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Evaluation of goods & services among white and black consumers

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E V A L U A T I O N O F G O O D S & S E R V I C E S A M O N G W H I T E A N D B L A C K C O N S U M E R S

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A research report submitted to the Faculty of Business Administration, University of the Witwatersrand, Johannesburg, in partial fulfilment of the requirements for the degree of Master of Business Administration.

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ABSTRACT

The research investigated the evaluation of common goods and services by white and black consumers, and to determine where similarities and dissimilarities between these two segments existed. A review of the literature on consumer behaviour, with specific reference to decision making models, and a series of in depth interviews enabled the expansion of the Zeithaml (1981) set of constructs by a factor of two. A questionnaire was developed and administered to white and black employees of well known local firms in a variety of industries. Hypothesis testing enabled validation of the expanded set of constructs, and the comparison of white and black evaluative differences, while correspondence analysis determined the key evaluative dimensions. Important new dimensions discovered included Convenience, Loyalty and Reception. An invaluable method of clustering was found in the chi squared trees technique.

The results indicated that black consumers are significantly less experienced in the use and evaluation of common services compared to their white counterparts. As a result of this inexperience, a much less sophisticated set of key evaluative constructs are relied upon in the decision process. Both segments appear to be aware of generally higher risks associated with services, but are less prone to invest effort in information gathering prior to purchase. The white segment purchases services based on their convenience, whilst the black segment faces equal inconvenience for any purchase.

The most significant marketing implications drawn were firstly, the need to appreciate consumer perceptual similarities across, and differences within, goods and services categories. Secondly, marketers need very different strategies for the black segment.

DECLARATION

I declare that this is my own, unaided work. It is being submitted in partial fulfilment of the requirements for the degree of Master of Business Administration in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in any other University.



C. CAMBITZI

29TH day of AUGUST, 1991

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1.0 INTRODUCTION

1.1 Background and Study Objectives

Much academic research has recently been completed on the question of how services differ from goods, and consequently on the evaluative differences and similarities that characterize consumer's purchase decision processes. Most notably in the available literature is the work of Zeithaml (1981), who refuted the common assumption that "services, if not identical to goods, are at least similar enough in the consumer's mind that they are chosen and evaluated in the same manner"(p186). Her commonly referred to system of classification stems from earlier work by Nelson (1970), and Darbi and Karni (1973), in which all products possess varying amounts of three qualities which rank them on a spectrum of ease of evaluation. The assertion is that consumer goods possess search qualities, attributes which a consumer can determine prior to purchasing a good, and experience qualities, those attributes which can only be discerned after purchase or during consumption.

Conversely, while consumer services possess some aspects of experience qualities, their main characteristic is that they possess credence qualities, those attributes which the consumer may find impossible to evaluate even after purchase and consumption.

In addition to taxonomical differences, Zeithaml (1981) and others assert that services possess characteristics of intangibility, non-standardization, inseparability of production and consumption, and perishability which make them conceptually unique from goods. In summary, it is these conceptual differences that lead Zeithaml (1981),to state that "(these) lead (services) to possess few search qualities and many experience qualities, (while) credence qualities also dominate in many services, particularly those provided by professionals and specialists (p187)."

These differences lead many researchers (among them Lovelock, (1981 and 1983), Booms and Bitner (1981), Zeithaml (1981)), to stress that different marketing strategies are needed for services, and that organizational structure of the service firm must allow for necessarily overlapping functions.

Conversely, there are the researchers (among them Enis and Roering (1981), Brown and Fern (1981)), who stress that a product is a "bundle of benefits" (Enis and Roering, 1981, p1), and that indiscriminant taxonomical clustering of seemingly homogeneous products has ignored the augmented product concept, with no regard to the "focus (which must fall) on the buyers' perspective of this bundle" (Enis and Roering, 1981, p3). They believe that the appropriate marketing strategy is determined by the underlying characteristics of the offering and not whether it is a good or a service.

The current research aims to conduct an exploratory investigation into the differences in techniques and processes that white and black consumers use to evaluate goods and services. Contrary to prior research (most notably Ewels (1989)), this study will not begin from a basis of acceptance of the 11 research hypotheses on consumer evaluation established by Zeithaml in 1981, but rather from the issues developed from consumer behaviour theory, and empirically from direct construct generation resulting from in-depth interviews. In this fashion, it is hoped that constructs developed will be more exhaustive with respect to local consumer behaviour. Should Zeithaml's hypotheses be valid locally, their founding constructs will become apparent during the development of the new constructs, and those emergent will be assumed to have relevance in the new set.

1.2 Research Questions

The questions to be addressed in this research are as follows;

1.2.1 The Appropriateness of the Zeithaml Hypotheses

- What are the common evaluative criteria used by a

consumer when contemplating the purchase of a good or a service?

- From these criteria, hypotheses detailing how the evaluation process differs for the purchase of goods and services will be developed; do they differ substantially from those assumed to be locally valid as defined by Zeithaml, and as used as bases in similar recent research? Which criteria are in agreement with Zeithaml's?

- From the set of evaluative criteria both empirically ascertained and coincident with Zeithaml's, which are the key determinants?.

1.2.2 The Uniqueness of Goods and Services Evaluation

- Does the evaluation of services differ significantly from that of goods?

- Do the results of white consumer evaluation compare with those derived from the previous research of Ewels (1989)?

1.2.3 Comparison of White and Black Evaluation

- Are there significant differences between the evaluative determinants pertaining to the black consumers compared with the white consumers, and what is their nature?

1.2.4 Marketing Strategies

- What should marketing strategies emphasize to capitalize on the differences (if any) between the evaluation of goods and services in the white and black markets respectively?

1.3 Importance of the Research

Numerous recent research efforts as already summarized have striven to determine if differences exist in consumers' evaluative processes and determinants when they contemplate the

purchase of goods and services. This work has largely assumed that existing theory (most notably the Zeithaml hypotheses) is valid locally, and furthermore exhaustive; one of the prime objectives of the proposed research will have been fulfilled if the latter assumption is either proved or disproved.

Prior research has also focused exclusively on the white consumer, ignoring the black segment for a variety of seemingly good reasons such as access, illiteracy, poor questionnaire comprehension, and pure convenience. Nevertheless, such data is important, particularly considering that the average black consumer's real purchasing power increase has outstripped that of the white in recent years, and will constitute the vast majority of the consumer value base in the near future.

1.4 Limitations and Key Assumptions

One of the advantages of the research was that the constructs were empirically derived and thus relevant to local conditions. Allied to this is the assumption that the set of derived constructs was also exhaustive, since construct development emanated from two new sources, namely the research into consumer behaviour, and the projective technique used in the in-depth interviews themselves.

Due to the exploratory nature of the proposed research, it is not expected that the sample selected, particularly among black consumers, be representative of the population. Sampling was convenience based, owing to the necessary, voluntary participation of the employing organizations and their staff. Rather, it is the researcher's belief that the insights derived were sufficiently illuminating to allow meaningful first interpretation, and served as a guideline for future, more extensive and representative research.

A further research limitation arises from the sampling of employees of corporate entities; it is possible that their evaluative approach to product purchase may differ from that of the non-corporate worker.

A problem with mailed, self-completion type questionnaires is the characteristically low response rate. Typically, one can expect no more than a 10 percent return. Non-response bias can also pose a problem, since the response rate in mail surveys is related to the respondent's interest in the survey topic. Since the proposed method of sampling did not involve "cold" mailing, response rates were excellent; participants were pre-arranged, and they had telephonic recourse to help with completion from the researcher. Non-response bias was also not a factor.

A final limitation was that the selection of goods and services used for the research was necessarily identical to that used in previous work, most notably that of Ewels (1989), since the intention was a comparison following a differing approach. This selection may have contained opportunity for bias under local conditions across population segments.

1.5 Review of Subsequent Chapters

The research will be documented as follows in eight major sections;

Chapter Two: Significant Prior Research

A review of current literature, including recent research reports will be presented, developing theoretical foundations for the current research.

Chapter Three: Research Questions

Following on from the introduction of the broad aims of this research, an in depth analysis of the specific research questions to be answered will be presented.

Chapter Four: Research Methodology

The method of generation of the constructs from consumer interview sessions, using the Kelly Repertory Grid technique, will be discussed. A review of the integration of these

empirically derived constructs into the set existing in the form of the Zeithaml constructs will be presented, together with those mentioned in the models on consumer behaviour.

The presentation of the researchable hypotheses and rationale for each will be confined to those discovered in consumer behaviour theory and interviews not encompassed by the 11 Zeithaml hypotheses.

The sampling method will be briefly discussed, and a review of the analytical techniques employed for the research will be covered.

Chapter Five: Questionnaire Construction

This chapter will be devoted to the method of conversion of hypotheses into understandable questions for the consumer, the structure of the questionnaire, the method of and results from the piloting of the questionnaire, and the method and success rate of administration and collection of the completed forms.

Chapter Six: Research Results

This chapter will be subdivided into two major areas, notably the detailed presentation of the results from the comparison of goods and services (hypothesis testing), and the detailed presentation of the results from the analysis of key evaluative distinguishers (the correspondence analysis). Both the white and the black consumer samples will be dealt with separately.

Chapter Seven: Discussion of Results

This chapter is subdivided into four major areas, all dealing with a discussion of the results presented in the previous chapter. The first part will cover the discussion of the hypothesis testing, for both white and black segments in turn, whilst the second will deal with a comparison of black and white goods and services evaluation along the dimensions in which significant differences occur. The third section will discuss the

interpretation of the results from the correspondence analysis, for both segments, with particular reference to product clustering and their correlation to the defined evaluative dimensions. Segmental comparisons will be made between the white and black consumer. Finally, comparisons with prior research, specifically that of Ewels (1989), will be attempted.

Chapter Eight: Conclusions and Recommendations

From the presented data and results, this chapter will summarize the more important findings with reference to both consumer segments, with respect to the relatedness of the two segments, and with respect to earlier research.

An attempt to provide some strategic marketing implications for both segments will be made, and some suggested areas for further research will be provided.

2.0 SIGNIFICANT PRIOR RESEARCH

2.1 On General Consumer Behaviour

Researchers in the literature on consumer behaviour all propose essentially similar models explaining recognizable stages in the decision process. Most notable is the work of Engel, Blackwell and Miniard (1986,1990), Howard and Sheth (1969), and Nicosia (1966).

2.1.1 Engel, Blackwell and Miniard (1986, 1990)

These researchers developed a complete model of consumer behaviour, known as the EKB model, after the original authors Engel, Kollat and Blackwell. Their analysis is chiefly concerned with consumer evaluation of goods rather than services, most probably as a result of the relative levels of interest in marketing strategies of goods over services at the time of writing. In addition, it is recognized that consumer behaviour may not necessarily follow the discrete stages portrayed in the model, but may rather be a more continuous process in the mind. The stages presented in the model serve merely to indicate sequence and as an aid in clarity of argument.

In the contemplation of the purchase of a good or a service, consumers are envisaged to proceed through three main stages, of

- inputs,
- information processing, and
- the decision process proper,

and to be influenced by certain variables affecting the decision process. The basic model is also modified by brand loyalty in a habitual decision making situation, and by impulse.

The decision process proper is subdivided into five recognizable stages, namely need recognition, search, alternative evaluation, purchase, and outcomes. The rigour of the consumer's decision process varies along a continuum, from Extended Problem Solving (EPS) to Limited Problem Solving (LPS), depending upon their level of involvement and search effort with the alternatives on offer to them. Figure 2.1 illustrates the model.

At the outset of the Decision Process, the authors suggest that need recognition is influenced by three determinants, namely

i) information stored in memory,

ii) individual differences (consumer resources, motivation and involvement, knowledge, attitudes, personality, lifestyle and demographics), and

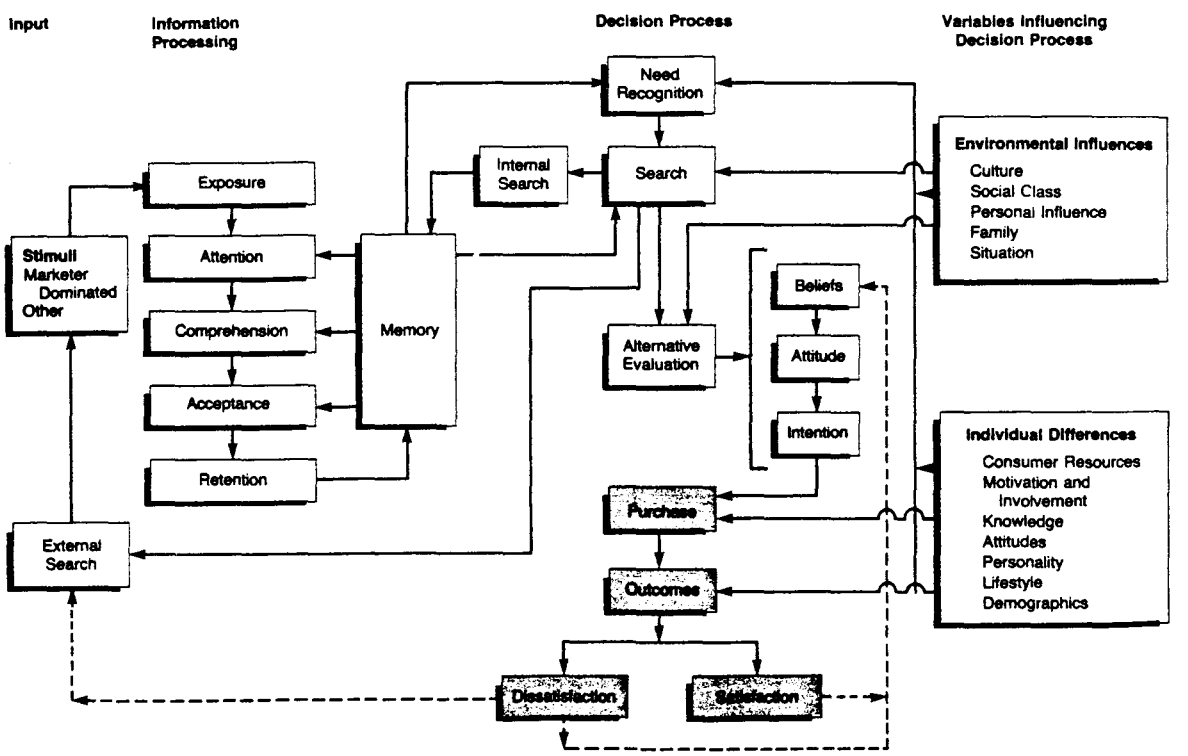


Figure 2.1: The Complete EKB Model of Consumer Behaviour

iii) environmental influences (culture, social class, personal influence, family, situation, time pressure, financial status and the importance of the purchase).

The information search process is concerned with the search for information in regard to available options for the consumer. It is subdivided into an initial internal search (memory), followed by an external search phase; in the latter, both the dimensions and the determinants of the search are discussed.

i) Dimensions of the search

- Degree of Search: The total amount of the search, including how many stores, brands, product attributes and information sources were consulted, and how much time was spent during the search.

- Direction of Search: What was the specific content of the search, including which stores, brands, product attributes and information sources were consulted.

- Sequence of Search: The order of the search activities, including in which order the stores, brands, product attributes and information sources were considered. Two logical alternative approaches available to the consumer are mentioned; the consumer can either conduct a brand-search or an attribute-search sequence.

ii) Determinants of the search

- Situational: where the particular situation in which the consumer finds him or herself dictates the characteristics of the search initiated. If for example a fridge has broken down irreparably, the consumer in likelihood would engage in a very limited period of external information search, being pressurized by time constraints to purchase a replacement before loss occurs due to spoilage.

- Product: where for example the degree of differentiation between competing brands is large, the consumer is likely to engage in a fairly extensive search.

- Retail environment: for example, the distance between retail competitors can determine the number of stores consumers would visit during decision making.

- Consumer: characteristics of the consumer greatly influence search behaviour, such as level of knowledge, involvement or motivation, beliefs and attitudes, and demographics.

Once the information required has been gathered, it is processed through the six sub-stages as depicted in the model, originally developed by McGuire (1976);

i) Stimuli: A stimulus must be present in order for the first stage of processing (exposure) to proceed. This could be marketer-dominated or some other stimulus.

ii) Exposure: this occurs from "physical proximity to a stimulus that allows the opportunity for one or more senses to be activated" (Engel, et al., 1990, p363).

iii) Attention: this is defined by Engel, et al., (1990, p367) as "the allocation of processing capacity to the incoming stimulus."

- Personal determinants; included here are the consumer's need or motivation, their attitudes, adaptation level (at which the consumer becomes so habituated to a stimulus that it is no longer noticed), and their span of attention.

- Stimulus determinants; these are characteristic of the stimulus itself, and include size, colour, intensity, contrast, position, directionality,

movement, isolation and novelty.

iv) Comprehension: this is the interpretation of the stimulus, affected by two determinants,

- Personal; such as the consumer's motivation, knowledge and expectations

- Stimulus; such as linguistics (perceptions and response will be modified by linguistic phenomena), order effects and context (the surrounding situation in which the stimulus occurs).

v) Acceptance: the occurrence of persuasion

vi) Retention: this is defined by Engel, et al., (1990, p388) as "the transfer of information to long term memory."

Resulting from the information search phase, alternative evaluation is undertaken. In EPS, the authors contend that a compensatory strategy is adopted, in which "perceived weakness in one product attribute is can be compensated for or offset by strength on others" (Engel, et al., 1990, p480). In practice this would commonly consist of processing information one brand at a time, weighing each against the most important attributes. In LPS however, it is more common for a non-compensatory alternative evaluation strategy to be adopted. Here, an option will be eliminated if it falls short in terms of the expected benefits perceived by the consumer.

i) Evaluative Criteria:

Alternative evaluation makes use of various evaluative criteria to compare different products and brands, which are shaped and influenced by individual and environmental differences. The authors state that such criteria are "the desired outcomes from purchase and consumption, and are expressed in the form of preferred attributes" (Engel, et al., 1990, p479). Examples of common criteria include

price, convenience, brand name (which the authors label as "a surrogate indicator of product quality" (Engel, et al., 1990, p515), and country of origin.

Various determinants of criteria are given, such as situational influences (for example location convenience), the similarity of choice alternatives, motivation (consumers are driven by utilitarian or hedonistic considerations), involvement, knowledge, impulse, brand loyalty and inertia.

ii) Choice Alternatives:

The construction of what Engel, et al., (1990, p522) term the "consideration set", or what Zeithaml (1981, p187) terms "the evoked alternative set", is assumed to be either from memory, as the "retrieval set" (Engel, et al., 1990 p522), or from external sources such as in-store scanning, or information sources such as other consumers and the yellow pages.

iii) Assessing Choice Alternatives:

The authors mention that "the performance of choice alternatives (occurs) along salient evaluation criteria" (Engel, et al., 1990, p524). Mention is also made of the use of cutoffs (for example, price), and the use of signals (for example, the use of price as a cue to quality).

iv) Beliefs, Attitude, Intention:

Engel, et al., 1990, p479, assert that "the most common chain of effects of processed information on alternative evaluation begins with formation and change in beliefs about the product or brand and its attributes, followed by a shift in attitude toward the act of purchase ... (which) ... leads to an intention to act consistently with the attitude and finally to the act of purchase itself."

v) Selecting a Decision Rule:

The final element of the alternative evaluation process involves "the strategies consumers use to make a selection from the choice alternatives" (Engel, et al., 1990, p526). Five logical alternatives are recognized, namely compensatory, non-compensatory, phased decision strategy (involving the sequential use of at least two different rules to cope with a large number of choice alternatives), constructive rules (on the spot rule building, for novel or unfamiliar choices), and affect referral (using a previously formed overall evaluation of each choice alternative).

After choice alternatives have been assessed, the model contends that a purchase decision is made, and depending on the extent to which expectations have been matched, a satisfactory or dissatisfactory outcome results. Again, the assertion is made that satisfaction ranges along a continuum. Oliver (1980) contends that "consumers enter into purchase with expectations of how the product will actually perform once it is used" (Engel, et al., 1990, p545). Such expectations occur in three forms;

i) Equitable Performance: the expectation of what one ought to receive,

ii) Ideal Performance: the optimum or hoped for, ideal performance level, and

iii) Expected Performance: the most likely performance.

Once the product has been selected and used, outcomes are compared against expectancies;

i) Positive Confirmation, where performance is better than expected, and leads to satisfaction,

ii) Simple Confirmation, where performance equals expectations, leading to a neutral response, and

iii) Negative Confirmation, in which case performance is worse than expected, leading to dissatisfaction.

Another subprocess of the decision process proper is the innovation decision process, over five stages, from knowledge, through persuasion, decision, implementation to confirmation. Figure 2.2 depicts this model as initially developed by Rogers (1983);

Stage 1 (Knowledge): this stage is characterized by the "receiving (of) physical or social stimuli that give exposure and attention to the new product and how it works" (Engel, et al., 1990, p703).

Stage 2 (Persuasion): this refers to the formation of favourable or unfavourable attitudes toward the innovation.

Stage 3 (Decision): this refers to the activities that lead to a choice between adopting or rejecting the innovation.

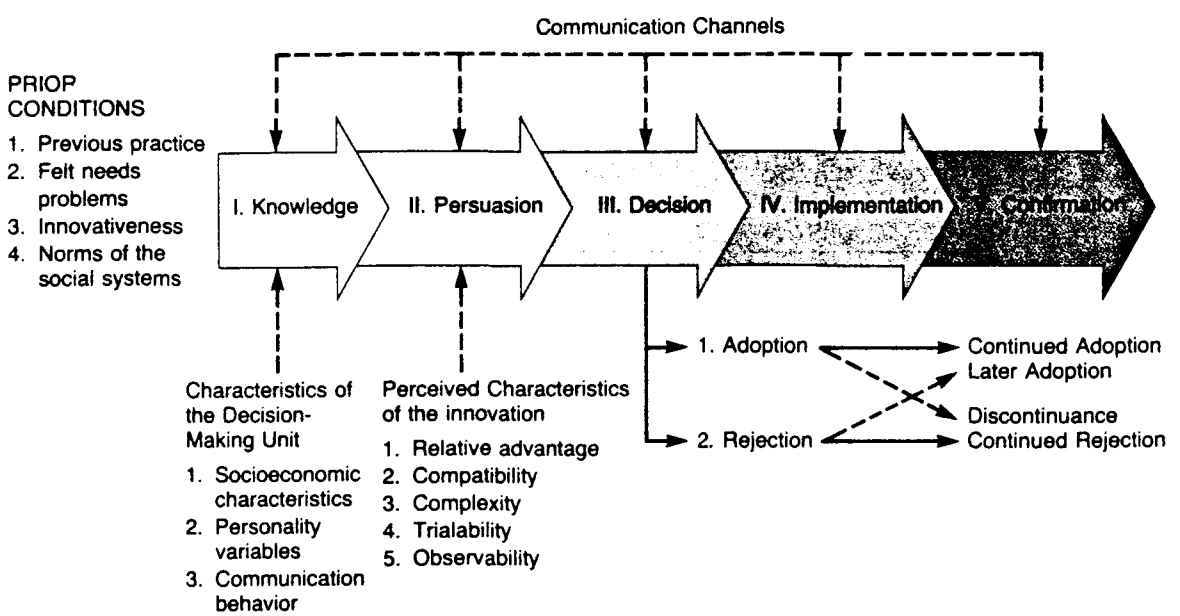


Figure 2.2: The Rogers Model of the Innovation-Decision Process

Stage 4 (Implementation): occurs where the consumer puts the innovation to use.

Stage 5 (Confirmation): is "the process through which consumers seek reinforcement for the innovation decision" (Engel et al., 1990, p706).

Finally, the authors discuss the concept of the augmented product, reinforcing the approach taken by Enis and Roering (1981), regarding the "bundle of benefits" (Enis and Roering, 1981, p1), which a product represents.

2.1.2 Howard and Sheth (1969)

In this model, the researchers contend that the theory of buyer behaviour is based on four sets of variables. Figure 2.3 illustrates the model's components and relationships.

i) Input Variables:

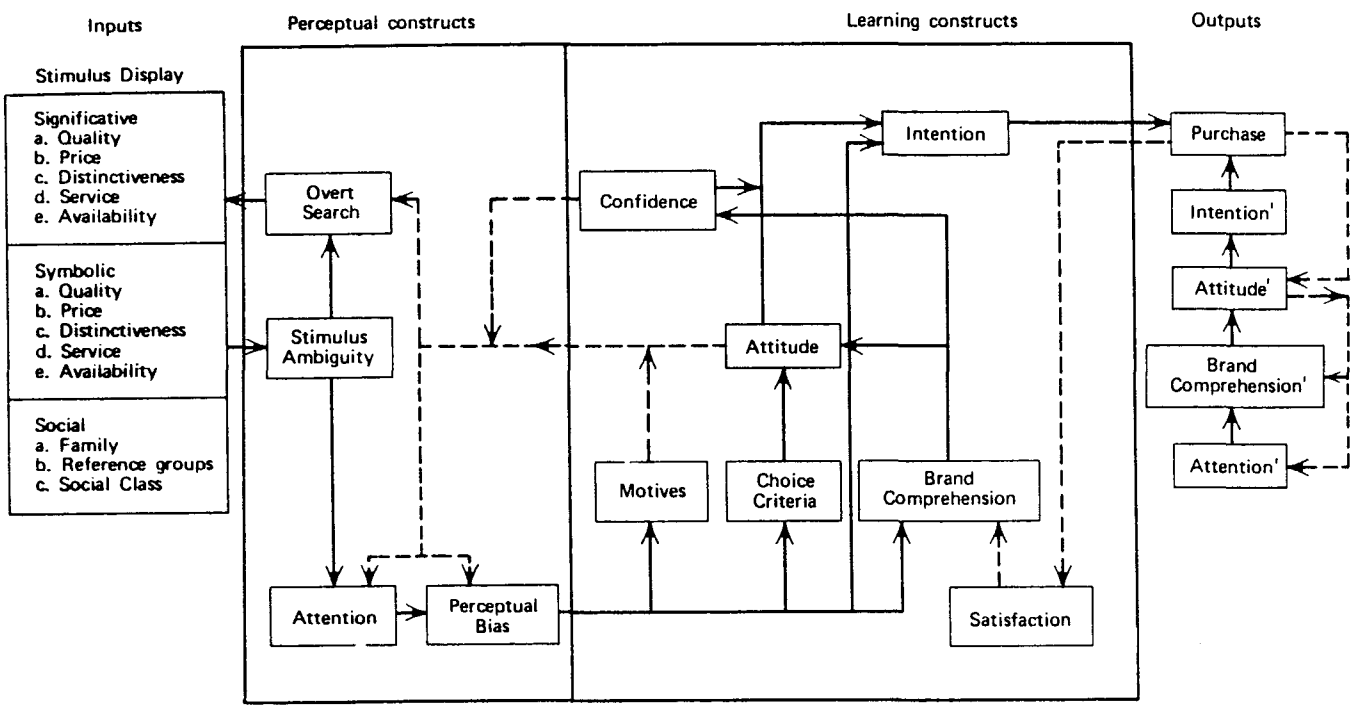
Stimuli from the buyer's environment, by way of either the physical brands themselves (significative, including quality, price, distinctiveness, service and availability), or linguistic / pictorial representations (symbolic, including similar aspects), or social stimuli (including word of mouth, family and social class). These input variables correspond with Engel, et al's (1990) input stimuli in the EKB model.

ii) Output Variables:

The outward manifestation of the buyer's behaviour, culminating in actual purchase. Five visible and measurable sub-processes are postulated, namely

- attention,
- brand comprehension (the consumer's "verbal statement about his knowledge of brands in a product class", (Howard and Sheth, 1969, p31)),

- attitude formation ("a verbal evaluation of the brand's potential to satisfy the motives", (Howard and Sheth, 1969, p31)),
- intention (the "buyer's expectation, expressed verbally", (Howard and Sheth, 1969, p31)), and
- the purchase itself.



Solid lines indicate flow of information; dashedlines, feedback effects.

Figure 2.3: The Howard and Sheth Theory of Buyer Behaviour

iiia) Perceptual Hypothetical Constructs:

These, while <u>not</u> all outwardly manifest, deal with information procurement and processing relevant to a purchase decision. The perceptual constructs are

- attention,
- stimulus ambiguity (the "perceived uncertainty and lack of meaning of information received from the environment", (Howard and Sheth, 1969, p36)),
- perceptual bias (where the buyer selectively attends to information and also distorts it), and
- overt search, where the consumer actively seeks information.

These constructs correspond with those counterparts in the information processing stage of the EKB model.

Attention is drawn to the fact that "a perceptual phenomenon implies ignoring a physical event, seeing it attentively, or sometimes imagining what is not present in reality. All perceptual phenomena essentially create some change in quantity or meaning of objective information." (Howard and Sheth, 1969, p36).

iiib) Learning Hypothetical Constructs:

These seven serve the function of concept formation, and include

- motives ("the goals of a buyer impinging upon a buying situation", (Howard and Sheth, 1969, p32)),

- brand comprehension ("knowledge about the existence and characteristics of those brands that form the buyer's evoked set of alternatives", (Howard and Sheth, 1969, p33)),

- choice criteria ("the buyer's mental rules, which he utilizes to evaluate brands as goal-objects", (Howard and Sheth, 1969, p34)),

- attitude ("the buyer's relative preference of brands in his evoked set, based on his evaluative beliefs about these brands", (Howard and Sheth, 1969, p34)),

- intention (the "buyer's forecast as to when, where and how he is likely to buy a brand", (Howard and Sheth, 1969, p35)),

- confidence (the degree of certainty a consumer perceives toward a brand), and

- satisfaction (the degree of congruence between actual outcome from purchase and what was expected at the time of purchase).

Clearly, with the exception of the certainty construct, and the search construct, which is introduced as a perceptual hypothetical construct, the above correspond with the stages in the decision process proper in the EKB model.

iv) Exogenous Variables:

These describe the contexts in which buyer behaviour occurs, and although not integral to the decision-making approach, are nevertheless powerful influences that the buyer takes into consideration. Examples include importance of purchase, culture, social class, personality traits, social setting, time pressure and financial status. They are postulated to be causally related to the Output Variables through their effect on the Hypothetical Constructs. They appear to be analogous to Engel et al's (1990) individual and environmental influences, although clearly not listed in the same detail.

2.1.3 Nicosia (1966)

Nicosia proposed a twin-loop, four stage model of consumer decision-making, structurally unaffected by a starting point. The model is illustrated in figure 2.4

The two main circular flows of events involve that from the firm to the consumer and back to the firm, and the flow from the consumer before the advertising message to his reaction and back

to the consumer after the message. In the flow of the process, these two loops constantly interact over time, hence there is no logical starting point to the process.

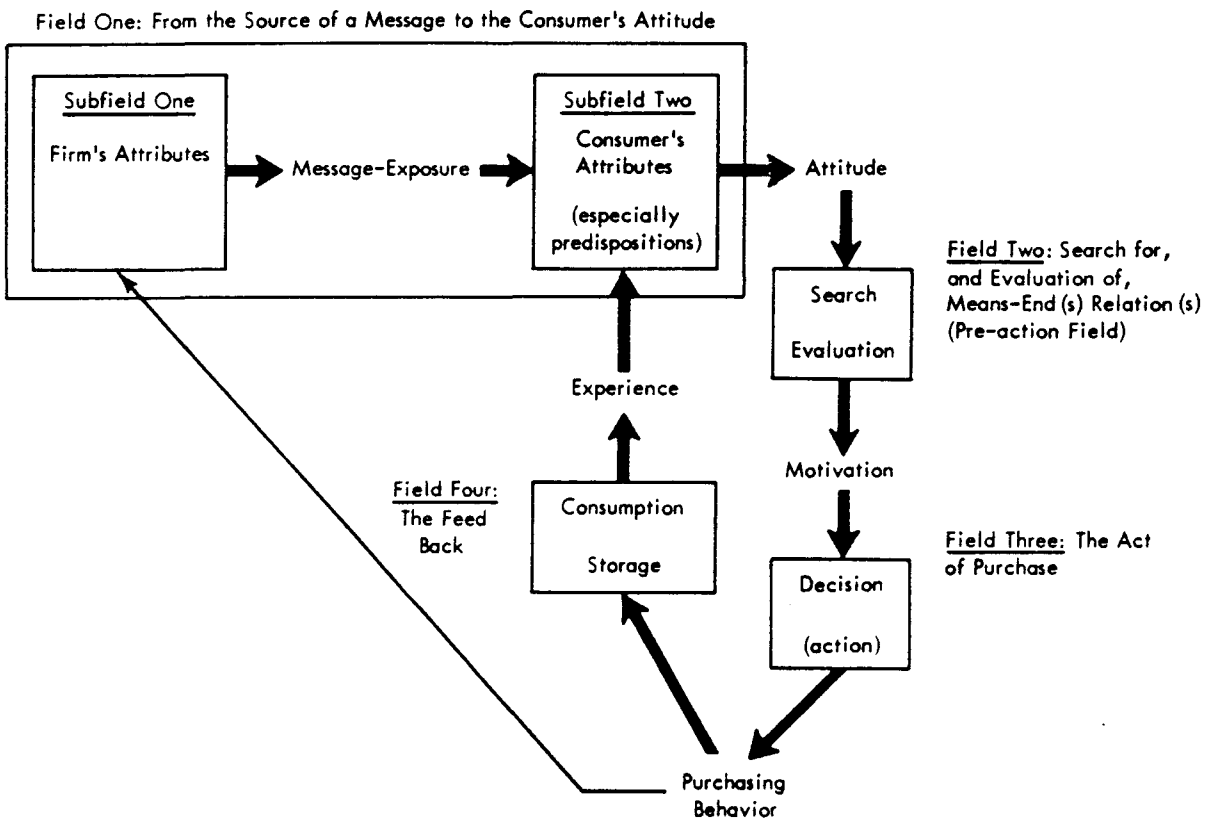


Figure 2.4: Nicosia's Decision Making-Evaluation Model

i) From the Source of a Message To the Consumer's Attitude:

This stage or field includes

- the organizational attributes of the firm (short and long term goals, degree of centralization, policies and procedures, and marketing and advertising strategies),
- attributes of the brand or product to be advertised (technical, functional, and social psychological),
- environmental factors (competitors, legislation and regulations, available media),

- their interaction producing a message,
- the consumer's exposure to it, and
- the consumer's attributes and predispositions.

The formation of an attitude results and signifies the logical end of the first field.

Clearly, the above field describes fairly accurately the firm stimuli, environmental and individual influence stages of the EKB model previously described. The consumer's attitudes and dispositions match the need recognition, beliefs and attitude constructs of the EKB model.

ii) Search For / Evaluation Of Means-Ends Relations:

(between the attitude toward the advertised product and the number of perceived brands available). The type, complexity, intensity and duration of search all depend on several factors, such as the consumer's range of values and interests, his commitment to them, the level of aspiration, the perceived cost of information, the perceived amount of payoff, the degree of involvement, and the search propensity. Both internal and external phases of the search are postulated.

The formation of a motivation towards the advertised brand results. This field corresponds with the search, information processing, alternative evaluation and intention stages of the EKB model.

iii) The Act of Purchase:

This field has an exact counterpart in the EKB model, and comprises of the transformation of the motivation into a decision to purchase the advertised brand. The result is a purchase action, which provides feedback into the firm's attributes in field (i). No such feedback counterpart exists for the EKB model however.

iv) The Feedback:

Storage and consumption that lead to experience with the brand characterise this field. This experience corresponds with the outcome stage of the EKB decision process, and feeds back into the consumer's attributes by modifying his or her predispositions in field (i), in a similar fashion to the feedback mechanism proposed in the EKB environment, where satisfaction or dissatisfaction with the product influences the consumer's beliefs or initiates a new decision process from the external search phase.

2.2 On Consumer Evaluation

2.2.1 Fisk (1981)

A model is proposed describing the consumption/evaluation of services in particular, highlighting the need to maintain consumer satisfaction for successful services marketing.

The model, as represented in figure 2.5 has three stages. In addition, three evaluation points follow three behaviours serving as "triggering cues"; Fisk refers to these cues and evaluations as "act-evaluation linkages" (Fisk, 1981, p193).

i) Pre-consumption Stage:

This corresponds to the EKB model stages of need recognition, information search (internal then external), and alternative selection, the latter being the first triggering cue. Evaluation 1 occurs here, and this seeks to identify the "best" solution to the consumer's problem.

ii) Consumption Stage:

Here, a choice is made, (the second triggering cue) followed by Evaluation 2, which forms a set of expectations held about the service. The consumer then uses the service, the third triggering cue.

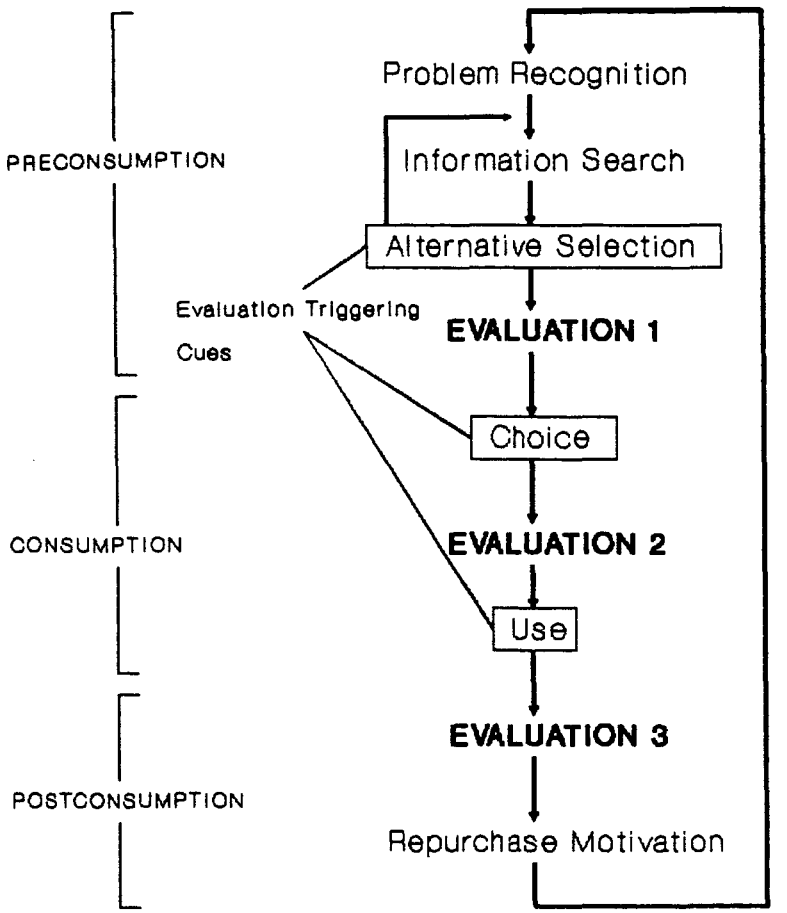


Figure 2.5: The Fisk Consumption-Evaluation Process for Services

iii) Post-consumption Stage:

Following the use of a service, Evaluation 3 occurs, which considers the degree of satisfaction or dissatisfaction with use of the service.

The Fisk model is based on six important key assumptions.

