus insignificant, indicating that there was no distinction between data derived from the online or intercept samples.
Table 4.1 Descriptive statistics for cars and brand loyalty

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>I put in quite a great deal of effort when I make a decision about which make of car to buy.</td>
<td>1.7</td>
<td>0.9</td>
<td>1.4</td>
<td>1.6</td>
</tr>
<tr>
<td>I always think of my preferred make of car over the other makes when I consider buying a new one.</td>
<td>2.1</td>
<td>0.9</td>
<td>0.5</td>
<td>-0.4</td>
</tr>
<tr>
<td>I consider the make to be very important in choosing a car.</td>
<td>2.0</td>
<td>0.8</td>
<td>0.9</td>
<td>0.8</td>
</tr>
<tr>
<td>I paid a lot of attention to my particular make of car over the other makes.</td>
<td>2.2</td>
<td>0.9</td>
<td>0.5</td>
<td>-0.3</td>
</tr>
<tr>
<td>I have always bought the same make of car because I really like it.</td>
<td>3.3</td>
<td>1.0</td>
<td>-0.7</td>
<td>-0.1</td>
</tr>
<tr>
<td>I would be upset if I had to buy another make of car if this particular make was not available</td>
<td>3.3</td>
<td>1.0</td>
<td>-0.4</td>
<td>-0.4</td>
</tr>
<tr>
<td>I was excited about getting my make of car over the other makes.</td>
<td>2.5</td>
<td>1.0</td>
<td>0.3</td>
<td>-0.5</td>
</tr>
<tr>
<td>I would continue to buy the same make of car because I like the make very much.</td>
<td>2.6</td>
<td>1.0</td>
<td>0.2</td>
<td>-0.6</td>
</tr>
<tr>
<td>I feel good about my particular make of car over the other makes.</td>
<td>2.2</td>
<td>0.8</td>
<td>0.6</td>
<td>0.3</td>
</tr>
<tr>
<td>I feel very attached to my particular make of car over the other makes.</td>
<td>2.5</td>
<td>0.9</td>
<td>0.0</td>
<td>-0.8</td>
</tr>
<tr>
<td>I was interested in my particular make of car over the other makes.</td>
<td>2.4</td>
<td>0.9</td>
<td>0.6</td>
<td>-0.1</td>
</tr>
<tr>
<td>It was very important for me to buy my particular make of car over the other makes.</td>
<td>2.8</td>
<td>0.9</td>
<td>-0.1</td>
<td>-0.3</td>
</tr>
<tr>
<td>Although another make was on sale, I still bought my particular make of car.</td>
<td>2.9</td>
<td>1.0</td>
<td>0.1</td>
<td>-0.9</td>
</tr>
<tr>
<td>I always find myself consistently buying my particular make of car over the other makes.</td>
<td>3.1</td>
<td>1.0</td>
<td>-0.3</td>
<td>-0.6</td>
</tr>
<tr>
<td>Once I have decided on a particular make of car over other makes, I will stick by it.</td>
<td>3.1</td>
<td>1.0</td>
<td>-0.3</td>
<td>-0.5</td>
</tr>
<tr>
<td>If my particular make of car was not available, I would rather not buy at all.</td>
<td>3.8</td>
<td>0.9</td>
<td>-0.9</td>
<td>0.9</td>
</tr>
</tbody>
</table>

4.3.2 Descriptive statistics for batteries and brand loyalty

Data relating to Batteries returned means between 3.1 and 4.0 and standard deviations between 0.8 and 1.0 for brand loyalty (Table 4.2). Interestingly, every variable returned a mean above 3 on a Likert scale of 5, suggesting a high degree of brand loyalty for batteries. However, only “If this particular brand of batteries was not available, I would rather not buy at all” returned a kurtosis score beyond 1 suggesting an abnormal skew towards the brand loyalty construct. All of the variables returned significance scores greater than 0.05 indicating that there was no discernable difference between the online and intercept samples for brand loyalty and batteries.
Table 4.2 Descriptive statistics for batteries and brand loyalty

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>I put in quite a great deal of effort when I make a decision about which brand of batteries to buy</td>
<td>3.4</td>
<td>1.0</td>
<td>-0.4</td>
<td>-0.5</td>
</tr>
<tr>
<td>I always think of my preferred brand of batteries over the other brands when I consider buying them</td>
<td>3.2</td>
<td>1.0</td>
<td>-0.1</td>
<td>-1.0</td>
</tr>
<tr>
<td>I consider brand to be very important when choosing batteries</td>
<td>3.1</td>
<td>1.0</td>
<td>0.2</td>
<td>-1.0</td>
</tr>
<tr>
<td>I paid a lot of attention to my particular brand of batteries over the other brands</td>
<td>3.3</td>
<td>1.0</td>
<td>-0.2</td>
<td>-0.7</td>
</tr>
<tr>
<td>I have always bought the same brand of batteries because I really liked the brand</td>
<td>3.5</td>
<td>0.9</td>
<td>-0.3</td>
<td>-0.7</td>
</tr>
<tr>
<td>I would be upset if I had to buy another brand of batteries if my particular brand was not available</td>
<td>3.7</td>
<td>0.9</td>
<td>-0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>I was excited about getting my particular brand of batteries over the other brands</td>
<td>3.8</td>
<td>0.8</td>
<td>-0.4</td>
<td>-0.2</td>
</tr>
<tr>
<td>I would continue to buy the same brand of batteries because I like the brand very much</td>
<td>3.3</td>
<td>1.0</td>
<td>-0.2</td>
<td>-0.8</td>
</tr>
<tr>
<td>I feel good about my particular brand of batteries over the other brands</td>
<td>3.4</td>
<td>1.0</td>
<td>-0.2</td>
<td>-0.5</td>
</tr>
<tr>
<td>I feel very attached to my particular brand of batteries over the other brands</td>
<td>3.6</td>
<td>0.9</td>
<td>-0.4</td>
<td>-0.1</td>
</tr>
<tr>
<td>I was interested in my particular brand of batteries over the other brands</td>
<td>3.4</td>
<td>0.9</td>
<td>-0.2</td>
<td>-0.7</td>
</tr>
<tr>
<td>It was very important for me to buy my particular brand of batteries over other brands</td>
<td>3.6</td>
<td>0.9</td>
<td>-0.5</td>
<td>0.1</td>
</tr>
<tr>
<td>Although another brand was on sale, I still bought this particular brand of batteries</td>
<td>3.4</td>
<td>1.0</td>
<td>-0.4</td>
<td>-0.7</td>
</tr>
<tr>
<td>I always find myself consistently buying this particular brand of batteries over the other brands</td>
<td>3.3</td>
<td>1.0</td>
<td>-0.2</td>
<td>-0.9</td>
</tr>
<tr>
<td>Once I have decided on a particular brand of batteries over other brands, I will stick by it</td>
<td>3.5</td>
<td>1.0</td>
<td>-0.5</td>
<td>-0.5</td>
</tr>
<tr>
<td>If this particular brand of batteries was not available, I would rather not buy at all</td>
<td>4.0</td>
<td>0.8</td>
<td>-0.9</td>
<td>1.3</td>
</tr>
</tbody>
</table>

4.3.3 Descriptive statistics for cars and product involvement

Product involvement for cars returned means between 1.8 and 3.9 and standard deviations between 0.8 and 1.0 (Table 4.3). Of the 16 variables that contribute to product involvement for cars, six returned values outside the normal parameters of distribution. “When you buy a car it is a bit like giving a gift to yourself,” “You can tell something about a person by the car they pick out,” “The car you buy tells a bit about you,” “When you choose a car it is not a big deal if you make a mistake,” “It certainly is annoying to purchase a car that doesn't meet my needs,” and “I would be really upset if, after I bought a car I found I had made a poor choice” all reported
skewness or kurtosis scores greater than 1. This indicates a skew towards the positive side of the Likert scale suggesting that the product in this research has an unusually high Product involvement. The product is of course a car, which is typically considered one of the highest involved purchases by most consumers (Mittal & Lee, 1989). This statistic supports these findings.

The t-test returned 15 scores between 0.09 and 0.98 which were insignificant. At 0.04 “It gives me pleasure to purchase my car make for myself,” was significant suggesting that there may have been a difference between results returned from the online sample and results returned from the intercept sample for this variable.
Table 4.3 Descriptive statistics for cars and purchase involvement

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>I attach great importance to my car make.</td>
<td>2.8</td>
<td>1.0</td>
<td>0.2</td>
<td>-0.7</td>
</tr>
<tr>
<td>My car make interests me a lot.</td>
<td>2.7</td>
<td>1.0</td>
<td>0.2</td>
<td>-0.7</td>
</tr>
<tr>
<td>My car make leaves me totally indifferent.</td>
<td>3.3</td>
<td>1.0</td>
<td>-0.3</td>
<td>-0.4</td>
</tr>
<tr>
<td>It gives me pleasure to purchase my car make for myself.</td>
<td>2.3</td>
<td>0.8</td>
<td>0.6</td>
<td>0.5</td>
</tr>
<tr>
<td>When you buy a car it is a bit like giving a gift to yourself.</td>
<td>2.1</td>
<td>0.8</td>
<td>1.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Having a car is a pleasure for me.</td>
<td>2.0</td>
<td>0.7</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td>You can tell something about a person by the car they pick out.</td>
<td>2.2</td>
<td>0.7</td>
<td>0.8</td>
<td>1.4</td>
</tr>
<tr>
<td>The car you buy tells a bit about you.</td>
<td>2.1</td>
<td>0.7</td>
<td>1.1</td>
<td>2.6</td>
</tr>
<tr>
<td>The car I buy shows what type of person I am.</td>
<td>2.5</td>
<td>0.8</td>
<td>0.7</td>
<td>0.0</td>
</tr>
<tr>
<td>When you purchase a car you are never certain you made the right choice.</td>
<td>3.2</td>
<td>1.0</td>
<td>-0.2</td>
<td>-0.7</td>
</tr>
<tr>
<td>Whenever you buy a car you never really know whether it is the one you should have bought.</td>
<td>3.3</td>
<td>0.9</td>
<td>-0.3</td>
<td>-0.5</td>
</tr>
<tr>
<td>When I can select from several brands of cars I always feel at a bit of a loss in making my choice.</td>
<td>3.5</td>
<td>0.9</td>
<td>-0.6</td>
<td>-0.2</td>
</tr>
<tr>
<td>Choosing a car is rather complicated.</td>
<td>2.8</td>
<td>1.0</td>
<td>0.5</td>
<td>-0.8</td>
</tr>
<tr>
<td>When you choose a car it is not a big deal if you make a mistake.</td>
<td>3.9</td>
<td>0.8</td>
<td>-1.0</td>
<td>1.5</td>
</tr>
<tr>
<td>It certainly is annoying to purchase a car that doesn't meet my needs.</td>
<td>2.0</td>
<td>0.9</td>
<td>1.3</td>
<td>2.7</td>
</tr>
<tr>
<td>I would be really upset if, after I bought a car I found I had made a poor choice.</td>
<td>1.8</td>
<td>0.8</td>
<td>1.4</td>
<td>3.3</td>
</tr>
</tbody>
</table>