Firstly, that the consumer decision process (with its attendant evaluation stages) can be described in three stages. Fisk mentions that consumption/evaluation occurs "...in a continuous fashion, in which the component parts are inseparably blurred" (Fisk, 1981, p193), an that the model is only a representation of reality.

Secondly, that "evaluation is an ongoing cognitive process" (Fisk, 1981, p193), and thirdly that consumer evaluation is a process of comparisons between expectations and actual performances. Fourthly, evaluation occurs predominantly after act cues, and fifthly, since evaluation is focused on the act it follows, those variables affecting evaluation will vary with each act. Finally, Fisk asserts that the evaluation is cumulative over time.

Since some services are promised to be delivered if some specific event occurs (insurances, warranties for example), the consumer has no immediate opportunity to evaluate the delivery of the offering. This suggests that "post-choice evaluation of services might be a more critical dimension of total satisfaction with some services than would post-use evaluation" (Fisk, 1981, p193), a subtlety not covered in Zeithaml's set of 11 hypotheses.

Consumer evaluation during consumption of the service is regarded as a significant aspect of services. This observation agrees with Zeithaml's third hypothesis, that consumers of services engage in more post-purchase than pre-purchase evaluation. This, and the assertion that "services are more intimately linked with the delivery of satisfactions than are goods" (Fisk, 1981, p194), implies that successful service marketers should ensure high levels of consumer satisfaction, and post-choice satisfaction in particular.

2.2.2 Zeithaml (1981)

Zeithaml's research proposed to refute the common assumption that " ... goods and services are evaluated in the same manner by the consumer" (Zeithaml, 1981, p186), by focusing on the differences lying in the assertion that most goods are high in search qualities (attributes which a consumer can determine prior to purchasing a good), and experience qualities, (those which can only be evaluated after purchase or during consumption), whilst most services are high in experience and credence qualities (characteristics difficult to evaluate even after consumption). In addition, the distinguishing characteristics of intangibility,

non-standardization and inseparability of production and consumption make services more difficult to evaluate than goods. Hence, according to Zeithaml, consumers rely on different cues and processes when evaluating them compared with goods.

11 hypotheses were proposed to explain these divergent evaluation processes;

i) Information Search:

> (H1) "Consumers seek and rely more on information from personal sources than from non-personal sources when evaluating services prior to purchase" (Zeithaml, 1981, p187).

This hypothesis is constructed on the assumptions that non-personal sources such as mass media cannot convey search quality information, whilst personal sources can, that there may be a scarcity of non-personal sources, and given the risk involved, consumers may rely more on personal sources which they perceive as more credible.

> (H2) "Consumers engage in greater post-purchase evaluation and information seeking with services than with (goods)" (Zeithaml, 1981, p187).

> (H3) "Consumers engage in more post-purchase evaluation than pre-purchase evaluation when selecting and consuming services" (Zeithaml, 1981, p187).

Both these hypotheses are based on the assumptions that "services possess experience qualities which cannot be adequately assessed prior to purchase" (Zeithaml, 1981, p187).

ii) Evaluating Quality:

> (H4) "Consumers use price and (appearance of) physical facilities as the major cues to service quality" (Zeithaml, 1981, p187).

Compared with the many cues such as style, colour, label, feel on so on available to judge a good, in many cases the only cues available to evaluate a service may be its price, the premises and equipment used in the service delivery.

iii) Evoked Alternative Set:

> (H5) "The consumer's evoked set of alternatives is smaller with services than with (goods)" (Zeithaml, 1981, p188).
>
> (H6) "For many non-professional services, the consumer's evoked set frequently includes self-provision of the service" (Zeithaml, 1981, p188).

Since consumer purchasing services would approach an outlet typically having only one brand "on display", and are unlikely to find many competing firms in the immediate area, the choice of alternatives is assumed to be smaller for services. In addition, consumers may experience difficulty in obtaining adequate pre-purchase information about the desired service.

Finally, a consumer may be faced with the choice between performing the service for themselves and hiring someone else.

iv) Innovation Diffusion:

> (H7) "Consumers adopt innovation in services more slowly than they adopt innovations in (goods)" (Zeithaml, 1981, p188).

According to Rogers (1962), the relative diffusion of an innovation depends on a consumer's perceptions with regard to the product's relative advantage, compatibility (with existing norms, values and behaviours), communicability, divisibility (can it be tried or tested on a limited basis), and complexity.

Zeithaml asserts that services are less communicable because they are intangible and often unique to each buyer (as in a medical diagnosis), are less divisible since it is usually impossible to

sample a service, are frequently more complex due to their bundle of different attributes offered, often varying on each purchase, and they may be incompatible with existing norms, especially if the consumer is accustomed to self-provision of the service. Consequently, service innovation will be adopted more slowly then innovations in goods offered.

v) Perceived Risk:

(H8) "Consumers perceive greater risks when buying services than when buying (goods)" (Zeithaml, 1981, p188).

Here, the assumption is based on the fact that services are intangible, non-standardized, usually sold without guarantees, have high levels of experience qualities, and that many services are specialized or technical, resulting in greater feelings of risk for the prospective consumer.

vi) Brand Loyalty:

(H9) "Brand switching is less frequent with services than with (goods)" (Zeithaml, 1981, p189).

Zeithaml attributes this assertion to the fact that it may be more costly (both monetary and search costs) to switch brands of services, the difficulty of awareness of substitutes, and higher risks accompanying services. Finally, in order to achieve optimum satisfaction with a service, it may be necessary to purchase on a regular basis, thereby establishing a relationship with the service provider.

vii) Attribution of Dissatisfaction:

(H10) "Consumers attribute some of their dissatisfaction with services to their own inability to specify or perform their part of the service" (Zeithaml, 1981, p189).

(H11) "Consumers may complain less frequently about services than about (goods) due to their belief that they

themselves are partly responsible for their dissatisfaction" (Zeithaml, 1981, p189).

This phenomenon is attributed to the fact that consumers of services participate to a greater extent in their definition and production compared with goods, where they cannot attribute their dissatisfaction to their own decision making error, and place blame on the producer.

2.2.3 Ewels (1989)

The major objectives of this research were to test the validity of Zeithaml's hypotheses on the evaluation of goods and services, and to ascertain the key determinants which distinguish the evaluation of goods and services from each other.

Zeithaml's hypotheses can be used to market certain services more effectively, but Ewels asserts that most of the illustrations were with examples selected to support the arguments, and furthermore, that Zeithaml then made broad generalizations proposing the hypotheses held for all services and goods. Another aim of the research therefore was to show whether some hypotheses are more applicable to certain categories of goods and services than to others.

Results indicated that two of the hypotheses (post-purchase evaluation and price) were <u>not</u> supported as unique to services. Rather it was found that "consumers do not engage in more post-purchase evaluation, nor in more post-purchase than pre-purchase evaluation, for services. It was also found that price is used as a major cue to the quality of goods, not services" (Ewels, 1989, abstract).

The key distinguishers found were that "when more concrete or external cues are available, consumers prefer to rely on them in their evaluation process. Clearly, this is because the tangible aspects of goods provide consumers with attributes which can be compared or searched ... before purchase" (Ewels, 1989, p101).

Another finding was that services (generally) are associated with higher perceived risks, which is not supported by Gault's more recent findings. The research also confirmed that there are similarities between goods and services ("homogeneity" (Ewels, 1989, p105), such as the price/perceived risk relationship, and the consequences/evaluative effort relationship) as well as differences within the two classes ("heterogeneity" (Ewels, 1989, p105), shown in the spread of goods or services having differing key distinguishers). This finding prompted Ewels to assert that "indiscriminant use of generic strategies for the marketing of either goods or services (was) dangerous" (Ewels, 1989, abstract), a contention which reflects the position adopted by Enis and Roering (1981), and others.

2.2.4 Gault (1991)

Overall this research was undertaken to determine how consumers perceive risk in their evaluation of goods and services. Specifically, the objectives were threefold;

i) To establish the components of perceived risk amongst consumers: Gault adopted those components from prior research done by Roselius (1971), as overall, financial, ego, performance, emotional /psychological, physical danger and time wasting risks. From his pilot study, loss of control, and specification risks were added.

ii) To determine the major specific service quality determinants serving as risk reducers: His field here was taken from Parasuraman, Zeithaml and Berry (1985), including constructs such as tangibles, reliability, responsiveness, assurance and empathy.

iii) To ascertain the most common risk reducing strategies used by consumers and marketers: Here, Gault used strategies uncovered from his pilot study (known brand, image/physical evidence, recommendations, demonstration/trial, communication of needs, encouragement to communicate, homework, supplier-provided information,

and professionalism/expertise), and considered 11 strategies from Roselius' research (endorsements, brand loyalty, brand image, private testing, store image, free sample, money-back guarantee, government testing, shopping around, price, and word of mouth).

The results of this research indicated that of the nine identified risk components, only the risk of losing control was not significant; this may be product selection-controlled. All five of the Parasuraman et al's (1985) determinants of service quality were found to be significant. Finally, of the possible risk reducing strategies considered, only demonstration/trial, homework, supplier-provided information, known brand, and recommendations proved to be significant.

The study revealed that neither goods nor services as generic classifications are associated with higher perceived risk. However, some specific components of risk could be associated with the specific goods and services used in the study, and hence a form of risk market segmentation is possible.

2.3 On Evaluation/Strategic Marketing

2.3.1 Zeithaml (1981)

Strategic marketing implications were given regarding an effective approach to information provision, pricing, new service introduction, and other marketing strategies;

i) Information Provision:

The role of advertising in the services marketing mix should be modified to allow for more personal source information, and to encourage word of mouth communication. Marketers also need to concentrate communication efforts to ensure post-purchase satisfaction.

ii) Quality Image:

The service marketer needs to manipulate the tangible cues to quality of price (setting a high price to indicate high quality), and physical facilities to their best advantage.

iii) The Customer as Competitor:

Non-professional service providers must be aware that since the consumer intimately knows the capabilities of his own work, more individualized and personal attention to requirements and detail may be required by the firm to compete for the consumer's business.

iv) Innovation Diffusion:

Service marketers need to concentrate on incentives to trial when introducing new services.

v) Reduction of Perceived Risk:

Where appropriate, guarantees of satisfaction may be offered, and greater emphasis should be placed on employee training, and any special procedures or precautions taken.

vi) Implications of Strong Brand Loyalty;

The service marketer may need to advertise to his competitor's customers, highlighting attribute and strength advantages of his own offering.

2.3.2 Ewels (1989)

Some additional service marketing implications were drawn;

i) Services high in perceived risk, usually unsought and of high cost: encourage word of mouth communications amongst satisfied clients.

iii) Services high in brand loyalty: emphasize guaranteed satisfaction.

iv) Services should be standardized to reduce the amount of uncertainty about the outcome.

v) the deliverable should always be clearly defined before, and revisited after performance of the service.

vi) contact staff should be extensively used to assist the consumer in specifying the latter's needs and performing their part in the service.

vii) services promotion stressing price would only clutter the information, being of minor use in evaluation. Alternatively, risk reduction information should be emphasized.

2.3.3 Lovelock (1981)

This researcher argued that a different marketing approach is needed for services, and emphasized the management aspects of services marketing. Marketing management tasks can be differentiated from those in the manufacturing sector along two dimensions;

i) Generic differences:

- nature of the product (ephemeral nature of services, role of people),
- creation of the product (client involvement, making it difficult for providers to control quality and to offer consistence),
- stockpiling (services cannot be inventoried, thus suppliers must smooth demand levels to match capacity),
- distribution channels (no intermediaries with services), and
- costing difficulties (apportionment of fixed and

variable cost components to the different services offered).

ii) Contextual differences:

- narrow marketing definition (decisions such as new product development, retail site location, pricing and product line policy have historically been excluded from marketing's domain in the service sector),
- limited appreciation for marketing skills (lack of influence),
- organizational structure (better integration of marketing and operations is required within a service firm),
- lack of competitive data, and
- regulation (as a result of deregulation, key strategic elements of the mix such as pricing, distribution and advertising will assume greater importance as management activities).

Lovelock also stresses the multiple role needed for the services marketer, such as screening officer, relationship administrator, enforcer of rules (airline flights for example), teacher (since first-time service purchases are frequently more complex than goods), the service itself, choreographer (designing the service setting and costuming the personnel), demand engineer (controlling strategies such as product enhancement in off-peak periods, selective pricing, and the use of communications), manufacturer and product itself (since those who create the service are often perceived by consumers as part of that service product).

2.3.4 Lovelock (1983)

In this research the author segmented services into clusters that share certain relevant marketing characteristics, thereby refuting the service contention that insists each service industry is different. Instead, five logical approaches to classification are proposed, each consisting of a four-way

classification matrix for use in the development of marketing strategies, depending on;

i) The nature of the service act:

Arising from this classification, the marketer must answer the questions regarding the physical and mental presence of the consumer during service provision, and the ways in which the target of the service act is modified by receipt of the service.

ii) the type of relationship:

Knowing the membership of the service relationship can allow the provider to target and selectively price offerings to favoured clients, whilst still attracting casual consumers.

iii) The scope for customization and judgement:

Customization may have additional cost implications, therefore a good understanding of consumer choice criteria is required. To some customers, speed, consistency and price savings may be more important than customization, and usually, uncertainty about the outcome is undesirable.

iv) The nature of supply and demand:

Questions raised such as the typical cycle period, and the cycle's underlying causes must be addressed; since services cannot be inventoried to act as a buffer between supply and demand, accurate prediction is essential.

v) The nature of service delivery:

"Offering service through several outlets increases the convenience of access for customers but may start to raise problems of quality control..., relating to consistency of service product delivered" (Lovelock, 1983, p18).

He noted that a particular service may share characteristics with another, often in a seemingly unrelated field, and marketers should look beyond their immediate competitors for innovations.

2.3.5 Enis and Roering (1981)

These controversial researchers stress that "a product is a combination of qualities, processes and capabilities (goods, services and/or ideas) that a buyer expects will deliver want satisfaction" (Enis and Roering, 1981, p1), and that there is "an intangible component to the marketing of even the most tangible of goods" (Enis and Roering, 1981, p2).

Furthermore, "describing a product as a service rather than a good contributes little to the formulation of an effective marketing strategy for that product. Every product good/service/idea bundle should have its own marketing strategy" (Enis and Roering, 1981, p3). This view is taken since their experience with previously offered service taxonomies in the literature indicated an indiscriminant grouping of heterogeneous products and separation of homogeneous products, with no regard to the "focus (which must fall) on the buyer's perspective of the 'bundle of benefits' (the augmented product concept), identifying them and matching the product attributes to them" (Enis and Roering, 1981, p3).

They proposed a product taxonomy based on the two dimensions of Consumer Effort (money, time, aggravation) required to obtain the product, and Perceived Risk (physical danger, social stigma) associated with a product, which recognizes the "bundle of benefits" (Enis and Roering, 1981, p1) as it is perceived by the potential buyer, and not on arbitrary product differences, which may even be as trivial as whether the product is a good or a service. Effective marketing strategy formulation begins with recognizing the bundle as they are perceived by the potential buyer, and then marketing that bundle, often including both tangible and intangible aspects, to that segment holding such perceptions.

2.3.6 Brown & Fern (1981)

Echoing the sentiments of Enis and Roering (1981), the researchers believe that the appropriate marketing strategy is determined by the underlying characteristics of the offering, and not whether the offering is a good or a service. They also suggest "focusing on the tangibles when offering an undifferentiated service concept" (Brown and Fern, 1981, p206).

2.3.7 Guseman (1981)

This research formulated and validated two hypotheses regarding differing roles of risk;

> (H1) "Consumer services are perceived as having more risk than consumer goods" (Guseman, 1981, p200).
>
> In the selection of a service,".. consumers must choose amongst alternatives which vary widely in quality, with the level of quality difficult to determine .. This uncertainty .. produces risk in the purchase of a service" (Guseman, 1981, p200). Interestingly, this belief as a generality is evidently unsupported in Gault's more recent research.
>
> (H2) "Different means of reducing risk will be used for services than for goods, when risk is perceived" (Guseman, 1981, p200).
>
> For services, store loyalty, reference groups, and brand loyalty were found to be common methods, whilst those used for goods included supplier-provided information, and shopping around in addition to the above.

Guseman postulated, but did not research that "perceived risk has two major influences upon behaviour; influencing the decision of whether or not to purchase, and how to handle or reduce the perceived risk" (Guseman, 1981, p203), and that "risk is a function of two components; uncertainty and consequences" (Guseman, 1981, p200).

With regard to services marketing, the service firm should provide something tangible the consumer can evaluate (building appearance, location, interior design, personnel, guarantees).

2.3.8 Booms & Bitner (1981)

The researchers assert that the organizational structure of a service firm must allow for necessarily overlapping functions, to cater for prime differences (compared to a manufacturer) arising from areas of quality control (standardization and expectations matching difficulties), customer interaction (the staff <u>are</u> the service and the firm; they are all marketers), and fragmentation of the marketing activities within the organization.

Booms and Bitner (1981) also stressed the need for a modified marketing mix (the existing 4-P's, and 3 new P's of

- Participants (all staff who play a part in service delivery influence the buyer's perceptions),

- Physical evidence, and

- Process of service assembly (the actual procedures and flow of activities by which the service is delivered).

In particular, they recognized that promotion occurs at both the pre- and during delivery stages, where the service is actually delivered, in addition to the traditional methods of promotion.

They also stated the need for an expanded marketing role "to manage the total buyer/seller interaction process" (Booms and Bitner, 1981, p50), including education of personnel about their roles and communication skills requirements, and internal marketing.

2.4 Summary

The literature review conducted reveals that the consumer behaviour process can be subdivided into discretely recognizable stages, separated by evaluative events following specific triggers. All researchers utilize similar generic descriptors of the decision process stages in their models, which comprise

a need recognition stage,

an information search stage,

an alternative evaluation stage,

a purchase decision stage, and

an outcome or experiential stage, which affects satisfaction.

The entire process is modified by consumer individual differences and attitudes, environmental and social influences, input stimuli (such as advertising), brand loyalty, and impulsive decision making.

Zeithaml (1981), hypothesised that there were 11 constructs controlling a consumer's evaluation of goods and services, and that owing to the different nature of goods and services, the consumer would rely on different cues and processes when evaluating them. Ewels accepted these constructs and showed that consumers did use them in their evaluation, but it was never established whether the Zeithaml hypotheses were exhaustive in their description of the evaluation process.

The question of the nature of the exhaustive set was one of the areas addressed in the course of the current research.

The basic assumption that goods and services are so essentially similar to the consumer's mind that they are evaluated in the same manner is refuted by all researchers. Ewels (1989), has

shown that post-purchase evaluation and price as a cue to service quality are not unique to services as Zeithaml (1981), hypothesized. However, only the constructs as proposed by Zeithaml were tested for service uniqueness. Furthermore, that research was confined to the local white consumer segment.

The current research has focused on showing the extent of the uniqueness of the services constructs across a much larger construct set, and within the black segment in addition.

Guseman (1981), and later Ewels (1989), also showed that services generally are associated with greater levels of perceived risk. This finding was unsupported in Gault's (1991) later work, who asserted that (in the Ewels research) differentiation based on risk was achieved owing to the nature of the product set selected in Ewels' research, and that in general, services did not command higher perceived risks among consumers.

The current research has included risk as being one of the original Zeithaml constructs, and has shown the nature of the perception for the black consumer market in addition to confirming the Ewels and Guseman findings for the white market.

Finally, the literature on strategic marketing for the most holds that strategies should differ between goods and services, due to generic and contextual differences for services. The exceptions are Enis and Roering (1981), and also Brown and Fern (1981). These researchers contend that the strategy must account for the differing "bundles of benefits" (Enis and Roering, 1981, p1), that the consumer perceives the products to possess, and not necessarily be based on an industrial classification or a pure generic taxonomy.

They are in favour of unique marketing strategies for each and every offering, with the emphasis on the differing benefits of the good or the service, as perceived by the different market segments. They argue for the two-way classification scheme based on Consumer Effort and Perceived Risk as the framework for the positioning of goods and services as differentiated by the

market. Presumably, in addition to the positioning of products by the consumer, the researchers would also know the associated demographics of each cluster on the framework, thereby facilitating a customized marketing strategy.

Lovelock (1983), has refuted the claim that services within a particular industrial segment need to be marketed in like fashion. He stressed that there are at least five logical approaches to services classification depending on the nature of the act, the relationship, the level of customization, the nature of the supply and demand, and the method of delivery. Since many services may share characteristics with another, in a seemingly unrelated field, the marketer needs to look beyond their immediate competitor for innovations.

Booms and Bitner have stressed the need for an expanded services marketing mix, including three extra "P's" of Participants, Physical evidence, and Process, to allow for the " (management) of the total buyer-seller interaction process" (Booms and Bitner, 1981, p50).

An important aspect of the current research was therefore to determine the validity of the above 3 contentions, in both the white and black segments, namely

- the appropriateness of such evaluative dimensions, together with the relatedness of goods and services and hence their marketing,

- the relatedness of seemingly different services, and

- the importance of the staff, the physical cues and the delivery process in the services marketing mix.

3.0 RESEARCH OBJECTIVES

3.1 Research Propositions

Four overall propositions may be stated at the outset of this research; they encapsulate certain research questions, gleaned from a review of the current literature as presented in chapter 2, which have lead to their formulation. Some of these questions were tested by the structuring and validation of specific hypotheses, and depending on the outcome of the testing, the propositions were accepted or rejected in chapter 8.

3.1.1 On The Appropriateness of the Zeithaml Hypotheses

Three research questions comprise this proposition;

3.1.1.1 Dimensions of Evaluation.

> Question: "What are the common evaluative criteria used by a consumer when contemplating the purchase of a good or a service? "

The answer to this question lay in the set of evaluative constructs developed from three sources. Firstly, and as one of the theoretical foundations for the research, Zeithaml (1981), proposed that there are 11 unique dimensions along which the evaluation of goods and services differ. Secondly, a review of the literature on consumer behaviour has revealed that these dimensions are well founded in theory, and can be relied upon to have some significance in the current research. This literature, particularly the popular models on the decision process, has also revealed that there exist further constructs not covered by Zeithaml. These include

- the motivation for the purchase (utilitarian or hedonistic), controlled by factors such as desired image or the portrayal of the desired social class,

- the confidence in judging a brand or service prior to purchasing it,

- the use of monetary cut-off criteria for the evaluation of goods compared with services, and

- the element of post-choice rather than post-use evaluation, related to services such as life insurance or appliance repair, designed to engage on the happening of a specified event in the future.

Thirdly, by the use of a projective technique, further confirmation of the above two sources was possible, but more importantly, its objective was the exploration of new, locally important evaluative criteria not yet developed.

Since a later objective of this research was to ascertain which evaluative determinants were the more important to each of the white and black consumer segments respectively, no attempt was made here to present separate sets of constructs for both segments. A combined, exhaustive set was presented, differentiated in another section of the research.

3.1.1.2 Comparison and Validation with Zeithaml

Question: "From these criteria, hypotheses detailing how the evaluation process differs significantly for the purchase of services will be developed; do they differ substantially from those assumed to be locally valid as defined by Zeithaml, and as used as bases in similar recent research? Which criteria are in agreement with Zeithaml's?"

The set of criteria developed should prove to be exhaustive since it emanates from three independent sources. A direct comparison of the constructs detailed by Zeithaml (1981), and those developed from the current research enabled the validity (second) portion of this question to be answered. Since the final set proved to be more comprehensive than that used by Zeithaml, by way of a greater number of contained constructs, then in addition

to the validity of the Zeithaml constructs, their exhaustiveness has been tested, thus addressing the first portion of this question.

3.1.1.3 Key Determinants

> Question: "From the set of evaluative criteria both empirically ascertained and coincident with Zeithaml's, which are the key determinants? "

The use of the full, exhaustive set of attributes will prove cumbersome, especially for marketing efforts designed to address the majority of the consumer emphasis in an efficient manner. What was required was a smaller, more succinct set of constructs.

Thus a third major objective of this research was to select on the basis of construct frequency, which attributes from the exhaustive set are the most important in describing each consumer segment's evaluation of the products, and furthermore which of these products are related to (best described by) these attributes. This needed to be achieved to an acceptable level of completeness, without unnecessary loss of descriptive ability, but equally without the burden of all the 11 Zeithaml constructs, or perhaps more.

In conclusion, Zeithaml is a well known and experienced researcher, who is sure to be familiar with the concepts of consumer behaviour as described in the various decision process models earlier. Her 11 hypotheses were never validated as being truly (nor exhaustively) representative of the critical areas facing the consumer, but were formulated from logic and reasoned argument. However, the literature review has highlighted that there are criteria which are not covered by the Zeithaml hypotheses. Consequently, while the set of evaluative constructs derived by Zeithaml (1981), are representative, they are perhaps not exhaustively representative, of the attributes considered by the consumer. Thus

Proposition 1: "the locally developed criteria set regarding the uniqueness in consumer evaluation of services over goods differs from that developed by Zeithaml."

3.1.2 On The Uniqueness of Goods and Services Evaluation

Two research questions comprise this proposition;

3.1.2.1 Comparison of Goods and Services

Question: "Does the evaluation of services differ significantly from that of goods? "

A major portion of the research effort was directed at testing the final, exhaustive set of hypotheses formulated from the three sources, and determining significant differences in their applicability to the evaluation of the goods and services. Since Zeithaml (1981) has phrased the hypotheses to reflect differences, by implicating services as being more applicable to the subject matter of each hypothesis, a similar approach was assumed in the current research.

3.1.2.2 Comparison with Recent Research

Question: "Do the results of white consumer evaluation compare with those derived from the previous research of Ewels (1989)?"

Recent work, especially that of Ewels (1989), has outlined the nature of local evaluation by the white market. In this work, as mentioned in chapter 2, the proposals of Zeithaml (1981) were accepted as being valid locally, in their ability to describe the dimensionality of the evaluative process. Interpretation of the dimensionality of the white consumer's evaluative efforts was made according to this premise, which could prove incomplete should the dimensionality be increased. One of the secondary objectives of the current research was therefore to attempt a validation of the Zeithaml hypotheses from a precursive origin, namely consumer behaviour theory. Achieving this, the hypotheses

could at least be assumed to have foundation in theory. A criticism of the interpretation of the key distinguishers was also attempted.

From a review of the literature on consumer evaluation, authors such as Enis and Roering (1981), or Brown and Fern (1981), have valid arguments for the different treatment of heterogeneous and homogeneous goods and services. Intuitively, the concept that seemingly unrelated goods and services will share the same "bundle of benefits" (Enis and Roering, 1981, p1), as perceived by the consumer is attractive, and would imply that previous classification systems are ignoring less superficial aspects of evaluation in an attempt to keep the separation purely along taxonomical grounds. Whilst it is not disputed that some service evaluation will be significantly different to that for goods, if the above argument is to be believed, some will be significantly similar too. Therefore,

> **Proposition 2:** "Not all evaluation of goods and services is uniquely different. Some evaluative criteria are the same for goods as for services."

3.1.3 On White and Black Evaluation

One research question comprised this proposition;

3.1.3.1 White and Black Consumer Comparisons

> Question: "Are there significant differences between the evaluative determinants pertaining to the black consumers compared with the white consumers, and what is their nature?"

The objective of comparing white and black consumer evaluation was a prime overall concern of this research. From the results generated, a direct comparison of the white and black consumers was possible.

From a purely intuitive, economic viewpoint, black consumers were expected to be less experienced in their evaluation of goods and services than their white counterparts. They were also expected to be considerably less sophisticated in this evaluation, probably as a result of their relative inexperience. These assumptions create the basis for

> **Proposition 3:** "There are significant differences between the evaluative determinants pertaining to black consumers compared with white consumers."

3.1.4 On Different Marketing Strategies

One research question comprises this proposition;

3.1.4.1 Marketing Implications

> Question: "What should marketing strategies emphasize to capitalize on the differences (if any) between the evaluation of goods and services in the white and black markets respectively? "

The ultimate objective of the current research was to be able to locally confirm or refute some commonly held marketing philosophies dealing with the nature of goods and services. Some authors, notably Enis and Roering (1981), and Brown and Fern (1981), argue that the classification difference between whether the product is a good or a service is irrelevant, as is the argument that two or more services should be marketed in the same way. They opt for the view that certain goods will share evaluative attributes with services, seemingly unrelated, but since it is the consumer who makes the ultimate evaluation of the "bundle of benefits" (Enis and Roering, 1981, p1), accruing from the purchase, appropriate marketing should conform to this evaluation.

Other authors reviewed hold the more conventional belief that services should be marketed alike due to a variety of differences between them and goods. For example, intangibility, non-

standardization, inseparability and perishability, as described by Zeithaml (1981), and others, or Nelson (1970) and Darbi and Karni (1973), classifying services into experience and credence qualities, different from the search and experience qualities possessed by goods.

It is of importance to those charged with the maintenance or creation of a marketing strategy to be able to validate such strategy in the light of these results, and if necessary to redesign their strategy to follow one of the two schools advocating such diametrically opposed solutions.

Equally important, since the black consumer today represents such a powerful market resource, strategies not capturing any significant differences or similarities between them and white consumers are bound to be inefficient and wasteful at best, or an outright failure at worst.

Following on from the arguments posed in Propositions 2 and 3,

> **Proposition 4:** "Marketing strategies should differ significantly when marketers address black evaluation of the product compared with white evaluation."

4.0 RESEARCH METHODOLOGY

To this point, a set of hypotheses exists as proposed by Zeithaml (1981). A means of establishing the validity and completeness of this set was to be found in a review of the relevant literature on consumer behaviour, and in interviewing candidates who had agreed to participate in the generation of constructs. This chapter will review the method of construct generation, and will bring the discussion to the point where the three sources of evaluation attributes are compared. Constructs arising from consumer behaviour or interview were considered new, and were transformed into researchable new hypotheses.

The method of sampling will also be covered, and a summary of the data manipulation and analytical techniques used during the course of this research will be given.

4.1 Overall Method

The origin of the research was a review of the available theory on consumer behaviour, for the purpose of ascertaining the more pertinent aspects of the evaluative process that consumers may employ when contemplating the purchase of a product.

These aspects or constructs were then confirmed in an interview session with targeted respondents from both the white and the black consumer market. A black sample (male and female) was chosen with permission from organizations employing suitable black staff (The Hyperama, AECI, Ogilvy, Mather and partners (an advertising agency), and the Standard Bank). The same organizations were used for the selection and interview of suitable white staff. An in-depth interview with three black and three white respondents in each of the four organizations (24 mixed interviews) was believed to be sufficient for construct, and later hypotheses development.

The interview made use of the Kelly Repertory Grid projective technique (Kelly 1955), to interpret the evaluative approach taken by the consumer. A more thorough explanation of this

technique is given in the following section.

At the completion of the interviews, a questionnaire was developed containing the hypotheses and administered to a non-probability, convenience sample of 12 employees (male and female) of each race in each participating organization, excluding those interviewed, resulting in a usable sample of 96 racially-mixed consumers. The hypotheses were reconstituted into unambiguous and straightforward questions or statements, phrased in colloquial English, for ease of completion. No other languages were deemed appropriate or practical, due to the possibility of needing to include two white and perhaps three black languages in the questionnaire. In the interests of time, these questionnaires were self-completed, with telephonic recourse to assistance from the researcher only if difficulty arose.

Differences in consumer evaluative approach between goods and services were tested for each individual hypothesis in each of the black and white segments respectively, by means of chi-squared goodness of fit testing (Groebner and Shannon, 1989). A comparison with the results obtained in Ewels' (1989) research was undertaken, who assumed Zeithaml's (1981) hypotheses without validation, in order to highlight any differences and similarities.

In order to distinguish from the full set of evaluative determinants which ones were key, correspondence analysis (Greenacre, 1984), was conducted on the data for black and white consumers respectively. Distinguishing dimensions were compared between the two segments, and differences highlighted and described. Again, since the goods and services categories were purposely selected to match those in Ewels' (1989) work, a direct comparison was possible for the white segment, highlighting the result of a differing theoretical foundation (consumer behaviour vs Zeithaml's unresearched observations) for hypothesis development.

Finally, important aspects of marketing implications concerning the white and black goods and services markets was outlined.

4.2 Interview Technique

Following from the analysis of the current literature on consumer behaviour, with specific reference to the decision and evaluative models developed, it became clear that in order for the average consumer to be able to express him or herself with regard to their own evaluative processes, and in their own terms, a simple interview technique would be required.

Not only would it be difficult for such a consumer to understand the structured approach to the decision process adopted by the researchers in the literature, but forcing the consumer to think in a rigid, sequential fashion would be imposing a highly theoretical and analytically rigorous framework on a totally unprepared mind, probably more adept at functioning in practice in a non-sequential, integrative method anyway. Furthermore, the essence of the discussion would be extremely difficult for the interviewer to reliably and repeatably capture in an efficient form for subsequent retrieval, thus making interpretation a questionable task.

Finally, since the objective of the in-depth interview sessions was the development of a self-completion questionnaire, it was highly desirable to generate constructs in "consumer language" terms, understandable in question format without assistance, and possibly interference from the researcher.

The Kelly Repertory Grid technique was believed to one such simple and effective technique. The original method was developed by the researcher to identify the important constructs a person used to construe significant people in their life. It performed as a diagnostic instrument to assist the therapist in understanding a client's construct system and the way the client used it to structure their personal and material environment. In the current research however, the method was only used for the development of the constructs, and no further.

Since one of the parameters of this research was to utilize the same set of 21 goods and services as that used by Ewels (1989)

in her earlier research, in order to facilitate direct comparison, the products were as follows;

Goods (9)	Services (12)
Furniture	Medical Diagnosis
New Car	Legal Advice
Used Car	Banking
TV	Life Insurance
Suitcase	Car Service
Car Tyres	TV Repair
Clothing	Nursery School Care
Toothpaste	Haircut
Fruit Juice	Restaurant Meal
	Dry Cleaning
	Photo Development and Printing
	Furniture and Household Removals

The selection of the particular goods and services will not be elaborated upon here, since its coverage was thorough and adequately explained by Ewels (1989). In that work, it was deemed necessary that for the testing of Zeithaml's (1981) hypotheses, a broad and therefore representative range of goods and services should be used. The goods were selected according to the goods classification schemes of

- degree of durability,
- convenience, shopping and speciality goods,
- search, experience or credence quality dominated,
- convenience goods,

whilst the services were selected according to the schemes dealing with

- search, experience or credence quality dominated,
- type of market, degree of labour intensiveness, degree of customer contact, skill of the service provider, and goal

of the service provider (profit or non-profit).
- elements of a "good-service bundle" (Ewels, 1989, p50).

Cards enscribed each with one of the above keywords denoting the various goods and services were shown to the interviewee, who was asked firstly to remove any products with which they were unfamiliar. The remaining cards were presented in randomly chosen triads to the interviewee. The interviewee was reminded to think as a consumer, in an imagined situation of purchasing the three products shown to them. They were then requested to select the two products which they perceived to be the most similar in terms of the decision and evaluation processes invoked, and then to explain to the researcher why they had chosen in this fashion. This explanation was the key to their evaluative reasoning, since it verbalized the essence of a construct, or in many cases, more than one construct.

Similarly, for the remaining card, they were asked to explain what made the represented product essentially different to the paired products, again emphasizing and verbalizing at least one construct.

Differences in evaluative approach between paired products was common at the second or third level of association, that is, where there was more than one combination of pairing. This served to enrich the construct development process. In addition, the repeat showing of a particular product in a few triads served to explore undisclosed dimensions attributable to that product in an earlier triad. Each interview lasted approximately 40 minutes, until six to eight triads had been generated, or until further selection of triads proved of little additional value.

4.3 Constructs Generated

During the course of the interviewing, it became apparent that the constructs discussed by the interviewees were often those repeated by the various consumer decision models, and those proposed in Zeithaml's 11 hypotheses regarding the unique characteristics of services. Of the 81 individually identifiable

constructs generated from these interviews, a set of 24 grouped constructs were collated. This grouping was performed by subjectively assigning each of the 81 "raw" constructs to a group with a specific descriptive name, recording their frequencies of occurrence, and the overall frequency for the group. The set of 24 was felt to represent a more manageable form of the 81 "raw" constructs of varying degrees of importance to the consumer.

This data is contained in Appendix 1.

The ordering of the grouped constructs according to descending frequency was interpreted to reflect a utilization ranking in the collective mind of the consumer. Figure 4.1 represents the grouped constructs and their respective frequencies of occurrence.

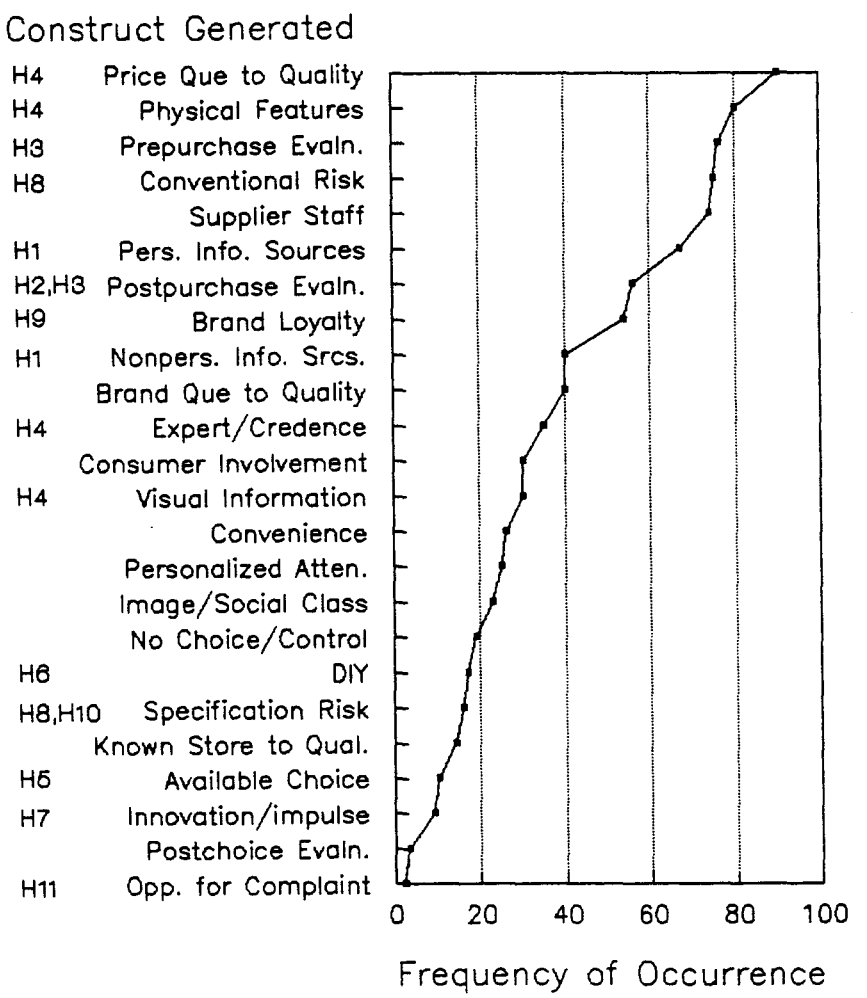


Figure 4.1: Grouped Interviewee Constructs

A further three constructs, not yet uncovered by Zeithaml and interviewing, were derived from the various consumer decision models. When combined with the above 24, these 27 constructs formed what was considered to be the exhaustive set describing the fullness of consumer evaluation.

Figure 4.1 also depicts the repetition of identifiable Zeithaml hypotheses, denoted by the hypothesis number concerned next to the construct grouping. By inspection, of the 24 empirical construct groupings, 15 correspond to various Zeithaml hypotheses, whilst the remaining nine cannot be obviously attributed to a hypothesis. This is clearly indicative that the hypotheses used by Zeithaml are not locally exhaustive, and that further constructs are important to the interviewed consumers. The construction of further, related hypotheses was possible.

4.4 Researchable Hypotheses and Rationale for Each

The use of the 11 Zeithaml hypotheses can be justified since a review of the current literature on consumer decision models confirmed that their foundation is supported by consumer behaviour theory. However, this theory also indicated that other aspects of the decision process were not covered by these hypotheses, and had to be included in the new hypotheses set. Furthermore, analysis of the constructs developed from the interview sessions highlighted the need for additional hypotheses development to accompany the above set.

The reader is referred to the full statement and description of the 11 Zeithaml hypotheses presented in chapter 2, under the discussion of that author's work on consumer evaluation; their rationale will not be repeated here.

The following sections detail the "new" constructs and their source of discovery. Hypotheses were created to enable the testing of these constructs along with those already proposed by Zeithaml.

4.4.1 Confidence in Brand Judging

Source: Theory

Howard and Sheth (1969) state that confidence in the selection of brands is controlled by factors such as brand comprehension, or knowledge about the brand, the consumer's attitude toward the brand, their purchase intention, and the level of satisfaction achieved with use of the brand. Since most services are associated with high levels of experience and credence qualities, and that little can be discerned about them prior to purchase and consumption, it is proposed that services will offer <u>less</u> opportunity for confidence in brand judging. Thus;

> Hypothesis 12: "Consumers of services are less confident in regard to brand judging than are consumers of goods."

4.4.2 Importance of the Supplier Staff

Source: Interview

Given that services possess little search qualities which a consumer may make use of to evaluate the service offering prior to purchase, he or she will rely more on how they are made to feel about the transaction by the first impressions of the service staff on the telephone, or upon first entering the store, their attitude and friendliness, their attempts to put the consumer at their ease. The consumer is also likely to look for signs of professionalism, confidentiality if it is warranted, care and assurances of service delivery.

> Hypothesis 13: "Consumers of services will rely more on the initial response of the supplier's staff in their evaluation than with goods."

4.4.3 Brand As a Cue to Quality

Source: Interview

Largely due to the predominance of goods advertising over the more regulated environment of services advertising, and due to the subtlety and effectiveness of such goods advertising in holding consumers' attention, gaining acceptance and retention of the message, consumers will associate well known brands with higher quality products, since these are the brands more likely to have more sophisticated advertising messages, more exposure and more credibility.

Hypothesis 14: " The presence of a well known brand name is more of an assurance of likely quality with goods than with services."

4.4.4 Consumer Involvement in the Decision Process

Source: Interview

The degree of effort invested by the consumer in the decision process undertaken prior to and after the purchase of a product will depend on the level of perceived risk associated with the purchase, and the ease with which the transaction can be reversed. Zeithaml (1981), has proposed that the level of perceived risk is higher with services than with goods. In addition, it is clear that for most services, once the transaction has been entered into, little scope for its reversal exists, since one of the characteristics of services is the inseparability of production and consumption.

Many consumer goods are seen as largely undifferentiated products, such as toothpaste, which leads to an element of consumer indifference with respect to brand. The consumption of everyday type commodities, particularly toothpaste and fruit juice, where repeat purchasing characterizes the product, shows an element of habitual decision making, which serves as convenient means of avoiding high involvement in the decision.

Thus;

Hypothesis 15: "The extent to which a consumer becomes involved in the decision process is greater with services than with goods."

4.4.5 Convenience

Source: Interview

Again, since services are postulated to invoke greater amounts of perceived risk in the eyes of the consumer, and since goods purchases can often be reversed or are covered by guarantees or warranties, the consumer is less likely to choose a service offering based simply on the geographic convenience of the offering.

Hypothesis 16: "Convenience-based shopping is more prevalent with goods than with services."

4.4.6 Personalized Attention

Source: Interview

Since many goods offered are of fixed physical attribute, function and price, the consumer is often faced with the classic "take-it-or-leave-it" purchase decision. This is a function of the nature of goods, in that their production tends to be standardized for reasons of efficiency and quality control. With services however, a far greater degree of customization is possible, and even desirable, particularly for such services as life insurance, haircut, and banking.

In addition, since the service has to be taylor made for each individual consumer, the degree of personal attention received (and expected) is higher than for the purchase of goods. In the latter, it is largely a case of "lifting the good off the shelf" and paying for it.

Hypothesis 17: "The aspect of personalized attention is of greater importance in the consumption of services than with goods."

4.4.7 Image / Indicators of Social Class

Source: Interview

Material possessions have often been quoted as being things dearest to mankind. Engel, et al.,(1990), when discussing the determinants of alternative evaluation suggest that a consumer's motivation for purchase may be based on either utilitarian or hedonistic considerations. Since all goods possess tangible aspects that can be more readily appreciated by the basic senses, and that they are often necessary as part of our daily living and travelling environment, goods are likely to be purchased based on whether or not they suit the consumer's image, in addition to whether they conform to certain functional requirements.

Furthermore, during the course of the interviewing, it became apparent that black consumers in particular are more conscious of their choice of goods reflecting the "right" social class to which they would wish to be categorized by their friends and peers. Thus;

Hypothesis 18: "The decision to purchase a particular service does not draw as much on image-matching and social class indication factors as does the purchase of a particular good."

Hypothesis 19: "Black consumers are more conscious of the need for a particular purchase of a good to match the image and to indicate their social class they would wish their peers ascribed them to."

4.4.8 The Aspect of Choice / Control Over the Purchase Decision

Source: Interview

Owing to the aspect of the non-perishability of some goods, which indicates that the decision to replace can be postponed almost indefinitely, a consumer contemplating the decision to purchase a good will often be faced with the option of deciding against the purchase for a period of time. This is usually the result of the conflict arising in the question of the distribution of the consumer's finite resources (mostly financial), between various purchase acquisitions.

In the case of services, however, very often the service provides for some periodic and fairly urgent, non-postponable need arising in the life of the consumer. Consequently, the consumer is often faced with the (sometimes grudgingly) necessary decision to purchase and consume the service even though they would rather apportion that money to the purchase of some other item.

> Hypothesis 20: "The need to purchase a service is more frequently out of the control of the consumer for services than for goods."

4.4.9 Well Known Store / Outlet as a Cue to Quality

Source: Interview

The perception in the mind of the consumer of the superiority of the products on offer in one outlet over another is largely controlled by the manner in which the offerings are promoted and presented in the outlet. Ambience may also play a significant role in such perceptions and predispositions. Whilst it cannot be argued that service outlets such as restaurants, bank branches, car service garages, hairdressers, and possibly TV repair shops do not strive to create the "right" image through such advertisement of their offerings, it is likely that goods stores offer significantly greater cues to quality, owing to their more sophisticated advertising messages appealing to the

wants rather than the needs of the prospective customer.

Hypothesis 21: "A well know store is a greater cue to quality for goods than for services."

4.4.10 Post-choice Evaluation

Source: Interview / Theory

According to Fisk (1981), some services, for example life insurance and appliance repair warranties, are merely a promise to deliver if and when some specific event occurs in the future, and consequently the consumer has no opportunity to immediately evaluate the delivery of the offering. This suggests that post-choice evaluation of some services is a more important dimension of satisfaction than is post-use evaluation.

Hypothesis 22: "Owing to the temporal separation between choice and use of some services, post-choice evaluation of such services is a more important factor than is post-use evaluation."

4.4.11 Use of Cut Off Points

Source: Theory

Engel, et al., (1990) state that as an aid in the assessing of choice alternatives, a consumer will often impose cut off criteria which they believe to be reasonable in some way. The most popularly assigned cut off is that of price ceilings, where the consumer will set a particular price, above which they believe the purchase price exceeds the product's utility.
Since some services are complex and may involve high levels of credence on behalf of the consumer, the consumer's perception of the offering's true worth would not be as influenced by the purchase price as would that of goods, since the consumer may feel intimidated by such an offering (a medical diagnosis, or legal advice, other typically complex service). Owing to the lack of tangible characteristics associated with the service, the

consumer also has little opportunity to assess the quality of the offering up front, and hence its value for money is difficult to establish.

Hypothesis 23: "The use of monetary cut offs is more prevalent in the evaluation of goods than in services."

4.5 Sampling

Although already treated in chapter 4, brief mention must again be made regarding the representativeness of the sample.

Since this research is of an exploratory nature only, and owing to the anticipated difficulty arising from other methods of defining and contacting a suitable black subsample, organizations were fairly carefully chosen for their ability (and willingness) to provide a cross section of their black staff for interview and questionnaire completion. Any skewness which may be introduced by such an approach is acknowledged and qualified in this light.

The selection of the participating organizations was based firstly on their ability to provide the required numbers of black staff for the research. A second factor of the selection was the desirability of representing a spectrum of industries. It is felt that these objectives were met, since the industries represented can be summarized as follows;

Organization:	Industry:	Culture:
Hyperama	Retailing	Progressive
AECI	Chemicals Manufacturing	Conservative, production
Standard Bank	Financial Services	Formal, conservative
Ogilvy & Mather	Advertising	Informal, creative

The criteria for the suitable respondents was kept broad for similar reasoning, and included any employee being

- black or white only,

- male or female,

- able to speak, read and write in at least English, and

- of any job grading, and come from any discipline or department in the PWV area.

4.6 Analytical Techniques Employed

4.6.1 Chi Squared Goodness of Fit Testing (Groebner and Shannon 1989)

The test was chosen since it was suited to analyzing association between attributes and products respectively. The attributes used were the set of 27 constructs, whilst the products were the generic classes "good" and "service".

Frequencies of response to a particular attribute were summed under the goods and services distinction. The assumption was that if no significant difference in evaluation of goods and services existed for a particular attribute, there would be no significant difference between the observed and expected frequencies of response for goods and services reporting for that attribute respectively. Since there were more services included in the options than goods, a weighting ratio of number of possible goods (nine) to total number of products (21) was used to proportion the expected goods frequencies for each question, and similarly for the 12 services options.

Hypotheses were set up for each of the 27 attributes so that Ho, the null hypothesis, reflected no significant difference existing between the observed and expected frequency of response for goods or services. The alternative hypothesis, Ha, reflected a significant difference between the expected and observed response

frequency.

A difference in evaluation between services in general and goods in general along the dimension represented by a particular attribute would be shown to be significant whenever the calculated chi squared value for each attribute exceeded the critical value as determined by the significance level (five percent in this research), and the degrees of freedom (n-1, where n is the greater of the number of attributes and products). The calculated chi squared statistic would thus fall in the tail of the chi squared distribution, indicating its difference from the value range allowable from sampling error alone, at the five percent significance level, thereby confirming association.

Where the calculated value was less than critical, it was reasonable to assume sampling error alone could have been responsible for the frequency difference, and thus the attribute inconclusively showed evaluative difference, and its hypothesis was rejectable.

4.6.2 White / Black Evaluative Differences

A method of performing chi squared contingency analysis was required to determine which of the 27 attributes showed significant differences in evaluation between the white and black consumers. The Survey System data capture and manipulative package proved able to achieve this goal. Once the questionnaire data had been efficiently captured and checked, the package was able to run the contingency analysis at the five percent significance level to determine along which dimensions whites and blacks showed difference. Furthermore, the package was also capable of pinpointing for which goods in the dimension the overall difference was being created by. This detail enabled significant comparative conclusions to be drawn, as an aid to the development of strategic marketing implications.

4.6.3 Correspondence Analysis (Greenacre 1984)

The second part of this research was devoted to highlighting from the exhaustive set of 27 constructs which ones were key, for both the white and the black segments respectively. Correspondence analysis was capable of achieving this goal. Since this technique is also designed to show numerically and graphically the dependence between products and attributes, that is, which of the products used are significantly associated with particular attributes, its use here was ideal.
Not only could each of the white and black consumer markets be analyzed separately in this fashion, but a direct comparison between the two markets could be made. Furthermore, the technique has allowed the comparison of the results obtained from the development of consumer behaviour theory to those derived from an outright acceptance of the 11 Zeithaml hypotheses by Ewels (1989).

Allied to the definition of the major dimensions of evaluation was firstly the task of confidently correlating products to their dimensions of highest association, and secondly the clustering of products that were similarly evaluated by the consumer. The technique of chi squared trees (Greenacre 1988), was used, since it gave an unambiguous interpretation.

Addressing the second task of ascertaining whether certain products could be significantly grouped together into characteristically describable clusters, a means of calculating significance intervals for each product was considered by means of the 95 % confidence radius technique. However, since this method required firstly the plotting of the radii in each of the dimensions for each product, and secondly the testing by inspection of all the pairs of radii so plotted for those significantly overlapping, the technique was rejected as being too cumbersome.

The method of chi squared trees was used instead, since this method was able to consider product association simultaneously in multiple dimensions.

For the first task, the technique could not assign product clusters or even individual products to attributes, as represented by axes. Hence the technique in isolation was unable to provide meaningful interpretation of consumer evaluation, but used in conjunction with correspondence analysis proved to be a highly powerful partner, particularly useful in clustering similarly evaluated products, to then be interpreted by their association with attribute clusters (axes), as provided by the correspondence analysis.

As a further use for the technique, clustering of attributes allowed each axis interpretation in the correspondence analysis to be validated, by observing which attribute clusters associated with which axis. In addition, attributes clustering from a variety of axes indicated the association of these axes, information not available from the correspondence analysis alone.

The determination of the chi squared critical value was accomplished by interpolation of tables produced by Pearson and Hartley (1972).

5.0 QUESTIONNAIRE CONSTRUCTION AND ADMINISTRATION

5.1 Conversion of Hypotheses into Questions

As stated in the previous chapter, it was imperative that the questions were stated in as clear and simple a form as possible. Keywords in each statement were emphasized in upper case characters to make them the central focus of the question as an aid to quicker understanding. The research hypotheses are presented in numerical sequence followed by the corresponding question included in the questionnaire. Question ordering will be dealt with under the section on structure.

Hypothesis 1: "Consumers seek and rely more on information from personal sources than from non-personal sources when evaluating services prior to purchase" (Zeithaml, 1981, p187).

> **Question 8:** I prefer to listen to the ADVICE OF SOMEONE THAT I KNOW rather than to the message in the advertising when deciding to purchase the following:

Hypothesis 2: "Consumers engage in greater post-purchase evaluation and information seeking with services than with (goods)" (Zeithaml, 1981, p187).

> **Question 9:** I find myself still assessing whether or not I've made the right decision AFTER purchasing the following:

Hypothesis 3: "Consumers engage in more post-purchase evaluation than pre-purchase evaluation when selecting and consuming services" (Zeithaml, 1981, p187).

> **Question 4:** I tend to evaluate my purchase decisions MORE AFTER I buy THAN BEFORE I buy the following:

Hypothesis 4: "Consumers use price and (appearance of) physical facilities as the major cues to service quality" (Zeithaml, 1981, p187).

Since this original Zeithaml hypothesis deals with the concept of visual surrogate information concerning quality, it was felt that the construct of "the presence of other consumers", discovered during the literature review, would best be represented under this hypothesis cluster, and not by itself.

Question 1: To me, the PRICE indicates what the QUALITY will be like for the following:

Question 3: For which of the following items do the PHYSICAL FEATURES (things which you can see and feel for example) play an important part in making an evaluation?:

Question 13: To me, the appearance of the PREMISES indicates what the QUALITY will be like for the following:

Question 14: To me, the appearance of the STAFF indicates what the QUALITY will be like for the following:

Question 15: For which of the following can you judge the likely QUALITY by the presence of / numbers of OTHER CONSUMERS?:

Hypothesis 5: "The consumer's evoked set of alternatives is smaller with services than with (goods)" (Zeithaml, 1981, p188).

Question 23: Which of the following do you feel offers you little CHOICE OF ALTERNATIVE brands or stores / outlets?:

Hypothesis 6: "For many non-professional services, the consumer's evoked set frequently includes self-provision of the service" (Zeithaml, 1981, p188).

Question 21: For which of the following would you consider the option of DOING THE JOB YOURSELF?:

Hypothesis 7: "Consumers adopt innovation, in services more slowly than they adopt innovations in (goods)" (Zeithaml, 1981, p188).

Question 10: I prefer not to try out SOMETHING / SOMEONE NEW when purchasing the following:

Hypothesis 8: "Consumers perceive greater risks when buying services than when buying (goods)" (Zeithaml, 1981, p188).

Question 5: I feel that I am taking a RISK when purchasing the following:

Hypothesis 9: "Brand switching is less frequent with services than with (goods)" (Zeithaml, 1981, p189).

Question 24: Once I've been using a brand / person / supplier for a while, I prefer NOT TO CHANGE to another for the following:

Hypothesis 10: "Consumers attribute some of their dissatisfaction with services to their own inability to specify or perform their part of the service" (Zeithaml, 1981, p189).

Question 26: When I'm NOT SATISFIED with the outcome of the purchase, I believe that part of the problem lies with my own INABILITY TO SPECIFY / KNOW MYSELF what I wanted with the following:

Hypothesis 11: "Consumers may complain less frequently about services than about products due to their belief that they themselves are partly responsible for their dissatisfaction" (Zeithaml, 1981, p189).

Question 27: For which of the following do you think that your own inability / lack of knowledge CONTRIBUTED to you NOT COMPLAINING about your dissatisfaction?:

Hypothesis 12: "Consumers of services are less confident in regard to brand judging than are consumers of goods."

Question 6: I feel CONFIDENT IN JUDGING brands / people / suppliers for the following:

Hypothesis 13: "Consumers of services will rely more on the initial response of the supplier's staff in their evaluation than with goods."

Question 7: To me, it is the FIRST IMPRESSION I get from the response of the staff which is most important for the following:

Hypothesis 14: " The presence of a well known brand name is more of an assurance of likely quality with goods than with services."

Question 11: For which of the following is the BRAND NAME of the product / supplier more important as an indicator of what the QUALITY will be like ?:

Hypothesis 15: "The extent to which a consumer becomes involved in the decision process is greater with services than with goods."

Question 12: I really go to GREAT LENGTHS before making a decision to purchase the following:

Hypothesis 16: "Convenience-based shopping is more prevalent with goods than with services."

Question 16: To me, CONVENIENCE is the most important factor for the following purchases:

Hypothesis 17: "The aspect of personalized attention is of greater importance in the consumption of services than with goods."

Question 17: I look for a store / person / supplier who will provide PERSONALIZED ATTENTION for the purchase of the following:

Hypothesis 18: "The decision to purchase a particular service does not draw as much on image-matching and social class indication factors as does the purchase of a particular good."

Hypothesis 19: "Black consumers are more conscious of the need for a particular purchase of a good to match the image and to indicate their social class they would wish their peers ascribed them to."

Question 18: To me, it is important that the purchase matches my IMAGE for the following:

Question 19: I feel it is important that the purchase of the following must REFLECT THE SOCIAL CLASS I would like others to see me in:

Hypothesis 20: "The need to purchase a service is more frequently out of the control of the consumer for services than for goods."

Question 20: I feel that I have LITTLE CHOICE in whether to purchase / when to purchase the following:

Hypothesis 21: "A well know store is a greater cue to quality for goods than for services."

Question 22: To me, a well known STORE NAME indicates what the QUALITY will be like for the following:

Hypothesis 22: "Owing to the temporal separation between choice and use of some services, post-choice evaluation of such services is a more important factor than is post-use evaluation."

Question 25: For which of the following do you think it is more important to be satisfied with the CHOICE rather than with the actual USE ?:

Hypothesis 23: "The use of monetary cut offs is more prevalent in the evaluation of goods than in services."

Question 2: I find that I set an UPPER LIMIT in money terms above which I'm not prepared to pay for the following:

5.2 Structure

The ordering of the questions in a questionnaire was important to achieve optimal performance from the respondent. For this research, it was considered appropriate to use the supposition that the most commonly used constructs should appear first in the questionnaire. Therefore, its structure resembles the order of occurrence of the constructs as depicted in figure 4.1. Additional constructs from the literature closely related to those in this ranking of familiarity have been included where most appropriate, for example "upper limit" follows "price cue to quality" and "confidence in brand judging" follows "risk."

5.3 Piloting the Questionnaire

In order to ascertain whether or not the questions were unambiguous, and how long it would take on average to complete the questionnaire, it was administered to a judgement sample of 10 consumers, who were requested to complete the test questionnaire and provide comment and criticism on any of the questions that were unclear. This enabled any interpretation problems with the questions to be assessed by the interviewer, and would avoid the misinterpretation or passing over of any of the questions during the main information collection phase.
Any changes required in the questionnaire as indicated by the pre test were made prior to its distribution within the participating organizations.

An example of the final, pretested questionnaire as distributed is contained in Appendix 2.

5.4 Administration

The questionnaire was distributed to a project controller appointed from the participating organization. This person was also charged with ensuring the respondents completed their questionnaires, being in a more optimal position than the researcher to perform regular checks on so many respondents.

Telephonic recourse to assistance for the respondents who had problems with any portion of the document was offered to all, but was never made use of.

The return rate for the questionnaires as originally distributed was 87.5 %. This figure includes partially-completed questionnaires, as this information was still relevant, even if incomplete. Two of the organizations each did not submit six questionnaires for a variety of reasons before the final deadline. A further 12 questionnaires were then distributed to six friends of the researcher, and to six MBA students, who all satisfied the selection parameters, and who completed the questionnaire simultaneously in the presence of the researcher.

The final response rate was 100 %, comprised as follows;

	Number / 96	Frequency (%)
White Male:	25	26.04
White Female:	26	27.08
Black Male:	27	28.13
Black Female:	17	17.17
Unspecified:	1	1.04
	96	100.00

6.0 RESEARCH RESULTS

This chapter will present the results in two major sections. The first will deal with a comparison of goods and services according to the results of the hypothesis testing for both white and black segments in turn. At this point, no discussion or inter-segmental comparisons will be attempted; these will be discussed separately in the following chapter. The second section will present the key distinguishers of evaluation for both white and black segments, as interpreted from the correspondence analysis. Again, coverage of the discussion and inter-segmental comparisons will be postponed until chapter 7.

6.1 Comparison of Goods and Services: Hypothesis Testing

Chi-squared goodness of fit analysis was conducted on the data collected from the questionnaire.

Appendix 3 shows the results of the hypothesis testing for both the white and the black subsamples respectively.

6.1.1 White Consumer Subsample

Of the 23 hypotheses as represented by their 27 corresponding questions or statements, six hypotheses were rejected as follows;

> Hypothesis 2: "Consumers engage in greater post-purchase evaluation and information seeking with services than with (goods)" (Zeithaml, 1981, p187).

This was shown to be rejected, that is, Ho was found to be true at the 95 % significance level. This implies that services purchases do not invoke significantly more post-purchase evaluation than goods purchases. In fact, the results indicate the opposite to be more likely, although perhaps it would require a greater sample size to be able to prove this at the 95 % significance level.

> Hypothesis 4: (portion pertaining to price only) "Consumers use price ...as (a) major cue to service quality" (Zeithaml, 1981, p187).

Although a significant difference does exist between goods and services, the results indicate that the use of the price cue is applicable to goods purchases and not to services, as the hypothesis originally states.

> Hypothesis 15: "The extent to which a consumer becomes involved in the decision process is greater with services than with goods."

Although a significant difference exists between goods and services, the relationship is in reverse to that stated in the hypothesis, thus white consumers are more involved in the goods purchase decision process than that for services.

> Hypothesis 16: "Convenience-based shopping is more prevalent with goods than with services."

Again, although a significant difference exists between goods and services, the relationship is in reverse to that stated in the hypothesis, thus the aspect of convenience is more important in the purchase of a service than with goods.

> Hypothesis 19: "Black consumers are more conscious of the need for a particular purchase of a good to match their image and to indicate their social class they would wish their peers ascribed them to."

Whilst there is a difference between goods and services, the relationship is reversed. By normalizing the respective responses given by white and black consumers (expressing the response frequency to number of respondents as a ratio), it was found that each white consumer selected 1.67 goods compared with 1.64 chosen by each black respondent. This implies that neither white nor black consumers are more prone to purchase goods that reflect their social class.

Hypothesis 22: "Owing to the temporal separation between the choice and use of some services, post-choice evaluation of such services is a more important factor than is post-use evaluation."

In this case, white respondents did not highlight services, to which this criteria was intended to apply, more frequently than goods.

6.1.2 Black Consumer Subsample

Appendix 3 also shows the results of the hypotheses testing for the black respondents. The following 12 hypotheses were found to be rejected;

Hypothesis 2: "Consumers engage in greater post-purchase evaluation and information seeking with services than with (goods)" (Zeithaml, 1981, p187).

Although a significant difference exists between goods and services, the relationship is in reverse to that stated in the hypothesis, thus black consumers continue to evaluate in a post-purchase fashion for goods rather than for services.

Hypothesis 3: "Consumers engage in more post-purchase evaluation than pre-purchase evaluation when selecting and consuming services" (Zeithaml, 1981, p187).

Hypothesis 4: (portion pertaining to price only) "Consumers use price ...as (a) major cue to service quality" (Zeithaml, 1981, p187).

Although a significant difference does exist between goods and services, the results indicate that the use of the price cue is applicable to goods purchases and not to services, as the hypothesis originally states.

Hypothesis 5: "The consumer's evoked set of alternatives is smaller with services than with goods" (Zeithaml, 1981,

p188).

Hypothesis 7: "Consumers adopt innovation in services more slowly than they adopt innovation in goods" (Zeithaml, 1981, p188).

The results indicate a tendency for the reverse to be true, although the difference is still not significant at the 95 % level.

Hypothesis 8: "Consumers perceive greater risks when buying services than when buying goods" (Zeithaml, 1981, p188).

Hypothesis 12: "Consumers of services are less confident in regard to brand judging than are consumers of goods."

Hypothesis 16: "Convenience-based shopping is more prevalent with goods than with services."

Hypothesis 20: "The need to purchase a service is more frequently out of the control of the consumer for services than for goods."

Hypothesis 21: "A well known store is a greater cue to quality for goods than for services."

Hypothesis 22: "Owing to the temporal separation between the choice and use of some services, post-choice evaluation of such services is a more important factor than is post-use evaluation."

Hypothesis 23: "The use of monetary cut offs is more prevalent in the evaluation of goods than in services."

While the difference here is insignificant, the results tend to indicate that black consumers do set more price ceilings for goods than for services.

6.2 Key Distinguishers: Correspondence Analysis

In order to determine from the entire set of constructs or dimensions which ones were the key distinguishers of the manner of evaluation of goods and services by both the white and the black consumers respectively, correspondence analysis was carried out on the full set of 27 constructs.

6.2.1 White Consumer Subsample

6.2.1.1 Product - Attribute Dependency

Product and attribute dependence was determined by consideration of the trace from the correspondence analysis report as contained in Appendix 4. The square root of the trace is representative of the correlation coefficient, and at 0,663, there was strong correlation or dependence between the products and attributes used.

Another method of testing for dependence is to calculate the chi squared statistic and compare this to the critical value for the appropriate level of degrees of freedom. The calculated value was 2 380, and compared with a critical chi squared value of 574 for 520 degrees of freedom, indicated the rejection of the null hypothesis Ho, that is, there was significant dependence between the products and the attributes.

6.2.1.2 Dimensionality

The dimensionality of the solution was determined by two methods. Firstly, an examination of the percentage trace attributed to each axis was required, giving an indication of the percentage portion of the total chi squared value for the tabulation. It can be shown that for perfect representation with n products or attributes, the dimensionality of the required solution would be (n-1) (Bendixen, 1991). If the data were purely random with no significant dependencies, an "average" axis should account for 100 divided by one less than the smaller of the number of products and attributes. This would give the maximum percentage

trace represented by either products or attributes, below which any incremental axis would contribute less than the "average", and in the interests of parsimony, should not be included in a count of dimensions for the solution.

Since there were 27 attributes and 21 products in the data, the percentage trace cut was taken at five. Thus any axis contributing more than five percent trace was regarded as significant and included in the solution. More dimensions would be unlikely to contribute significantly to the interpretation of the nature of the dependency between products and attributes. This indicated the need for a five-dimensional solution, but since the understanding of four dimensions is complex in itself, it seemed pointless to introduce a further dimension purely to gain the meagre six percent contribution of another axis. Thus a four-dimensional solution was opted for as best satisfying all criteria.

Further justification for a four-dimensional solution came from an analysis of the degree of representation of attributes in the fourth dimension. The sum of the squared correlations for each individual attribute over the first three dimensions was calculated, and where this sum was especially low, (less than 0.4), the use of the fourth dimension was necessary to represent the low sum attribute. A similar calculation was performed on the products, and the products and attributes requiring the fourth dimension for their strongest representation are listed in Table 6.1 below.

As can be seen from this analysis, certain attributes and products which were poorly represented in three-dimensional space were also poorly represented in the fourth dimension. The attributes "choice of alternatives", "inability to specify", and perhaps even "choice vs. use" clearly did not represent themselves any better in the fourth dimension than in any of the first three, and could be considered marginal to the analysis of this solution. The product haircut behaved similarly, and was thus similarly excluded from further analysis.

Table 6.1: 4th Dimension Attribute Representation - White Subsample

ITEM	E (SQUARED CORRELATION OVER 1st 3 DIMENSIONS)	SQUARED CORRELATION IN 4th DIMENSION
Attributes:		
Doing the Job Yourself	0.185	0.301
Choice of Alternatives	0.266	0.001
Not to Change	0.390	0.349
Choice vs. Use	0.377	0.166
Inability to Specify	0.086	0.038
Products:		
House Moving	0.129	0.305
Banking	0.295	0.287
Haircut	0.147	0.002

With the inclusion of four dimensions in the solution, the trade off between accuracy and representability was acceptable, since the retention, as shown by the cumulative percentage trace was high at 73.5%. The higher the retention, the more subtlety in the original data is retained in the original solution.

Secondly, an examination of the scree plot did not indicate the slope change for which number of axes represents attainment of the average percent trace contribution to the solution.

6.2.1.3 Axis Interpretation

Interpretation of the axes in this case was confined to the representation of products in attribute space.

From consideration of the correspondence report in Appendix 4, it was clear that the attributes "price", "risk", "brand", "great lengths", "convenience", "image" and "DIY" were well represented

in four-dimensional space, since their respective qualities were high. Since their individual inertias were all above the five percent cut, these are also the dimensions along which most of the dependency between the products and the attributes in this solution was created. Thus any interpretation of the axes had to include the representation of the above attributes at the very least.

In determining the individual contribution made by each attribute to an axis's contribution to the overall dependency, all attributes with greater than five percent contribution were included in that axes's interpretation. The following represents the interpretation of axis 1;

AXIS 1:

-ve	0	+ve
<----------	|	---------->
NOT COMPLAINING		PHYSICAL FEATURES
Staff->Quality		Image
		Brand->Quality
		PRICE->QUALITY
		Reflect Social Class

The attributes are listed in decreasing importance of their percentage contribution. The attributes displayed in bold represent those with the strongest squared correlation with the axis. The other axes are interpreted in similar fashion;

AXIS 2:

-ve	0	+ve
CONVENIENCE		GREAT LENGTHS
MORE AFTER THAN BEFORE		PERSONAL ATTENTION
		Continue After
		Reflect Social Class

AXIS 3:

-ve	0	+ve
STAFF->QUALITY		RISK
PREMISES->QUALITY		BRAND->QUALITY
Reflect Social Class		Great Lengths
OTHER CONSUMERS->QUALITY		Little Choice Where / When

AXIS 4:

-ve	0	+ve
DIY		Brand->Quality
RISK		NOT TO CHANGE
Physical Features		Confident in Judging
Upper Limit		

In naming the axes, consideration was given to the description most capable of encompassing the nature of the dimension as described by the attributes which contributed mostly to that axis.

Axis 1+:

The most significant aspect of this axis was the predominance of attributes that involve tangible aspects of the products, such as "physical features", "the brand name" and "the price." Both brand and price are used as surrogate cues to the expected quality of goods exclusively, namely furniture, clothing, new car, suitcase and television. These indicators of goods quality rather than services quality confirms the reversal of Zeithaml's fourth hypothesis as found in the hypothesis testing section of this research.

The goods indicated were also characterised by readily discernable and comparable physical features (colour, feel, weight, materials and the like). The remaining two attributes associated with this axis were "image" and "reflect social class." Hence white consumers are extremely conscious of the need to reflect the societal image and social class they believe their peers see them in.

As a consequence, the name given to this axis reflected the physical, the comparable, the ability to create image and confirm social status. The axis was thus named **HEDONISTICS**.

Axis 1-:

This axis was characterized by the consumer's perceived reasons for not complaining when certain services were not performed to the standards as expected by the consumer at the outset of the transaction. Services such as legal advice, medical diagnosis, car service and television repair were associated with this axis, all strongly indicative of high levels of expertise and therefore their

evaluation is based upon credence. The white consumer also used the surrogate quality cue of the "appearance of the staff" in these service establishments, indicating that very little else is available for the pre-purchase evaluation of the impending service.

All the associated services require a high degree of consumer involvement in the initial diagnosis of the expected problem. When the consumer does not feel confident that he or she has performed this function adequately through ignorance or negligence, they do not complain about the substandard service received due to feelings of guilt on their behalf.

Consequently, this axis has been named **SPECIFICATION RISK.**

Axis 2+:

Products used car and life insurance were associated with this axis, which has the attributes "great lengths", "personalized attention", "continue evaluation after purchase", and "reflect social class".

The associated products seemed to indicate considerable potential financial risk associated with an incorrect decision to purchase (or not to purchase, equally applicable to life insurance). Both products contain large elements of hidden aspects, unobservable to the untrained eye. As a consequence, it is logical that a prospective consumer would become highly involved in pre-purchase evaluation and information seeking about the product, which would also extend into post-purchase evaluation once the product had been tested for a period (used car).

The consumer would also expect a high level of personalized attention in the case of life insurance, since customization of the product is usually necessary, and cannot be performed at arm's length. In the case of the used car, the dealer would also pay close attention to the

individual needs as supplied by the consumer.

Such high degrees of involvement by the consumer lead to the name **INVOLVEMENT** being given to this axis.

Axis 2-:

This axis showed very strong elements of convenience as the primary purchasing motivation. Stated conversely, the consumer is not expected to engage in detailed pre-purchase evaluation, information seeking and product comparison, but rather to merely behave in a habitual mode of decision making, or alternatively to purchase according to which product is the more readily available.
Risk of the wrong decision is not significant, mainly due to the relatively low cost of the associated products, which were, expectably, fruit juice, photo developing, dry cleaning (possibly the exception in terms of financial risk), and toothpaste.

These products also share the need for post-purchase evaluation, since they are all equally difficult to evaluate prior to purchase (and consumption), having high levels of experience qualities.

The axis was named **CONVENIENCE** to reflect these characteristics

Axis 3+:

This axis showed logical product correlation when the use of the physical risk aspect (to the consumer's person and family) is considered. Car tyres is the only product which associated with this axis. The axis itself was comprised of attributes "risk", "brand as a cue to quality", "great lengths" and "little choice when or where to purchase."

Consumers are clearly highly aware of the inherent physical risk associated with an incorrect purchase decision, and

thus rely on well known brand names to indicate quality of the product, as well as getting involved in the decision to purchase the correct tyres. Significantly however, brand loyalty did not feature in this axis' interpretation, and equally significantly medical diagnosis remained absent from the associated products. Consumers are also aware that the decision of time and place of purchase is out of their control.

The axis has been named **CONVENTIONAL RISK AMELIORATION.**

Axis 3-:

Remaining with the concept of physical risk, the attributes comprising this axis were mostly surrogate cues to the expected quality of the associated services restaurant meal, nursery school care and haircut.

Consumers clearly perceive the element of physical risk associated with the purchase of these services, and consequently utilize the "staff appearance", "premises appearance", and "presence (and numbers) of other consumers" on the premises as their cues to the quality of the service offered. Since all three products share strong intangible elements (the ambience of the restaurant, the play and educational climate of the nursery school, and the image created by the haircut selected), it is logical to expect consumers to use tangible elements of each service to indicate likely quality, and to rely fairly exclusively on these elements for assurance.

Consequently, the axis has been named **ASSURANCE (Perceived Quality).**

Axis 4+:

This axis was characterised by the attributes "brand as a cue to quality", "not to change (brand loyalty)", and "confident in judging brands". The associated service was

banking.

The brand name of a particular bank is clearly the major carrier of the service quality message to the white consumer, and brand loyalty is established after a period of continual use of the service, which serves to build the relationship between the consumer (who perceives the bank to have his or her best interests always at heart), and the bank. Consumers are also confident (correctly or otherwise) in their ability to judge between brands of bank.

Quality of service thus comes form experience, which breeds brand loyalty; the name of this axis, **LOYALTY (Experienced Quality)** reflects this relationship.

Axis 4-:

This axis was most strongly characterized by the option for the consumer of "doing the job themselves". Other attributes associating with this axis included "risk", "physical features" and "upper price limit". The only product which associated with the axis is house moving.

It is significant that consumers perceive they are at least equally as capable (if not more capable) as the removals firm of accomplishing the task, which they also perceive to carry significant financial risk. Due to these perceptions, the consumer is faced with the decision to contract or to do it themselves; other attributes used in aiding this decision are price ceilings and the physical features of the service (the appearance of the firm's vehicles, guarantees, the logo and advertising used and such like). The threshold for the decision will be influenced by how well the firm's service offering satisfies the last two attributes.

Table 6.2: Summary of Axis Characteristics - White Subsample

AXIS	NAME	QUESTION & ATTRIBUTE	% CONTRIBUTION
1+	**HEDONISTICS**		
		3: Physical Features	14.7
		18: Image	8.9
		11: Brand->Quality	8.0
		1: Price->Quality	7.8
		19: Reflect Social Class	7.3
1-	**SPECIFICATION RISK**		
		27: Not Complaining	7.3
		14: Staff->Quality	5.1
2+	**INVOLVEMENT**		
		12: Great Lengths	15.1
		17: Personal Attention	7.0
		9: Continue After	5.1
		19: Reflect Social Class	5.0
2-	**CONVENIENCE**		
		16: Convenience	32.6
		4: More After Than Before	16.2
3+	**CONVENTIONAL RISK AMELIORATION**		
		5: Risk	15.1
		11: Brand->Quality	13.2
		12: Great Lengths	7.5
		20: Little Choice When/Where	6.1
3-	**ASSURANCE (Perceived Quality)**		
		14: Staff->Quality	17.7
		13: Premises->Quality	8.8
		19: Reflect Social Class	5.9
		15: Other Consumers->Quality	5.1
4+	**LOYALTY (Experienced Quality)**		
		11: Brand->Quality	17.3
		24: Not To Change	11.2
		6: Confident in Judging	6.5
4-	**DIY**		
		21: Doing the Job Yourself	18.1
		5: Risk	15.5
		3: Physical Features	6.6
		2: Upper Limit	5.8

The axis was named DIY.