4.3.4 Descriptive statistics for batteries and product involvement

Means for batteries and product involvement ranged between 2.4 and 4.1 with standard deviations between 0.7 and 1.1 (Table 4.4). Skewness and Kurtosis scores were all within ±1 indicating normal bell curve symmetry and distribution parameters.

The T-test returned 15 scores above 0.05 but “I would be really upset if, after I bought batteries I found I had made a poor choice,” proved to be significant, indicating a difference between the online and intercept samples.
Table 4.4 Descriptive statistics for batteries and purchase involvement

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>I attach great importance to my brand of batteries</td>
<td>3.8</td>
<td>0.9</td>
<td>-0.6</td>
<td>0.0</td>
</tr>
<tr>
<td>My brand of batteries interests me a lot</td>
<td>3.9</td>
<td>0.8</td>
<td>-0.6</td>
<td>0.0</td>
</tr>
<tr>
<td>My brand of batteries leaves me totally indifferent</td>
<td>2.6</td>
<td>1.1</td>
<td>0.3</td>
<td>-0.7</td>
</tr>
<tr>
<td>It would give me pleasure to purchase my brand of batteries for myself</td>
<td>3.8</td>
<td>0.8</td>
<td>-0.3</td>
<td>-0.1</td>
</tr>
<tr>
<td>When you buy batteries it is a bit like giving a gift to yourself</td>
<td>4.2</td>
<td>0.7</td>
<td>-0.7</td>
<td>0.9</td>
</tr>
<tr>
<td>Having batteries is a pleasure for me</td>
<td>4.0</td>
<td>0.9</td>
<td>-0.7</td>
<td>0.3</td>
</tr>
<tr>
<td>You can tell something about a person by the batteries they pick out</td>
<td>4.1</td>
<td>0.8</td>
<td>-0.7</td>
<td>0.2</td>
</tr>
<tr>
<td>The batteries you buy tells a bit about you</td>
<td>4.1</td>
<td>0.8</td>
<td>-0.7</td>
<td>0.3</td>
</tr>
<tr>
<td>The batteries I buy shows what type of person I am</td>
<td>4.1</td>
<td>0.8</td>
<td>-0.5</td>
<td>-0.4</td>
</tr>
<tr>
<td>When you purchase batteries you are never certain you made the right choice</td>
<td>3.5</td>
<td>1.0</td>
<td>-0.3</td>
<td>-0.5</td>
</tr>
<tr>
<td>Whenever you buy batteries you never really know whether it is a brand you should have bought</td>
<td>3.4</td>
<td>1.0</td>
<td>-0.2</td>
<td>-0.5</td>
</tr>
<tr>
<td>When I can select from several brands of batteries I always feel at a bit of a loss in making my choice</td>
<td>3.5</td>
<td>1.0</td>
<td>-0.4</td>
<td>-0.7</td>
</tr>
<tr>
<td>Choosing batteries is rather complicated</td>
<td>3.8</td>
<td>0.9</td>
<td>-0.7</td>
<td>0.3</td>
</tr>
<tr>
<td>When you choose batteries it is not a big deal if you make a mistake</td>
<td>2.6</td>
<td>1.1</td>
<td>0.7</td>
<td>-0.4</td>
</tr>
<tr>
<td>It certainly is annoying to purchase batteries that don't meet my needs</td>
<td>2.4</td>
<td>1.0</td>
<td>1.0</td>
<td>0.8</td>
</tr>
<tr>
<td>I would be really upset if, after I bought batteries I found I had made a poor choice</td>
<td>2.8</td>
<td>1.0</td>
<td>0.4</td>
<td>-0.4</td>
</tr>
</tbody>
</table>

4.3.5 Summary for descriptive statistics

This section reviews the assessment of means, standard deviations skewness and kurtosis to test for validity and normal data distribution. T-tests were also conducted to identify any differences in data derived from the online sample as opposed to the intercept sample.

The skewness and kurtosis scores indicated that only the variable that related to effort in decision making skewed towards the positive side of the scale for cars and brand loyalty and the t-test showed no significant difference between data derived from the online sample and data derived from the intercept sample.

The data for cars also returned unusually high skews towards product involvement, consistent with research that related specifically to cars conducted by Mittal and Lee.
(1989). Essentially, their research suggests that cars are one of the most involved purchases made by consumers, rationalising this skew towards the top end of the scale on six of the 16 product involvement variables. Only one of the t-statistics was significant suggesting that there was predominantly no difference in the data derived from the online sample and the data derived from the intercept sample.

Interestingly, the variables for batteries all returned means over 3 on a 5 point Likert scale, suggesting that consumers are particularly brand loyal to this product category. Although, this was not deemed to be outside of behavioural norms with only one of the variables returning an abnormal kurtosis score. None of the t-statistics were significant suggesting that there were no differences in the data derived from the online sample compared with the intercept sample.

When it came to product involvement, batteries returned completely normal patterns of behaviour as they related to purchase involvement. Only one of the t-statistics was significant indicating there were generally no differences in the data derived from the online and intercept samples.

The descriptive statistics generally indicate brand loyalty for both product lines. There are few abnormalities in the data as explained by research previously conducted by Mittal (1989a). Only two of the 64 variables returned significant t-statistics suggesting that there were generally no discernible differences in the data derived from the online and intercept samples.

4.4 Measurement scales
Factor analysis can be used to analyse the interrelationships of multiple variables and to explain these variables in terms of their underlying commonalities as univariate factors. The goal is to condense a large number of variables into a smaller set of variates for further analysis with minimal data loss (Hair, 1998). Principal component analysis was used to account for the full variance in the data set. The orthogonal rotation method was also used to ensure independence of the factors and develop good constructs for brand loyalty and the five dimensions of product involvement for
cars and batteries. Variables reporting factor loadings above 0.5 are deemed to be significant (Hair, 1998).

Additionally, eigenvalues were measured to determine the number of factors to be retained. Only factors returning an Eigen value over 1 are deemed significant. This analysis also allows us to identify the amount of variance in the correlation matrix (Hair, 1998). The factors returned by this process will then be used for subsequent regression analysis to identify correlations and test the hypothesis.

4.4.1 Measurement scales for cars and brand loyalty
Where Quester and Lim (2003) reported factor loadings above 0.426, this research measuring cars and brand loyalty (Table 4.5) has returned a minimum factor loading of 0.542, with a range between 0.542 and 0.806, demonstrating a high degree of reliability.

In contrast to the wider body of literature, Quester and Lim found that consumers could not distinguish between the cognitive, conative and affective dimensions of brand loyalty. This analysis supports the literature, with the variables merging on three factors, accounting for 66.20% of the differences (Table 4.5). The research suggests that consumers in NZ can and do distinguish between the cognitive, conative and affective components for brand loyalty and cars.
Table 4.5 Rotated component matrix for cars and brand loyalty

<table>
<thead>
<tr>
<th>Variable</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Cognitive</td>
</tr>
<tr>
<td>I put in quite a great deal of effort when I make a decision about which make of car to buy.</td>
<td></td>
</tr>
<tr>
<td>I always think of my preferred make of car over the other makes when I consider buying a new one.</td>
<td></td>
</tr>
<tr>
<td>I consider the make to be very important in choosing a car.</td>
<td></td>
</tr>
<tr>
<td>I paid a lot of attention to my particular make of car over the other makes.</td>
<td></td>
</tr>
<tr>
<td>I was excited about getting my make of car over the other makes.</td>
<td>.745</td>
</tr>
<tr>
<td>I would continue to buy the same make of car because I like the make very much.</td>
<td></td>
</tr>
<tr>
<td>I feel good about my particular make of car over the other makes.</td>
<td></td>
</tr>
<tr>
<td>I feel very attached to my particular make of car over the other makes.</td>
<td></td>
</tr>
<tr>
<td>I was interested in my particular make of car over the other makes.</td>
<td></td>
</tr>
<tr>
<td>It was very important for me to buy my particular make of car over the other makes.</td>
<td></td>
</tr>
<tr>
<td>Although another make was on sale, I still bought my particular make of car.</td>
<td></td>
</tr>
<tr>
<td>I have always bought the same make of car because I really like it.</td>
<td></td>
</tr>
<tr>
<td>I would be upset if I had to buy another make of car if this particular make was not available</td>
<td></td>
</tr>
<tr>
<td>I always find myself consistently buying my particular make of car over the other makes.</td>
<td></td>
</tr>
<tr>
<td>Once I have decided on a particular make of car over other makes, I will stick by it.</td>
<td></td>
</tr>
<tr>
<td>If my particular make of car was not available, I would rather not buy at all.</td>
<td></td>
</tr>
<tr>
<td>Eigen Values</td>
<td>8.03</td>
</tr>
<tr>
<td>Cumulative percentage of variance</td>
<td>29.04</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
Rotation method: Varimax with Kaiser normalisation
N = 298

These results show strong support for brand loyalty as a multi dimensional construct consisting of cognitive, conative and affective components. Despite strong support for this in the literature, Quester and Lim (2003) only found support for one dimension. In order to replicate their study this research has reset the analysis to yield one factor. Under this parameter the constructs still accounted for 50.212% of the differences.