Table 6.2 above summarizes the axes naming and the grouping of attributes with axes.

Figure 6.1 below illustrates the axes of the four dimensional solution as interpreted.

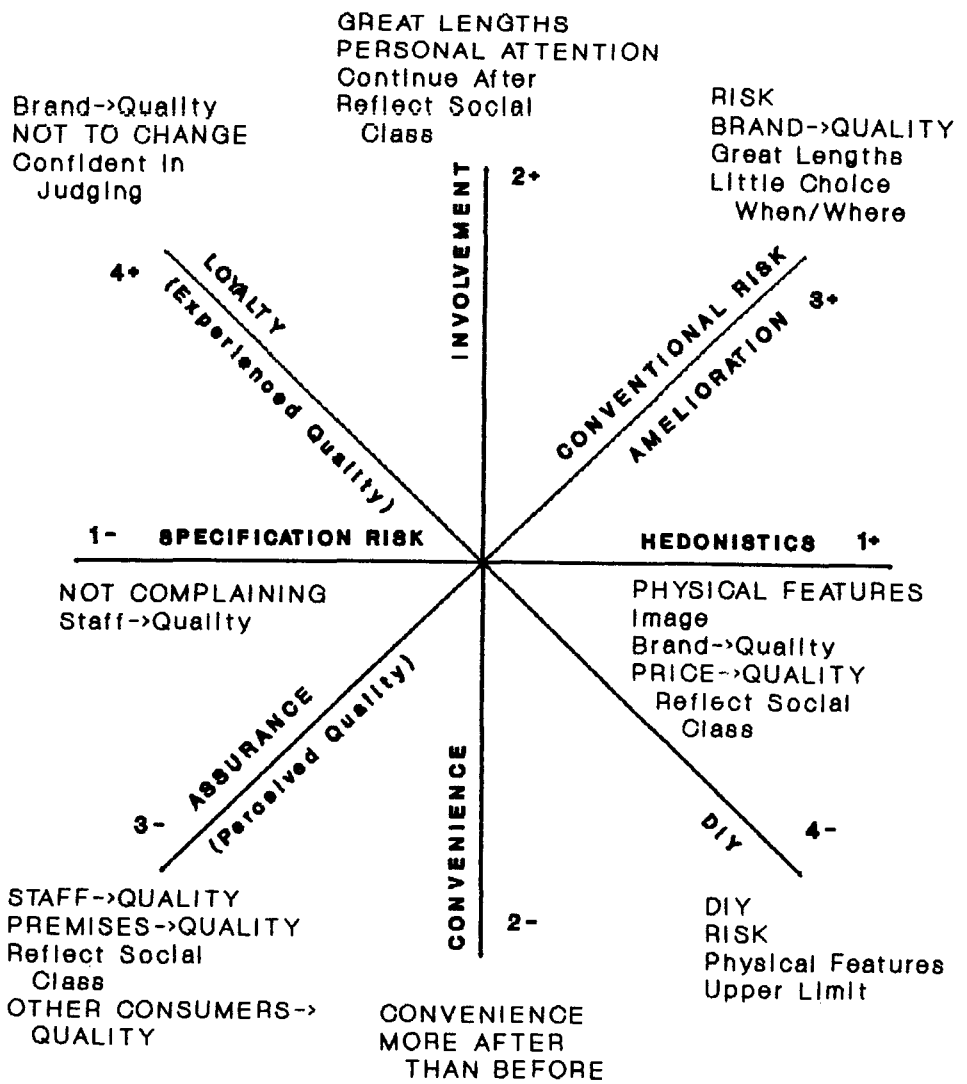


Figure 6.1: Axis Interpretation - White Subsample

6.2.1.4 Product - Axis Correlation

An important aid to the interpretation of the solution was being confident in assigning products to the axes in which they were best represented, (or stating the task in the reverse, avoiding making interpretation of products in a particular dimension when they were clearly poorly associated with that dimension). Table 6.3 below summarizes each product's axis of best representation, numerically through the axes in terms of descending squared correlation for each axis, with its representation in the remaining axes listed in decreasing order of importance.

6.2.1.5 Stability of the Solution

The correspondence report for the white consumer subsample also indicated instability of axes within the 3 - 4 plane. This form of instability was assessed by examination of the eigen values of planes, and where such a pair of eigen values had a small difference, such as that displayed in the third plane (that is, between eigen values for axes three and four), the two axes were unstable within this plane, and their orientation within this plane was non-unique. Hence any subsequent interpretation of these two axes must be undertaken with caution and in the light of this restriction.

The other form of instability occurs when the actual plane carrying the axes is found to be unstable; this is indicated by the trace of subsequent axes being substantially greater than half the trace of the prior axis. In this case, the orientation of the plane within space is non unique. For the white subsample, this form of instability did not exist.

Table 6.3: Product / Axis Association - White Subsample (values below 0.2 have been ignored)

PRODUCT	PRIMARY AXIS	SQ COR	SECONDARY AXIS	SQ COR	TERTIARY AXIS	SQ COR
	HEDONISTICS					
Furn	1+	0.728	3-		2+	
CL	1+	0.700	3-		4-	
NC	1+	0.590	2+	0.270	3+	
SC	1+	0.547	2-		4-	
TV	1+	0.451	4+		3+	
	SPECIFICATION RISK					
LA	1-	0.718	2+		4+	
MD	1-	0.671	4+		2+	
CS	1-	0.542	4-		3+	
TVR	1-	0.467	3+		4-	
	INVOLVEMENT					
LI	2+	0.397	1-	0.209	3+	
UC	2+	0.357	4-	0.270	3+	
	CONVENIENCE					
FJ	2-	0.731	1+		3+	
PD	2-	0.584	4-		3+	
DC	2-	0.579	1-		4-	
TP	2-	0.444	4+		3+	
	CONVENTIONAL RISK AMELIORATION					
CT	3+	0.431	4+	0.207	1+	
	ASSURANCE					
RM	3-	0.591	2-		1-	
Nurs	3-	0.269	1-		2+	
HC	3-	0.082	2-		1-	
	LOYALTY					
B	4+	0.287	1-		3-	
	DIY					
HM	4-	0.305	1-		3+	

6.2.1.6 Outlier Analysis

An examination of the correspondence report revealed the possibility of the "convenience" attribute behaving as an outlier; this was deduced from the high percentage contribution coincident with the relatively high absolute coordinate value. Hence the possibility existed that the convenience attribute was dominating the (2-) axis to the detriment of any other attribute, disallowing their influence to colour the nature of this axis. Consequently, the attribute "convenience" was excluded from the subsequent run of the analysis, and treated as a supplementary variable, having coordinates for plotting on subsequent perceptual maps, but no squared correlation and no contribution to any axis.

Analysis of this run indicated similar axes interpretation as that <u>including</u> the "convenience" attribute, with the exception of a reversal of coordinate value in both third and fourth axes. Since a check on the correlation of the products with their respective axes indicated they too had "followed" the axis coordinate reversal, their interpretation had remained unaffected by the treatment of the "convenience" attribute.

In conclusion, it was deduced that the "convenience" attribute was never behaving as an outlier in the first instance, and the modification was therefore scrapped.

6.2.1.7 Product Clustering

Appendix 5 shows the chi squared tree report and dendogram for white and black consumers respectively. Grouping of products for the white consumer subsample was as follows;

Group 1:

Used Car

Group 2:

New Car
Suitcase
Furniture
Clothing

Group 3:

Photo Developing
Dry Cleaning
Fruit Juice
Toothpaste

Group 4:

Life Insurance
Nursery School Care
Banking
Legal Advice
Medical Diagnosis

Group 5:

Car Tyres
TV

Group 6:

Restaurant Meal
Haircut

Group 7:

House Moving
TV Repair
Car Service

The above clustering indicates which products were associated in terms of their evaluation by the white consumer subsample, that is, similar methods and cues for evaluation were used for a particular cluster of products. What the actual methods and cues were could only be determined by axes interpretation and correlation through correspondence analysis.

Inspection of the above listing revealed that clusters so derived from the chi squared tree technique were not always identical to groupings derived from product-axes association data supplied by the correspondence analysis (table 6.3). This is where the chi squared tree technique became invaluable in interpretation of product clustering without the need for confidence radii methods of inferential testing. Correspondence analysis in such high dimensional space complicated the product - axis correlation interpretation so that products which apparently clustered onto a particular axis were often not significantly associated with each other.

Such superficial interpretation would obviously lead to erroneous conclusions.

As a case in point, consider the four products associated with axis 1-, namely legal advice, medical diagnosis, car service and TV repair. Although these products were the most strongly correlated with this axis, and their individual correlations can be logically explained in terms of the attribute composition of the axis, legal advice and medical diagnosis were in fact significantly related to each other in terms of their evaluative processes, but were significantly unrelated to car service and TV repair.

The former two were furthermore related to life insurance, nursery school care and banking, all products associated with axes 2, 3 and 4 in turn; this cluster is in fact group 4 of the chi squared tree. Car service and TV repair were related to house moving, itself associated best with axis 4-.

The significance of the above was that it became imperative to interpret product clustering not in terms of their axes of highest association, but rather in terms of the chi squared tree clusters, which considered all four dimensions (eight axes poles) simultaneously.

Table 6.4 represents a summary of the product groupings as derived from the chi squared tree analysis, together with the

primary axis of association for each product within a product cluster, and the name of that axis.

This table shows clearly the multi - dimensionality of the cluster envelope for product groups 4, 5 and 7, although the remaining groups are also multi dimensional, but not to the same degree. Hence now meaningful correlation between product groupings and axes (attribute groupings) had been achieved; from this, significant interpretation was possible.

Figure 6.2 immediately following the table shows the plot of the products in their product groupings in the first and second dimensions only. Those products associating mainly with axes 3 or 4 are strictly not represented in this plane, and should be imagined to lie either behind (positive side of axes 3 or 4), or in front (negative side), to correspond with the axis interpretation shown earlier in figure 6.1. Such products are marked by small shaded symbols and large shaded symbols, respectively, as an aid to visualizing the plot.

6.2.1.8 Attribute Clustering

In similar fashion, the chi squared tree technique was also used to aid the interpretation of axes derived from correspondence analysis. Table 6.5 shows the associated attributes according to the chi squared tree method, together with their primary axes of association (from correspondence analysis), and subsequent axes where they are represented in more than one dimension.

GROUP	PRODUCTS	1st AXIS OF ASSOCIATION	AXIS NAME
1	Used Car	2+	INVOLVEMENT
2	Furniture	1+	HEDONISTICS
	Clothing	1+	"
	New Car	1+	"
	Suitcase	1+	"
3	Fruit Juice	2-	CONVENIENCE
	Photo Developing	2-	"
	Dry Cleaning	2-	"
	Toothpaste	2-	"
4	Legal Advice	1-	SPECIFICATION RISK
	Medical Diagnosis	1-	"
	Life Insurance	2+	INVOLVEMENT
	Nursery School Care	3-	ASSURANCE
	Banking	4+	LOYALTY
5	TV	1+	HEDONISTICS
	Car Tyres	3+	CONVENTIONAL RISK AMELIORATION
6	Restaurant Meal	3-	ASSURANCE
	Haircut	3-	"
7	Car Service	1-	SPECIFICATION RISK
	TV Repair	1-	"
	House Moving	4-	DIY

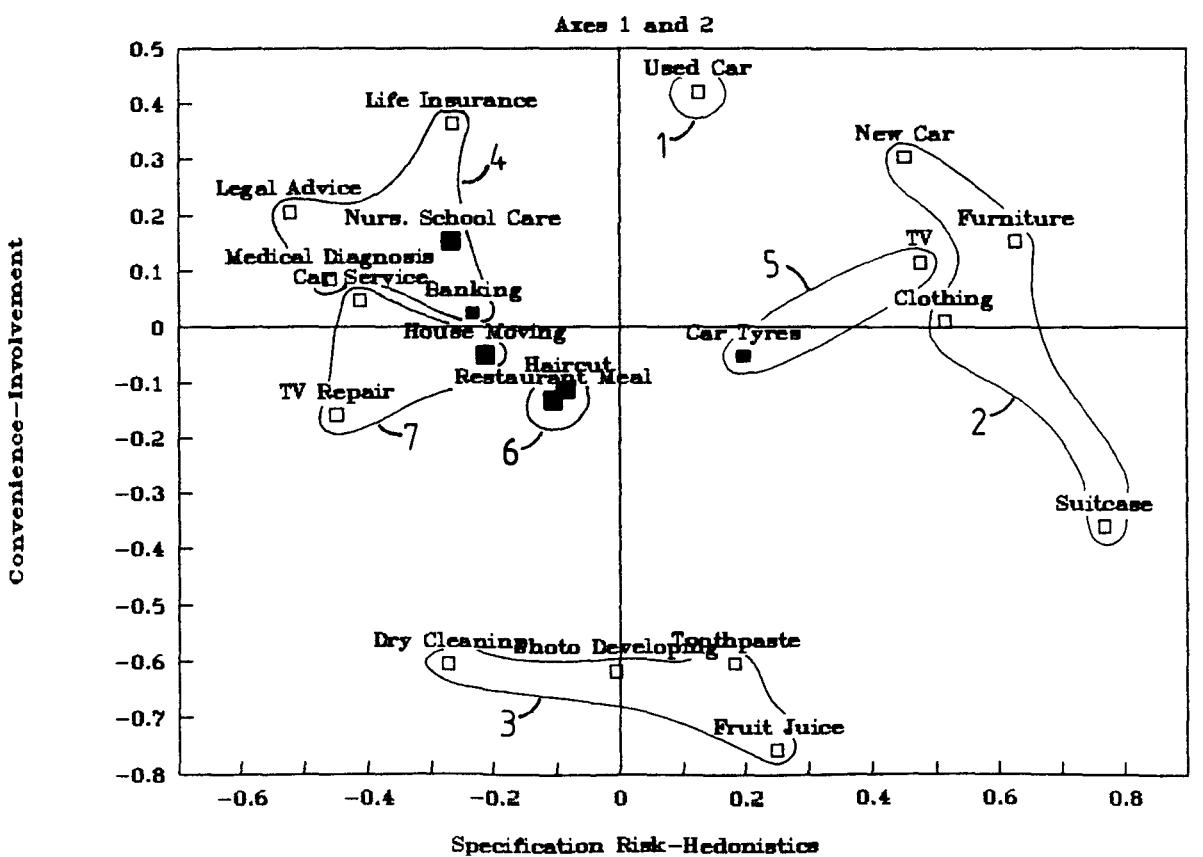


Table 6.5: Summary of Attribute Groupings - White Subsample

GROUP	ATTRIBUTES	1st AXIS	NAME	OTHER AXES
A	Price->Quality	1+	HEDONISTICS	
	Physical Features	1+	"	
	Image	1+	"	
	Reflect Social Class	1+	"	
B	More After Than Before	2-	CONVENIENCE	
	Convenience	2-	"	
C	Risk	3+	CONVENTIONAL RISK	4-
	Great Lengths	3+	AMELIORATION	2+
	Continue After	2+	INVOLVEMENT	
D	First Impression	NR*		
	Premises->Quality	3-	ASSURANCE	
	Other Consumers->Quality	3-	"	
	Staff->Quality	3-	"	
E	Brand Name->Quality	4+	LOYALTY	3+ 1+
	Confident in Judging	4+	"	
	Upper Price Limit	4-	DIY	
	Store Name->Quality	NR		
	Choice vs. Use	NR		
F	DIY	4-	DIY	
G	Not Complaining	1-	SPECIFICATION RISK	
	Inability to Specify	NR		
	Personal Attention	2+	INVOLVEMENT	
	Advice	NR		
	Little Choice When/where	3+	CONVENTIONAL RISK AMELIORATION	
	Choice of Alternatives	NR		
	Not to Change	4+	LOYALTY	
	Something/one New	NR		

*NR: Attribute not represented in correspondence analysis.

From these results, it can be seen that most of the attribute groupings displayed strong resemblance to those comprising the axis interpretations, as shown earlier in figure 6.1.

Groups A, B, D and F closely resembled their correspondence analysis counterparts of Hedonistics, Convenience, Assurance and

DIY, respectively. Group E tended to indicate opposite poles to axis 4, Loyalty and DIY. Group C was more ambivalent since it displayed characteristics of both the Risk and Involvement axes. Since risk can be ameliorated to a large extent by increased effort in the pre-purchase phase of the evaluation process, it is logical to expect the clustering to combine these two attributes. This association was also well reflected in the correspondence analysis, since both Risk and Involvement dimensions describe this similar consumer behaviour environment.

Only Group G was comprised of attributes not associating with predominantly one axis. Since these related attributes associated with four axes, it was concluded that these axes are themselves non-independent. Thus the implication was that these four associated axes were all describing very similar evaluative processes and strategies in the mind of the white consumer.

The common linkage appeared to be that of the need to avoid an incorrect purchase decision. Consumers appear to get involved and invest effort in the evaluation process to lower both the conventional risks associated with the purchase, by being more aware of them, and the specification risks, through increased knowledge of their needs. This involvement, following a successful transaction, is expected to lead to loyalty.

Overall, it was concluded that the interpretation of the axes was substantiated by both the correspondence analysis and chi squared tree techniques. The latter technique has also enabled additional insight to be won; for the white consumer, certain attributes of four of the eight axes in the solution were significantly associated (Group G). This meant that these four axes were not independent of each other, but rather comprised very similar evaluative dimensions in the overall white evaluative framework.

6.2.2 Black Consumer Subsample

6.2.2.1 Product - Attribute Dependency

The correspondence report appears in Appendix 6.

From a square root trace of 0,600, there was strong correlation or dependence between the products and attributes used.

6.2.2.2 Dimensionality

The dimensionality of the solution was determined by an examination of the percentage trace attributed to each axis. This indicated the need for a five-dimensional solution, but again, since the understanding of four dimensions is complex in itself, a four-dimensional solution was opted for as best satisfying all criteria.

Further justification for a four-dimensional solution came from an analysis of the degree of representation of attributes in the fourth dimension. A similar calculation was performed on the products, and the products and attributes requiring the fourth dimension for their strongest representation are listed in Table 6.6 below.

As before, certain attributes and products which were poorly represented in three-dimensional space were also poorly represented in the fourth dimension. The attributes "confident in judging", "convenience", "store name -> quality", "inability to specify" and perhaps "choice of alternatives" clearly did not represent themselves any better in the fourth dimension than in any of the first three, and were considered marginal to the analysis of this solution. The products banking, haircut, and perhaps fruit juice behaved similarly, and were thus similarly excluded from further analysis.

Table 6.6: 4th Dimension Attribute Representation - Black Subsample

ITEM	E (SQUARED CORRELATION OVER 1st 3 DIMENSIONS)	SQUARED CORRELATION IN 4th DIMENSION
Attributes:		
Confidence in judging	0.177	0.069
Something / someone new	0.388	0.261
Convenience	0.226	0.016
Little choice when where	0.174	0.295
Store name-> quality	0.137	0.002
Choice of alternatives	0.321	0.148
Not to change	0.335	0.315
Inability to specify	0.351	0.000
Products:		
Fruit juice	0.370	0.118
Car tyres	0.376	0.285
Toothpaste	0.283	0.579
House moving	0.094	0.216
Banking	0.332	0.006
Haircut	0.147	0.002

With the inclusion of four dimensions in the solution, the trade off between accuracy and representability was acceptable, since the retention, as shown by the cumulative percentage trace was high at 69.3%.

Again, as for the white consumer subsample, an examination of the scree plot revealed no obvious change in slope, and the method was rejected.

6.2.2.3 Axis Interpretation

Interpretation of the axes was again confined to the representation of products in attribute space. From consideration of the correspondence report in Appendix 6, it was clear that the attributes "upper limit", "physical features", "risk", "first impressions", "advice", "after", "premises -> quality", "staff -> quality", "other consumers -> quality", "personalized attention", "reflect social class" and "DIY" were well represented in four-dimensional space, since their respective qualities were high.

In determining the individual contribution made by each attribute to an axis's overall contribution to the overall dependency, all attributes with greater than five percent contribution were included in that axes's interpretation. The following represents the interpretation of axis 1;

AXIS 1:

-ve	0	+ve
<----------	|	---------->
STAFF->QUALITY		**REFLECT SOCIAL**
Diy		**CLASS**
First Impressions		**PHYSICAL FEATURES**
		PRICE->QUALITY
		BRAND->QUALITY
		Image

As before, the attributes are listed in decreasing importance of their percentage contribution. The attributes displayed in bold represent those with the strongest squared correlation with the axis. The other axes are interpreted in similar fashion;

AXIS 2:

-ve	0	+ve
UPPER LIMIT		PERSONAL
Diy		ATTENTION
More After Than Before		First Impressions
		Staff->Quality

AXIS 3:

-ve	0	+ve
RISK		
AFTER		
Advice of Someone I Know		

AXIS 4:

-ve	0	+ve
NOT TO CHANGE		Diy
Something / Someone New		Risk
Little Choice When Where		
Brand->Quality		

Axis 1+:

For similar reasoning as presented in the naming of axis 1+ for the white consumers, this axis was similarly called **HEDONISTICS.**

Axis 1-:

This axis was characterised by the attributes "staff as a cue to quality", "doing the job yourself", "first impressions", and "premises as a cue to quality". Although DIY featured in this axis, its contribution here was small, especially when compared with that made in axis 2- (15.9%), and 4+ (19.6%) respectively. The remaining attributes hinted that the black consumer relies heavily on visual surrogates such as the appearance of the staff, the premises appearance, and on the general first impression made on establishing first contact with the firm. All associated services involved an element of professional know how, probably invoking a form of reverence for the service provider in the mind of the consumer.

As a consequence, the axis has been named **ASSURANCE (Perceived Quality).**

Axis 2+:

All the products associated with this axis were services (legal advice, life insurance and banking), and the axis itself was characterized by attributes implying that the consumer makes an assessment of the likely service quality based on the nature of their initial reception into the establishment. Furthermore, the consumer evaluates the service offering by analyzing the level of personalized attention given them. Since the associated services are of sufficient perceived importance to the business affairs of the black consumer, who requires a high degree of displayed care by the service provider, logically they would associate with this axis, which has been named **RECEPTION**

(Staff Reaction).

Axis 2-:

On the other end of the spectrum from RECEPTION, that is, the reaction from the service staff to the consumer, the customer also has an important reaction to the purchase. Strongly characterising this axis were the attributes "upper price limit", and "doing the job yourself." Since the services associated with this axis were photo developing, fruit juice and haircut, the implication was that if the price seems too high, the customer's reaction would be to opt for doing the job themselves. In the case of photo developing, whilst it is not envisaged that the consumer has the facilities to process photographs, they probably know of an acquaintance who could help.

The level of customer **COMMITMENT** to the offering as opposed to the option of not purchasing or doing the job themselves is a function of the above attributes.

Axis 3+:

No attributes were significantly associated with this axis; the name **LACK OF RISK** was purely derived as the antonym for risk, the nature of axis 3-. Restaurant meal was only very weakly associated with this axis.

Axis 3-:

The associated products used car and TV repair both feature aspects of high cost to the consumer, and of the risk of fraudulent exposure to less reputable sellers. Consequently, the attributes "risk", "continuing evaluation after the sale", and "advice of someone I know" all highlight the danger contained in an incorrect purchase decision, and all reflect some form of effort on the part of the consumer in attempting to reduce this financial risk.

The axis has been named **CONVENTIONAL RISK AMELIORATION.**

Axis 4+:

For essentially similar reasons as given in the interpretation of axis 4- in the white consumer analysis, house moving was clearly perceived as being physically risky (to the possessions of the consumer), and always invokes the option of doing the job themselves. Hence the axis was named **DIY.**

Axis 4-:

The only product which associated with this axis was toothpaste. The attributes of the axis suggested strong brand loyalty, and a resistance to be innovative with new products. Toothpaste is also seen as a necessity for personal hygiene, and consequently the consumer has little scope for delaying the purchase. Brand is also used as a cue to the likely quality.

The axis was consequently named **LOYALTY (Experienced Quality).**

Table 6.7 below summarizes the naming given to the axes.

Figure 6.3 illustrates the axes of the four dimensional solution as interpreted.

Table 6.7: Summary of Axis Characteristics - Black Subsample

AXIS	NAME	QUESTION & ATTRIBUTE	% CONTRIBUTION
1+	**HEDONISTICS**		
		19: Reflect Social Class	10.7
		3: Physical Features	10.3
		1: Price->Quality	10.1
		11: Brand->Quality	8.8
		18: Image	5.4
1-	**ASSURANCE (Perceived Quality)**		
		14: Staff->Quality	9.8
		21: DIY	6.5
		7: First Impressions	5.1
		13: Premises->Quality	5.0
2+	**RECEPTION (Staff Reaction)**		
		17: Personalized Attention	12.0
		7: First Impressions	10.4
		14: Staff->Quality	6.7
2-	**COMMITMENT (Customer Reaction)**		
		2: Upper Limit	22.0
		21: DIY	15.9
		4: More After Than Before	6.9
3+	**LACK OF RISK**		
3-	**CONVENTIONAL RISK AMELIORATION**		
		5: Risk	45.5
		9: After	13.8
		8: Advice of Someone I Know	7.1
4+	**DIY**		
		21: DIY	19.6
		5: Risk	8.0
4-	**LOYALTY (Experienced Quality)**		
		24: Not to Change	16.7
		10: Something / Someone New	6.9
		20: Little Choice When Where	6.8
		11: Brand->Quality	6.5

6.2.2.4 Product - Axis Correlation

As before, table 6.8 summarizes each product's axis of best representation, numerically through the axes in terms of descending squared correlation for each axis, with its representation in the remaining axes listed in decreasing order of importance.

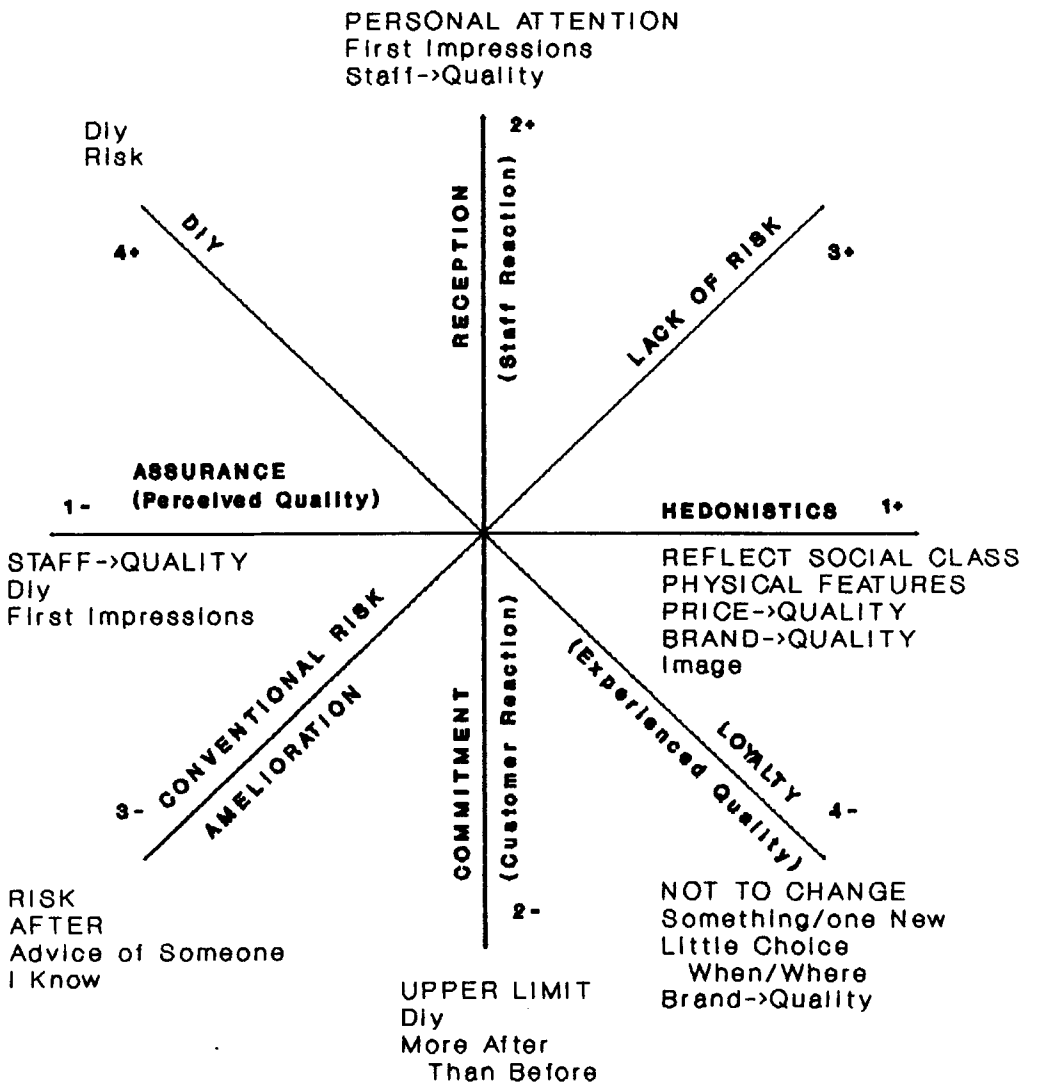


Figure 6.3: Axis Interpretation - Black Subsample

6.2.2.5 Stability of the Solution

The correspondence report for the black consumer subsample also indicated instability of the 2 - 3 plane, and axes 2 and 3 within that plane. This form of instability was assessed by

Table 6.8: Product / Axis Association - Black Subsample (values below 0.2 have been ignored)

PRODUCT	PRIMARY AXIS	SQ COR	SECONDARY AXIS	SQ COR	TERTIARY AXIS	SQ COR
	HEDONISTICS					
NC	1+	0.769	4+		2+	
TV	1+	0.738	4-		3+	
Furn	1+	0.608	3+		2+	
CL	1+	0.490	3+		2-	
SC	1+	0.407	2-		3+	
CT	1+	0.326	4-	0.285	3-	
	ASSURANCE (Perceived Quality)					
MD	1-	0.433	2+	0.391	4-	
CS	1-	0.414	2+		3-	
DC	1-	0.393	2-	0.365		
NSC	1-	0.238	2+		3+	
	RECEPTION (Staff Reaction)					
LA	2+	0.437	1-	0.220	3-	
LI	2+	0.288	3-		4-	
B	2+	0.143	3+		1-	
	COMMITMENT (Customer Reaction)					
PD	2-	0.405	1-		3+	
FJ	2-	0.227	4-		1-	
HC	2-	0.178	4+		1-	
	LACK OF RISK					
RM	3+	0.289	1-	0.280	4+	
	CONVENTIONAL RISK AMELIORATION					
UC	3-	0.776	4+		1+	
TVR	3-	0.270	1-	0.215	2-	0.209
	DIY					
HM	4+	0.216	2-		3-	
	LOYALTY (Experienced Quality)					
TP	4-	0.579	2-	0.250	1-	

examination of the eigen values of the planes, and the change in percentage trace between axes 2 and 3. The pair of eigen values had an extremely small difference, as had the percentage trace for the axes pair. Thus the orientation of the plane was considered unstable, as was that of the two axes within this plane. Hence any subsequent interpretation of the 2 - 3 plane and the 2 and 3 axes must be undertaken with caution and in the light of this restriction.

6.2.2.6 Outlier Analysis

No outlier treatment was indicated for the attributes in the black subsample.

6.2.2.7 Product Clustering

As shown in Appendix 5, grouping was as follows;

Group 1:

Used Car

Group 2:

New Car
Furniture
Car Tyres
TV
Suitcase
Clothing

Group 3:

Restaurant Meal
House Moving
Haircut
Toothpaste
Fruit Juice
Photo Developing
TV Repair
Dry Cleaning

Group 4:

Life Insurance
Legal Advice
Banking
Nursery School Care
Medical Diagnosis
Car Service

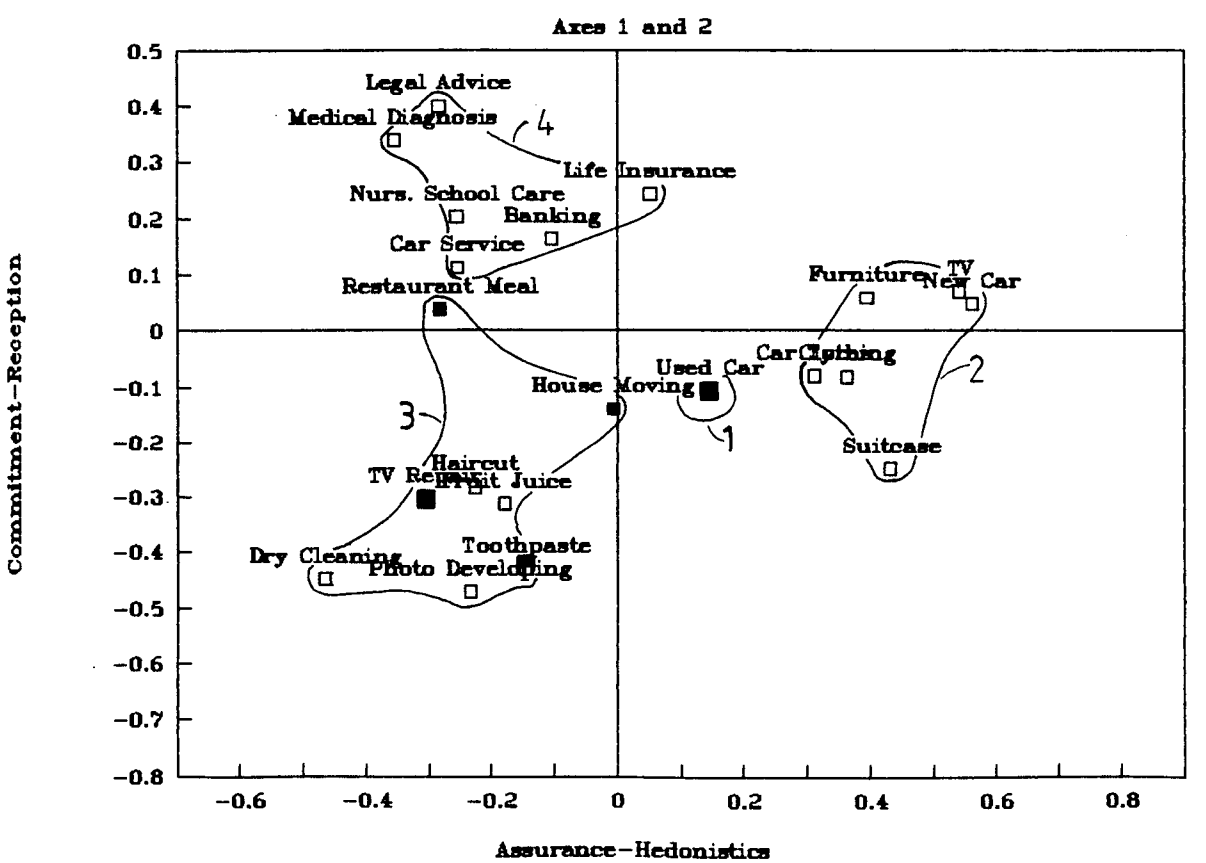
The above clustering indicates which products were associated in terms of their evaluation by the black consumer subsample. Again, what the actual methods and cues were could only be determined by axes interpretation and correlation through correspondence analysis.

As before, inspection of the above listing revealed that clusters so derived from the chi squared tree technique were not always identical to groupings derived from product-axes association data supplied by the correspondence analysis (table 6.8).

Table 6.9 represents a summary of the product groupings as derived from the chi squared tree analysis, together with the axes of association for each product within a product cluster, and the name of the axis;

Figure 6.4 immediately following the table shows the plot of the products in their product groupings in the first and second dimensions only. As for the white consumers, shown in figure 6.2, those products associating mainly with axes 3 or 4 should be imagined to lie either <u>behind</u> (positive side of axes 3 or 4), or <u>in front</u> (negative side), to correspond with the axis interpretation shown earlier in figure 6.3. Such products are marked by small shaded symbols and large shaded symbols, respectively, as an aid to visualizing the plot.

GROUP	PRODUCTS	PRIMARY AXIS OF ASSOCIATION	AXIS NAME
1	Used Car	3-	CONVENTIONAL RISK AMELIORATION
2	New Car	1+	HEDONISTICS
	TV	1+	"
	Furniture	1+	"
	Clothing	1+	"
	Suitcase	1+	"
	Car Tyres	1+	"
3	Dry Cleaning	1-	ASSURANCE
	Photo Developing	2-	COMMITMENT
	Fruit Juice	2-	"
	Haircut	2-	"
	Restaurant Meal	3+	LACK OF RISK
	TV Repair	3-	CONVENTIONAL RISK AMELIORATION
	House Moving	4+	DIY
	Toothpaste	4-	LOYALTY
4	Medical Diagnosis	1-	ASSURANCE
	Car Service	1-	"
	Nursery School Care	1-	"
	Legal Advice	2+	RECEPTION
	Life Insurance	2+	"
	Banking	2+	"



6.2.2.8 Attribute Clustering

Table 6.10 below shows the results of the attribute clustering from the chi squared tree method for the black subsample.

Table 6.10: Summary of Attribute Groupings - Black Subsample

GROUP	ATTRIBUTES	1st AXIS	NAME	OTHER AXES
A	Price->Quality	1+	HEDONISTICS	
	Physical Features	1+	"	
	Image	1+	"	
	Reflect Social Class	1+	"	
	Brand->Quality	1+	"	4-
	Great Lengths	NR*		
	Inability to Specify	NR		
	Confident in Judging	NR		
	Choice vs. Use	NR		
	Store Name->Quality	NR		
B	More After Than Before	2-	COMMITMENT	
	Upper Price Limit	2-	"	
	DIY	4+	DIY	1- 2-
	Choice of Alternatives	NR		
C	Risk	3-	CONVENTIONAL RISK AMELIORATION	4+
	Continue After	3-	"	
D	Staff->Quality	1-	ASSURANCE	2+
	First Impressions	2+	RECEPTION	1-
	Personalized Attention	2+	"	
	Advice	3-	CONVENTIONAL RISK AMELIORATION	
	Something/one New	4-	LOYALTY	
	Not to Change	4-	"	
	Little Choice When/where	4-	"	
	Premises->Quality	NR		
	Other Consumers->Quality	NR		
	Not Complaining	NR		
	Convenience	NR		

*NR: Attribute not represented in correspondence analysis.

It was apparent that Groups A and C most closely resembled the axes containing their attributes, that of Hedonistics and Risk, respectively.

Group B was comprised of attributes from the Commitment and DIY axes, respectively. Since these attributes have been shown to be significantly associated by the chi squared tree technique, these axes must also be associated. This appears to be logical, since price limits and post-purchase evaluation of the associated products (photo developing, fruit juice and haircut, and house moving respectively), would normally determine the consumers' drive to either go without the product, or do the job themselves.

Group D was made up of associated attributes from four different axes. These axes by implication represented very similar evaluative dimensions in the mind of the black consumer, namely Assurance, Reception, Conventional Risk, and Loyalty.

In a manner deemed very similar to the white consumer, the black consumer places emphasis on the collection and interpretation of information relating to an intended purchase. Unlike the white consumer, this information is not self-generated, but is comprised of the stimuli received from the outlet and its staff, most often upon first encounter. Such collation of information is believed to be an attempt to ameliorate the perceived conventional risk associated with the purchase. The development of loyalty is expected to follow a successful transaction.

For the black consumer segment, interpretation of the axes was therefore substantiated by both correspondence and chi squared techniques. Furthermore, the latter technique has enabled <u>additional</u> insight into the interpretation to be gathered, namely, that four of the eight axes in the solution were significantly similar (Group D), in the black consumers' framework of evaluation.

7.0 DISCUSSION OF RESULTS

This chapter analyses the implication of the results of the research under five main sections. The first deals with a discussion of the findings of the hypothesis testing of goods and services for both segments. Secondly, a comparison of the findings between the two segments is presented. Thirdly, the product grouping from the chi squared tree analysis is discussed in more detail, with particular emphasis on the distinguishing characteristics of the seven white and four black clusters, and plausible reasoning for their association with evaluative dimensions. Fourthly, segmental comparisons of the spatial arrangements of the product cluster interpretations is conducted.

Lastly, some comparisons with the prior research of Ewels (1989), in particular are made, regarding the evaluation of goods and services, and how the interpretations of the key evaluative distinguishers have compared.

7.1 Comparison of Goods and Services: Hypothesis Testing

A full discussion of the construction of the new hypotheses (12 through 23) has been covered in chapter 4. An overview of the hypotheses which proved unacceptable with suggested reasons will now be presented; these results are graphically displayed in Appendices 7 and 8 for white and black consumers respectively.

The remaining hypotheses were assumed acceptable as the testing has shown, as was the rationale for their construction; no further discussion of these acceptable hypotheses will be presented.

7.1.1 White Consumer Subsample

Appendix 7 refers. Where reference is made here to a question number, the reader is referred to the graphical representation of the frequency of attribute occurrence as contained in the Appendix.

7.1.1.1 Information Search

> Hypothesis 2: "Consumers engage in greater post-purchase evaluation and information seeking with services than with (goods)" (Zeithaml, 1981, p187).

Hypothesis testing dictated outright rejection of this hypothesis, that is, there was no difference along this dimension for goods and services. Question 9 displayed graphically shows that used car and new car were the two goods having the highest frequency of occurrence, but there was no clear trend for goods or services in general.

7.1.1.2 Quality Criteria

> Hypothesis 4: "Consumers use price and (appearance of) physical facilities as the major cues to service quality" (Zeithaml, 1981, p187).

As stated in chapter 6, although there was a significant difference in evaluation method between goods and services along the price dimension, question 1 shows that more goods occur higher in the frequency profile, namely new car, furniture and clothing, followed by car tyres, then fruit juice, suitcase and TV. Clearly, the price cue was used across a broad spectrum of goods categories.

7.1.1.3 Consumer Involvement in the Decision Process

> Hypothesis 15: "The extent to which a consumer becomes involved in the decision process is greater with services than with goods."

Question 12 shows the reversal of the anticipated outcome for this hypothesis, with high value and high risk goods new car used car and furniture ranking most frequently applicable. It would seem that the influence over a consumer's decision to become involved in the decision process is more controlled by financial risk than by the intangible nature of services.

7.1.1.4 Convenience

> Hypothesis 16: "Convenience-based shopping is more prevalent with goods than with services."

Strangely, although the hypothesis testing has shown that white consumers recognize the higher associated risks with the selection, purchase and consumption of services, they are prone to opt for the most convenient service when making a decision. This suggests that they are not prepared to invest additional effort in the information search and pre-purchase evaluation stage of the purchase. Significantly, it is also the services characterized by low personal risk which rank among the highest on the profile, (banking, photo development and haircut as shown by question 16), which suggests "convenience" to have been an important discriminating dimension.

7.1.1.5 Image / Indicators of Social Class

> Hypothesis 19: "Black consumers are more conscious of the need for a particular purchase of a good to match the image and to indicate their social class they would wish their peers ascribed them to."

During the course of the interviewing, it became apparent that black consumers in particular were more conscious of their choice of goods reflecting the "right" social class to which they would wish to be categorized by their friends and peers. However, as shown by the hypothesis testing, it was neither consumer segment who choose goods according to this criterion more than the other. Question 19 illustrates the closeness in terms of the goods selected as the most important indicators of social class (new car, clothing, furniture, used car for the whites, and TV for the blacks).

7.1.1.6 Post-choice Evaluation

> Hypothesis 22: "Owing to the temporal separation between choice and use of some services, post-choice evaluation of

such services is a more important factor than is post-use evaluation."

Some services, for example life insurance and appliance repair warranties, are merely a promise to deliver if and when some specific event occurs in the future, and consequently the consumer has no opportunity to immediately evaluate the delivery of the offering. However, as shown by question 25
these services ranked near the bottom of the frequency profile, suggesting that the intended interpretation of the question was different to that actually used.

Certainly, the high ranking of the goods new car, furniture, clothing and used car seems to suggest this, considering that all these goods involve an element of social class reflection for the consumer.

7.1.2 Black Consumer Subsample

Appendix 8 refers.

7.1.2.1 Information Search

> Hypothesis 2: "Consumers engage in greater post-purchase evaluation and information seeking with services than with (goods)" (Zeithaml, 1981, p187).

Whilst there was a significant difference between goods and services evaluation in this dimension, the hypothesis is true only in the reverse. Question 9 shows clearly that the goods used car, furniture, new car, clothing and TV ranked among the highest on the frequency profile. These are all high cost items, and it is likely that the black consumer feels the need to continue to evaluate such purchases to assure themselves that they were justified in their decision.

> Hypothesis 3: "Consumers engage in more post-purchase evaluation than pre-purchase evaluation when selecting and consuming services." (Zeithaml, 1981, p187).

This hypothesis is unfounded, since inspection of question 4 shows the mix of both goods and services throughout the spectrum. Restaurant meal and TV repair ranked the most frequently selected services, since they both share a high degree of experience qualities.

7.1.2.2 Quality Criteria

> Hypothesis 4: "Consumers use price ... as the major cues to service quality" (Zeithaml, 1981, p187).

As for the white consumers, whilst there was a significant difference between goods and services, the goods new car, TV, furniture, and clothing dominated the frequency profile in question 1. Clearly, the black consumer is aware of the high cost of such goods to themselves, and is familiar and comfortable with the use of the price / quality principle. The reason for the low frequency of the services may be due to the perceived equality of most service offerings, or a high incidence of fraudulence amongst the service providers encountered by the black consumer in the past.

7.1.2.3 Evoked Set of Alternatives

> Hypothesis 5: "The consumer's evoked set of alternatives is smaller with services than with (goods)" (Zeithaml, 1981, p188).

Question 23 shows the spread of both goods and services across the frequency profile, confirming the applicability of the smallness of the evoked alternative set to both goods and services.

7.1.2.4 Innovation Adoption

> Hypothesis 7: "Consumers adopt innovation in services more slowly than they adopt innovations in (goods)" (Zeithaml, 1981, p188).

Although not significant at the 95 % confidence level, the profile in question 10 indicated a reversal, with the services life insurance, TV repair and legal advice being most frequent. It may be of importance that these services all have high levels of credence qualities, and as such innovation is not encouraged since the choice of these services is strongly influenced by relationship and track record.

7.1.2.5 Perceived Risk

> Hypothesis 8: "Consumers perceive greater risks when buying services than when buying (goods)" (Zeithaml, 1981, p188).

Clearly, as demonstrated in question 5, the black consumer is either insensitive to the risks associated with the selection of services, or they genuinely perceive certain goods purchases (used car strongly dominated the profile, perhaps to the detriment of the other products), to be extremely more risky than services from past experience. The products at this end of the profile are also characterized by high cost to the consumer.

7.1.2.6 Confidence in Brand Judging

> Hypothesis 12: "Consumers of services are less confident in regard to brand judging than are consumers of goods."

Howard and Sheth (1969) state that confidence in the selection of brands is controlled by factors such as brand comprehension, or knowledge about the brand, the consumer's attitude toward the brand, their purchase intention, and the level of satisfaction achieved with use of the brand.

Since black consumers did not feel significantly more or less confident about brand judging with goods or services, they are evidently confident about the services they use, and not as overly-confident about the goods they purchase as originally postulated.

7.1.2.7 Convenience

Hypothesis 16: "Convenience-based shopping is more prevalent with goods than with services."

Neither goods nor services were purchased by convenience more than the other. Dry cleaning and banking were the most frequently selected services, probably since they are needed the most frequently, and involve visiting the outlet twice in the case of dry cleaning, and delays in the case of banking transactions. Both these reasons could be significant for these two products' positioning in the profile shown by question 16

7.1.2.8 The Aspect of Choice / Control Over the Purchase Decision

Hypothesis 20: "The need to purchase a service is more frequently out of the control of the consumer for services than for goods."

The black consumer is evidently able to delay the purchase of both goods and services in general. Question 20 however does indicate the expected trend that urgent and vital services cannot be postponed (such as medical diagnosis, nursery school care, and dry cleaning), which dominated the upper end of the frequency profile.

7.1.2.9 Well Known Store / Outlet As a Cue to Quality

Hypothesis 21: "A well know store is a greater cue to quality for goods than for services."

Clothing stores, restaurants and furniture/TV outlets dominated this profile, indicating that branded products are held by the more well known stores, although the occurrence of goods is dispersed throughout the range of products.

7.1.2.10 Post-choice Evaluation

> Hypothesis 22: "Owing to the temporal separation between choice and use of some services, post-choice evaluation of such services is a more important factor than is post-use evaluation."

As in the case of white consumers, it appears that the interpretation of this question was different to that intended. Although there was no significant difference between goods and services, furniture and TV have been chosen the most often, probably satisfying image and social class indicator needs rather than providing satisfactory preparation for future events. Interestingly, and absent from the white consumers, life assurance ranked third in the profile (see question 25), indicating that the black consumer in fact understood the intended meaning of the question more than the white consumer.

7.1.2.11 Use of Cut Off Points

> Hypothesis 23: "The use of monetary cut offs is more prevalent in the evaluation of goods than in services."

No significant basis for this hypothesis exists for the black consumer. Question 2 shows restaurant meal and TV repair as being the most likely candidates for price ceilings imposed by consumers, probably due to a perceived ability to do without the service (perhaps only temporarily), and to divert funding to other, more pressing purchases. The most commonly selected goods are new car, fruit juice and used car; it is conceivable that the black consumer views these as luxury items, and the same opportunity cost evaluation characterizes the decision making process more than the mere generic difference between good and service.

7.2 Comparison of White and Black Consumers

Hypothesis testing revealed some interesting phenomena. Apart from the reversal of the applicability of the price cue to

quality (which is likewise true for black consumers), white consumers went to much greater lengths to become involved in the decision process for the consumption of goods and not for services as the hypothesis states. However, this would appear to be in contradiction to the sentiment that white consumers perceived greater risk when purchasing services than goods. The more expected relationship should reflect that because services are seen as riskier to purchase. The consumer would get more involved in the search for information and comparison of alternatives when faced with the impending purchase, than they would for the purchase of goods, which were perceived as less risky, probably due to their being guaranteed, standardized, more competitive and subject to more stringent controls.

This higher involvement in the decision process was also more pronounced for goods purchases in the black consumer subsample, but since the risk aspect was not conclusive, similar inverse relationships could not be drawn here.

Another interesting anomaly in the black subsample was the insignificant difference between goods and services when considering convenience. While the anomalous response to the importance of convenience in the white subsample tended to imply that white consumers were far less discerning when opting for services purchases than the hypothesis argues, the black consumer is probably faced with <u>equal inconvenience</u> when considering the purchase of goods and services due to transport constraints placed on them.

This probably arises since many black consumers are dependant almost exclusively upon some form of mass transport system with its attendant schedule and route constraints, and for them, it is inconsequential whether services or goods are being purchased, both are as inconvenient to acquire as each other.

7.2.1 Specific Areas of Dependence

Whilst the above general phenomena are interesting, it was important to consider which products were responsible for

creating dependencies within a particular attribute, causing the creation of the general condition of a significant difference in the goodness of fit testing.

Appendix 9 contains the summarized data according to attribute; chi squared contingency analysis was conducted on the combined data, according to the breakdown variables race, age, and personal income. No significant dependencies existed according to the age or income variables.

Only the hypotheses where significant differences existed at the 95 % (or greater) level of confidence between black and white consumers will be discussed.

> Hypothesis 4: (portion pertaining to price only) "Consumers use price ...as (a) major cue to service quality" (Zeithaml, 1981, p187).

The chi squared statistic indicated that there was a significant difference between white and black consumers; on inspection of table 9-1 in this appendix, it was clear that the purchase of a TV and a life insurance policy by black consumers was moderated by strong (99 % level) price/quality considerations not seen amongst the white subsample.

> Hypothesis 16: "Convenience-based shopping is more prevalent with goods than with services."

Table 9-2 shows that significant differences existed along the convenience dimension between white and black consumers. In particular, blacks were more prone to rate both new and used car purchase in convenience terms than whites, but less prone to do so for the purchase of fruit juice and toothpaste (99 % level).

For services, white consumers held convenience to be an important consideration for photo developing, but were less likely to purchase life insurance based on convenience aspects. This lends weight to the argument that white consumers were more discerning when choosing between insurers, probably being more aware of the

options available, or the pitfalls of a poor service offering, than were blacks.

> Hypothesis 21: "For many non-professional services, the consumer's evoked set frequently includes self-provision of the service."

Table 9-3 shows the rather confusing result that blacks would consider doing the job themselves more than whites would for photo developing. This position of the black consumer is difficult to understand, unless the interpretation of the question was taken to mean engaging the services of a friend or family member. The seeking of a haircut was strongly determined by race (99 % level), with black consumers considering a do it yourself job more frequently than white consumers. The interpretation of this attribute in this context is probably similar to that for photo developing.

7.3 Key Distinguishers: Correspondence Analysis

Chapter 6 had the purpose of derivation of key dimensions along which white and black consumers respectively evaluated goods and services, and of grouping products so closely associated to be considered significantly similar in their manner of evaluation. An attempt will now be made to justify the product groupings for both the white and black segments, so as to move the research's applicability from a strictly defined product set to a more generalized set, to enable broad marketing implications to be drawn in the final chapter.

7.3.1 White Consumer Subsample

Group 1: Fraud Risk

This product cluster had only used car representing it from the experimental set of nine goods and 12 services. That it alone characterized Group 1 products was significant, in that no other products invoked similar consumer behaviour responses, and anticipated evaluation methods. The associated axis was

characterized by INVOLVEMENT (of the consumer in the decision process, the gathering of information both pre and post-purchase, the need for highly personalized attention by the seller, and the overall evaluation of the purchase).

Clearly the white consumer perceives the need to engage in such activity since the intended purchase represents strong risk of an incorrect decision. Since little influence from image related attributes characterized this axis, that risk was assumed to be purely financial and conventional (physical injury to the consumer or their families).

Considering the nature of the intended purchase transaction, the consumer is faced with high capital outlay, probably on expensive financing terms, for a product used (and perhaps abused) by at least one previous owner of the car. What probably frightens the consumer the most is the possibility of inheriting someone else's problems, whether openly disclosed prior to the purchase or knowingly concealed by the seller. Logically, the prospective consumer is expected to engage in an in depth analysis of the product to the limited extent that they are able before committing themselves, as well as a continuing information searching after the sale to determine if their assessment was correct.

There is also a need for the consumer to interact with the seller, to spend time enquiring about the car as opposed to purchasing the vehicle "off the shelf", which would explain the perceived need for personalized attention.

The group's name reflected the risk of a fraudulent transaction attempt by the seller as perceived by the consumer; it is unlikely that other products not tested in the research would be defined as Group 1, with the possible exception of the purchase of a house.

Group 2: Image

The products furniture, clothing, new car and suitcase are all goods, and associated with the axis characterized by HEDONISTIC purchase motives. There is a risk of the purchase conveying the wrong image about the consumer, and such an incorrect decision would affect the ego of the purchaser, and would lead to the consumer feeling undesirably conspicuous amongst their peers and in society in general. With the correct purchase decision, the consumer will be able to feel that their expected and required image is portrayed, and that the correct "social statement" is being made at all times.

Attributes comprising this axis were indicative of this broadcast nature of the statement, involving the branding of products, the higher price of products, and items possessing rather unique physical features, easily inspected and hopefully admired by the peer group.

Group 3: Convenience

By far the most dominant trait of this grouping was the aspect of CONVENIENCE of the purchase. The white consumer segment was known from the results of the hypothesis testing to be concerned with the attendant risk when selecting and purchasing services in general, but to be more concerned with how difficult the acquisition of the service is likely to be for them, than with goods purchases. They are significantly more prone to shop for services with convenience in mind than for goods, which seems highly anomalous.

The products in this group were both goods (fruit juice and toothpaste) and services (photo developing and dry cleaning). Apparently, such purchases are not influenced greatly by perceived risk of any form, with no need to become involved in extensive information search and evaluation. Should no outlet be conveniently available, the consumer will either postpone the purchase until such easy availability arises, or indefinitely, preferring to forego the purchase in favour of not being

inconvenienced in its procurement.

Convenience also forms the opposite pole for the second evaluative dimension to the attribute INVOLVEMENT.

Group 4: Professional / Expert Services

All associated products in this grouping were services characterized by a strong element of professionalism, expertise and training by the service provider. All involved experience and credence qualities, being strongly devoid of search properties.

Multiple axes of association include SPECIFICATION RISK, associated with legal advice and medical diagnosis, INVOLVEMENT, associated with life insurance, ASSURANCE, associated with nursery school care, and LOYALTY, associated with banking. These axes shared in common the attributes "staff as a quality cue", "brand as a quality cue", and "reflect social class."

What these attributes seemed to imply is the need for the consumer to feel happy that both the service provider and themselves are capable of performing their respective parts of the service transaction to standards acceptable to the consumer.

When the service level falls below these standards, or when the consumer has not specified their wants and needs adequately to enable the provider to fulfil the service obligation, the consumer feels a sense of under achievement, that one or both parties could have done better. When the consumer selects the "right" service, they feel satisfied with the choice, since they have no conscience about selecting a "sub-standard" service provider.

The consumer's CONSCIENCE provides the stimulus for this satisfaction or dissatisfaction. Therefore, this product group Professional / Expert Services was understood to be evaluated in an overall environment of CONSCIENCE.

Group 5: Reliability and Performance

The associated products TV and car tyres shared the characteristics of reliability and performance (including longevity), and are amongst the more frequently selected goods in the price as a quality cue frequency profile (Appendix 7, question 1). Their axes of association are HEDONISTICS, (TV), and CONVENTIONAL RISK AMELIORATION, (car tyres). These dimensions shared the "brand cue to quality" attribute.

The environment of evaluation for the above two axes implied white consumers place their TRUST in the purchase of these kinds of goods. They make use of the brand as quality cue attribute in their purchase decisions. Branded products are perceived to be associated with higher levels of performance and reliability, and they can also be trusted to convey something about the consumer's image and understanding of quality to their peers.

Group 6: Comfort / Enjoyment

Both services restaurant meal and haircut were associated with the ASSURANCE dimension. These services, in order to be successfully delivered need to be preempted by invoking feelings of what the consumer really wants, or will suit their wants, and that the offering will satisfy consumer expectations about the outcome. In the selection of a restaurant, the consumer needs to be assured of their impending enjoyment; that the particular establishment has the kind of food that's wanted, together with the required atmosphere and service level.

The hairdresser needs to assure he client that they will feel comfortable with the suggested hairstyle about to be performed.

The indication is that the consumer is lacking the conviction on their own to make the decision, and needs the stimulus of the provider, aimed at their doubts, to sway the balance into action.

Group 7: Grudge

The associated products were all services, namely car service, TV repair and house moving. These services are characterized by needs driven purchase situations facing the consumer on an infrequent basis.

Car service and TV repair associated with the SPECIFICATION RISK axis, implying that consumers perceive that their knowledge of their needs is important to the successful outcome of the service transaction. House moving strongly invoked the DIY option, based on risks, price ceilings and a perceived ability to be able to perform an equal service to the provider.

The purchase of these services is thus characterized by grudge feelings, that the service is necessary but unwelcome in terms of price, and develops in an environment of AWARENESS of the need to understand and describe the problem to the firm, together with the perceived capability of self-provision of the service.

Figure 7.1 shows an approximation of the spatial arrangement of the product groupings, as characterized by the axes distinguishers (or evaluative environments in parentheses, if more than one axis was associated).

7.3.2 Black Consumer Subsample

The black consumer subsample consisted of only four significant product groupings.

Group 1: Fraud Risk

The only product associated with no other group was used car, and thus formed this group in its entirety. The associated axis was CONVENTIONAL RISK AMELIORATION, indicating as with the white consumer the perception of hidden risks associated with the incorrect purchase decision. Axis attributes other than risk included post-purchase evaluation and the seeking of advice from a known personal source, both linked to the evaluation of the

purchase decision and an attempt to lessen the risk respectively.

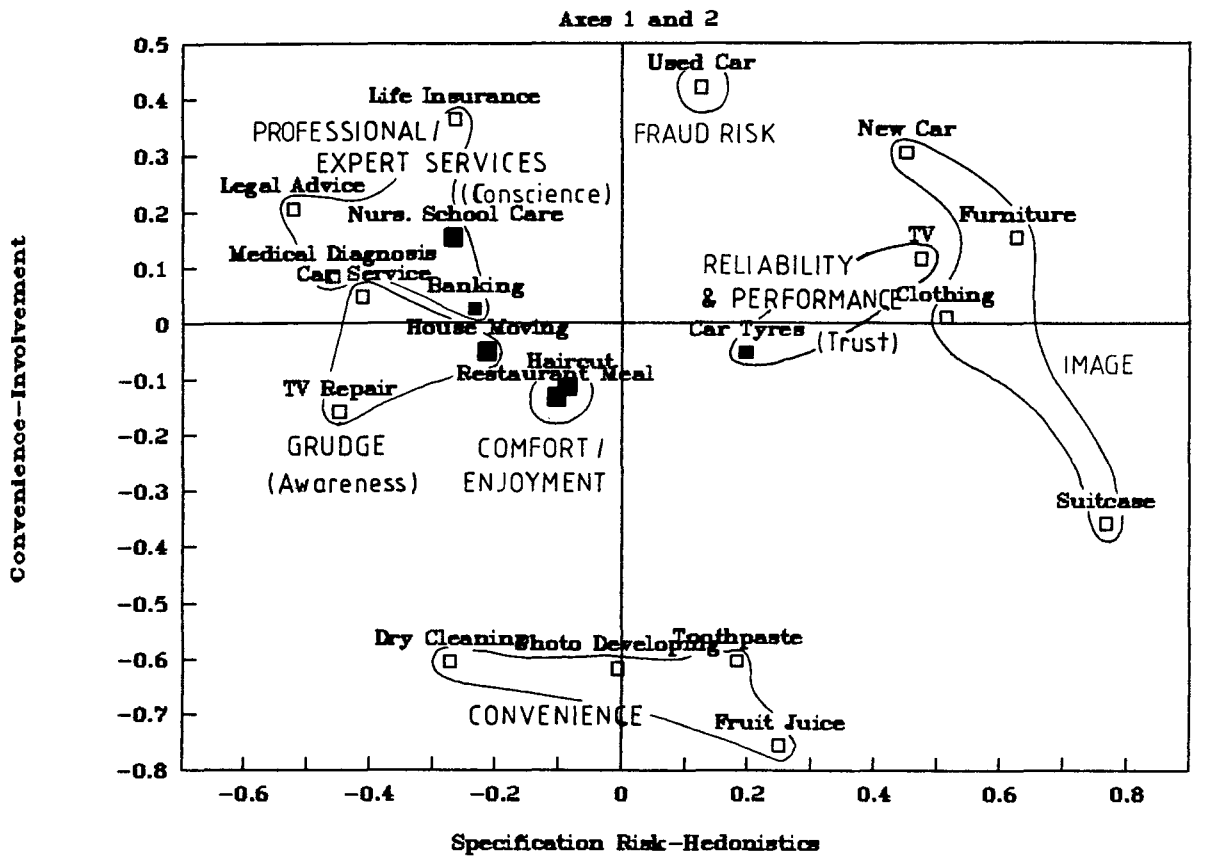


Figure 7.1: Product Groupings and Evaluative Environments - White Subsample

Group 2: Image

Products associated were all goods, namely new car, TV, furniture, clothing, suitcase and car tyres. HEDONISTIC attributes characterise and motivate the purchase decision for the black consumer, who displays a perceived need for the creation of the "right" social statement and image to be portrayed.

Group 3: Experienced Quality

Of the four black product clusters, group 4 was the most multidimensional, with only axes 1+ (HEDONISTICS) and 2+ (RECEPTION) not represented.

An inspection of the associated products revealed that with the exception of perhaps only haircut, the other products (dry cleaning, photo developing, fruit juice, restaurant meal, TV repair, house moving and toothpaste) are clearly not purchased with the objective of satisfying hedonistic motives. In addition, since all except haircut involve little or no customization, and all the services have high levels of experience properties, the manner in which they are presented to the consumer, particularly the consumer's reception into the outlet, plays a minor role in their overall evaluation.

Hence it is their shared need for consumption prior to an evaluation which draws them into a product grouping.

Examination of the attributes contributing to their associated axes revealed the sharing of "Diy", "after sale evaluation", "more after sale evaluation than before", and "risk" attributes. This lent weight to the argument that experienced quality was the important linking quality for these types of products. Only toothpaste was evaluated along the brand loyalty dimension, although it too possesses strong experience properties.

The environment of evaluation was thus characterized by JUSTIFICATION of the purchase, based on experience in using the product, which can lead to brand LOYALTY.

Group 4: Professional / Expert Services

All the services associated in this grouping have strong elements of professionalism, expertise and training involved. The axes of association were ASSURANCE (medical diagnosis, car service, and nursery school care), and RECEPTION (legal advice, life insurance, and banking), the latter services all financial.

The black consumer evidently looks for assurance that their needs will be met in a manner that they expect. Such assurance provisions on behalf of the firm are part of the overall RECEPTION environment created by the supplier, and received by the customer during their first encounter.

Figure 7.2 shows an approximation of the spatial arrangement of the product groupings, as characterized by the axes distinguishers, (or evaluative environments in parentheses, if more than one axis was associated).

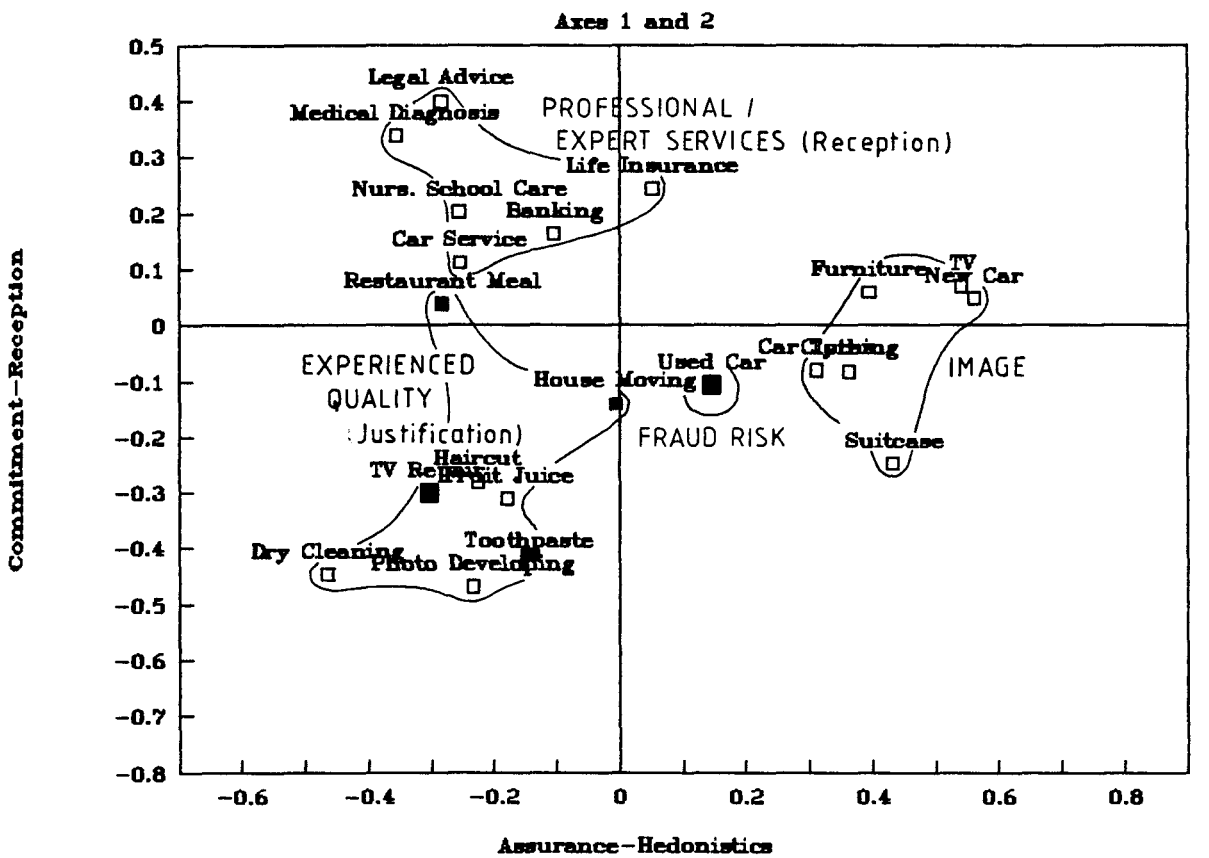


Figure 7.2: Product Groupings and Evaluative Environments -Black Subsample

7.3.3 Comparison of Segments

Overall, the lower number of product groupings for the black consumers indicated that they are less sophisticated in their analysis and evaluation methods and approaches than their white counterparts. They did not differentiate along a particular dimension to the same extent, but tended to include more products in similar evaluative groups. The white consumer tended to fraction out products into the further three clusters of Grudge, Comfort/Enjoyment, and Reliability and Performance products, thus indicating a more sophisticated, experienced and discerning market segment.

Group 1 for both white and black consumer segments was characterized by the same single product; used car. The same risk of fraud characterized the product grouping, and although the white consumer's evaluative environment was Involvement, as compared to Conventional Risk Amelioration for the black consumer, the activities accompanying the product's evaluation were equally directed at the reduction of this perceived risk element. It is significant however that the black consumer perceives a much stronger element of risk associated with this type of purchase, as a comparison of the attribute contribution to its associated axis has shown.

Group 2 products for both white and black segments were essentially identical, but for the inclusion of car tyres in the latter, as opposed to its inclusion in Reliability and Performance (a Trust type of evaluative environment) for the white consumer. The environment is one of Hedonistics, which for car tyres indicated stronger brand identification in the black segment.

Group 3 products differed the most out of the common groupings between both segments. Apart from the black group 3 inclusion of more products, the categorization of the products was different. In the white segment, the goods were moderated by Convenience aspects of purchase, whilst in the black segment, since convenience was considered a non-issue, the products were

evaluated by Experience properties, with the objective being their overall Justification for purchase. This justification for purchase may also have root in the differing level of disposable income available to both segments.

That the white segment's Grudge characteristics for house moving and TV repair and Comfort characteristics for haircut were absent from the cluster is again indicative of the diminished dimensionality of the black consumer's evaluative environment.

Group 4 products were identical across both segments, with the exception of the inclusion of car service by the black consumer. This may be due to such a service being viewed more as high in credence properties, to be more revered, than as a Grudge service as seen by the white consumer.

There was a significant difference in the nature of the evaluation across the segments. The white consumer was controlled by their Conscience as to the "right" service selection. The black consumer relied on the nature of their Reception at first encounter.

7.4 Comparisons with Prior Research

7.4.1 Hypotheses Testing

The original research done by Zeithaml (1981), presented 11 unique hypotheses governing consumer evaluation of goods and services. Recent research completed by Ewels (1989), was based on an outright acceptance of these hypotheses as a basis for testing their validity amongst white consumers locally.

The present research has demonstrated that this hypothesis set is <u>insufficient</u> to encompass the complete collection of consumer evaluation constructs, and proposed the use of a <u>further 12 hypotheses</u>. As a consequence, this research proposed the need for 23 unique hypotheses to fully describe local consumer evaluation across both the white and the black consumer segments.

From the work of Ewels (1989), hypothesis testing revealed the acceptance of all but hypotheses 2 and 3 on post-purchase evaluation (more post purchase evaluation with services than with goods, and more post-purchase than pre-purchase evaluation with services, respectively). A further important finding was the portion of hypothesis 4 concerning the use of price as a quality cue for services evaluation. Whilst the testing accepted the difference between goods and services in this regard, it showed that the sense was in the reverse, that is, the price cue was applicable to goods and not to services purchases.

The results from the current research into the white consumer segment indicate agreement with the above findings for hypotheses 2 and 4, but are supportive of hypothesis 3, contrary to Ewels' research. Thus it is proposed that white consumers of services engage in greater post-purchase evaluation and information seeking than pre-purchase evaluation, in agreement with the argument forwarded by Zeithaml (1981).

White consumers do not continue to evaluate a service after its purchase more than a goods purchase. Finally, white consumers rely more on the price cue to indicate the likely quality for goods purchases, compared to services purchases.

7.4.2 Correspondence Analysis

One of the objectives of the current research was to attempt to arrive at a similar interpretation of the key distinguishers of white consumer evaluation of goods and services as that produced by Ewels (1989). The objective was to begin from the basis of consumer behaviour theory and to validate the Zeithaml constructs, appending to them any contained in the various models of the consumer decision process, so as to check the exhaustiveness of the Zeithaml set. To this end, an abbreviated form of the correspondence analysis was performed on only the original 12 Zeithaml constructs used by Ewels, who also excluded DIY from the study, believing it to be in conflict with some of the services included in the product set presented to consumers.

One of the first points of departure between the two analyses was the indication that the current data required a four-dimensional solution as compared with Ewels' three dimensions. Temporarily ignoring this indication for an additional dimension, a three-dimensional solution was tested for fit with the interpretation by Ewels. Appendix 10 contains the correspondence analysis report for the current data set, using the same 12 Zeithaml constructs as used by Ewels.

A second point of departure was the indication that the price attribute was dominating the 1+ axis to the extent that it may be considered an outlier (co-ordinate 0.959, contribution 65.7). The analysis was repeated but with the exclusion of the price attribute as a supplementary data point, but still having no influence on the composition of the axes. Appendix 11 contains the report for this modified solution.

A third factor complicating a comparison with this research was the serious instability of the Ewels and the current research's solutions. In both cases, the position of the first and second axes in the 1 - 2 plane was indicated as unstable by the small difference in trace. This meant that the interpretation of the first two axes could not be compared, since there are two equally feasible solutions possible.

Considering the fullness of the Ewels solution, using only the original Zeithaml hypotheses, it became clear that the Convenience/Loyalty, and the DIY dimensions were not represented. If the 12 constructs were used in a four-dimensional solution, these dimensions appeared. Furthermore, certain products confined to a three-dimensional solution reported to other axes when the dimensionality was increased to four. TV, haircut and toothpaste were a good example of this; in three-dimensional space, all showed alignment with the post purchase form of evaluation, and TV with risk in addition, but in four dimensions, the stronger attribute was that of Loyalty to the brand or service outlet.

Table 7.1 below summarizes the comparison dilemma by presenting the three-dimensional solution both with and without the effect

of the price attribute, as well as Ewels' solution. In each case, the products and their principal axis of associated are shown, with their percentage contribution to that axis. Manipulation of the 1 and 2 axes interpretation resulted in two plausible ways of interpretation of the solution, highlighting this instability problem.

Table 7.1: The Axis Comparison Dilemma

	ALL ATTRIBUTES		PRICE SUPPLEMENTARY		EWELS	
AXIS	ATTRIBUTE	% CONT.	ATTRIBUTE	% CONT.	ATTRIBUTE	% CONT.
1+	Price->Q	65.7	Risk	44.4	S/thing New	11.4
	(More After)	(5.8)	After	15.5	Staff->Q	9.9
			(Advice)	(1.2)		
1-	Not Compl	11.2	Staff->Q	16.5	Price->Q	26.1
	Risk	8.9	More After	14.3	Risk	17.3
	(Change)	(3.8)	(Preme)	(5.8)	More After	14.2
					After	8.5
2+	Risk	39.0	More After	65.5	Price->Q	29.7
	After	18.1			Choice	13.5
	(Price)	(2.5)			Complain	9.3
2-	Staff->Q	22.8	Staff->Q	26.5	Risk	22.2
	(More After)	(6.5)	(Premises)	(2.7)	Advice	18.6
3+	Staff->Q	21.2	Premises->Q	21.9	Staff->Q	28.3
	(Premises)	(7.0)	(After)	(5.3)	Premises->Q	24.1
3-	More After	60.8	Change	44.8	Choice	12.5
			S/thing New	14.7	Change	10.8
					S/thing New	9.6

Considering the effect of the outlier treatment of the price attribute jointly with it unmodified (that is, the first and second columns of the table together), Axis 1+ could be defined in terms of "price cue to quality" and "risk." This could be interpreted to correspond to Ewels' Axis 1-. Axis 1- may be defined as "staff cue to quality" and "not complaining", which may be interpreted to correspond to Ewels' Axis 1+.

Axis 2+ could be defined in terms of "risk" (its strongest axis of association), and "more after-purchase evaluation", which could be interpreted to correspond to Ewels' Axis 2-, (where risk is likewise most strongly associated). Axis 2- was represented by various surrogate cues to quality such as "staff" and "premises", which could correspond to Ewels' Axis 2+.

Axis 3+ was represented by "staff" and "premises" cues, corresponding exactly (the only axis in both research results showing stability) with Ewels' Axis 3+. Axis 3-, "more after - purchase evaluation" and "brand loyalty" corresponded with Ewels' Axis 3- when the latter was read to mean mostly brand loyalty.

An alternative interpretation involved the reversal of Axes 1 and 2 between this and Ewels'research. If Axis 2+ was interpreted as "risk" and "after-purchase evaluation", this corresponded with Ewels' Axis 1-, if "price" was ignored. Axis 2- compared well with Ewels' Axis 1+ as "staff cue to quality." Axis 1+ corresponded with Ewels' Axis 2+ in terms of "price", whilst Axis 2+ in terms of "risk" and "after-purchase evaluation" corresponded to Ewels' Axis 1-. The interpretation of Axis 3 remained unaffected.

Finally, when considering each product's axis of best representation, this instability problem was again highlighted, since a group of associated products on one of the first two axes may be partially associated with one of two of the Ewels axes depending on the method of axis interpretation. Table 7.2 below shows this phenomenon clearly.

In conclusion, these fundamental problems made it impossible to compare the two results with any degree of confidence.