### 4.4.2 Measurement scales for batteries and brand loyalty
Batteries returned factor loadings between 0.536 and 0.849, similar to the range for cars and equally robust.
Quester and Lim (2003) also found that their low involvement product, ball point pens loaded onto one factor for brand loyalty. Loading onto two factors, this research shows that New Zealand consumers identify with the conative dimension of brand loyalty but the affective and cognitive dimensions merge onto one factor, strongly accounting for 71.884% of the differences (Table 4.6).

While the literature generally agrees on these three dimensions of brand loyalty there is also consideration for habitual and attitudinal dimensions of brand loyalty (Beatty & Kahle, 1988; Bennett & Rundle-Thiele, 2002). You could suggest that the conative dimension of brand loyalty would align with the habitual dimension and the cognitive and affective dimensions may represent rational and emotional dimensions of attitudinal brand loyalty. This finding may present an opportunity for further research.
Table 4.6 Rotated component matrix, batteries and brand loyalty

<table>
<thead>
<tr>
<th>Variable</th>
<th>Component</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>I put in quite a great deal of effort when I make a decision about which brand of batteries to buy</td>
<td>Cognitive/Affective</td>
<td>.719</td>
<td></td>
</tr>
<tr>
<td>I always think of my preferred brand of batteries over the other brands when I consider buying them</td>
<td>Conative</td>
<td></td>
<td>.846</td>
</tr>
<tr>
<td>I consider brand to be very important when choosing batteries</td>
<td></td>
<td></td>
<td>.853</td>
</tr>
<tr>
<td>I paid a lot of attention to my particular brand of batteries over the other brands</td>
<td></td>
<td></td>
<td>.810</td>
</tr>
<tr>
<td>I have always bought the same brand of batteries because I really liked the brand</td>
<td></td>
<td></td>
<td>.709</td>
</tr>
<tr>
<td>I would continue to buy the same brand of batteries because I like the brand very much</td>
<td></td>
<td></td>
<td>.693</td>
</tr>
<tr>
<td>I feel good about my particular brand of batteries over the other brands</td>
<td></td>
<td></td>
<td>.673</td>
</tr>
<tr>
<td>I was interested in my particular brand of batteries over the other brands</td>
<td></td>
<td></td>
<td>.669</td>
</tr>
<tr>
<td>I always find myself consistently buying this particular brand of batteries over the other brands</td>
<td></td>
<td></td>
<td>.702</td>
</tr>
<tr>
<td>I would be upset if I had to buy another brand of batteries if my particular brand was not available</td>
<td></td>
<td></td>
<td>.750</td>
</tr>
<tr>
<td>I was excited about getting my particular brand of batteries over the other brands</td>
<td></td>
<td></td>
<td>.746</td>
</tr>
<tr>
<td>I feel very attached to my particular brand of batteries over the other brands</td>
<td></td>
<td></td>
<td>.679</td>
</tr>
<tr>
<td>It was very important for me to buy my particular brand of batteries over other brands</td>
<td></td>
<td></td>
<td>.716</td>
</tr>
<tr>
<td>Although another brand was on sale, I still bought this particular brand of batteries</td>
<td></td>
<td></td>
<td>.536</td>
</tr>
<tr>
<td>Once I have decided on a particular brand of batteries over other brands, I will stick by it</td>
<td></td>
<td></td>
<td>.663</td>
</tr>
<tr>
<td>If this particular brand of batteries was not available, I would rather not buy at all</td>
<td></td>
<td></td>
<td>.849</td>
</tr>
<tr>
<td>Eigen Values</td>
<td></td>
<td>10.542</td>
<td>1.050</td>
</tr>
<tr>
<td>Cumulative percentage of variance</td>
<td></td>
<td>39.291</td>
<td>71.884</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis. Rotation method: Varimax with Kaiser normalisation N = 298

Again in order to replicate Quester and Lim the analysis was reset to deliver a unidimensional factor for brand loyalty and batteries yielding factors between 0.670 and 0.888. Loading onto one factor the variables still accounted for 65.324% of the differences.

4.4.3 Measurement scales for cars and product involvement
Consistent with others (Jain & Srinivasan, 1990; Kapferer & Laurent, 1985a; Rodgers & Schneider, 1993), Quester and Lim (2003) found that interest and pleasure merged on one factor against their high involvement product, sports shoes.
This research shows a clear distinction between the variables, synchronising with all five product involvement constructs. The confidence of knowing you made the right choice returned the highest loading at 0.873 but at 0.402 and lower than the accepted standard of 0.500 the consequence of making a mistake was unreliable. Therefore this variable was eliminated and the factor analysis was recalculated.

The cumulative factor loadings originally accounted for 68.092% of the differences and after eliminating the unreliable variable improved to account for 71.700% of the differences (Table 4.7), suggesting that product involvement makes a significant contribution to brand loyalty for cars.
Table 4.7 Rotated component matrix, cars and product involvement

<table>
<thead>
<tr>
<th>Variable</th>
<th>Component 1</th>
<th>Component 2</th>
<th>Component 3</th>
<th>Component 4</th>
<th>Component 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Probability</td>
<td>4.095</td>
<td>2.646</td>
<td>1.620</td>
<td>1.314</td>
<td>1.079</td>
</tr>
<tr>
<td>Cumulative percentage of variance</td>
<td>16.839</td>
<td>32.190</td>
<td>47.274</td>
<td>61.243</td>
<td>71.700</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
Rotation method: Varimax with Kaiser normalisation
N = 298
4.4.4 Measurement scales for batteries and product involvement
Unlike their result for sports shoes and inconsistent with other research (Jain & Srinivasan, 1990; Kapferer & Laurent, 1985a; Rodgers & Schneider, 1993) which found that respondents could not distinguish between interest and pleasure, Quester and Lim (2003) found that their low involvement product, ball point pens, loaded on one factor for sign and pleasure.

Contrary to Quester and Lim, yet consistent with Kapferer and Laurent, this research found that consumers could not distinguish between interest and pleasure when it came to low involvement products (Table 4.8). Returning a loading of .716, “My brand of batteries leaves me totally indifferent” showed a high degree of validity yet didn’t load onto any of the constructs. “When you choose batteries it is not a big deal if you make a mistake,” also returned a highly valid loading at .866 but didn’t load onto any of the constructs. The remaining variables synchronised with the other three constructs, sign, risk importance and risk consequence. Where Quester and Lim had a minimum factor loading of 0.426, this analysis shows a high degree of reliability with a minimum factor loading of 0.560 and a maximum loading of 0.902. At 77.346% these factors also accounted for a high percentage of variance.
### Table 4.8 Rotated component matrix, batteries and product involvement

<table>
<thead>
<tr>
<th>Variable</th>
<th>Component</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>I attach great importance to my brand of batteries</td>
<td>Interest/Pleasure</td>
<td>.801</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My brand of batteries interests me a lot</td>
<td>Sign</td>
<td></td>
<td>.850</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It would give me pleasure to purchase my brand of batteries for myself</td>
<td>Risk</td>
<td></td>
<td></td>
<td>.814</td>
<td></td>
<td></td>
</tr>
<tr>
<td>When you buy batteries it is a bit like giving a gift to yourself</td>
<td>Probability</td>
<td></td>
<td></td>
<td></td>
<td>.740</td>
<td></td>
</tr>
<tr>
<td>Having batteries is a pleasure for me</td>
<td>Importance</td>
<td></td>
<td>.560</td>
<td>.869</td>
<td></td>
<td></td>
</tr>
<tr>
<td>You can tell something about a person by the batteries they pick out</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.919</td>
</tr>
<tr>
<td>The batteries you buy tells a bit about you</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.902</td>
<td></td>
</tr>
<tr>
<td>The batteries I buy shows what type of person I am</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When you purchase batteries you are never certain you made the right choice</td>
<td></td>
<td></td>
<td></td>
<td>.824</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whenever you buy batteries you never really know whether it is the brand you should have bought</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.888</td>
<td></td>
</tr>
<tr>
<td>When I can select from several brands of batteries I always feel at a bit of a loss in making my choice</td>
<td></td>
<td></td>
<td></td>
<td>.879</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Choosing batteries is rather complicated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.820</td>
<td></td>
</tr>
<tr>
<td>It certainly is annoying to purchase batteries that don't meet my needs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.900</td>
</tr>
<tr>
<td>I would be really upset if, after I bought batteries I found I had made a poor choice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.896</td>
<td></td>
</tr>
<tr>
<td>My brand of batteries leaves me totally indifferent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.716</td>
</tr>
<tr>
<td>When you choose batteries it is not a big deal if you make a mistake</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.866</td>
</tr>
<tr>
<td><strong>Eigen Values</strong></td>
<td>5.203</td>
<td>3.006</td>
<td>1.694</td>
<td>1.359</td>
<td>1.113</td>
<td></td>
</tr>
<tr>
<td><strong>Cumulative percentage of variance</strong></td>
<td>20.060</td>
<td>38.803</td>
<td>57.544</td>
<td>68.008</td>
<td>77.346</td>
<td></td>
</tr>
</tbody>
</table>

### 4.4.5 Reliability

Reliability is a measure of consistency between multiple measurements of a variable. The consistency of these measures indicate homogeneity of the variables measuring the same construct. The items should be highly correlated to obtain a reliable measure for the construct (Hair, 1998). Cronbach’s alpha is a test designed to measure this reliability. The correlation is indicated by a score greater than 0.700. This research uses Cronbach’s Alpha to test for reliability.
4.4.5.1 Reliability of cars, batteries and product involvement

The variables contributing to pleasure, sign and risk probability as they related to cars all proved to be homogeneous and reliable with Cronbach’s Alphas in excess of 0.700 (Table 4.9).

Initially, the variables contributing to the construct, Interest reported a negative result. The value was negative due to a negative average covariance among items so transposing the results returned a reliable measure of 0.722.

Risk importance also returned a result less than 0.700. Subsequent factor analysis suggested that the variable “If my particular make of car was unavailable I would purchase another car” had low validity. Removing this variable from the analysis returned a reliable Alpha of 0.713 indicating that the variables contributing to the constructs for product involvement for cars were then consistent, homogeneous and reliable.

Similar to the results for cars, the variables indicating pleasure, sign, risk probability and risk importance for batteries all reported a high degree of homogeneity and reliability with Cronbach’s Alphas in excess of 0.700 (Table 4.9).

Again, the variables contributing to the construct, Interest against batteries reported a negative result due to a negative average covariance among items. Transposing the results returned a reliable measure of 0.740.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach’s Alpha</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cars and Interest</td>
<td>0.772</td>
<td>283</td>
</tr>
<tr>
<td>Cars and Pleasure</td>
<td>0.764</td>
<td>281</td>
</tr>
<tr>
<td>Cars and Sign</td>
<td>0.817</td>
<td>280</td>
</tr>
<tr>
<td>Cars and Risk probability</td>
<td>0.782</td>
<td>281</td>
</tr>
<tr>
<td>Cars and Risk importance</td>
<td>0.713</td>
<td>283</td>
</tr>
<tr>
<td>Batteries and Interest</td>
<td>0.740</td>
<td>273</td>
</tr>
<tr>
<td>Batteries and Pleasure</td>
<td>0.810</td>
<td>274</td>
</tr>
<tr>
<td>Batteries and Sign</td>
<td>0.939</td>
<td>273</td>
</tr>
<tr>
<td>Batteries and Risk probability</td>
<td>0.707</td>
<td>271</td>
</tr>
<tr>
<td>Batteries and Risk importance</td>
<td>0.783</td>
<td>275</td>
</tr>
</tbody>
</table>
4.4.5.2 Reliability of cars, batteries and brand loyalty
All 16 variables contributing to brand loyalty against both batteries and cars reported a high degree of consistency, homogeneity and reliability with Cronbach’s Alphas in excess of 0.700 at 0.917 and 0.904 respectively (Table 4.10).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach’s Alpha</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cars and brand loyalty</td>
<td>0.904</td>
<td>268</td>
</tr>
<tr>
<td>Batteries and brand loyalty</td>
<td>0.917</td>
<td>270</td>
</tr>
</tbody>
</table>

4. 5 Testing correlations between product involvement and brand loyalty
In order to predict the changes on a dependent variable caused by the changes in an independent variable we use regression analysis. When there is more than one independent variable we use multiple regression analysis. The dependent variable is deemed to that which is effected. The independent variables are those deemed to cause the affect (Hair, 1998). The basic formulation of the multiple regression equations is:

\[ Y = X_1 + X_2 + X_3 + X_4 + X_5 \]

Where:

Y = the level of the dependent variable, brand loyalty
X_1 = the level of the independent variable X_1, interest
X_2 = the level of the independent variable X_2, pleasure
X_3 = the level of the independent variable X_3, sign
X_4 = the level of the independent variable X_4, risk probability
X_5 = the level of the independent variable X_5, risk importance

This research explores the affect of product involvement on brand loyalty. Thus, the dependent variable is brand loyalty and the independent variables are the constructs that contribute to product involvement, interest, pleasure, sign, risk importance and risk consequence.
The hypotheses to be tested in this study are:

**H1.** Product involvement is positively associated with brand loyalty.

**H1a.** Interest is positively associated with brand loyalty.

**H1b.** Pleasure is positively associated with brand loyalty.

**H1c.** Sign is positively associated with brand loyalty.

**H1d.** Risk probability is positively associated with brand loyalty.

**H1e.** Risk importance is positively associated with brand loyalty.

This section uses multiple regression analysis to test these hypotheses.

### 4.5.1 The correlations between product involvement and brand loyalty for cars

Quester and Lim (2003) found support for four constructs of product involvement, interest and pleasure, sign, risk importance and risk probability. Their F values were significant and cumulatively, they accounted for 29.4% of the variance in brand loyalty. This study shows significantly greater support for product involvement as an antecedent of brand loyalty. The F values are significant at 0.00 ($p < 0.05$) with an adjusted R Square of 0.516, accounting for 51.6% of the variance in brand loyalty (Table 4.11).

Quester and Lim (2003) found support for interest/pleasure and sign for their high involvement product while this research shows strong support for pleasure, sign and risk probability. ($p < 0.05$, Table 4.11.) You could suggest that at 0.076, there is partial support for Interest but the t values show that this support would be negative.

**Table 4.11 Regression coefficients for brand loyalty of cars and product involvement**

<table>
<thead>
<tr>
<th></th>
<th>Regression Coefficients B</th>
<th>Standardized Coefficients Beta</th>
<th>t</th>
<th>Sig.</th>
<th>Model Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-.026</td>
<td></td>
<td>-.594</td>
<td>.553</td>
<td>R 0.725</td>
</tr>
<tr>
<td>Interest</td>
<td>-.078</td>
<td>-.078</td>
<td>-1.782</td>
<td>.076</td>
<td>R² 0.525</td>
</tr>
<tr>
<td>Pleasure</td>
<td>.110</td>
<td>.110</td>
<td>2.519</td>
<td>.012</td>
<td></td>
</tr>
<tr>
<td>Sign</td>
<td>.633</td>
<td>.641</td>
<td>14.744</td>
<td>.000</td>
<td>Adjusted R² 0.516</td>
</tr>
<tr>
<td>Risk Probability</td>
<td>.301</td>
<td>.300</td>
<td>6.880</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Risk Importance</td>
<td>.057</td>
<td>.058</td>
<td>1.343</td>
<td>.181</td>
<td></td>
</tr>
</tbody>
</table>
4.5.2 The correlations between product involvement and brand loyalty for batteries
At 36.3%, Quester and Lim (2003) explained more of the variance in brand loyalty when it came to their low involvement product however with an adjusted R Square of 0.620 (Table 4.12), this research explained even more variance at 62%, suggesting that product involvement is an extremely significant antecedent to brand loyalty for New Zealand battery consumers.

Quester and Lim found that sign/pleasure and risk importance had positive and significant relationships but risk probability had a negative and significant relationship with brand loyalty.

This research illustrates significant relationships (Table 4.12) with all of the variables, positive with the exception of risk importance which is strongly negative. Eg The consequences of battery failure are extremely significant.
Table 4.12 Regression coefficients for brand loyalty of batteries and product involvement

<table>
<thead>
<tr>
<th></th>
<th>Unstandardised Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig</th>
<th>Model Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>.004</td>
<td>.043</td>
<td>.931</td>
<td>.931</td>
<td>R .738</td>
</tr>
<tr>
<td>Interest/Pleasure</td>
<td>.698</td>
<td>.043</td>
<td>.688</td>
<td>.000</td>
<td>R2 .545</td>
</tr>
<tr>
<td>Sign</td>
<td>.225</td>
<td>.043</td>
<td>.221</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Risk Probability</td>
<td>.089</td>
<td>.043</td>
<td>.088</td>
<td>.040</td>
<td>Adjusted R2</td>
</tr>
<tr>
<td>Risk Importance</td>
<td>.116</td>
<td>.043</td>
<td>.115</td>
<td>.007</td>
<td>.537</td>
</tr>
</tbody>
</table>

### 4.6 Summary

The hypotheses suggested the following.

*H1*. Product involvement is positively associated with brand loyalty.

*H1a*. Interest is positively associated with brand loyalty.

*H1b*. Pleasure is positively associated with brand loyalty

*H1c*. Sign is positively associated with brand loyalty.

*H1d*. Risk probability is positively associated with brand loyalty.

*H1e*. Risk importance is positively associated with brand loyalty.

The research shows support for *H1b*, *H1c* and *H1d*. Thus, excluding risk importance there is strong support for a positive association between pleasure, sign and risk probability for high involvement products. With three of the five hypotheses supported there is partial support for *H1*, Product involvement is positively associated with brand loyalty for the high involvement product, cars.

The research also shows support for *H1a* and *b* together, *H1c* and *H1d* for batteries but strong negative support for *H1e*. So, similar to the conclusions for high involvement, excluding risk importance there is a positive association between product involvement and brand loyalty for low involvement products.

With better, stronger fit between the factors and the variables, stronger support for both high and low involvement purchases and brand loyalty and stronger support for
the hypotheses this research adds strong support for both high and low product involvement as an antecedent to brand loyalty. The conclusions and implications of these findings will be discussed in the next section, chapter 5
Chapter 5: Conclusions and implications

5.1 Introduction
This research seeks insight into the relationship between product involvement and brand loyalty. The first Chapter introduced this research problem and framed it for subsequent analysis.

The second Chapter reviewed the study by Quester and Lim (2003) as a foundation for replication and extension. To recap, Quester and Lim used a convenience sample of 253 students to test the relationship between product involvement and brand loyalty with ball point pens and sports shoes/sneakers. Their research found partial support for product involvement as an antecedent to brand loyalty but there were a number of inconsistencies that could be rationalised through sampling techniques and product characteristics, creating an opportunity for validation through further research.