Table 7.2: Instability Reflected in Product - Axis Association

AXIS	ALL ATTRIBUTES	PRICE SUPPLEMENTARY ATTRIBUTE	EWELS ATTRIBUTE
1+	New Car	New Car	Legal Advice
	Fruit Juice	Used Car	Medical Diagnosis
	Suitcase	Car Tyres	Banking
	Furniture	TV Repair	Haircut
	Clothing	House Moving	
		Car Service	
1-	Legal Advice	Restaurant Meal	New Car
	TV Repair		Used Car
	Medical Diagnosis		Furniture
	Banking		Car Tyres
	Life Insurance		TV
	Car Service		
2+	Used Car	Fruit Juice	Fruit Juice
	Car Tyres	Photo Developing	Suitcase
	TV	Dry Cleaning	Clothing
	House Moving		Toothpaste
2-	Restaurant Meal	Legal Advice	TV Repair
		Nursery School Care	House Moving
		Banking	Life Insurance
		Life Insurance	Car Service
3+	Nursery School	Care Suitcase	Restaurant Meal
		Furniture	Nursery School
		Clothing	Care
3-	Toothpaste	TV	Dry Cleaning
	Photo Developing	Toothpaste	Photo Developing
	Haircut	Medical Diagnosis	
	Dry Cleaning	Haircut	

8.0 CONCLUSIONS AND IMPLICATIONS

This chapter will cover the research findings, the marketing implications of these, and suggested areas for further research, in turn.

8.1 Research Findings

8.1.1 On the Appropriateness of the Zeithaml Hypotheses:

The first of the research questions concerned the nature of the set of all commonly used evaluative criteria for both goods and services. This set has been found to be representable by 24 grouped constructs as displayed in Appendix 1, but including the three "new" constructs from consumer decision models of "confidence in brand judging", "post-choice evaluation", and "use of cut off points."

The comparison with Zeithaml (1981), involved matching her 13 constructs (11 hypotheses) with those formed during the current research. It has been shown that the Zeithaml constructs are all valid locally, but are incomplete, requiring a further 14 constructs (12 hypotheses) to exhaustively represent the dimensions of consumer evaluation of goods and services.

Concerning the key evaluative determinants, both white and black consumers were found to evaluate goods and services along key four dimensions. For the white consumer, these were as follows;

DIMENSION	CHARACTERISTIC
1	Hedonistics/Specification Risk
2	Involvement/Convenience
3	Conventional Risk Amelioration/Assurance (Perceived Quality)
4	Loyalty (Experienced Quality)/DIY

Black evaluative dimensions were as follows;

DIMENSION	CHARACTERISTIC
1	Hedonistics/Assurance (Perceived Quality)
2	Reception/Commitment
3	Conventional Risk Amelioration/Lack of Risk
4	DIY/Loyalty (Experienced Quality)

Proposition 1 held that;

> "The locally developed criteria set regarding the uniqueness in consumer evaluation of services over goods differs from that developed by Zeithaml."

In chapter 4 it was shown that Zeithaml's original 11 hypotheses were substantiated by research into consumer behaviour theory, and by the constructs developed from the in-depth interviews. However, as also shown in that chapter, these hypotheses alone did not adequately account for the dimensions along which consumers evaluate both goods and services. Hence whilst the Zeithaml hypotheses did not differ from those derived locally from interviews, they were by no means exhaustive. Consequently, the proposition is only partially true.

8.1.2 On the Uniqueness of Goods and Services Evaluation:

The exhaustive set of 27 constructs were representable by 23 hypotheses. The chi squared goodness of fit testing of the set of 23 hypotheses revealed that for the white consumer, six hypotheses were rejected as follows;

> Hypothesis 2: "Consumers engage in greater post-purchase evaluation and information seeking with services than with (goods)" (Zeithaml, 1981, p187).

> Hypothesis 4: "Consumers use price and (appearance of) physical facilities as the major cues to service quality"

(Zeithaml, 1981, p187).

Hypothesis 15: "The extent to which a consumer becomes involved in the decision process is greater with services than with goods."

Hypothesis 16: "Convenience-based shopping is more prevalent with goods than with services."

Hypothesis 19: "Black consumers are more conscious of the need for a particular purchase of a good to match the image and to indicate their social class they would wish their peers ascribed them to."

Hypothesis 22: "Owing to the temporal separation between choice and use of some services, post-choice evaluation of such services is a more important factor than is post-use evaluation."

For the black consumer, 12 hypotheses were rejectable as follows;

Hypothesis 2: "Consumers engage in greater post-purchase evaluation and information seeking with services than with (goods)" (Zeithaml, 1981, p187).

Hypothesis 3: "Consumers engage in more post-purchase evaluation than pre-purchase evaluation when selecting and consuming services" (Zeithaml, 1981, p187).

Hypothesis 4: "Consumers use price ... as the major cues to service quality" (Zeithaml, 1981, p187).

Hypothesis 5: "The consumer's evoked set of alternatives is smaller with services than with (goods)" (Zeithaml, 1981, p188).

Hypothesis 7: "Consumers adopt innovation in services more slowly than they adopt innovations in (goods)" (Zeithaml, 1981, p188).

Hypothesis 8: "Consumers perceive greater risks when buying services than when buying (goods)" (Zeithaml, 1981, p188).

Hypothesis 12: "Consumers of services are less confident in regard to brand judging than are consumers of goods."

Hypothesis 16: "Convenience-based shopping is more prevalent with goods than with services."

Hypothesis 20: "The need to purchase a service is more frequently out of the control of the consumer for services than for goods."

Hypothesis 21: "A well know store is a greater cue to quality for goods than for services."

Hypothesis 22: "Owing to the temporal separation between choice and use of some services, post-choice evaluation of such services is a more important factor than is post-use evaluation."

Hypothesis 23: "The use of monetary cut offs is more prevalent in the evaluation of goods than in services."

Numerous difficulties in interpreting both solutions made a comparison of Ewels' findings impossible. Furthermore, depending on the manner of comparison, product groupings tended to associate with different dimensions, thereby precluding any meaningful comparison.

A further proposition raised in the course of this research was Proposition 2:

"Not all evaluation of goods and services is uniquely different. Some evaluative distinguishers are the same for goods and for services."

Since the hypothesis testing has shown this to be true, in both white and black segments, it can be concluded that this proposition is also true. Further reinforcement comes from the demonstrated product-axis associations, where chi squared tree clustering has shown certain goods and services to be significantly associated, and their evaluation according to similar criteria was interpreted from the correspondence analysis.

8.1.3 On White and Black Evaluation:

The evaluative constructs along which there are differences have already been highlighted. White consumers were prone to become involved in the decision process for goods, but perceived more risk in services. Black consumers were also apt to become involved in the decision to purchase goods, but only inconclusive evidence of their higher risk regard for services was found.

White consumers were also more concerned with the convenience aspects of services compared to goods. Black consumers rated convenience equally for goods and services, probably inconvenienced by the purchase of both.

Since the white consumers responded significantly to more of the subtleties in evaluation as contained in the hypotheses, blacks are assumed to be less experienced and less sophisticated in their evaluation of goods and services. This is expected to account for the many occasions of insignificant differences arising between goods and services evaluation as discovered in this segment.

From a comparison of the key distinguishers of evaluation, white consumers evaluated products in seven groups according to the following criteria;

GROUP	CRITERIA	EVALUATIVE ENVIRONMENT
Fraud Risk	Involvement	Involvement
Image	Hedonistics	Hedonistics
Convenience	Convenience	Convenience
Professional/ Expert Services	Specification Risk, Involvement, Assurance, Loyalty	Conscience
Reliability & Performance	Hedonistics, Conventional Risk	Trust
Comfort/Enjoyment	Assurance	Assurance
Grudge	Specification Risk, DIY	Awareness

Black consumers evaluated products in four groups according to the following criteria;

GROUP	CRITERIA	EVALUATIVE ENVIRONMENT
Fraud Risk	Conventional Risk	Conventional Risk
Image	Hedonistics	Hedonistics
Experienced Quality	Assurance, Commitment, Conventional Risk, DIY, Loyalty	Justification
Professional/ Expert Services	Assurance, Reception	Reception

Again, the black consumer is held to be less discerning in their evaluation since there are fewer product groupings used. This could be a reflection of their relative lack of experience with the purchase and evaluation of some of the services tested over their white counterparts.

Overall, the greater number of rejectable hypotheses for the black consumer subsample suggests that Proposition 3 can be assumed correct, that;

> "There are significant differences between the evaluative determinants pertaining to black consumers compared with white consumers."

8.1.4 On Different Marketing Strategies:

The basic assumption that goods and services are so essentially similar to the consumer's mind that they are evaluated in the same manner is refuted by all the researchers studied.

Lovelock (1983) segmented services into clusters that shared certain relevant marketing characteristics, thereby refuting the contention that insists each service industry is different. Similar interpretations have been found to apply for both the white and black segments in the current research. He also suggested that services sharing characteristics with others in a seemingly unrelated field should be marketed similarly, and that marketers should look beyond their immediate competitors for innovations. These sentiments have been found to apply to the current research.

Enis and Roering (1981) in particular have criticised the grouping of heterogenous products and separation of homogeneous products with little regard for how the consumer sees the "bundle of benefits" (Enis and Roering, 1981, p1), arising form the product. An effective marketing strategy would recognize this bundle as perceived by the consumer, and marketing its tangible and intangible components to the segment with these perceptions. The current research is in agreement with these suggestions.

Ewels (1989) also confirmed the similarities between goods and services, as well as differences within the two classes. She concluded that generic marketing strategies were dangerous, since they overlooked this inter-class relationship.

The white consumer perceives services as more risky than goods, but the black consumer's perceptions are inconclusive.

The final proposition held that;

> "Marketing strategies should differ significantly when marketers address black evaluation of the product compared with white evaluation."

Since Proposition 3 has been shown to be true, that black consumers evaluate their goods and services in significantly different ways to white consumers, then for optimal marketing effect, strategies should be different and addressed separately to each segment. Thus the fourth proposition is also shown to be true.

8.2 Strategic Marketing Implications

Two broad implications can be drawn;

- Marketers aiming at the black segment should have a differing strategy to those aiming at the white segment.

The areas of difference should be assumed to be according to the nature of the different evaluative dimensions of the two segments. In summary, whites

- are aware of the need to specify their needs adequately,
- do continue their evaluation after purchasing services more so than with goods,
- use surrogate, visual service quality indicators, but do not use price,
- do perceive greater risks with services, but don't invest as much effort in information seeking as with goods,

- purchase services based on convenience more so than goods, particularly those services low in personal risk,
- Are no more or less image conscious than blacks about the goods they buy.

Black consumers generally

- rely heavily on how they are received into the service establishment,
- tend to evaluate their goods purchases after the sale more than services,
- do not use price, but are aware of the price indicator of quality for electronics and insurance,
- are aware of few alternatives,
- are possibly more innovative with new services,
- perceive both purchases as equally risky, but invest more pre-purchase effort in services than goods,
- feel confident about services brand judging,
- are inconvenienced in any purchase,

- Marketers of services need not necessarily have a different strategy to marketers of goods.

The distinction should not even be made according to which class (good or service) the product belongs to, but rather to what common consumer-evaluative characteristics are shared. These characteristics have been clearly described for both consumer segments in the correspondence and cluster analyses presented earlier.

8.3 Areas For Further Research

Four broad areas are believed to be deserving of further research.

Firstly, Enis and Roering (1981), and Brown and Fern (1981), refer to goods and services sharing characteristics, which implies a need to view them not as separate entities, but as like products from a marketing perspective. The argument is that a

consumer will view a product as a "bundle of benefits" (Enis and Roering, 1981, p1), comprised of both tangible and intangible components. The marketing strategy should address this bundle as perceived by the prospective consumer.

An extension of the type of research as currently completed could be made to include in the product options, or to analyze separately, such services which could be termed "knowledge" or "information-based." These frequently possess both tangible and intangible qualities, and have become important services in the age of information. Some means of establishing the level of tangibility of a product could also be included, which effectively describes its character along the "goods-services" tangibility spectrum.

Secondly, an in depth investigation of the "Information" dimension would be useful. Gault (1991) has studied the "Risk" dimension in some detail, proposing various risk dimensions, service quality determinants serving as risk reducers, and risk reducing strategies available to the consumer and the marketer. How a consumer evaluates information related to a purchase would provide valuable insight into the second of these two important dimensions.

Thirdly, with the recent introduction of the chi squared trees method of clustering the rows and columns of a contingency table by Greenacre (1988), and its demonstrated analytical ability in the current research, research could be directed at the validation of previous interpretations based on correspondence analysis and other clustering techniques.

Finally, as shown in the results of this research, the black consumer market appears to share significant evaluation similarities to the white market, as well as strong differences. In view of the demonstrated success of accessing interviewees and respondents to questionnaires, it would be feasible to use a similar data generation methodology for a more thorough probe of this important market.

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Appendix 1:

Grouped Constructs From Consumer Interviews

Note:

(i) Figures in parentheses indicate the cumulative frequency of occurrence of the related constructs comprising the group.

(ii) Zeithaml hypotheses corresponding to the constructs are denoted by `H-(hypothesis number)', or `NIL' where no hypothesis corresponds.

(iii) Group listing indicates aspects commonly discussed by interviewees, together with frequency.

Group 1: Price as a Cue to Quality (90) **H4**

- Price	69
- Price as a cue	21

Group 2: Importance of Product's Physical Features (80) **H4**

- Physical Features	61
- Taste	16
- Complexity	2
- Packaging	1

Group 3: Pre-purchase Evaluation and Information Search (76) **H3**

- Pre-purchase search	29
- Own experience	19
- Supplier provided information	13
- Availability	4
- Track record	3
- Top management visibility	2
- Full disclosure	2
- Demonstration	1
- Quotes	1
- Price known before purchase	1
- Special offers	1

Group 4: Perceived Conventional Risk (75) **H8**

- Conventional risk	36
- Guarantee / warranty	13
- Money back / returnability	10
- Long term investment	9
- Samples	7

Group 5: Response of Supplier Staff (74) **NIL**

- Response / first impression	21
- Speed of service	14

- Care 13
- Professionalism 9
- Staff attitude / friendliness 8
- Service assurance 8
- Confidentiality 1

Group 6: Personal Sources of Information (67) **H1**

- Personal information sources 67

Group 7: Post-purchase Evaluation and Information Search (56) **H2, H3**

- Conformance to customer specification 16
- Staff expertise 13
- Thoroughness of service 7
- Keeping promises 6
- Good / efficient service 5
- Reliability 3
- Performance 3
- After sales service 3

Group 8: Brand Loyalty (54) **H9**

- Brand loyalty 21
- Relationship 17
- Everyday commodities 7
- Infrequent purchase 5
- Switching costs 2
- Brand switching 1
- Instinct / feeling 1

Group 9a: Non-personal Sources of Information (40) **H1**

- Advertisements 27
- Second opinion 8
- Press /print media 4
- Other consumers 1

Group 9b: Well-Known Brand as a Cue to Quality (40) **NIL**

- Well-known brand 37
- Brand as a cue 3

Group 11: Degree of `Expert Opinion' / Credence (35) **NIL**

- Expert opinion 23
- Credence 9
- Trust 3

Group 12a: Consumer's Involvement in the Decision (30) **NIL**

- Involvement / effort 15
- Undifferentiated product 10
- Indifference 2
- Habitual decision 2
- Unimportance of outlet 1

Group 12b: Importance of Visual Information (30) **H4**

- Appearance of the outlet 19
- Appearance of the staff 7
- Presence of other consumers 4

Group 14: Convenience (26) **NIL**

- Convenience 26

Group 15: Importance of Personalized Attention (25) **NIL**

- Personalized service 18
- Customized service 5
- Personal aspects 2

Group 16: Importance of Image and Indicator of Social Class (23) **NIL**

- Image 16
- Indicator of social class 7

Group 17: No Choice; Decision out of Consumer's Control (19) **NIL**

- No choice / driven by need 10
- Control 9

Group 18: Do It Yourself as an Alternative (17) **H6**

- DIY 17

Group 19: Perceived Specification Risk (16) **H8, H10**

- Specification risk 10
- Consumer knowledge 6

Group 20: Well-Known Store as Cue to Quality (14) **NIL**

- Known store 8
- Known store as cue 5
- Store loyalty 1

Group 21: Available Choice (10) **H5**

- Choice of alternative products 5
- Choice of alternative outlets 5

Group 22: Innovation / Impulsive Purchasing (9) **H7**

- Innovation / impulse 9

Group 23: Post-choice Evaluation and Information Search (3) **NIL**

- contingent on future event 3

Group 24: Opportunity for Complaint (2) **H11**

- Opportunity for complaint 2

Appendix 2:
Questionnaire

Name:_____ Q___

INSTRUCTION:
PLEASE PLACE AN 'X' IN ALL THE APPROPRIATE SPACES PROVIDED. YOU MAY CHOOSE MORE THAN ONE ITEM IF YOU WISH.

Question 1: ***To me, the PRICE indicates what the QUALITY will be like for the following:***

restaurant meal.....___	photograph developing & printing.....___	
new car.....___	furniture & house-hold moving.....___	
legal advice.....___	banking.....___	a TV.....___
nursery school care..___	suitcase.....___	clothing....___
fruit juice.....___	haircut.....___	life in-surance....___
TV repair.....___	furniture.....___	car service.___
medical diagnosis....___	car tyres.....___	toothpaste..___
used car.....___	dry cleaning..___	

Question 2: ***I find that I set an UPPER LIMIT in money terms above which I'm not prepared to pay for the following:***

restaurant meal.....___	photograph developing & printing.....___	
new car.....___	furniture & house-hold moving.....___	
legal advice.....___	banking.....___	a TV.....___
nursery school care..___	suitcase.....___	clothing....___
fruit juice.....___	haircut.....___	life in-surance....___
TV repair.....___	furniture.....___	car service.___
medical diagnosis....___	car tyres.....___	toothpaste..___
used car.....___	dry cleaning..___	

Question 3: ***For which of the following items do the PHYSICAL FEATURES (things which you can see and feel for example) play an important part in making an evaluation?:***

restaurant meal.....___	photograph developing & printing.....___	
new car.....___	furniture & house-hold moving.....___	
legal advice.....___	banking.....___	a TV.....___
nursery school care..___	suitcase.....___	clothing....___
fruit juice.....___	haircut.....___	life in-surance....___
TV repair.....___	furniture.....___	car service.___
medical diagnosis....___	car tyres.....___	toothpaste..___
used car.....___	dry cleaning..___	

Question 4: ***I tend to evaluate my purchase decisions MORE AFTER I buy THAN BEFORE I buy the following:***

restaurant meal.....___	photograph developing & printing.....___	
new car.....___	furniture & house-hold moving.....___	
legal advice.....___	banking.....___	a TV.....___
nursery school care..___	suitcase.....___	clothing....___
fruit juice.....___	haircut.....___	life in-surance....___
TV repair.....___	furniture.....___	car service.___
medical diagnosis....___	car tyres.....___	toothpaste..___
used car.....___	dry cleaning..___	

Question 5: ***I feel that I am taking a RISK when purchasing the following:***

restaurant meal.....___
new car.....___
legal advice.....___
nursery school care..___
fruit juice.....___
TV repair.....___
medical diagnosis....___
used car.....___

photograph developing & printing.....___
furniture & house-hold moving.....___
banking.....___
suitcase.....___
haircut.....___
furniture.....___
car tyres.....___
dry cleaning..___

a TV.....___
clothing....___
life in-surance....___
car service.___
toothpaste..

Question 6: ***I feel CONFIDENT IN JUDGING brands / people / suppliers for the following:***

restaurant meal.....___
new car.....___
legal advice.....___
nursery school care..___
fruit juice.....___
TV repair.....___
medical diagnosis....___
used car.....___

photograph developing & printing.....___
furniture & house-hold moving.....___
banking.....___
suitcase.....___
haircut.....___
furniture.....___
car tyres.....___
dry cleaning..___

a TV.....___
clothing....___
life in-surance....___
car service.___
toothpaste..___

Question 7: ***To me, it is the FIRST IMPRESSION I get from the response of the staff which is most important for the following:***

restaurant meal.....___
new car.....___
legal advice.....___
nursery school care..___
fruit juice.....___
TV repair.....___
medical diagnosis....___
used car.....___

photograph developing & printing.....___
furniture & house-hold moving.....___
banking.....___
suitcase.....___
haircut.....___
furniture.....___
car tyres.....___
dry cleaning..___

a TV.....___
clothing....___
life in-surance....___
car service.___
toothpaste..___

Question 8: ***I prefer to listen to the ADVICE OF SOMEONE THAT I KNOW rather than to the message in the advertising when deciding to purchase the following:***

restaurant meal.....___
new car.....___
legal advice.....___
nursery school care..___
fruit juice.....___
TV repair.....___
medical diagnosis....___
used car.....___

photograph developing & printing.....___
furniture & house-hold moving.....___
banking.....___
suitcase.....___
haircut.....___
furniture.....___
car tyres.....___
dry cleaning..___

a TV.....___
clothing....___
life in-surance....___
car service.___
toothpaste..___

Question 9: ***I find myself still assessing whether or not I've made the right decision AFTER purchasing the following:***

restaurant meal.....___	photograph developing & printing.....___	
new car.....___	furniture & house-hold moving.....___	
legal advice.....___	banking.....___	a TV.....___
nursery school care..___	suitcase.....___	clothing....___
fruit juice.....___	haircut.....___	life in-surance....___
TV repair.....___	furniture.....___	car service.___
medical diagnosis....___	car tyres.....___	toothpaste..___
used car.....___	dry cleaning..___	

Question 10: ***I prefer not to try out SOMETHING / SOMEONE NEW when purchasing the following:***

restaurant meal.....___	photograph developing & printing.....___	
new car.....___	furniture & house-hold moving.....___	
legal advice.....___	banking.....___	a TV.....___
nursery school care..___	suitcase.....___	clothing....___
fruit juice.....___	haircut.....___	life in-surance....___
TV repair.....___	furniture.....___	car service.___
medical diagnosis....___	car tyres.....___	toothpaste..___
used car.....___	dry cleaning..___	

Question 11: ***For which of the following is the BRAND NAME of the product / supplier more important as an indicator of what the QUALITY will be like ?:***

restaurant meal.....___	photograph developing & printing.....___	
new car.....___	furniture & house-hold moving.....___	
legal advice.....___	banking.....___	a TV.....___
nursery school care..___	suitcase.....___	clothing....___
fruit juice.....___	haircut.....___	life in-surance....___
TV repair.....___	furniture.....___	car service.___
medical diagnosis....___	car tyres.....___	toothpaste..___
used car.....___	dry cleaning..___	

Question 12: ***I really go to GREAT LENGTHS before making a decision to purchase the following:***

restaurant meal.....___	photograph developing & printing.....___	
new car.....___	furniture & house-hold moving.....___	
legal advice.....___	banking.....___	a TV.....___
nursery school care..___	suitcase.....___	clothing....___
fruit juice.....___	haircut.....___	life in-surance....___
TV repair.....___	furniture.....___	car service.___
medical diagnosis....___	car tyres.....___	toothpaste..___
used car.....___	dry cleaning..___	

Question 13: ***To me, the appearance of the PREMISES indicates what the QUALITY will be like for the following:***

restaurant meal.....___	photograph developing & printing.....___	
new car.....___	furniture & house-hold moving.....___	
legal advice.....___	banking.....___	a TV.....___
nursery school care..___	suitcase.....___	clothing....___
fruit juice.....___	haircut.....___	life in-surance....___
TV repair.....___	furniture.....___	car service.___
medical diagnosis....___	car tyres.....___	toothpaste..___
used car.....___	dry cleaning..___	

Question 14: ***To me, the appearance of the STAFF indicates what the QUALITY will be like for the following:***

restaurant meal.....___	photograph developing & printing.....___	
new car.....___	furniture & house-hold moving.....___	
legal advice.....___	banking.....___	a TV.....___
nursery school care..___	suitcase.....___	clothing....___
fruit juice.....___	haircut.....___	life in-surance....___
TV repair.....___	furniture.....___	car service.___
medical diagnosis....___	car tyres.....___	toothpaste..___
used car.....___	dry cleaning..___	

Question 15: ***For which of the following can you judge the likely QUALITY by the presence of / numbers of OTHER CONSUMERS?:***

restaurant meal.....___	photograph developing & printing.....___	
new car.....___	furniture & house-hold moving.....___	
legal advice.....___	banking.....___	a TV.....___
nursery school care..___	suitcase.....___	clothing....___
fruit juice.....___	haircut.....___	life in-surance....___
TV repair.....___	furniture.....___	car service.___
medical diagnosis....___	car tyres.....___	toothpaste..___
used car.....___	dry cleaning..___	

Question 16: ***To me, CONVENIENCE is the most important factor for the following purchases:***

restaurant meal.....___	photograph developing & printing.....___	
new car.....___	furniture & house-hold moving.....___	
legal advice.....___	banking.....___	a TV.....___
nursery school care..___	suitcase.....___	clothing....___
fruit juice.....___	haircut.....___	life in-surance....___
TV repair.....___	furniture.....___	car service.___
medical diagnosis....___	car tyres.....___	toothpaste..___
used car.....___	dry cleaning..___	

Question 17: ***I look for a store / person / supplier who will provide PERSONALIZED ATTENTION for the purchase of the following:***

restaurant meal.....___	photograph developing & printing.....___	
new car.....___	furniture & house-hold moving.....___	
legal advice.....___	banking.....___	a TV.....___
nursery school care..___	suitcase.....___	clothing....___
fruit juice.....___	haircut.....___	life in-surance....___
TV repair.....___	furniture.....___	car service.___
medical diagnosis....___	car tyres.....___	toothpaste..___
used car.....___	dry cleaning..___	

Question 18: ***To me, it is important that the purchase matches my IMAGE for the following:***

restaurant meal.....___	photograph developing & printing.....___	
new car.....___	furniture & house-hold moving.....___	
legal advice.....___	banking.....___	a TV.....___
nursery school care..___	suitcase.....___	clothing....___
fruit juice.....___	haircut.....___	life in-surance....___
TV repair.....___	furniture.....___	car service.___
medical diagnosis....___	car tyres.....___	toothpaste..___
used car.....___	dry cleaning..___	

Question 19: ***I feel it is important that the purchase of the following must REFLECT THE SOCIAL CLASS I would like others to see me in:***

restaurant meal.....___	photograph developing & printing.....___	
new car.....___	furniture & house-hold moving.....___	
legal advice.....___	banking.....___	a TV.....___
nursery school care..___	suitcase.....___	clothing....___
fruit juice.....___	haircut.....___	life in-surance....___
TV repair.....___	furniture.....___	car service.___
medical diagnosis....___	car tyres.....___	toothpaste..___
used car.....___	dry cleaning..___	

Question 20: ***I feel that I have LITTLE CHOICE in whether to purchase / when to purchase the following:***

restaurant meal.....___	photograph developing & printing.....___	
new car.....___	furniture & house-hold moving.....___	
legal advice.....___	banking.....___	a TV.....___
nursery school care..___	suitcase.....___	clothing....___
fruit juice.....___	haircut.....___	life in-surance....___
TV repair.....___	furniture.....___	car service.___
medical diagnosis....___	car tyres.....___	toothpaste..___
used car.....___	dry cleaning..___	

Question 21: ***For which of the following would you consider the option of DOING THE JOB YOURSELF?:***

restaurant meal.....___	photograph developing & printing.....___	
new car.....___	furniture & house-hold moving.....___	
legal advice.....___	banking.....___	a TV.....___
nursery school care..___	suitcase.....___	clothing....___
fruit juice.....___	haircut.....___	life in-surance....___
TV repair.....___	furniture.....___	car service.___
medical diagnosis....___	car tyres.....___	toothpaste..___
used car.....___	dry cleaning..___	

Question 22: ***To me, a well known STORE NAME indicates what the QUALITY will be like for the following:***

restaurant meal.....___	photograph developing & printing.....___	
new car.....___	furniture & house-hold moving.....___	
legal advice.....___	banking.....___	a TV.....___
nursery school care..___	suitcase.....___	clothing....___
fruit juice.....___	haircut.....___	life in-surance....___
TV repair.....___	furniture.....___	car service.___
medical diagnosis....___	car tyres.....___	toothpaste..___
used car.....___	dry cleaning..___	

Question 23: ***Which of the following do you feel offers you little CHOICE OF ALTERNATIVE brands, stores / outlets, or suppliers?:***

restaurant meal.....___	photograph developing & printing.....___	
new car.....___	furniture & house-hold moving.....___	
legal advice.....___	banking.....___	a TV.....___
nursery school care..___	suitcase.....___	clothing....___
fruit juice.....___	haircut.....___	life in-surance....___
TV repair.....___	furniture.....___	car service.___
medical diagnosis....___	car tyres.....___	toothpaste..___
used car.....___	dry cleaning..___	

Question 24: ***Once I've been using a brand / person / supplier for a while, I prefer NOT TO CHANGE to another for the following:***

restaurant meal.....___	photograph developing & printing.....___	
new car.....___	furniture & house-hold moving.....___	
legal advice.....___	banking.....___	a TV.....___
nursery school care..___	suitcase.....___	clothing....___
fruit juice.....___	haircut.....___	life in-surance....___
TV repair.....___	furniture.....___	car service.___
medical diagnosis....___	car tyres.....___	toothpaste..___
used car.....___	dry cleaning..___	

Question 25: ***For which of the following do you think it is more important to be satisfied with the CHOICE rather than with the actual USE ?:***

restaurant meal.....___	photograph developing & printing.....___	
new car.....___	furniture & house-hold moving.....___	
legal advice.....___	banking.....___	a TV.....___
nursery school care..___	suitcase.....___	clothing....___
fruit juice.....___	haircut.....___	life in-surance....___
TV repair.....___	furniture.....___	car service.___
medical diagnosis....___	car tyres.....___	toothpaste..___
used car.....___	dry cleaning..___	

Question 26: ***When I'm NOT SATISFIED with the outcome of the purchase, I believe that part of the problem lies with my own INABILITY TO SPECIFY / KNOW MYSELF what I wanted with the following:***

restaurant meal.....___	photograph developing & printing.....___	
new car.....___	furniture & house-hold moving.....___	
legal advice.....___	banking.....___	a TV.....___
nursery school care..___	suitcase.....___	clothing....___
fruit juice.....___	haircut.....___	life in-surance....___
TV repair.....___	furniture.....___	car service.___
medical diagnosis....___	car tyres.....___	toothpaste..___
used car.....___	dry cleaning..___	

Question 27: ***For which of the following do you think that your own inability / lack of knowledge CONTRIBUTED to you NOT COMPLAINING about your dissatisfaction?:***

restaurant meal.....___	photograph developing & printing.....___	
new car.....___	furniture & house-hold moving.....___	
legal advice.....___	banking.....___	a TV.....___

nursery school care..___	suitcase.....___	clothing....___
fruit juice.....___	haircut.....___	life in-surance....___
TV repair.....___	furniture.....___	car service.___
medical diagnosis....___	car tyres.....___	toothpaste..___
used car.....___	dry cleaning..___	

Please complete this section to help us analyze the results of the questionnaire. Your answers are confidential. Please mark your selection with an 'X'

I am

male.....___

female.....___

My preferred language is

English.....___

Afrikaans...___

other.....___( )

My education level is

some high school...___

matric.....___

diploma.....___

degree.....___

My age group is

18 - 24.....___

25 - 34.....___

35 - 49.....___

50+.....___

I am

single.....___

married / live together.....___

divorced.....___

widowed.....___

Do you have any children?

yes.....___

Ages: 0 - 6....___ (how many?)

7 - 18...___

19+.....___

no.....___

My personal income per month is

less than R500..___

R501 - R1000....___

R1001 - 2000....___

R2001 - R3000...___

R3001 - R5000...___

R5001 - R7000...___

R7000+.....___

My occupation is:

_____

THANK YOU VERY MUCH FOR YOUR TIME AND EFFORT !!

Appendix 3:
Results of Hypothesis Testing

WHITE CONSUMER SUBSAMPLE: Attribute Frequencies

			GOODS		SERVICES			
Question	Attribute	Total	Observed	Expected	Observed	Expected	X2 Calc.	Result
1	Price -> Quality	182	116	78	66	104	32.40	Reject Ho
2	Upper Limit	326	165	140	161	186	7.82	Reject Ho
3	Physical Features	302	187	129	115	173	45.52	Reject Ho
4	More After Than Before	231	75	99	156	132	10.18	Reject Ho
5	Risk	220	72	94	148	126	8.99	Reject Ho
6	Confident in Judging	285	149	122	136	163	10.45	Reject Ho
7	First Impression	220	49	94	171	126	37.61	Reject Ho
8	Advice From Someone Known	333	92	142	241	190	31.30	Reject Ho
9	Continue After	195	91	84	104	111	1.02	ACCEPT Ho
10	Something / Someone New	155	50	66	105	89	6.76	Reject Ho
11	Brand Name -> Quality	264	180	113	84	151	69.45	Reject Ho
12	Great Lengths	215	120	92	95	123	14.90	Reject Ho
13	Premesis -> Quality	274	73	117	201	157	28.88	Reject Ho
14	Staff -> Quality	213	36	91	177	122	58.04	Reject Ho
15	Other Consumers -> Quality	258	73	111	185	147	22.83	Reject Ho
16	Convenience	157	54	67	103	90	4.40	Reject Ho
17	Personalized Attention	296	74	127	222	169	38.74	Reject Ho
18	Image	174	110	75	64	99	28.71	Reject Ho
19	Reflect Social Class	118	87	51	31	67	44.76	Reject Ho
20	Little Choice	122	38	52	84	70	6.57	Reject Ho
21	DIY	82	13	35	69	47	24.13	Reject Ho
22	Store Name -> Quality	249	129	107	120	143	8.22	Reject Ho
23	Choice of Alternatives	52	12	22	40	30	7.88	Reject Ho
24	Not to Change	222	54	95	168	127	30.93	Reject Ho
25	Choice vs. Use	74	42	32	32	42	5.51	Reject Ho
26	Inability to Specify	95	28	41	67	54	7.25	Reject Ho
27	Not Complaining	95	6	41	89	54	52.56	Reject Ho

Ho: The response frequency of goods and services IS uniformly distributed (the hypothesis tested is NOT correct).

Ha: The response frequency is NOT uniformly distributed (the hypothesis tested IS correct).

alpha level = 5%

degrees of freedom = (n-1), i.e 1

critical chi squared statistic = 3.841

BLACK CONSUMER SUBSAMPLE: Attribute Frequencies

Question	Attribute	Total	GOODS Observed	GOODS Expected	SERVICES Observed	SERVICES Expected	X2 Calc.	Result
1	Price -> Quality	178	105	76	73	102	19.31	Reject Ho
2	Upper Limit	197	88	84	109	113	0.33	ACCEPT Ho
3	Physical Features	179	110	77	69	102	24.82	Reject Ho
4	More After Than Before	141	58	60	83	81	0.12	ACCEPT Ho
5	Risk	128	57	55	71	73	0.13	ACCEPT Ho
6	Confident in Judging	183	87	78	96	105	1.81	ACCEPT Ho
7	First Impression	139	25	60	114	79	35.92	Reject Ho
8	Advice From Someone Known	171	57	73	114	98	6.12	Reject Ho
9	Continue After	126	68	54	58	72	6.35	Reject Ho
10	Something / Someone New	118	44	51	74	67	1.69	ACCEPT Ho
11	Brand Name -> Quality	140	92	60	48	80	29.87	Reject Ho
12	Great Lengths	126	68	54	58	72	6.35	Reject Ho
13	Premesis -> Quality	175	48	75	127	100	17.01	Reject Ho
14	Staff -> Quality	151	27	65	124	86	39.01	Reject Ho
15	Other Consumers -> Quality	152	39	65	113	87	18.17	Reject Ho
16	Convenience	107	39	46	68	61	1.87	ACCEPT Ho
17	Personalized Attention	183	61	78	122	105	6.46	Reject Ho
18	Image	149	83	64	66	85	9.89	Reject Ho
19	Reflect Social Class	120	72	51	48	69	15.04	Reject Ho
20	Little Choice	102	38	44	64	58	1.44	ACCEPT Ho
21	DIY	83	9	36	74	47	35.76	Reject Ho
22	Store Name -> Quality	159	72	68	87	91	0.41	ACCEPT Ho
23	Choice of Alternatives	70	28	30	42	40	0.23	ACCEPT Ho
24	Not to Change	146	41	63	105	83	13.51	Reject Ho
25	Choice vs. Use	88	42	38	46	50	0.74	ACCEPT Ho
26	Inability to Specify	112	60	48	52	64	5.25	Reject Ho
27	Not Complaining	85	19	36	66	49	13.93	Reject Ho

Ho: The response frequency of goods and services IS uniformly distributed (the hypothesis tested is NOT correct).

Ha: The response frequency is NOT uniformly distributed (the hypothesis tested IS correct).

alpha level = 5%

degrees of freedom = (n-1), i.e 1

critical chi squared statistic = 3.841

Appendix 4:

Correspondence Report for the White Subsample

		VARIABLES																			
		NC	FJ	UC	SC	Furn	CT	TV	CL	TP	RM	LA	NSC	TVR	MD	PD	HM	B	HC	DC	LI	CS
	Price -> Quality	23	11	5	11	21	14	10	19	2	15	5	13	2	4	6	10	0	5	2	2	2
	Upper Price Limit	25	13	27	16	20	11	10	30	13	26	6	7	15	9	10	18	8	21	12	15	14
	Physical Features	41	7	25	20	31	4	17	34	8	30	1	14	1	3	21	9	5	16	6	3	6
O	More After Than Before	10	15	6	1	8	5	4	14	12	36	11	3	14	9	25	7	4	19	12	4	12
B	Risk	14	0	38	1	2	9	7	1	0	10	14	8	20	13	6	13	4	11	7	16	26
S	Confident in Judging	27	20	6	9	15	19	17	20	16	32	10	8	7	18	11	8	12	10	4	11	5
E	First Impressions	12	2	8	1	11	4	4	6	1	30	19	21	8	15	3	9	20	9	6	15	16
R	Advice From Someone I Know	19	5	21	4	10	12	9	9	3	30	31	22	19	26	11	18	15	16	11	22	20
V	Continue Evaluation After	21	2	27	1	7	8	7	16	2	7	10	9	8	8	4	7	9	9	3	17	13
A	Something/someone New	7	5	10	1	3	6	8	3	7	7	14	10	4	19	1	4	6	14	6	8	12
T	Brand Name -> Quality	35	16	11	6	18	28	33	18	15	10	7	4	2	10	3	6	11	5	2	15	9
I	Go to Great Lengths	40	0	25	0	17	8	14	8	8	1	10	16	4	10	0	11	6	1	1	27	8
O	Premises -> Quality	8	5	15	3	16	3	3	17	3	40	22	31	9	22	6	10	13	14	9	8	17
N	Staff -> Quality	9	3	3	0	2	1	2	13	3	40	19	31	7	20	1	6	19	11	3	15	5
S	Other Consumers -> Quality	14	9	9	2	11	5	8	11	4	42	11	22	7	19	12	8	13	17	10	11	13
	Convenience	2	17	0	7	1	3	2	5	17	7	1	9	9	5	13	5	15	14	18	1	6
	Personalized Attention	28	1	13	1	10	5	6	10	0	25	30	22	7	29	3	14	23	21	2	29	17
	Image	26	1	13	8	24	2	8	26	2	8	2	7	1	5	2	2	9	21	1	4	2
	Reflect Social Class	23	0	12	2	20	1	7	22	0	12	3	9	0	4	0	1	5	7	0	1	1
	Little Choice Where/when	6	2	4	1	4	10	1	4	6	0	12	7	11	17	6	5	2	3	7	4	10
	DIY	0	5	1	0	0	0	1	6	0	11	3	2	4	4	3	21	0	2	5	3	11
	Store Name -> Quality	14	12	12	6	31	9	16	23	6	24	8	4	8	7	9	8	14	6	7	12	13
	Choice of Alternatives	2	1	1	1	1	5	0	1	0	2	3	8	4	6	5	1	1	0	4	3	3
	Prefer Not to Change	6	4	3	1	1	11	9	7	12	8	15	18	10	24	5	7	18	23	6	16	10
	Choice vs. Use	8	1	3	1	5	3	10	9	2	9	2	2	1	2	1	0	6	3	2	4	0
	Inability to Specify	5	2	3	1	3	3	4	4	3	12	7	2	2	7	3	2	2	14	0	10	6
	Not Complaining	1	0	3	0	0	0	2	0	0	9	14	2	7	14	6	4	8	4	2	9	10

TRACE =0.440021

AXIS	EIGEN VALUE	% TRACE	CUM. % TRACE
1	0.137518	31.3	31.3
2	0.084925	19.3	50.6
3	0.055746	12.7	63.2
4	0.045373	10.3	73.5
5	0.026437	6.0	79.5
6	0.017816	4.0	83.6
7	0.016205	3.7	87.3
8	0.012562	2.9	90.1

4 FACTOR SOLUTION

CO-ORDINATES FOR VARIABLES

VARIABLE	QUALITY	MASS	INERTIA (%)
New Car	0.877	0.079	6.2
Fruit Juice	0.863	0.029	5.2
Used Car	0.802	0.056	6.4
Suitcase	0.695	0.019	4.8
Furniture	0.844	0.054	6.6
Car Tyres	0.712	0.035	4.4
TV	0.765	0.040	4.6
Clothing	0.860	0.062	5.3
Toothpaste	0.818	0.027	5.0
Rest. Meal	0.707	0.089	5.8
Legal Advice	0.862	0.054	4.6
Nurs.Sch.Care	0.568	0.057	4.8
TV Repair	0.796	0.035	3.5
Medical Diag.	0.817	0.061	4.3
Photo Devel.	0.678	0.033	4.8
Moving House	0.434	0.040	5.2
Banking	0.582	0.046	3.4
Haircut	0.149	0.055	3.6
Dry Cleaning	0.765	0.027	3.9
Life Insurance	0.755	0.053	4.0
Car Service	0.868	0.049	3.6

	AXIS 1		
VARIABLE	CO-ORD	SQ COR	CONT (%)
New Car	0.452	0.590	11.7
Fruit Juice	0.250	0.080	1.3
Used Car	0.125	0.032	0.6
Suitcase	0.768	0.547	8.3
Furniture	0.627	0.728	15.4
Car Tyres	0.197	0.069	1.0
TV	0.476	0.451	6.7
Clothing	0.515	0.700	12.0
Toothpaste	0.183	0.041	0.7
Rest. Meal	-0.105	0.038	0.7
Legal Advice	-0.523	0.718	10.6
Nurs.Sch.Care	-0.266	0.194	3.0
TV Repair	-0.448	0.467	5.2
Medical Diag.	-0.459	0.671	9.3
Photo Devel.	-0.006	0.000	0.0
Moving House	-0.213	0.079	1.3
Banking	-0.233	0.165	1.8
Haircut	-0.082	0.023	0.3
Dry Cleaning	-0.271	0.117	1.5

Life Insurance	-0.284	0.209	2.7
Car Service	-0.410	0.524	6.0

AXIS 2

VARIABLE	CO-ORD	SQ COR	CONT (%)
New Car	0.306	0.270	8.7
Fruit Juice	-0.757	0.731	19.8
Used Car	0.421	0.357	11.7
Suitcase	-0.356	0.118	2.9
Furniture	0.154	0.044	1.5
Car Tyres	-0.053	0.005	0.1
TV	0.116	0.027	0.6
Clothing	0.011	0.000	0.0
Toothpaste	-0.602	0.444	11.4
Rest. Meal	-0.132	0.061	1.8
Legal Advice	0.206	0.111	2.7
Nurs.Sch.Care	0.153	0.064	1.6
TV Repair	-0.158	0.058	1.0
Medical Diag.	0.084	0.022	0.5
Photo Devel.	-0.615	0.584	14.5
Moving House	-0.051	0.004	0.1
Banking	0.024	0.002	0.0
Haircut	-0.110	0.042	0.8
Dry Cleaning	-0.604	0.579	11.7
Life Insurance	0.365	0.397	8.2
Car Service	0.048	0.007	0.1

AXIS 3

VARIABLE	CO-ORD	SQ COR	CONT (%)
New Car	0.063	0.011	0.6
Fruit Juice	0.146	0.027	1.1
Used Car	0.267	0.143	7.2
Suitcase	-0.061	0.003	0.1
Furniture	-0.183	0.062	3.2
Car Tyres	0.491	0.431	15.1
TV	0.242	0.116	4.2
Clothing	-0.226	0.134	5.7
Toothpaste	0.335	0.137	5.4
Rest. Meal	-0.411	0.591	27.0
Legal Advice	-0.043	0.005	0.2
Nurs.Sch.Care	-0.314	0.269	10.1
TV Repair	0.267	0.165	4.5
Medical Diag.	-0.003	0.000	0.0
Photo Devel.	0.024	0.001	0.0
Moving House	0.163	0.046	1.9
Banking	-0.205	0.128	3.5
Haircut	-0.154	0.082	2.3
Dry Cleaning	0.124	0.024	0.7
Life Insurance	0.175	0.091	2.9
Car Service	0.218	0.148	4.2

AXIS 4

VARIABLE	CO-ORD	SQ COR	CONT (%)
New Car	0.041	0.005	0.3
Fruit Juice	0.141	0.025	1.3
Used Car	-0.367	0.270	16.7
Suitcase	-0.169	0.027	1.2
Furniture	-0.073	0.010	0.6
Car Tyres	0.340	0.207	8.9
TV	0.293	0.171	7.7
Clothing	-0.099	0.026	1.3
Toothpaste	0.399	0.195	9.4
Rest. Meal	-0.068	0.016	0.9
Legal Advice	0.103	0.028	1.3
Nurs.Sch.Care	0.122	0.041	1.9
TV Repair	-0.214	0.106	3.6

Medical Diag.	0.197	0.123	5.2
Photo Devel.	-0.245	0.093	4.3
Moving House	-0.419	0.305	15.3
Banking	0.307	0.287	9.5
Haircut	0.022	0.002	0.1
Dry Cleaning	-0.169	0.045	1.7
Life Insurance	0.139	0.058	2.2
Car Service	-0.246	0.189	6.6

CO-ORDINATES FOR OBSERVATIONS

OBSERVATION	QUALITY	MASS	INERTIA (%)
Price->Qual.	0.633	0.034	4.0
Upper Limit	0.730	0.060	2.4
Physical Feat.	0.868	0.056	6.5
More After	0.713	0.043	4.9
Risk	0.888	0.041	6.1
Confident	0.765	0.053	2.8
First Impress.	0.791	0.041	2.3
Advice Someone	0.855	0.062	1.8
Continue After	0.744	0.036	2.1
Something New	0.560	0.029	1.8
Brand->Qual.	0.893	0.049	6.7
Great Lengths	0.769	0.040	5.5
Premises	0.779	0.051	2.5
Staff->Qual.	0.882	0.039	4.9
Others->Qual.	0.709	0.048	1.6
Convenience	0.791	0.029	8.3
Personal Att.	0.839	0.055	3.5
Image	0.743	0.032	5.0
Social Class	0.892	0.024	4.5
Choice When	0.545	0.023	3.0
Doing Yourself	0.486	0.015	6.2
Store->Qual.	0.420	0.046	2.3
Alternatives	0.267	0.010	1.9
Not to Change	0.739	0.040	3.3
Choice vs Use	0.544	0.014	1.6
Inability	0.123	0 018	1.4
Complaining	0.708	0.018	3.3

	AXIS 1		
OBSERVATION	CO-ORD	SQ COR	CONT (%)
Price->Qual.	0.566	0.612	7.8
Upper Limit	0.236	0.314	2.4
Physical Feat.	0.602	0.708	14.7
More After	-0.082	0.013	0.2
Risk	-0.345	0.181	3.5
Confident	0.244	0.255	2.3
First Impress.	-0.344	0.485	3.5
Advice Someone	-0.305	0.745	4.2
Continue After	0.020	0.002	0.0
Something New	-0.298	0.323	1.9
Brand->Qual.	0.476	0.376	8.0
Great Lengths	0.191	0.060	1.1
Premises	-0.251	0.293	2.3
Staff->Qual.	-0.421	0.323	5.1
Others->Qual.	-0.164	0.186	0.9
Convenience	-0.086	0.006	0.2
Personal Att.	-0.321	0.365	4.1
Image	0.618	0.561	8.9
Social Class	0.646	0.504	7.3
Choice When	-0.379	0.247	2.4
Doing Yourself	-0.436	0.106	2.1
Store->Qual.	0.290	0.380	2.8

Alternatives	-0.408	0.193	1.2
Not to Change	-0.363	0.357	3.8
Choice vs Use	0.414	0.334	1.7
Inability	-0.165	0.076	0.3
Complaining	-0.757	0.698	7.3

AXIS 2

OBSERVATION	CO-ORD	SQ COR	CONT (%)
Price->Qual.	-0.085	0.014	0.3
Upper Limit	-0.141	0.112	1.4
Physical Feat.	-0.068	0.009	0.3
More After	-0.567	0.640	16.2
Risk	0.291	0.129	4.1
Confident	-0.245	0.257	3.7
First Impress.	0.149	0.091	1.1
Advice Someone	0.081	0.053	0.5
Continue After	0.347	0.463	5.1
Something New	0.027	0.003	0.0
Brand->Qual.	0.012	0.000	0.0
Great Lengths	0.567	0.528	15.1
Premises	0.028	0.004	0.0
Staff->Qual.	0.108	0.021	0.5
Others->Qual.	-0.127	0.112	0.9
Convenience	-0.977	0.760	32.6
Personal Att.	0.330	0.384	7.0
Image	0.230	0.077	2.0
Social Class	0.420	0.213	5.0
Choice When	-0.141	0.034	0.5
Doing Yourself	-0.357	0.071	2.3
Store->Qual.	-0.085	0.033	0.4
Alternatives	-0.199	0.046	0.4
Not to Change	-0.071	0.014	0.2
Choice vs Use	0.105	0.021	0.2
Inability	0.031	0.003	0.0
Complaining	0.082	0.008	0.1

AXIS 3

OBSERVATION	CO-ORD	SQ COR	CONT (%)
Price->Qual.	-0.055	0.006	0.2
Upper Limit	0.100	0.057	1.1
Physical Feat.	-0.154	0.046	2.4
More After	-0.047	0.004	0.2
Risk	0.455	0.315	15.1
Confident	0.059	0.015	0.3
First Impress.	-0.226	0.209	3.7
Advice Someone	0.053	0.022	0.3
Continue After	0.224	0.193	3.2
Something New	0.170	0.104	1.5
Brand->Qual.	0.388	0.250	13.2
Great Lengths	0.324	0.172	7.5
Premises	-0.311	0.449	8.8
Staff->Qual.	-0.501	0.457	17.7
Others->Qual.	-0.243	0.410	5.1
Convenience	0.128	0.013	0.9
Personal Att.	-0.117	0.048	1.3
Image	-0.260	0.099	3.9
Social Class	-0.370	0.165	5.9
Choice When	0.389	0.259	6.1
Doing Yourself	0.123	0.008	0.4
Store->Qual.	-0.016	0.001	0.0
Alternatives	0.152	0.027	0.4
Not to Change	0.085	0.019	0.5
Choice vs Use	-0.107	0.022	0.3
Inability	-0.050	0.007	0.1
Complaining	0.035	0.001	0.0

	AXIS 4		
OBSERVATION	CO-ORD	SQ COR	CONT (%)
Price->Qual.	-0.020	0.001	0.0
Upper Limit	-0.209	0.247	5.8
Physical Feat.	-0.232	0.105	6.6
More After	-0.166	0.055	2.6
Risk	-0.415	0.263	15.5
Confident	0.236	0.238	6.5
First Impress.	0.040	0.007	0.1
Advice Someone	-0.066	0.035	0.6
Continue After	-0.150	0.087	1.8
Something New	0.190	0.130	2.3
Brand->Qual.	0.401	0.267	17.3
Great Lengths	0.073	0.009	0.5
Premises	-0.085	0.033	0.8
Staff->Qual.	0.209	0.080	3.8
Others->Qual.	-0.002	0.000	0.0
Convenience	0.125	0.012	1.0
Personal Att.	0.108	0.041	1.4
Image	-0.063	0.006	0.3
Social Class	-0.090	0.010	0.4
Choice When	0.054	0.005	0.1
Doing Yourself	-0.736	0.301	18.1
Store->Qual.	-0.038	0.007	0.1
Alternatives	0.032	0.001	0.0
Not to Change	0.359	0.349	11.2
Choice vs Use	0.292	0.166	2.6
Inability	0.116	0.038	0.5
Complaining	-0.014	0.000	0.0

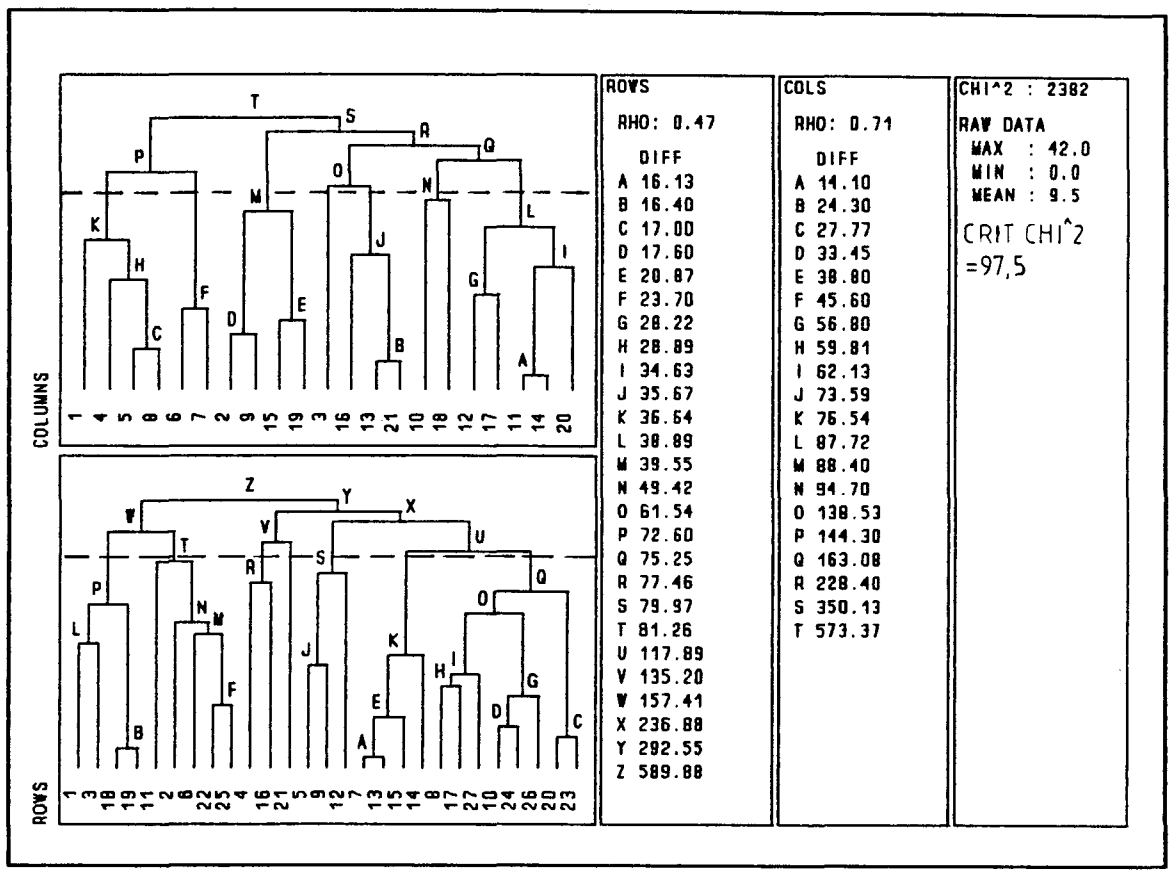
Appendix 5:
Chi Squared Tree Report
For Both Subsamples

Columns:

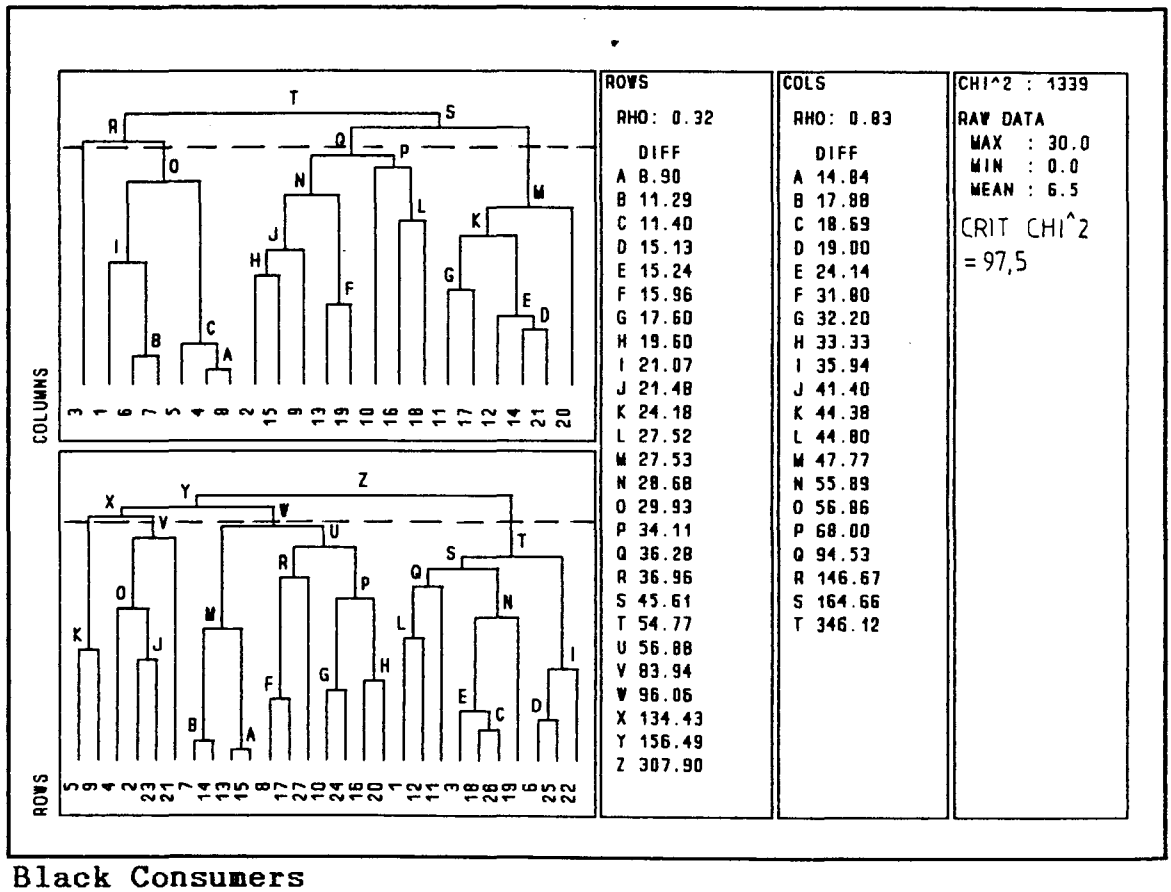
1	New Car
2	Fruit Juice
3	Used Car
4	Suitcase
5	Furniture
6	Car Tyres
7	TV
8	Clothing
9	Toothpaste
10	Restaurant Meal
11	Legal Advice
12	Nursery School Care
13	TV Repair
14	Medical Diagnosis
15	Photo Developing
16	Moving House
17	Banking
18	Haircut
19	Dry Cleaning
20	Life Insurance
21	Car Service

Rows:

1	Price->Quality
2	Upper Limit
3	Physical Features
4	More After Than Before
5	Risk
6	Confident in Judging
7	First Impressions
8	Advice of Someone
9	Continue After
10	Something/one New
11	Brand->Quality
12	Great Lengths
13	Premises->Quality
14	Staff->Quality
15	Consumers->Quality
16	Convenience
17	Personalized Attention
18	Image
19	Reflect Social Class
20	Choice Where/when
21	DIY
22	Store Name->Quality
23	Choice of Alternatives
24	Not to Change
25	Choice vs. Use
26	Inability to Specify
27	Not Complaining



White Consumers



Black Consumers

Appendix 6:
Correspondence Report for the Black Subsample

TRACE =0.361352

AXIS	EIGEN VALUE	% TRACE	CUM. % TRACE
1	0.109075	30.2	30.2
2	0.057574	15.9	46.1
3	0.053058	14.7	60.8
4	0.030534	8.4	69.3
5	0.023693	6.6	75.8
6	0.017634	4.9	80.7
7	0.012732	3.5	84.2
8	0.012156	3.4	87.6
9	0.008685	2.4	90.0
10	0.008277	2.3	92.3

4 FACTOR SOLUTION

CO-ORDINATES FOR VARIABLES

VARIABLE	QUALITY	MASS	INERTIA (%)
New Car	0.784	0.082	9.2
Fruit Juice	0.488	0.030	3.5
Used Car	0.912	0.055	9.6
Suitcase	0.634	0.022	2.9
Furniture	0.669	0.057	4.0
Car Tyres	0.660	0.030	2.4
TV	0.797	0.049	5.4
Clothing	0.673	0.063	4.7
Toothpaste	0.863	0.027	5.4
Rest. Meal	0.706	0.084	6.6
Legal Advice	0.784	0.066	6.7
Nurs.Sch.Care	0.492	0.052	3.9
TV Repair	0.700	0.039	4.8
Medical Diag.	0.858	0.066	5.3
Photo Devel.	0.520	0.029	4.4
Moving House	0.310	0.033	3.4
Banking	0.338	0.043	2.3
Haircut	0.530	0.041	5.0
Dry Cleaning	0.758	0.037	5.6
Life Insurance	0.511	0.057	3.2
Car Service	0.545	0.038	1.6

	AXIS 1		
VARIABLE	CO-ORD	SQ COR	CONT (%)
New Car	0.561	0.769	23.6
Fruit Juice	-0.179	0.075	0.9
Used Car	0.145	0.033	1.0
Suitcase	0.433	0.407	3.8
Furniture	0.395	0.608	8.1
Car Tyres	0.311	0.326	2.6
TV	0.541	0.738	13.2
Clothing	0.364	0.490	7.7
Toothpaste	-0.144	0.028	0.5
Rest. Meal	-0.281	0.280	6.1
Legal Advice	-0.283	0.220	4.9
Nurs.Sch.Care	-0.255	0.238	3.1
TV Repair	-0.306	0.215	3.4
Medical Diag.	-0.355	0.433	7.6
Photo Devel.	-0.233	0.100	1.4
Moving House	-0.006	0.000	0.0
Banking	-0.103	0.057	0.4

Haircut	-0.226	0.116	1.9
Dry Cleaning	-0.465	0.393	7.3
Life Insurance	0.052	0.013	0.1
Car Service	-0.254	0.414	2.2

AXIS 2

VARIABLE	CO-ORD	SQ COR	CONT (%)
New Car	0.048	0.006	0.3
Fruit Juice	-0.311	0.227	5.0
Used Car	-0.107	0.018	1.1
Suitcase	-0.248	0.134	2.4
Furniture	0.059	0.014	0.3
Car Tyres	-0.080	0.022	0.3
TV	0.069	0.012	0.4
Clothing	-0.082	0.025	0.7
Toothpaste	-0.428	0.250	8.5
Rest. Meal	0.038	0.005	0.2
Legal Advice	0.399	0.437	18.3
Nurs.Sch.Care	0.202	0.149	3.6
TV Repair	-0.302	0.209	6.2
Medical Diag.	0.338	0.391	13.0
Photo Devel.	-0.468	0.405	11.1
Moving House	-0.140	0.054	1.1
Banking	0.163	0.143	2.0
Haircut	-0.281	0.178	5.7
Dry Cleaning	-0.447	0.365	12.9
Life Insurance	0.243	0.288	5.8
Car Service	0.112	0.080	0.8

AXIS 3

VARIABLE	CO-ORD	SQ COR	CONT (%)
New Car	0.021	0.001	0.1
Fruit Juice	0.171	0.068	1.6
Used Car	-0.704	0.776	50.9
Suitcase	0.194	0.082	1.6
Furniture	0.100	0.039	1.1
Car Tyres	-0.091	0.028	0.5
TV	0.089	0.020	0.7
Clothing	0.207	0.158	5.1
Toothpaste	-0.063	0.005	0.2
Rest. Meal	0.286	0.289	12.9
Legal Advice	-0.154	0.065	3.0
Nurs.Sch.Care	0.138	0.070	1.9
TV Repair	-0.343	0.270	8.7
Medical Diag.	0.029	0.003	0.1
Photo Devel.	0.087	0.014	0.4
Moving House	-0.120	0.040	0.9
Banking	0.158	0.132	2.0
Haircut	0.211	0.101	3.5
Dry Cleaning	-0.003	0.000	0.0
Life Insurance	-0.200	0.197	4.3
Car Service	-0.088	0.050	0.6

AXIS 4

VARIABLE	CO-ORD	SQ COR	CONT (%)
New Car	0.058	0.008	0.9
Fruit Juice	-0.225	0.118	5.0
Used Car	0.234	0.086	9.8
Suitcase	-0.072	0.011	0.4
Furniture	0.045	0.008	0.4
Car Tyres	-0.290	0.285	8.2
TV	-0.104	0.027	1.7
Clothing	-0.004	0.000	0.0
Toothpaste	-0.651	0.579	37.1
Rest. Meal	0.194	0.133	10.3
Legal Advice	-0.151	0.063	4.9

Nurs.Sch.Care	0.097	0.035	1.6
TV Repair	-0.052	0.006	0.3
Medical Diag.	-0.095	0.031	2.0
Photo Devel.	0.022	0.001	0.0
Moving House	0.281	0.216	8.6
Banking	-0.034	0.006	0.2
Haircut	0.244	0.135	8.0
Dry Cleaning	0.009	0.000	0.0
Life Insurance	-0.050	0.012	0.5
Car Service	0.018	0.002	0.0

CO-ORDINATES FOR OBSERVATIONS

OBSERVATION	QUALITY	MASS	INERTIA (%)
Price->Qual.	0.680	0.048	4.7
Upper Limit	0.814	0.053	4.7
Physical Feat.	0.887	0.048	3.9
More After	0.516	0.038	3.9
Risk	0.935	0.035	8.1
Confident	0.245	0.049	1.0
First Impress.	0.886	0.038	4.0
Advice Someone	0.708	0.046	2.9
Continue After	0.804	0.034	3.2
Something New	0.649	0.032	2.2
Brand->Qual.	0.665	0.038	5.2
Great Lengths	0.651	0.034	4.0
Premises	0.720	0.047	3.5
Staff->Qual.	0.825	0.041	5.7
Others->Qual.	0.881	0.041	1.9
Convenience	0.240	0.029	2.0
Personal Att.	0.827	0.049	2.4
Image	0.691	0.040	3.2
Social Class	0.783	0.032	5.8
Choice When	0.468	0.028	1.9
Doing Yourself	0.745	0.022	8.6
Store->Qual.	0.139	0.043	2.3
Alternatives	0.469	0.019	2.8
Not to Change	0.650	0.039	4.5
Choice vs Use	0.497	0.024	1.5
Inability	0.352	0.030	1.7
Complaining	0.446	0.023	4.4

	AXIS 1		
OBSERVATION	CO-ORD	SQ COR	CONT (%)
Price->Qual.	0.478	0.650	10.1
Upper Limit	-0.124	0.049	0.8
Physical Feat.	0.481	0.797	10.3
More After	-0.209	0.117	1.5
Risk	0.002	0.000	0.0
Confident	0.109	0.163	0.5
First Impress.	-0.386	0.390	5.1
Advice Someone	-0.122	0.066	0.6
Continue After	0.212	0.130	1.4
Something New	-0.193	0.148	1.1
Brand->Qual.	0.505	0.513	8.8
Great Lengths	0.428	0.428	5.7
Premises	-0.341	0.438	5.0
Staff->Qual.	-0.511	0.518	9.8
Others->Qual.	-0.326	0.626	4.0
Convenience	-0.125	0.061	0.4
Personal Att.	-0.078	0.034	0.3
Image	0.384	0.505	5.4
Social Class	0.600	0.560	10.7
Choice When	-0.183	0.132	0.8
Doing Yourself	-0.563	0.228	6.5

Store->Qual.	0.100	0.053	0.4
Alternatives	-0.230	0.101	0.9
Not to Change	-0.318	0.245	3.6
Choice vs Use	0.160	0.110	0.6
Inability	0.256	0.325	1.8
Complaining	-0.427	0.262	3.8

AXIS 2

OBSERVATION	CO-ORD	SQ COR	CONT (%)
Price->Qual.	0.096	0.026	0.8
Upper Limit	-0.488	0.751	22.0
Physical Feat.	-0.094	0.031	0.7
More After	-0.323	0.280	6.9
Risk	-0.153	0.028	1.4
Confident	-0.024	0.008	0.0
First Impress.	0.400	0.420	10.4
Advice Someone	0.249	0.276	5.0
Continue After	-0.055	0.009	0.2
Something New	-0.171	0.116	1.6
Brand->Qual.	-0.093	0.017	0.6
Great Lengths	0.230	0.124	3.1
Premises	0.016	0.001	0.0
Staff->Qual.	0.307	0.186	6.7
Others->Qual.	0.038	0.008	0.1
Convenience	-0.195	0.150	1.9
Personal Att.	0.375	0.789	12.0
Image	-0.024	0.002	0.0
Social Class	0.165	0.042	1.5
Choice When	-0.031	0.004	0.0
Doing Yourself	-0.640	0.294	15.9
Store->Qual.	0.011	0.001	0.0
Alternatives	-0.331	0.208	3.6
Not to Change	0.154	0.057	1.6
Choice vs Use	-0.047	0.010	0.1
Inability	-0.051	0.013	0.1
Complaining	0.295	0.125	3.5

AXIS 3

OBSERVATION	CO-ORD	SQ COR	CONT (%)
Price->Qual.	0.036	0.004	0.1
Upper Limit	-0.049	0.007	0.2
Physical Feat.	0.074	0.019	0.5
More After	0.170	0.077	2.1
Risk	-0.836	0.824	45.5
Confident	0.020	0.006	0.0
First Impress.	0.015	0.001	0.0
Advice Someone	-0.285	0.362	7.1
Continue After	-0.464	0.623	13.8
Something New	-0.177	0.124	1.9
Brand->Qual.	0.121	0.030	1.0
Great Lengths	-0.201	0.095	2.6
Premises	0.222	0.185	4.4
Staff->Qual.	0.202	0.081	3.1
Others->Qual.	0.169	0.168	2.2
Convenience	0.061	0.015	0.2
Personal Att.	0.012	0.001	0.0
Image	0.206	0.146	3.2
Social Class	0.280	0.122	4.8
Choice When	0.099	0.038	0.5
Doing Yourself	0.204	0.030	1.8
Store->Qual.	0.126	0.083	1.3
Alternatives	-0.081	0.012	0.2
Not to Change	-0.116	0.033	1.0
Choice vs Use	0.189	0.154	1.6
Inability	0.052	0.013	0.2

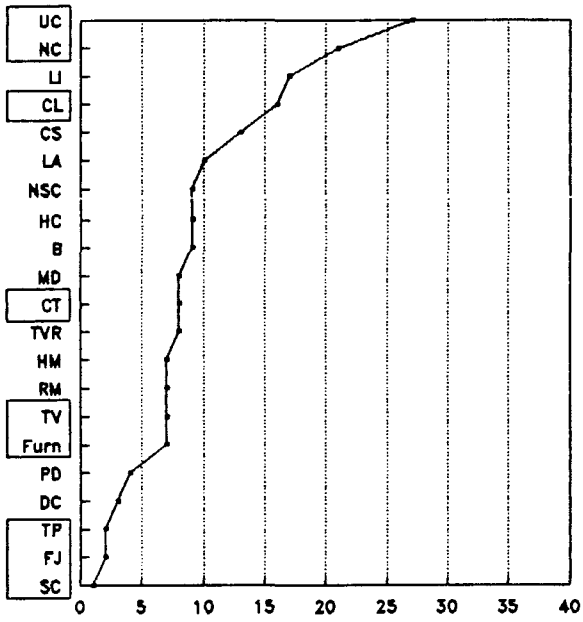
Complaining	-0.128	0.024	0.7

	AXIS 4		
OBSERVATION	CO-ORD	SQ COR	CONT (%)
Price->Qual.	0.010	0.000	0.0
Upper Limit	-0.045	0.006	0.3
Physical Feat.	0.108	0.040	1.9
More After	-0.124	0.041	1.9
Risk	0.267	0.084	8.0
Confident	-0.071	0.069	0.8
First Impress.	0.169	0.075	3.5
Advice Someone	-0.030	0.004	0.1
Continue After	0.121	0.042	1.6
Something New	-0.257	0.261	6.9
Brand->Qual.	-0.228	0.105	6.5
Great Lengths	0.044	0.004	0.2
Premises	0.160	0.096	3.9
Staff->Qual.	0.142	0.040	2.7
Others->Qual.	0.116	0.079	1.8
Convenience	-0.060	0.014	0.3
Personal Att.	-0.021	0.003	0.1
Image	0.106	0.039	1.5
Social Class	0.194	0.059	4.0
Choice When	-0.274	0.295	6.8
Doing Yourself	0.517	0.192	19.6
Store->Qual.	0.019	0.002	0.1
Alternatives	-0.279	0.148	4.8
Not to Change	-0.360	0.315	16.7
Choice vs Use	-0.227	0.223	4.0
Inability	-0.009	0.000	0.0
Complaining	-0.158	0.036	1.9

Appendix 7:

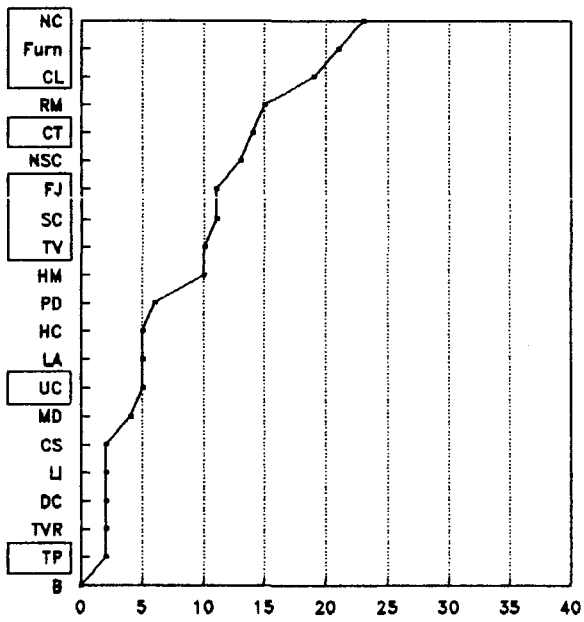
Product Frequencies for Rejected Hypotheses - White Subsample