In fact many other researchers (Foxall, 1993; Gordon & Valentine, 2000; Hansen, 2005; Nelson, 2002) agree that there are a number of inconsistencies that relate to this and the wider area of consumer behaviour. They suggest that this is caused by the complexity of the topic and the lack of contemporary research in this area. Hansen (2005) endeavoured to address this with a new model of consumer behaviour, incorporating attitude and involvement constructs, relating specifically to product involvement and brand loyalty as it pertains to this research.

Brand loyalty is extremely salient because it has been associated with high market share and profitability (Datta, 2003a). Many researchers (Aaker, 1992; Bennett & Rundle-Thiele, 2002; Chaudhuri & Holbrook, 2002; Fournier, 1998; Iwasaki & Havitz, 1998; Jacoby & Kyner, 1973; Pritchard & Howard, 1997) agree that brand loyalty should separated into its two operational constructs of attitudinal and habitual loyalty. In turn attitudinal loyalty has been broken down to cognitive, conative and affective dimensions, although Quester and Lim (2003) found that respondents in their study could not make the distinction.
Respondents were able to make more of a distinction between the product involvement dimensions although again, Quester and Lim’s (2003) findings were incomplete. They used Kapferer and Laurent’s (1985b) Consumer Involvement Profile (CIP), which identifies five antecedents of product involvement, interest, pleasure, sign, risk importance and risk probability. Consistent with others, they found that interest and pleasure merged for sports shoes/sneakers but sign and pleasure merged for ball point pens.

To consolidate these issues, this research went back to the beginning, using all five facets most commonly agreed to be antecedent to product involvement; interest, pleasure, sign, risk probability and risk importance to retest the relationship of involvement with brand loyalty with a different sample using different products and different methodology.

This research attempted to eliminate potential bias in Quester and Lim’s (2003) research by incorporating quantitative data analysis to determine suitable products for testing and more robust sampling techniques to add rigour and generalisability.

The survey was based on models developed by Kapferer and Laurent (1985b) and Jacoby and Kyner (1973), employed by Quester and Lim (2003).

Both traditional paper based and contemporary electronic methods of data collection were employed to provide a comprehensive platform for factor and regression analysis.

Chapter Four reports the details of these analyses. The first part of that chapter tested the data for normal distribution, reliability and validity, providing a robust platform for factor analysis. Unlike Quester and Lim (2003), three factors, conative, cognitive and affective loyalty emerged from the factor analysis for cars. Two factors, conative and cognitive/affective emerged for batteries. Consistent with the wider body of literature including Quester and Lim (2003) this research found that interest and pleasure merged on a sole factor for batteries but respondents made the distinction for all five variables as they related to cars. Regression analysis showed strong support for all of the variables for batteries and for three of the five variables for cars.
This final Chapter discusses the strength and nature of these relationships as identified by the empirical research. It considers the answers to the research question and the implications for both theory and practice. Finally, limitations and implications for further research are considered and concluded.

5.2 Discussion of findings
This research seeks to explore the relationship between product involvement and brand loyalty. Quester and Lim (2003) tested this relationship using Kapferer and Laurent’s (1985b) CIP scale, consisting of five constructs antecedent to product involvement; interest, sign, pleasure, risk probability and risk importance. Consistent with others (Iwasaki & Havitz, 1998; Jain & Srinivasan, 1990; Rodgers & Schneider, 1993), they found that interest and pleasure merged on one factor for their high involvement product, sports/shoes sneakers so they reframed their hypothesis against four rather than five variables; interest/pleasure, sign, risk probability and risk importance. Unexpectedly they then found that their low involvement product, batteries merged on sign and pleasure. Their risk profiles also returned unanticipated and inconsistent results so this research went back to Kapferer and Laurent’s (1985b) model to start from the beginning. Thus, the primary hypothesis was stated as follows:

\[ H1. \text{Product involvement is positively associated with brand loyalty.} \]

Quester and Lim (2003) found support for interest/pleasure and sign for their high involvement product, sports shoes/sneakers. In contrast, this research found weak support for interest and significant support for pleasure, sign and risk probability for the high involvement product, cars.

Quester and Lim (2003) found support for sign/pleasure and risk importance for their low involvement product, ball point pens. This research found strong support for all of the variables, interest/pleasure, sign, risk probability and risk importance for the low involvement product batteries, indicating that consumers can demonstrate brand loyalty to low involvement products.
While the greater body of literature suggests that consumers are more likely to be loyal to high involvement products, this research suggests that they can also demonstrate loyalty to low involvement products.

There is some support for this notion. Traylor (1983) found that consumers could have an emotional connection with something as mundane as table salt. Iwasaki and Havitz (1998) and Martin (2004) also found correlations between brand loyalty and low product involvement, topics for further discussion specific to each individual construct following.

5.2.1 *H1a. Interest and is positively associated with brand loyalty*

This research found partial support for interest as an antecedent to brand loyalty for the high involvement product, cars. The low involvement product, batteries merged on one factor for interest and pleasure. Consistent with the wider body of literature (Iwasaki & Havitz, 1998; Jain & Srinivasan, 1990; Rodgers & Schneider, 1993) Quester and Lim (2003) found that interest and pleasure merged on one factor for their high involvement product, sports shoes/sneakers. They didn’t find any support at all for interest as an antecedent to brand loyalty for their low involvement product ball point pens.

Interest appears to be one of the more significant contributors to product involvement. Several of the definitions (Bloch, 1983; Chakravarti et al., 1979; Iwasaki & Havitz, 1998; Mittal, 1989a; Vaughn, 1980) sourced for product involvement in chapter 2 actually incorporated the word “interest” in the definition. Richins and Bloch (1986) justify the salience of interest by suggesting that consumers with high product involvement would find the product interesting and this would occupy the consumers’ thoughts without the stimulus of an immediate purchase. Such interest in the product category may arise from the consumer’s perception that the product class meets important values and goals.

Although Mittal (1989a) found strong support for cars being a high involvement product it would seem that in this product class the interest variable may not be a strong dimension of the overarching construct of product involvement. Nelson (2002) and Mitchell (2002a) point to a possible explanation for this phenomenon, suggesting
that consumers are likely to exhibit different behaviour for the same product class depending on how and why they intend to use it. Eg A consumer is more likely to buy an expensive bottle of wine for a special occasion or a dinner party than they are for “regular” consumption at home. Although not generalisable, Pettigrew (2002) found similar results with her qualitative research on beer drinkers in Australia who would typically buy different brands in a pub, nightclub or for consumption at home. Relate this to cars and you could assume that the vast majority of people own and operate a car for the quite utilitarian purpose of getting from A to B. Thus their level of perpetual interest is actually quite low. By the same assertion of logic there would be a smaller group of car enthusiasts who would have a high degree of ongoing interest that is likely to lead to a higher degree of brand loyalty. This is a theory that could be tested by further research.

On the other hand, batteries merged onto one factor for interest and pleasure. This was consistent with body of knowledge (Iwasaki & Havitz, 1998; Jain & Srinivasan, 1990; Rodgers & Schneider, 1993), however Quester and Lim (2003) found that their low involvement product, ball point pens merged on sign/pleasure and no had no significant relationship of any kind with interest. It is hard to imagine that any research could come to any other conclusion for a product as inanimate as a ball point pen! The same could perhaps be said of batteries. It is hard to imagine that anybody could exhibit an “ongoing commitment” (Miller & Marks, 1996) to a battery brand. This degree of indifference may also contribute to consumers’ inability to distinguish a difference between interest and pleasure in this product category.

5.2.2 H1b Pleasure is positively associated with brand loyalty
While they may not have been able to distinguish a difference between interest and pleasure in relation to batteries, respondents in this research certainly made a distinction between interest and pleasure when it came to cars. While interest was only partially supported, at 0.012 ($p < 0.05$) pleasure had a significant and positive relationship with brand loyalty for the high involvement product cars. This result was inconsistent with Quester and Lim who found that interest and pleasure merged on one variable for their high involvement product sports shoes/sneakers and the wider body of literature (Iwasaki & Havitz, 1998; Jain & Srinivasan, 1990; Rodgers &
Schneider, 1993) that generally agrees that most consumers cannot make a distinction between the two variables.

Suggesting that emotions and feelings of enjoyment or pleasure are key components in purchase decisions, Chaudhuri and Holbrook (2002) may offer an explanation for this phenomenon. They proposed that there are two broadly different types of products, utilitarian products with tangible, objective features that offer functional benefits, and hedonic products with subjective, non-tangible features that produce enjoyment or pleasure. More recently, other researchers have attempted to measure these “hedonic” and “utilitarian” aspects of consumption and have broadly concluded that a ratio of emotion to reason complements the role of involvement in a variety of product categories. In fact Chaudhuri and Holbrook (2002) suggest that hedonism is most likely to lead to brand affect and brand commitment or brand loyalty, consistent with others that suggest that the higher the involvement the higher the higher the likelihood of brand loyalty.

If high involvement and hedonism are closely related then this could explain the significant and positive relationship between interest/pleasure for cars. The research indicates that respondents had a low ongoing level of interest in this product category but they do experience high levels of pleasure. While their ongoing level of interest may not be that great, their level of pleasure may be. Eg the average driver may not be continually reading car magazines to learn about the latest models to market but they may well experience high or low degrees of pleasure as they drive to work everyday. A well-tuned vehicle, air conditioning, a good car stereo, comfortable seats etc may all contribute to the pleasure experienced by a driver each day which may contribute to a high pleasure rating in association with brand loyalty.

Returning to batteries, interest and pleasure merged onto one variable in this product category. As mentioned in the previous section, it is hard to imagine that respondents could exhibit an ongoing interest or anticipate large levels of pleasure to come from purchasing batteries. Together these variables appear significant. This may be because of an association between the battery and the device it is designed to run. Eg A consumer may buy a set of batteries to run an ipod, a product that may have high hedonic pleasure associations, which may be transferred to the battery brand. This
type of transfer may also be relevant for this product category when it comes to sign value in the next section.

5.2.3 **H1c. Sign is positively associated with brand loyalty**

Both the low involvement product, batteries and the high involvement product, cars returned significant, positive relationships with sign and brand loyalty. Quester and Lim (2003) found a significant, positive relationship with their high involvement products sports shoes/sneakers but their low involvement product, ball point pens merged on one factor for sign and pleasure to return a positive and significant relationship with brand loyalty.

Just as the term “interest” featured prevalently in definitions for product involvement, “sign” was synonymous too (Blackwell et al., 2001; Day et al., 1995b; Vaughn, 1980). This actuality may also support some of the rationalisations for some of the previous findings where two of the dimensions merged onto a single factor. If one of the variables overwhelms one that is closely related it is possible that respondents can’t discern a difference and the variables merge as one.

Pettigrew (2002) certainly maintains that sign is one such variable showing a close affinity with hedonistic, pleasure oriented behaviour. In a study of Australian beer drinkers Pettigrew found that the primary concern of those drinking beer was image management, communicating their membership of specific groups, developing and reinforcing their self-concepts and maximising the outcomes of the stereotyping activities of others to enhance self-esteem. Pettigrew found that much of this function occurred beyond consciousness, with respondents subconsciously working towards the attainment of a self-image that they have been conditioned to desire by the culture and subcultures to which they belong. Respondents also attributed their own beer consumption to perceived rational explanations such as personal taste, while they tended to attribute image management as a primary source of motivation for others.

This type of behaviour would seem to be totally consistent with car buyers. They generally don’t show a great degree of interest, yet they do identify with strong pleasure cues. Essentially this leads to a subconscious, subjective, emotional connection with a certain brand that the consumer may identify due to expectations
and understandings of peer groups to which they belong. This behaviour may be post rationalised with logical, utilitarian reasoning. Eg The consumer really bought the car because it was a red Audi and they identified with a self image of success and warmth but justified the purchase by suggesting that the car was “The best performing” or “most economical” etc…

This logic makes perfect sense when considering cars but again does not really make sense for batteries. By its sheer nature, sign value intimates conspicuous consumption. Batteries are only ever used inconspicuously. As with pleasure the most logical conclusion may lie with an association (Gordon & Valentine, 2000) by proxy. Again the ipod serves as a good example where the battery drives the device and assumes its self expressive value.

Again it’s difficult to explain the significance of these issues when it comes to sign/pleasure for ball point pens. Noticeably Quester and Lim (2003) didn’t seem to attempt it. The same rationale for experiential pleasure would not seem to apply to ball point pens and equally, the theory posited for sign also seems unlikely, particularly when you relate it to the sample of students who are hardly likely to be buying or using a brand of pen that would portray any kind of sign value (Eg Mont Blanc). The considerations for risk make much more sense for this product category in the next section.

5.2.4 H1d. Risk probability is positively associated with brand loyalty

Both high involvement cars and low involvement batteries returned a high correlation between risk probability and brand loyalty. Quester and Lim (2003) also returned strong correlations between risk probability and brand loyalty for both their high involvement product, sports shoes/sneakers and their low involvement product ball point pens.

Risk seems to be a significant concept in the literature that crosses multiple areas within the wider category of consumer behaviour (Chaudhuri & Holbrook, 2002) so it stands to reason that it would be equally significant to consumers. Chaudhuri and Holbrook (2002) break risk into two categories, inherent and handled which relates to
brands within the category. Handled risk relates to the perceived differences among brands and is a determinant of brand trust and brand affect, the habitual and attitudinal aspects of brand loyalty. There are five types of brand choice risk within this category, financial, social, psychological, physical and performance which can also be grouped into two predominant types: functional and emotional. Specifically, functional brand-choice risk refers to risky aspects of choosing a brand in a product class where brands differ in their financial aspects (e.g. cost), physical safety (e.g. healthiness) or other tangible characteristics (e.g. performance). In contrast, emotional brand-choice risk refers to risky aspects of choosing among brands that differ in their psychological consequences (e.g. self-image) or in their social implications (e.g. status). Consistent with many others (Bennett & Rundle-Thiele, 2002; Datta, 2003a; Gordon & Valentine, 2000; Hansen, 2005; Mitchell, 2002a; Nelson, 2002), the authors also suggest that social and psychological dimensions of risk may be especially relevant in our present-day environment of parity products where very few brands can command true long-term technological superiority in terms of actual tangible product features.

This line of thinking seems particularly relevant to cars where a lack of interest may well indicate that technology has developed to the extent where consumers believe that every make and model will functionally perform to their expectations, therefore there is limited functional risk probability. On the other hand, the probability of choosing the wrong brand is high. Trends are typically fast moving and keeping in touch is obviously difficult. The probability of making the “wrong” choice here is obviously high. In line with their involvement profiles, batteries would seem to engender the exact opposite response. The probability of making a social faux pas is almost nil. After all, batteries are consumed inconspicuously. However the probability of a functional failure is clearly significant. In line with Chaudhuri’s (2002) path to brand loyalty this would suggest a lack of brand trust, related directly to habitual brand loyalty which Nelson (2002) implies is likely to be the salient side of loyalty associated with low involvement products. The same would apply to Quester and Lim’s (2003) findings. The probability of making a social error with the purchase of a pair of sneakers was obviously significant to Quester and Lim’s sample. They also had limited trust in the ball point pens they were using. The consequence of failure was probably also high in this category, discussed in the next section.
5.2.5 H1e. Risk importance is positively associated with brand loyalty
Consistent with Quester and Lim (2003) the relationship between risk importance and brand loyalty was insignificant for the high involvement product, cars. However, following on from the significant relationship with risk probability, the low involvement product, batteries also demonstrated a significant and negative relationship with brand loyalty.

Following on from their previous thoughts on risk probability, Chaudhuri and Holbrook (2002) comment on risk importance, suggesting that the affect of perceived differences on functional brand-choice risk is higher for products high in hedonic or sign value because perceptions of differences between brands and the consequences of choosing the wrong brand may be heightened for products with a highly involving level of motivation due to their potential for greater hedonic value as opposed to more mundane products that are used on a regular basis.

Interestingly this is completely inconsistent with the findings in this research. Chaudhuri (2002) suggests that risk importance should be high for high involvement, hedonic products like cars. While risk probability for this product was high, risk importance was not. This seems highly unlikely and is probably an area for further research. On the other hand risk importance for batteries was high when the literature suggests it is irrelevant. However, in the context of the product category it is easy to understand this finding. Eg The consequence of battery failure in a camera is undoubtedly significant. Quester and Lim (2003) noted the same experience for their sample with ball point pens. The significance of a ball point pen failing in an exam was clearly unsurmountable. Again these findings indicate areas for further research, but before this is considered the next section review the implications of these findings for both theory and practical application.

5.3 Conclusions about the research problem
The research problem asks how product involvement affects brand loyalty. While the wider body of literature including Quester and Lim (2003) hypothesized that greater
involvement should lead to greater loyalty, Traylor (1983), Iwasaki and Havitz (1998) and Martin (2004) found support for the inverse.

With an R squared figure of 0.717 this research accounted for 71.70% of the differences, showing a strong correlation product involvement and a high involvement product, cars. Quester and Lim (2003) accounted for 40.2% of the differences with their high involvement product, sports shoes/sneakers. Therefore this research shows significantly stronger support for high product involvement as an antecedent to brand loyalty.

Further analysis identified significant and positive relationships between three of the five product involvement variables, pleasure, sign and risk probability. As discussed in the previous section, these findings add new information to the literature, where consistent with others (Iwasaki & Havitz, 1998; Jain & Srinivasan, 1990; Rodgers & Schneider, 1993) Quester and Lim (2003) found support for interest and pleasure merging on a single factor. Consistent with this research and the wider body of literature Quester and Lim (2003) also found support for sign value as an antecedent to brand loyalty. This research found support for risk probability, but not for risk importance, which seems unusual and certainly Quester and Lim found no support for either construct with respect to their high involvement product sports shoes/sneakers where the wider body of literature (Bennett & Rundle-Thiele, 2002; Chaudhuri & Holbrook, 2002; Datta, 2003a; Gordon & Valentine, 2000; Hansen, 2005; Martin, 2004; Mitchell, 2002a; Nelson, 2002) suggests that both risk constructs should be significant antecedents to brand loyalty. In summary, this research finds strong support for high product involvement as an antecedent to brand loyalty but the only construct that was completely consistent as an antecedent to brand loyalty was sign. This research found support for pleasure and risk probability where the wider body of literature generally found support for interest and pleasure as one factor and excluding Quester and Lim, support for both risk constructs. There is obviously an opportunity to review the relationships between these constructs and brand loyalty in particular. And while accounting for 71.70% of the differences, this research shows strong support for product involvement generally, it does not account for 29.30% of the differences, also an opportunity for more research.
The low involvement product, batteries, also showed strong support for product involvement as an antecedent to brand loyalty accounting for 53.70% of the differences. Quester and Lim (2003) accounted for 36.30%. Consistent with the wider body of research (Iwasaki & Havitz, 1998; Jain & Srinivasan, 1990; Rodgers & Schneider, 1993) this research found significant support for all variables, interest and pleasure, sign, risk probability and risk importance as antecedents to brand loyalty. Quester and Lim (2003) unusually found support for sign and pleasure and only risk probability. This research adds support for low product involvement, in particular interest/pleasure, sign, risk probability and risk importance as antecedents to brand loyalty. Again, while accounting for a large percentage of the differences there are still 46.30% of the differences that are unaccounted. Further research could fill this gap.

In summary this research finds support for both high and low involvement products as antecedents to brand loyalty. This supports both the wider body of literature and more marginalised theories supporting low involvement products from Iwasaki and Havitz (1998), Martin (2004) and Traylor (1983). The next section considers the implications for theory and practice.

5.4 Implications for theory
Exploring the relationship between product involvement and brand loyalty Quester and Lim (2003) accounted for 40.2% of the differences for their high involvement product sports shoes/sneakers and 36.3% of the differences for their low involvement product, ball point pens. This research increased support for product involvement as an antecedent to brand loyalty accounting for 71.7% of the differences for the high involvement product, cars and 53.7% of the differences for the low involvement product batteries. While increasingly significant, both pieces of research clearly indicate that product involvement does not account for all of the antecedents to brand loyalty indicating an opportunity to further explore the relationship between this construct and others as a complete set of antecedents to brand loyalty.

Additionally, the literature (Iwasaki & Havitz, 1998; LeClerc & Little, 1997; Park, 1996) shows strong support for high involvement as an antecedent to brand loyalty while support for low involvement is limited (Iwasaki & Havitz, 1998; Traylor,
1983). However, Quester and Lim (2003) found partial support for their low involvement product ball point pens and more recently using phenomenological research, Martin (2004) found support for an influential relationship between low involvement products and brand loyalty. This research continues this trend also finding strong support for low involvement products antecedent to brand loyalty. Chaudhuri and Holbrook (2002) may explain this with their distinction between behavioural and attitudinal loyalty and their relationships with brand trust and brand affect and subsequently utilitarian and hedonistic behaviour. A number of researchers (Gordon, 2004; Hansen, 2005; Mitchell, 2002a; Nelson, 2002) may offer an explanation for this suggesting that time has seen markets evolve to the point where these theories and findings which may date back more than 40 years are simply obsolete. Either way the implication is that low involvement products are potentially more significant as an antecedent to brand loyalty than many have previously suggested.

There are also theoretical implications for interest and pleasure. While Kapferer and Laurent maintain that they are distinct variables, many researchers (Iwasaki & Havitz, 1998; Jain & Srinivasan, 1990; Rodgers & Schneider, 1993) have found that consumers have been unable to make a distinction between the two. This research found support for Kapferer and Laurent (1985b) with the high involvement product cars and support for the wider body of literature with the low involvement product, batteries merging on the two factors. Increasing this confusion, Quester and Lim (2003) found support for the wider body of literature with their high involvement product sports shoes/sneakers merging on interest and pleasure but their low involvement product, ball point pens merged on sign and pleasure. Again the implication is that the research is inconclusive.

Excluding Quester and Lim (2003), this research does support the wider body (Mitchell, 2002a; Nelson, 2002; Pettigrew, 2002) of literature indicating that sign is a significant antecedent to brand loyalty. This implies that sign is probably the most robust contributor to brand loyalty.

If the degree of literature (Chaudhuri & Holbrook, 2002; Fournier, 1998; Gordon, 2004; Nelson, 2002; Zeithaml, 1988) is in indicator then you could also expect both
risk probability and risk importance to make significant contributions to brand loyalty yet this is also inconclusive. Quester and Lim (2003) didn’t find any support for risk probability or risk importance for heir high involvement product, sports shoes/sneakers but found strong support for both variables for their low involvement product ball point pens when the general convention in the literature (Chaudhuri & Holbrook, 2002; Nelson, 2002) is that high involvement products are likely to be associated with higher risk probabilities. This research found strong support for risk probability for the high involvement product, cars but not for risk importance, which also seems unusual.

There are two completely consistent conclusions. Product involvement is a significant antecedent to brand loyalty and sign value is the most consistent contributor. Interest and pleasure and risk probability and importance certainly contribute to brand loyalty but just how is inconclusive.

5.5 Implications for practice

Amongst others, Aaker (1992) suggests that brand loyalty leads to brand equity, which leads to business profitability. Understanding the drivers for brand loyalty is the first step to understanding how to influence them and thus increase profitability.

The wider body of literature (Iwasaki & Havitz, 1998; LeClerc & Little, 1997; Park, 1996) suggests that product involvement, particularly high product involvement is a critical antecedent to brand loyalty. Traylor and Martin (2004, 1983) argue that low involvement products are also significant. Quester and Lim (2003) found partial support for both constructs and so did this research. If marketers want to increase their profitability through brand loyalty it is clear that they should consider the product involvement implications. In particular how the five antecedents (Kapferer & Laurent, 1985b) to product involvement affect brand loyalty.

The wider body of literature (Bloch, 1983; Chakravarti et al., 1981; Iwasaki & Havitz, 1998; Mittal, 1989a; Vaughn, 1986) found that consumers cannot distinguish between interest and the second antecedent to brand loyalty, pleasure. Quester and Lim (2003) added inconsistent findings as did this research, finding that the variables did in fact merge on one factor for the low involvement product batteries but did not for the high
involvement product, cars. Additionally, interest was insignificant as an antecedent to brand loyalty for cars in this research. This seems counter intuitive yet interest is defined by most as a perpetual phenomenon. It is possible and seemingly probable that interest peaks and troughs in categories as consumers enter and exit purchase cycles. Only enthusiasts remain perpetually interested. This may also offer an explanation for consumer’s inability to distinguish between interest and pleasure. It stands to reason that if you are interested you may find pleasure but the reverse may not necessarily be true. The implication for marketers is that only enthusiasts and warm to hot prospects are likely to show high levels of interest in their products. Information is likely to be pivotal to satisfy this interest and it is probable that marketers can fulfil this need through clubs, internet and media quite easily. By the same token they are likely to be able to communicate pleasurable outcomes to a greater proportion of the market on an ongoing basis.

Often in conjunction with Interest (Iwasaki & Havitz, 1998; Jain & Srinivasan, 1990; Rodgers & Schneider, 1993), pleasure seems to be a more consistent antecedent to brand loyalty. Quester and Lim (2003) certainly found support for pleasure in conjunction with interest for their high involvement product sports shoes/sneakers but more unusually with sign for their low involvement product ball point pens. This research indicated that pleasure was a strong antecedent to brand loyalty for the high involvement product, cars and in conjunction with interest the same was perhaps surprisingly true of the low involvement product, batteries. Chaudhuri (2002) in particular suggests that this may be because pleasure, in particular hedonism is a much stronger antecedent to brand loyalty than some others. He illustrates this theory with examples of luxury goods here the degree of anticipated pleasure significantly supersedes any rational consideration. This would support the theory in the previous theory where marketers would do well to project more hedonistic benefits to consumers, particularly in advertising where time and resources are limited to maintain a degree of loyalty with their customers.

Stretching this theory yet further may explain why brand loyalty for batteries can be influenced by pleasure. Earlier, this research suggested that this may be because of value assigned to the product intended for use rather than the batteries themselves. This is also perhaps supported by the theory that the occasion influences the purchase
as demonstrated by Nelson (2002) with wine and Pettigrew with beer (2002). If this is true then battery marketers in particular may benefit from associations with products that demonstrate high brand value. Eg ipod powered by Energizer. The association with a “Lovemark,” (Roberts, 2004) may well be transferred to the battery brand. Similar transfers may occur with sign value. The low involvement battery brand may receive sign value transferred from the product where it is used.

Sign value contributes most consistently to brand loyalty of all five product involvement constructs. Quester and Lim (2003) found strong support for this variable as did this research for both high involvement cars and low involvement batteries. As previously discussed the most likely explanation for low involvement batteries is that the product receives high sign value in association with the product in which it may be used. It is much easier to see how influential sign can be with cars. Technological advancements mean that the difference in style and performance of Japanese vs European cars is negligible yet European cars still generally command a significant price premium. Pettigrew (2002) offers support for this construct in other categories where the primary concern of Australian beer drinkers was to communicate their membership of specific groups, that develop and reinforce their self-concepts, and to maximise the outcomes of the stereotyping activities of others to enhance self-esteem. Much of this function occurred beyond consciousness, with respondents subconsciously working towards the attainment of a self-image that they have been conditioned to desire by the culture and subcultures to which they belong. Pettigrew and others (Mitchell, 2002a; Nelson, 2002; Pettigrew, 2002) also suggest that the occasion may additionally influence this construct. Pettigrew found that beer drinkers bought different brands of beer for home use than they would buy at the pub. Consequently, it may be prevalent for marketers to consider segmentation by occasion rather than by demographics. Eg rather than segmenting DB Draught purely as a “Blue collar” beer, DB has endeavoured to position it as “Earned,” suggesting that whether you conspicuously consume the brand at the pub or quietly consume it alone at home you will always feel and express a sense of achievement. Additionally, this motivation seems so strong that marketers could probably spend a lot of resource positioning their brand on this variable. Ultimately, this strategy is likely to fulfil one of mankind’s greatest desires for self esteem (Blackwell et al., 2001).
Risk probability is also closely related to sign. Contemporary research (Chaudhuri & Holbrook, 2002; Gordon, 2004; Mitchell, 2002a; Nelson, 2002) suggests that technology has advanced to the degree where there is little functional difference between most products shifting trust and affect to less tangible outcomes of pleasure and sign. While Quester and Lim (2003) did not find support for this theory, this research did. Both high involvement cars and low involvement batteries returned strong support for risk probability as an antecedent to brand loyalty. Following on from the wider body of literature the high risk probability for cars is likely to be attributed to portraying the “wrong” self image. Automotive marketers and in fact all marketers of high involvement products could probably minimise this risk effect quite simply with clear, consistent communication. They could also minimise this risk by diluting the polarity of their messages, however this is likely to result in the undesirable outcome of meaning absolutely nothing to nobody.

It would seem likely that these theories for risk probability would flow through to risk importance however this research did not support risk importance as antecedent to brand loyalty for the high involvement product, cars. This suggests that while the probability of making a social faux pas with your next car purchase is high the consequences are irrelevant! This merely indicates that marketers have everything to gain but nothing to lose.

On the other hand, risk importance was significant for the low involvement product batteries. Quester and Lim (2003) found similar results with their low involvement product ball point pens which they rationalised through occasion of use, suggesting that for their convenience sample of students the risk importance of a pen failing in an exam was extremely high. This rational explanation would seem to hold true for batteries too. A torch failing in a black out or smoke alarm failing in a fire would be significant. Marketers can and do endeavour to minimise this risk importance through product development. Eg the longer lasting pen, the longer lasting battery etc…

In conjunction with the wider body of literature, including the study by Quester and Lim (2003), the findings in this research support product involvement as an antecedent to brand loyalty. The five constructs of interest, pleasure, sign, risk probability and risk importance all affect brand loyalty for both high and low
involvement products differently. Marketers would do best by considering as many variables as possible to identify which are critical in their situation and then how to moderate them to influence brand loyalty and thus profitability for their products.

5.6 Limitations
Where Quester and Lim’s (2003) findings were primarily limited by their convenience sample, this research endeavoured to add generalisibility through a simple random sample. Nonetheless, this generalisability is still limited by the sample’s demographics, time horizon data collection and product sample.

This research determined that 90% of the population over 20 drove or owned a car. Consequently a sampling frame was sourced of all people who fit this demographic. To increase the sample, this frame was later narrowed to people at the Ellerslie car fair. While highly pertinent, this narrower frame obviously excluded people who buy new cars, cars from dealers, auctions or other private sales. In chapter 4, a t-test suggested that there was little difference between the car fair and general sample, however we cannot be sure what would have happened if the sample had been extended to include these other groups.

Additionally, the data collection of both samples may have included errors. Both samples filled out their own surveys, which may have led to errors through misunderstanding or simply data entry. Again data entry for the Car Fair sample was more likely to include errors because it had to be transferred into a database for further analysis by the researcher.

Data was also collected over a short period of time, in a cross sectional approach. Findings and conclusions are really only relevant to consumer perceptions and attitudes of New Zealanders in this sample dung the first quarter of 2006. Findings do not determine how these factors change over a period of time.

Finally, the product selection for analysis may have caused bias. Quester and Lim (2003) certainly found this to be the case with their products, sports shoes/sneakers which they selected based on qualitative research. In order to eliminate such bias, this research used a quantitative approach, using published empirical research (Mittal,
1989a) which suggested that cars and batteries could be suitable. This research was conducted in 1989 so their suitability may no longer be relevant.

5.7 Further research
Accounting for 71.7% of the differences for the high involvement products, cars and 53.7% of the differences for the low involvement product, batteries, this research showed stronger support for product involvement as an antecedent to brand loyalty than Quester and Lim (2003). However, this means that 28.3% and 46.3% of the differences require further explanation. Hansen (2005) developed a more contemporary model of consumer behaviour that incorporated involvement and attitude (Chaudhuri & Holbrook, 2002), one of the two key dimensions of brand loyalty that led to purchase intent. Other variables included, price, quality and emotion. A lot of the literature in this research considers these constructs but there is a real opportunity to regard these constructs as holistic determinants of purchase intent.

Additionally, the literature generally agrees that while attitude is the key determinant to real brand loyalty, the other is behavioural loyalty. Attitudinal loyalty has been broken down to cognitive, conative and affective constructs. Quester and Lim (2003) found that all three variables merged onto one factor for both products and brand loyalty so in order to replicate their study this research fixed brand loyalty to one factor. However, the research originally showed support for all three constructs as antecedent to brand loyalty for the high involvement product, cars, but found that the cognitive and affective constructs merged onto one factor for the low involvement product, batteries. These findings invite further research to test all three constructs for brand loyalty against all five for product involvement in order to identify further insight. Additionally, with two of the three antecedents for brand loyalty merging onto one factor for batteries, there is a suggestion that respondents to this survey made a distinction between behavioural and attitudinal loyalty for the low involvement product. Again this is an opportunity for further research.

The wider body of literature indicated support for interest and pleasure as one construct (Iwasaki & Havitz, 1998; Jain & Srinivasan, 1990; Rodgers & Schneider, 1993). Quester and Lim (2003) found support for this theory for their high
involvement product sports shoes/sneakers and this research found support for the low involvement product, batteries indicating that the theory is inconclusive. This research rationalised these results, referencing literature (Mitchell, 2002a; Nelson, 2002; Pettigrew, 2002) that suggested that interest was representative of an ongoing commitment, may be related to the occasion of use and may be overwhelmed by the potential for pleasure. Further research may shed some light on this conclusion.

Additionally, this research suggested that a low involvement product like batteries could only assume a high correlation between pleasure and brand loyalty from value transferred from products the batteries were used in. Further research is required to substantiate this conclusion.

Sign showed the strongest and most consistent correlation with brand loyalty. This research again suggested that this construct could be so strong that it overwhelmed others. Further research may corroborate this supposition.

While there was a larger body of literature that debated the probability and significance or risk, none of it was conclusive. Quester and Lim (2003) found no support for their high involvement product, sports shoes/sneakers when the literature suggested that high involvement products were more likely to be associated with higher risk. This research found support for risk probability for the high involvement, cars, but not for risk importance. Again it would seem unusual that the probability would be high but the importance would not for a high involvement product. The literature also suggested that technological advances had decreased the significance of functional brand-choice risk but along with Quester and Lim (2003) this research found strong support for both risk variables for low involvement products and both results would seem rationally motivated. Further research may resolve these issues.

This research generally adds veracity to the notion that product involvement is a significant contributor to brand loyalty. However it also shows that there are other contributors, that brand loyalty may be more complex than some believe and that product involvement is definitely as complex as most believe. Further research will add rigour and generalisability to this critical area of consumer behaviour.
5.8 Conclusion

This research set out to explore the relationship between product involvement and brand loyalty.

The research used a study by Quester and Lim (2003) as a foundation for replication and extension. Quester and Lim used a convenience sample of 253 students to test the relationship between product involvement and brand loyalty with ball point pens and sports shoes/sneakers. Their research found partial support for product involvement as antecedent to brand loyalty but there were a number of inconsistencies that they rationalised through sampling techniques and product characteristics, creating an opportunity for validation through further research.

To contribute to the literature, this research started from the beginning, using all five facets most commonly agreed to be antecedent to product involvement; interest, pleasure, sign, risk probability and risk importance to retest the relationship with brand loyalty with a different sample using different products and different methodology. The research also attempted to eliminate potential bias in Quester and Lim’s (2003) research by incorporating quantitative data analysis to determine suitable products for testing and more robust sampling techniques to add rigour and generalisability.

The survey was based on models developed by Kapferer and Laurent (1985b) and Jacoby and Kyner (1973), employed by Quester and Lim (2003). Both traditional paper based and contemporary electronic methods of data collection were employed to provide a comprehensive platform for factor and regression analysis.

Preliminary analysis returned three factors, conative, cognitive and affective loyalty for cars. Two factors, conative and cognitive/affective emerged for batteries. Consistent with the wider body of literature including Quester and Lim (2003) this research found that interest and pleasure merged on a sole factor for batteries but respondents made the distinction for all five proposed variables as they related to cars. Regression analysis showed strong support for all of the variables for batteries and for three of the five variables for cars.
While these findings lend support for product involvement as an antecedent to brand loyalty, sign value is the only construct that shows a consistent correlation, creating further opportunities for academic research. Marketers will do best by addressing sign or ego involvement as the most consistent construct correlated with brand loyalty.
Bibliography


Appendices

Appendix 1: Survey

Hi there

My name is Nigel Douglas; I am a student at the Auckland University of Technology conducting research as part of my Master of Business degree.

The research explores various aspects of consumer behaviour in order to provide more information that will help marketers develop products that will better serve the public.

The survey will only take ten minutes to complete and while entirely voluntary your participation is extremely valuable and very much appreciated.

Your response will be treated with complete confidentiality.

For further information there is a participant information sheet attached.

Otherwise please proceed to the first page.
Section One: Cars

Cast your mind back to the last time you bought a car or imagine you were going to buy one now, click on the selection that best suits.

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree or disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
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<tbody>
<tr>
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<td>Disagree</td>
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<tr>
<td>I considered make to be very important in choosing a car</td>
<td>Strongly agree</td>
<td>Agree</td>
<td>Neither agree or disagree</td>
<td>Disagree</td>
<td>Strongly disagree</td>
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<tr>
<td>I paid a lot of attention to my particular make of car over the other make(s)</td>
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<td>Neither agree or disagree</td>
<td>Disagree</td>
<td>Strongly disagree</td>
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<tr>
<td>I have always bought the same make of car because I really like the make</td>
<td>Strongly agree</td>
<td>Agree</td>
<td>Neither agree or disagree</td>
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<tr>
<td>I would be upset if I had to buy another make of car if my particular make was not available</td>
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<td>Strongly disagree</td>
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<tr>
<td>I was excited about getting this particular make of car over the other make(s)</td>
<td>Strongly agree</td>
<td>Agree</td>
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<tr>
<td>I would continue to buy the same make of car because I like the make very much</td>
<td>Strongly agree</td>
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<td>Neither agree or disagree</td>
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<tr>
<td>Although another make was on sale, I still bought this particular make of car</td>
<td>Strongly agree</td>
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<td>Neither agree or disagree</td>
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<td>I always find myself consistently buying this particular make of car over the other make(s)</td>
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<tr>
<td>Once I have decided on a particular make of car over other makes, I will stick by it</td>
<td>Strongly agree</td>
<td>Agree</td>
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<tr>
<td>If this particular make of car was not available at the store, I would rather not buy at all if I had to choose another make</td>
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<tr>
<td>I attach great importance to my car make</td>
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<td>My car make interests me a lot</td>
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<td>My car make leaves me totally indifferent</td>
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<td>Choosing a car is rather complicated</td>
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## Section Two: Batteries

Now, we will ask you the same questions about your experiences when purchasing batteries, click on the selection that best suits.

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<tr>
<th>Question</th>
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