CONTINUE AFTER
H2



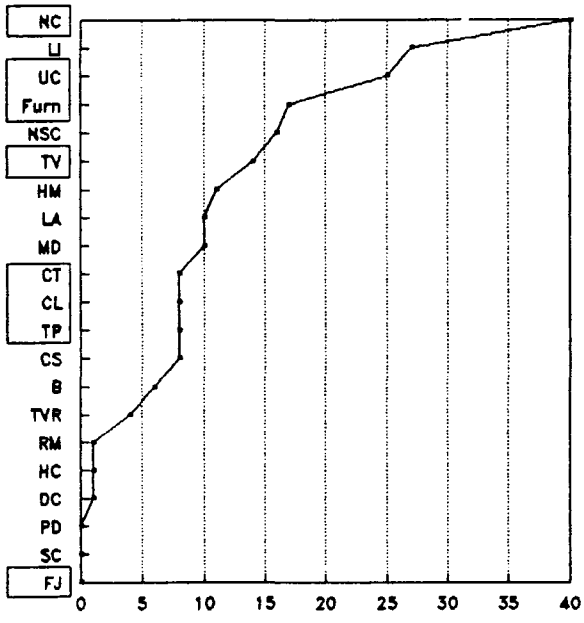
Question 9

PRICE->QUALITY
H4



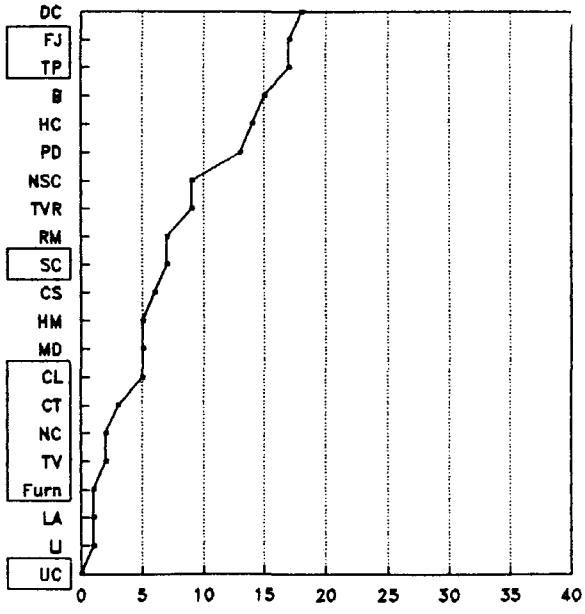
Question 1

GREAT LENGTHS
H15



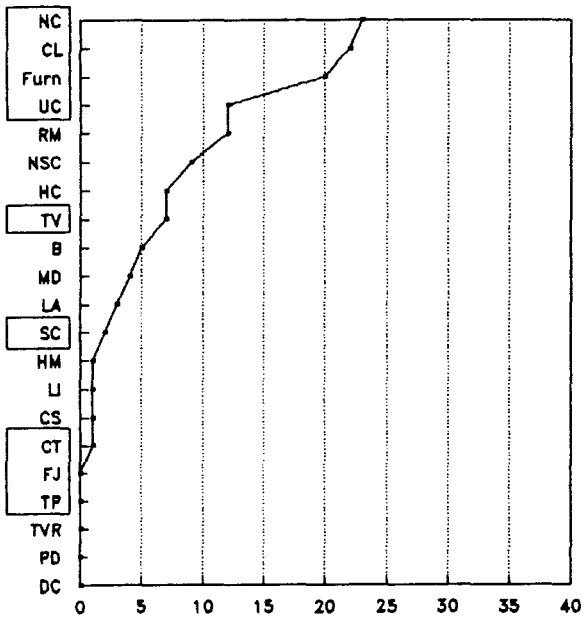
Question 12

CONVENIENCE
H16



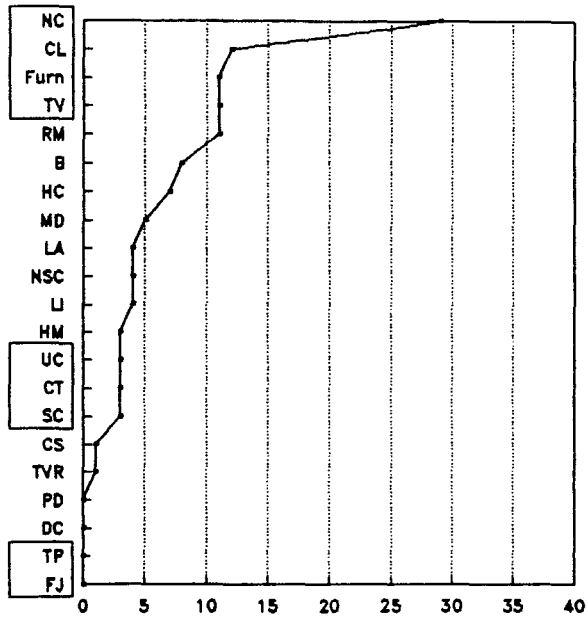
Question 16

REFLECT SOCIAL CLASS
H19



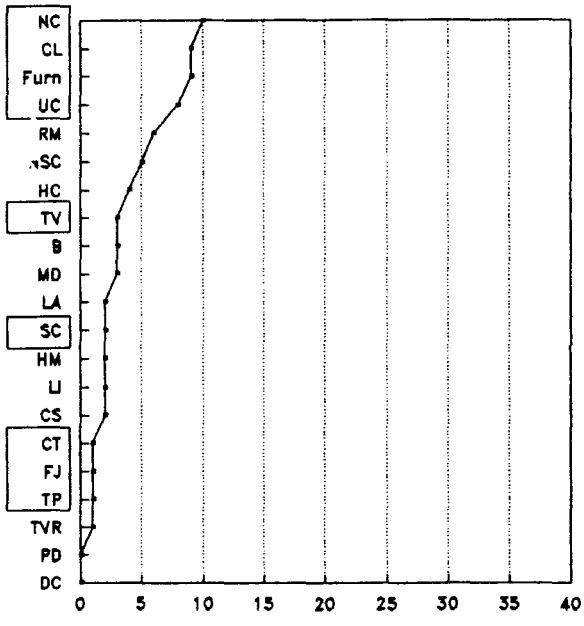
White Consumers: Question 19

REFLECT SOCIAL CLASS
H19



Black Consumers: Question 19

CHOICE vs. USE
H22

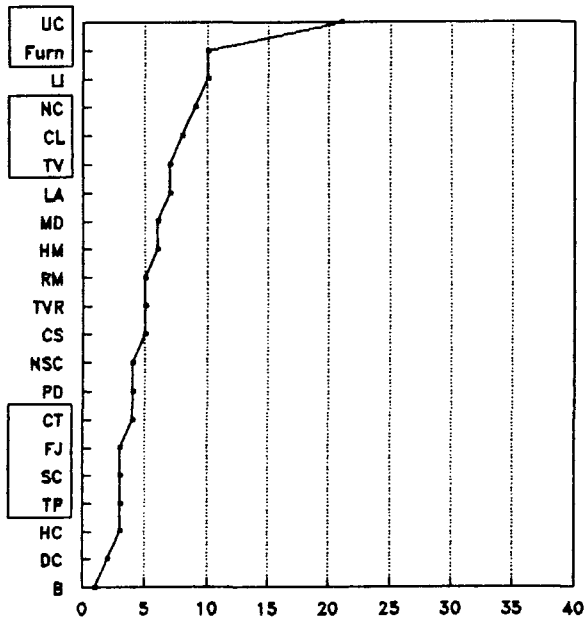


Question 25

Appendix 8:

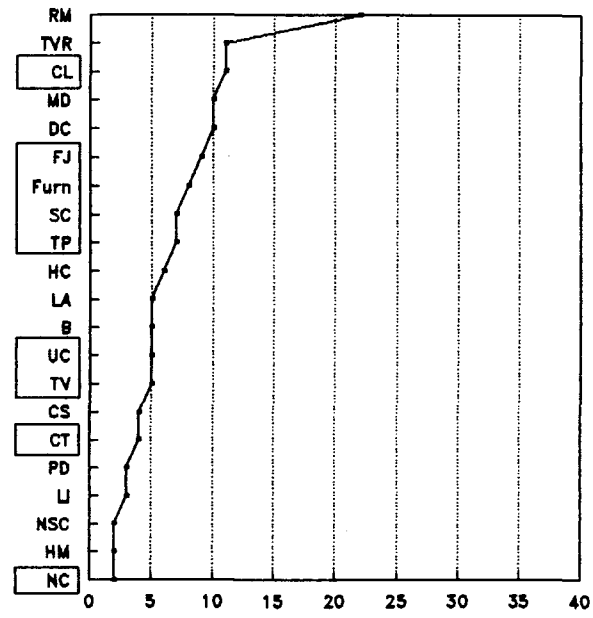
Product Frequencies for Rejected Hypotheses - Black Subsample

CONTINUE AFTER
H2



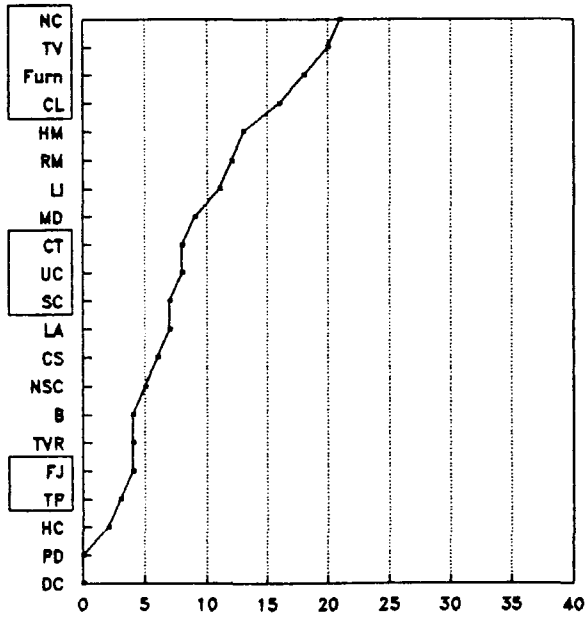
Question 9

MORE AFTER THAN BEFORE
H3



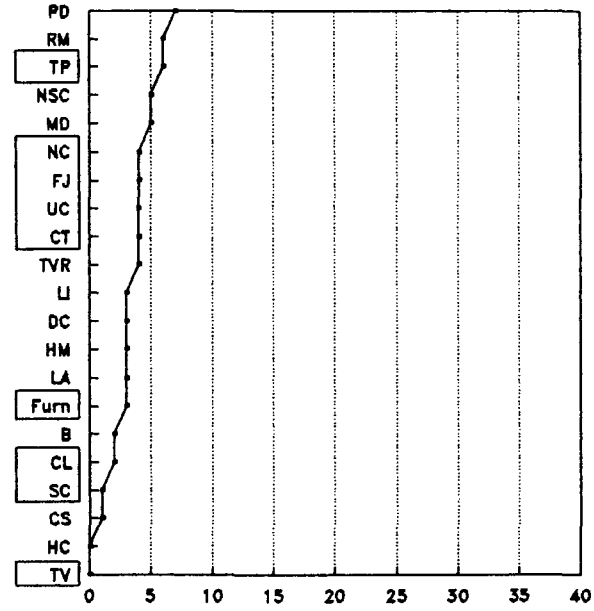
Question 4

PRICE->QUALITY
H4



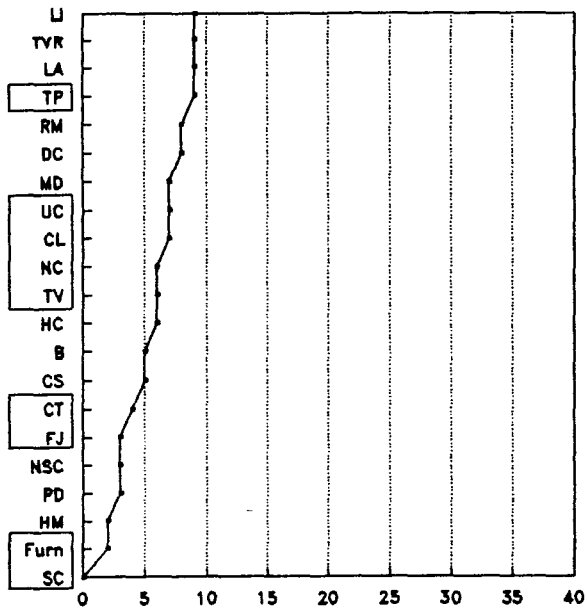
Question 1

CHOICE OF ALTERNATIVES
H5



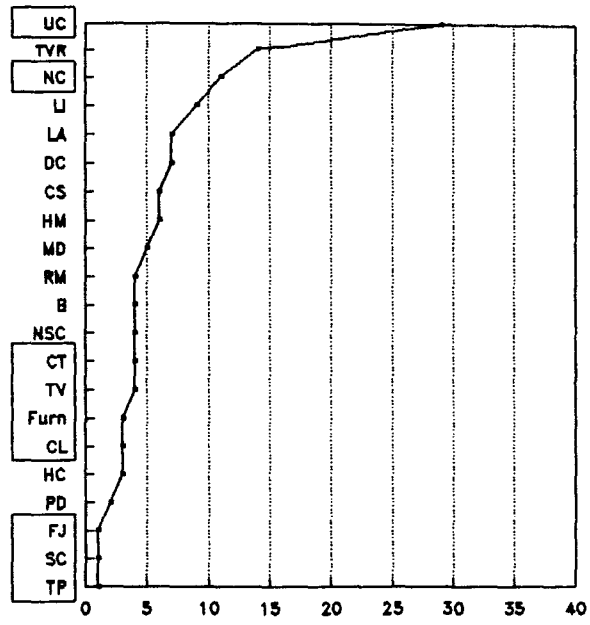
Question 23

SOMETHING / SOMEONE NEW
H7



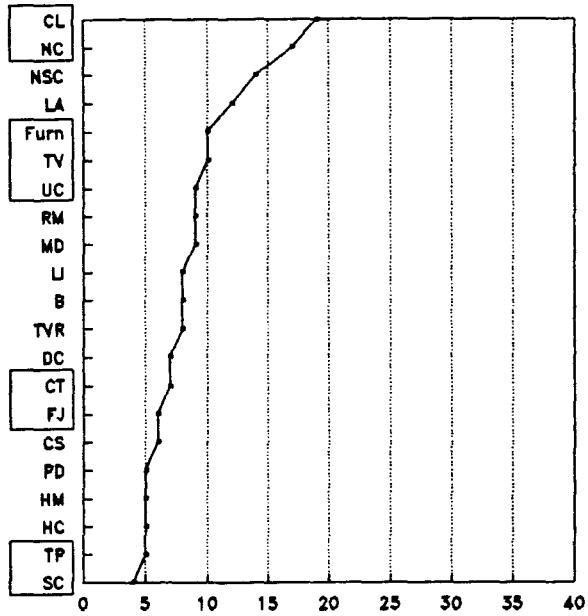
Question 10

RISK
H8



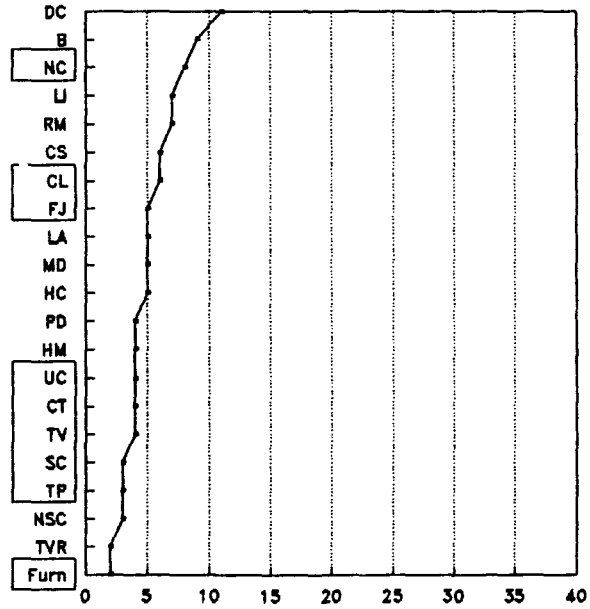
Question 5

CONFIDENCE IN JUDGING
H12



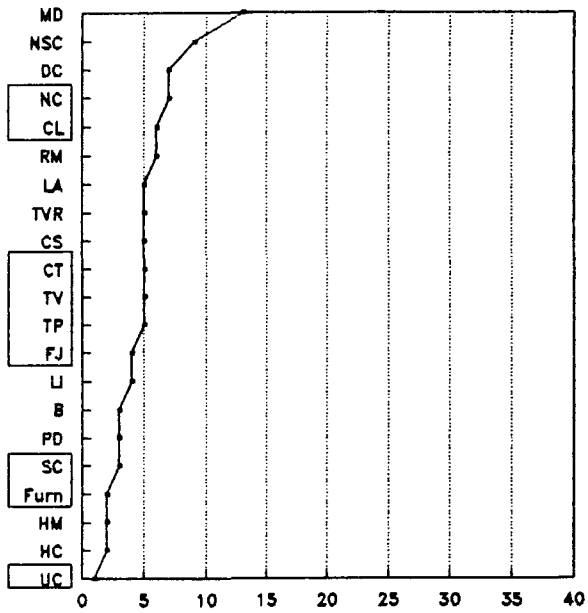
Question 6

CONVENIENCE
H16



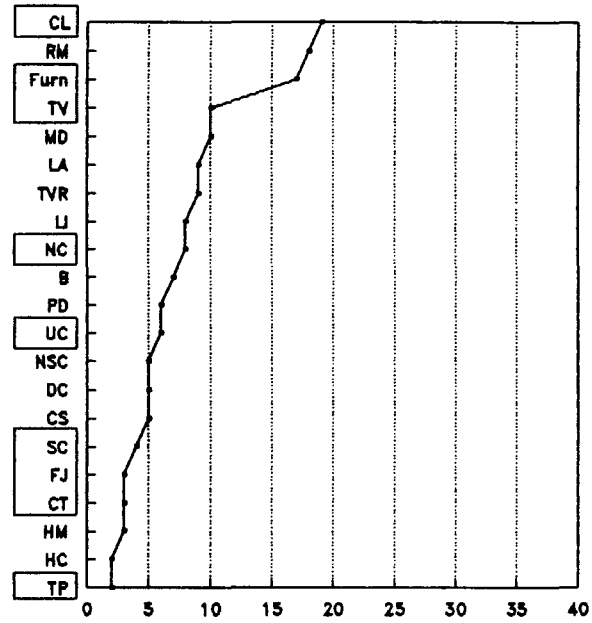
Question 16

LITTLE CHOICE WHEN / WHERE
H20



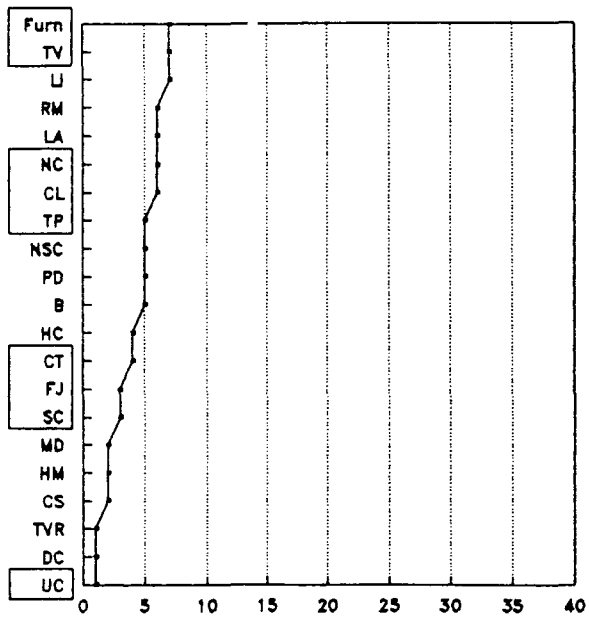
Question 20

STORE NAME->QUALITY
H21



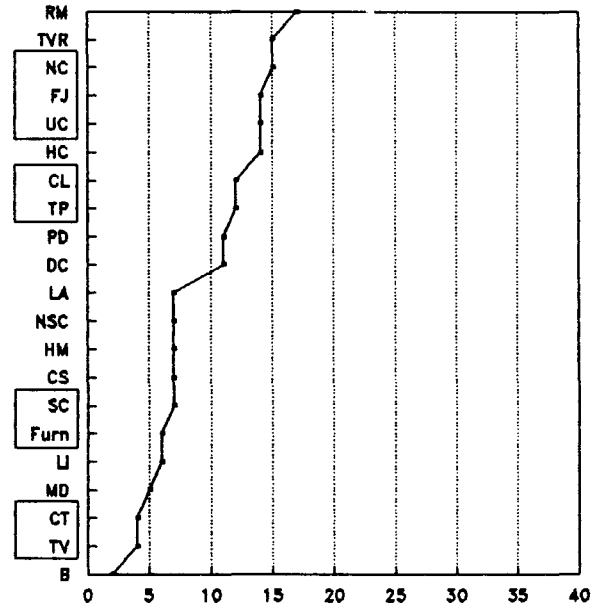
Question 22

CHOICE vs. USE
H22



Question 25

UPPER LIMIT
H23



Question 2

Appendix 9:

Chi Squared Contingency Analysis; Attributes Showing Differences Between White and Black Consumers

Table 9-1:

PRICE, QUALITY

		RACE		AGE		PERSONAL INCOME		
	TOTAL	WHITE	BLACK	<35	35+	UP TO R2000	R2001 R3000	> R3000
TOTAL RESPONSES	96	52	44	64	30	27	27	38
		54.2	45.8	66.7	31.3	28.1	28.1	39.6
GOODS	221	116	105	165	52	51	59	106
	60.7	62.4	59.0	62.5	55.9	52.6	62.1	65.0
		31.9	28.8	45.3	14.3	14.0	16.2	29.1
New car	44	23	21	34	9	12	14	17
	12.1	12.4	11.8	12.9	9.7	12.4	14.7	10.4
		6.3	5.8	9.3	2.5	3.3	3.8	4.7
Fruit juice	15	11	4	12	3	2	3	10
	4.1	5.9	2.2	4.5	3.2	2.1	3.2	6.1
		3.0	1.1	3.3	0.8	0.5	0.8	2.7
Used car	13	5	8	11	2	5	2	6
	3.6	2.7	4.5	4.2	2.2	5.2	2.1	3.7
		1.4	2.2	3.0	0.5	1.4	0.5	1.6
Suitcase	18	11	7	12	6	2	7	9
	4.9	5.9	3.9	4.5	6.5	2.1	7.4	5.5
		3.0	1.9	3.3	1.6	0.5	1.9	2.5
Furniture	39	21	18	29	10	10	8	20
	10.7	11.3	10.1	11.0	10.8	10.3	8.4	12.3
		5.8	4.9	8.0	2.7	2.7	2.2	5.5
Car tyres	22	14	8	14	7	3	6	12
	6.0	7.5	4.5	5.3	7.5	3.1	6.3	7.4
		3.8	2.2	3.8	1.9	0.8	1.6	3.3
TV	30	10	20	24	5	9	7	13
	8.2	5.4	11.2	9.1	5.4	9.3	7.4	8.0
		2.7	5.5	6.6	1.4	2.5	1.9	3.6

PRICE, QUALITY

		RACE		AGE		PERSONAL INCOME		
	TOTAL	WHITE	BLACK	<35	35+	UP TO R2000	R2001 R3000	> R3000
TOTAL RESPONSES	96	52	44	64	30	27	27	38
		54.2	45.8	66.7	31.3	28.1	28.1	39.6
Clothing	35	19	16	24	10	8	10	16
	9.6	10.2	9.0	9.1	10.8	8.2	10.5	9.8
		5.2	4.4	6.6	2.7	2.2	2.7	4.4
Toothpaste	5	2	3	5	0	0	2	3
	1.4	1.1	1.7	1.9	0.0	0.0	2.1	1.8
		0.5	0.8	1.4	0.0	0.0	0.5	0.8
SERVICES	139	66	73	97	39	46	36	54
	38.2	35.5	41.0	36.7	41.9	47.4	37.9	33.1
		18.1	20.1	26.6	10.7	12.6	9.9	14.8
Restaurant meal	27	15	12	18	7	6	8	11
	7.4	8.1	6.7	6.8	7.5	6.2	8.4	6.7
		4.1	3.3	4.9	1.9	1.6	2.2	3.0
Legal advice	12	5	7	6	6	5	3	4
	3.3	2.7	3.9	2.3	6.5	5.2	3.2	2.5
		1.4	1.9	1.6	1.6	1.4	0.8	1.1
Nursery school care	18	13	5	15	3	4	6	8
	4.9	7.0	2.8	5.7	3.2	4.1	6.3	4.9
		3.6	1.4	4.1	0.8	1.1	1.6	2.2
TV repair	6	2	4	6	0	2	1	3
	1.6	1.1	2.2	2.3	0.0	2.1	1.1	1.8
		0.5	1.1	1.6	0.0	0.5	0.3	0.8
Medical diagnosis	13	4	9	7	6	4	1	8
	3.6	2.2	5.1	2.7	6.5	4.1	1.1	4.9
		1.1	2.5	1.9	1.6	1.1	0.3	2.2

PRICE, QUALITY

	TOTAL	RACE		AGE		PERSONAL INCOME		
		WHITE	BLACK	<35	35+	UP TO R2000	R2001 R3000	> R3000
TOTAL RESPONSES	96	52	44	64	30	27	27	38
		54.2	45.8	66.7	31.3	28.1	28.1	39.6
Photo developing	6	6	0	5	1	1	2	3
	1.6	3.2	0.0	1.9	1.1	1.0	2.1	1.8
		1.6	0.0	1.4	0.3	0.3	0.5	0.8
Moving house	23	10	13	18	5	9	7	7
	6.3	5.4	7.3	6.8	5.4	9.3	7.4	4.3
		2.7	3.6	4.9	1.4	2.5	1.9	1.9
Banking	4	0	4	3	1	2	1	1
	1.1	0.0	2.2	1.1	1.1	2.1	1.1	0.6
		0.0	1.1	0.8	0.3	0.5	0.3	0.3
Haircut	7	5	2	5	2	2	3	2
	1.9	2.7	1.1	1.9	2.2	2.1	3.2	1.2
		1.4	0.5	1.4	0.5	0.5	0.8	0.5
Dry cleaning	2	2	0	1	1	1	0	1
	0.5	1.1	0.0	0.4	1.1	1.0	0.0	0.6
		0.5	0.0	0.3	0.3	0.3	0.0	0.3
Life insurance	13	2	11	6	6	6	3	3
	3.6	1.1	6.2	2.3	6.5	6.2	3.2	1.8
		0.5	3.0	1.6	1.6	1.6	0.8	0.8
Car service	8	2	6	7	1	4	1	3
	2.2	1.1	3.4	2.7	1.1	4.1	1.1	1.8
		0.5	1.6	1.9	0.3	1.1	0.3	0.8
NO RESPONSE	4	4	0	2	2	0	0	3
	1.1	2.2	0.0	0.8	2.2	0.0	0.0	1.8
		1.1	0.0	0.5	0.5	0.0	0.0	0.8

PRICE, QUALITY

	TOTAL	RACE		AGE		PERSONAL INCOME		
		WHITE	BLACK	<35	35+	UP TO R2000	R2001 R3000	> R3000
TOTAL RESPONSES	96	52	44	64	30	27	27	38
		54.2	45.8	66.7	31.3	28.1	28.1	39.6
Chi Square		39.28		20.71		29.43		
		p=.006		p=.414		p=.890		

Table 9-2:

CONVENIENCE

	TOTAL	RACE		AGE		PERSONAL INCOME		
		WHITE	BLACK	<35	35+	UP TO R2000	R2001 R3000	> R3000
TOTAL RESPONSES	96	52	44	64	30	27	27	38
		54.2	45.8	66.7	31.3	28.1	28.1	39.6
GOODS	93	54	39	76	17	20	42	31
	34.4	33.5	35.8	35.8	30.4	29.4	47.2	28.7
		20.0	14.4	28.1	6.3	7.4	15.6	11.5
New car	10	2	8	5	5	5	3	2
	3.7	1.2	7.3	2.4	8.9	7.4	3.4	1.9
		0.7	3.0	1.9	1.9	1.9	1.1	0.7
Fruit juice	22	17	5	19	3	2	11	9
	8.1	10.6	4.6	9.0	5.4	2.9	12.4	8.3
		6.3	1.9	7.0	1.1	0.7	4.1	3.3
Used car	4	0	4	3	1	1	2	1
	1.5	0.0	3.7	1.4	1.8	1.5	2.2	0.9
		0.0	1.5	1.1	0.4	0.4	0.7	0.4
Suitcase	10	7	3	9	1	1	7	2
	3.7	4.3	2.8	4.2	1.8	1.5	7.9	1.9
		2.6	1.1	3.3	0.4	0.4	2.6	0.7
Furniture	3	1	2	2	1	2	1	0
	1.1	0.6	1.8	0.9	1.8	2.9	1.1	0.0
		0.4	0.7	0.7	0.4	0.7	0.4	0.0
Car tyres	7	3	4	6	1	1	3	3
	2.6	1.9	3.7	2.8	1.8	1.5	3.4	2.8
		1.1	1.5	2.2	0.4	0.4	1.1	1.1
TV	6	2	4	4	2	1	2	3
	2.2	1.2	3.7	1.9	3.6	1.5	2.2	2.8
		0.7	1.5	1.5	0.7	0.4	0.7	1.1

CONVENIENCE

	TOTAL	RACE		AGE		PERSONAL INCOME		
		WHITE	BLACK	<35	35+	UP TO R2000	R2001 R3000	> R3000
TOTAL RESPONSES	96	52	44	64	30	27	27	38
		54.2	45.8	66.7	31.3	28.1	28.1	39.6
Clothing	11	5	6	11	0	3	5	3
	4.1	3.1	5.5	5.2	0.0	4.4	5.6	2.8
		1.9	2.2	4.1	0.0	1.1	1.9	1.1
Toothpaste	20	17	3	17	3	4	8	8
	7.4	10.6	2.8	8.0	5.4	5.9	9.0	7.4
		6.3	1.1	6.3	1.1	1.5	3.0	3.0
SERVICES	171	103	68	135	36	48	45	76
	63.3	64.0	62.4	63.7	64.3	70.6	50.6	70.4
		38.1	25.2	50.0	13.3	17.8	16.7	28.1
Restaurant meal	14	7	7	11	3	3	4	7
	5.2	4.3	6.4	5.2	5.4	4.4	4.5	6.5
		2.6	2.6	4.1	1.1	1.1	1.5	2.6
Legal advice	6	1	5	3	3	4	1	1
	2.2	0.6	4.6	1.4	5.4	5.9	1.1	0.9
		0.4	1.9	1.1	1.1	1.5	0.4	0.4
Nursery school care	12	9	3	10	2	4	3	5
	4.4	5.6	2.8	4.7	3.6	5.9	3.4	4.6
		3.3	1.1	3.7	0.7	1.5	1.1	1.9
TV repair	11	9	2	7	4	2	2	7
	4.1	5.6	1.8	3.3	7.1	2.9	2.2	6.5
		3.3	0.7	2.6	1.5	0.7	0.7	2.6
Medical diagnosis	10	5	5	7	3	4	3	3
	3.7	3.1	4.6	3.3	5.4	5.9	3.4	2.8
		1.9	1.9	2.6	1.1	1.5	1.1	1.1

CONVENIENCE

	TOTAL	RACE		AGE		PERSONAL INCOME		
		WHITE	BLACK	<35	35+	UP TO R2000	R2001 R3000	> R3000
TOTAL RESPONSES	96	52	44	64	30	27	27	38
		54.2	45.8	66.7	31.3	28.1	28.1	39.6
Photo developing	17	13	4	15	2	4	4	9
	6.3	8.1	3.7	7.1	3.6	5.9	4.5	8.3
		4.8	1.5	5.6	0.7	1.5	1.5	3.3
Moving house	9	5	4	5	4	1	6	2
	3.3	3.1	3.7	2.4	7.1	1.5	6.7	1.9
		1.9	1.5	1.9	1.5	0.4	2.2	0.7
Banking	24	15	9	18	6	8	5	11
	8.9	9.3	8.3	8.5	10.7	11.8	5.6	10.2
		5.6	3.3	6.7	2.2	3.0	1.9	4.1
Haircut	19	14	5	17	2	3	6	9
	7.0	8.7	4.6	8.0	3.6	4.4	6.7	8.3
		5.2	1.9	6.3	0.7	1.1	2.2	3.3
Dry cleaning	29	18	11	25	4	7	5	16
	10.7	11.2	10.1	11.8	7.1	10.3	5.6	14.8
		6.7	4.1	9.3	1.5	2.6	1.9	5.9
Life insurance	8	1	7	8	0	4	2	2
	3.0	0.6	6.4	3.8	0.0	5.9	2.2	1.9
		0.4	2.6	3.0	0.0	1.5	0.7	0.7
Car service	12	6	6	9	3	4	4	4
	4.4	3.7	5.5	4.2	5.4	5.9	4.5	3.7
		2.2	2.2	3.3	1.1	1.5	1.5	1.5
NO RESPONSE	6	4	2	1	3	0	2	1
	2.2	2.5	1.8	0.5	5.4	0.0	2.2	0.9
		1.5	0.7	0.4	1.1	0.0	0.7	0.4

CONVENIENCE

	TOTAL	RACE		AGE		PERSONAL INCOME		
		WHITE	BLACK	<35	35+	UP TO R2000	R2001 R3000	> R3000
TOTAL RESPONSES	96	52	44	64	30	27	27	38
		54.2	45.8	66.7	31.3	28.1	28.1	39.6
Chi Square		45.91		25.35		44.64		
		p=.001		p=.188		p=.283		

Table 9-3:

DOING THE JOB YOURSELF

	TOTAL	RACE		AGE		PERSONAL INCOME		
		WHITE	BLACK	<35	35+	UP TO R2000	R2001 R3000	> R3000
TOTAL RESPONSES	96	52	44	64	30	27	27	38
		54.2	45.8	66.7	31.3	28.1	28.1	39.6
GOODS	22	13	9	18	4	4	13	5
	12.4	14.1	10.5	14.4	7.8	8.3	20.3	8.2
		7.3	5.1	10.1	2.2	2.2	7.3	2.8
New car	2	0	2	2	0	1	1	0
	1.1	0.0	2.3	1.6	0.0	2.1	1.6	0.0
		0.0	1.1	1.1	0.0	0.6	0.6	0.0
Fruit juice	6	5	1	6	0	0	4	2
	3.4	5.4	1.2	4.8	0.0	0.0	6.3	3.3
		2.8	0.6	3.4	0.0	0.0	2.2	1.1
Used car	2	1	1	2	0	0	1	1
	1.1	1.1	1.2	1.6	0.0	0.0	1.6	1.6
		0.6	0.6	1.1	0.0	0.0	0.6	0.6
Furniture	3	0	3	2	1	2	1	0
	1.7	0.0	3.5	1.6	2.0	4.2	1.6	0.0
		0.0	1.7	1.1	0.6	1.1	0.6	0.0
TV	1	1	0	1	0	0	1	0
	0.6	1.1	0.0	0.8	0.0	0.0	1.6	0.0
		0.6	0.0	0.6	0.0	0.0	0.6	0.0
Clothing	7	6	1	4	3	0	5	2
	3.9	6.5	1.2	3.2	5.9	0.0	7.8	3.3
		3.4	0.6	2.2	1.7	0.0	2.8	1.1
Toothpaste	1	0	1	1	0	1	0	0
	0.6	0.0	1.2	0.8	0.0	2.1	0.0	0.0
		0.0	0.8	0.6	0.0	0.6	0.0	0.0

DOING THE JOB YOURSELF

	TOTAL	RACE		AGE		PERSONAL INCOME		
		WHITE	BLACK	<35	35+	UP TO R2000	R2001 R3000	> R3000
TOTAL RESPONSES	96	52	44	64	30	27	27	38
		54.2	45.8	66.7	31.3	28.1	28.1	39.6
SERVICES	143	69	74	98	45	44	49	48
	80.3	75.0	86.0	78.4	88.2	91.7	76.6	78.7
		38.8	41.6	55.1	25.3	24.7	27.5	27.0
Restaurant meal	21	11	10	13	8	6	8	7
	11.8	12.0	11.6	10.4	15.7	12.5	12.5	11.5
		6.2	5.6	7.3	4.5	3.4	4.5	3.9
Legal advice	4	3	1	4	0	0	1	3
	2.2	3.3	1.2	3.2	0.0	0.0	1.6	4.9
		1.7	0.6	2.2	0.0	0.0	0.6	1.7
Nursery school care	6	2	4	5	1	4	1	1
	3.4	2.2	4.7	4.0	2.0	8.3	1.6	1.6
		1.1	2.2	2.8	0.6	2.2	0.6	0.6
TV repair	9	4	5	4	5	2	3	4
	5.1	4.3	5.8	3.2	9.8	4.2	4.7	6.6
		2.2	2.8	2.2	2.8	1.1	1.7	2.2
Medical diagnosis	6	4	2	5	1	1	4	1
	3.4	4.3	2.3	4.0	2.0	2.1	6.3	1.6
		2.2	1.1	2.8	0.6	0.6	2.2	0.6
Photo developing	12	3	9	10	2	7	2	3
	6.7	3.3	10.5	8.0	3.9	14.6	3.1	4.9
		1.7	5.1	5.6	1.1	3.9	1.1	1.7
Moving house	31	21	10	25	6	5	13	12
	17.4	22.8	11.6	20.0	11.8	10.4	20.3	19.7
		11.8	5.6	14.0	3.4	2.8	7.3	6.7

DOING THE JOB YOURSELF

		RACE		AGE		PERSONAL INCOME		
	TOTAL	WHITE	BLACK	<35	35+	UP TO R2000	R2001 R3000	> R3000
TOTAL RESPONSES	96	52	44	64	30	27	27	38
		54.2	45.8	66.7	31.3	28.1	28.1	39.6
Banking	4	0	4	2	2	2	1	1
	2.2	0.0	4.7	1.6	3.9	4.2	1.6	1.6
		0.0	2.2	1.1	1.1	1.1	0.6	0.6
Haircut	15	2	13	9	6	7	4	4
	8.4	2.2	15.1	7.2	11.8	14.6	6.3	6.6
		1.1	7.3	5.1	3.4	3.9	2.2	2.2
		--	++					
Dry cleaning	16	5	11	8	8	7	6	3
	9.0	5.4	12.8	6.4	15.7	14.6	9.4	4.9
		2.8	6.2	4.5	4.5	3.9	3.4	1.7
Life insurance	4	3	1	4	0	1	0	3
	2.2	3.3	1.2	3.2	0.0	2.1	0.0	4.9
		1.7	0.6	2.2	0.0	0.6	0.0	1.7
Car service	15	11	4	9	6	2	6	6
	8.4	12.0	4.7	7.2	11.8	4.2	9.4	9.8
		6.2	2.2	5.1	3.4	1.1	3.4	3.4
NO RESPONSE	13	10	3	9	2	0	2	8
	7.3	10.9	3.5	7.2	3.9	0.0	3.1	13.1
		5.6	1.7	5.1	1.1	0.0	1.1	4.5
Chi Square		41.21		21.65		43.69		
		p=.001		p=.248		p=.177		

Appendix 10:

Correspondence Report with 12 Original Zeithaml Constructs (White Only)

TRACE =0.360988

AXIS	EIGEN VALUE	% TRACE	CUM. % TRACE
1	0.112697	31.2	31.2
2	0.088075	24.4	55.6
3	0.056815	15.7	71.4
4	0.039865	11.0	82.4
5	0.024245	6.7	89.1
6	0.013894	3.8	93.0

3 FACTOR SOLUTION

CO-ORDINATES FOR VARIABLES

VARIABLE	QUALITY	MASS	INERTIA (%)
New Car	0.855	0.055	4.7
Fruit Juice	0.947	0.023	4.8
Used Car	0.870	0.060	11.5
Suitcase	0.825	0.011	5.8
Furniture	0.900	0.033	7.4
Car Tyres	0.443	0.034	4.0
TV	0.290	0.029	2.2
Clothing	0.754	0.046	5.1
Toothpaste	0.548	0.021	5.2
Rest. Meal	0.536	0.096	7.7
Legal Advice	0.671	0.073	2.4
Nurs.Sch.Care	0.760	0.069	6.5
TV Repair	0.666	0.047	2.8
Medical Diag.	0.696	0.076	3.9
Photo Devel.	0.754	0.035	6.9
Moving House	0.443	0.039	1.1
Banking	0.807	0.044	4.7
Haircut	0.341	0.062	4.0
Dry Cleaning	0.376	0.029	2.1
Life Insurance	0.628	0.058	3.6
Car Service	0.846	0.060	3.6

	AXIS 1		
VARIABLE	CO-ORD	SQ COR	CONT (%)
New Car	0.360	0.426	6.4
Fruit Juice	0.683	0.630	9.7
Used Car	-0.232	0.077	2.8
Suitcase	1.187	0.744	13.8
Furniture	0.834	0.854	20.2
Car Tyres	0.298	0.212	2.7
TV	0.153	0.084	0.6
Clothing	0.517	0.665	10.9
Toothpaste	0.050	0.003	0.0
Rest. Meal	0.087	0.026	0.6
Legal Advice	-0.252	0.536	4.1
Nurs.Sch.Care	-0.006	0.000	0.0
TV Repair	-0.267	0.325	3.0
Medical Diag.	-0.304	0.503	6.2
Photo Devel.	0.188	0.050	1.1
Moving House	0.040	0.016	0.1
Banking	-0.378	0.367	5.6
Haircut	-0.114	0.057	0.7
Dry Cleaning	-0.062	0.015	0.1
Life Insurance	-0.347	0.534	6.1
Car Service	-0.309	0.440	5.1

	AXIS 2		
VARIABLE	CO-ORD	SQ COR	CONT (%)
New Car	0.340	0.380	7.3
Fruit Juice	-0.244	0.080	1.6
Used Car	0.741	0.791	37.3
Suitcase	0.270	0.038	0.9
Furniture	0.096	0.011	0.3
Car Tyres	0.310	0.229	3.7
TV	0.239	0.205	1.9
Clothing	-0.098	0.024	0.5
Toothpaste	-0.436	0.213	4.5
Rest. Meal	-0.384	0.508	16.0
Legal Advice	-0.106	0.094	0.9
Nurs.Sch.Care	-0.272	0.218	5.8
TV Repair	0.179	0.147	1.7
Medical Diag.	-0.176	0.169	2.7
Photo Devel.	-0.109	0.017	0.5
Moving House	0.199	0.405	1.8
Banking	-0.328	0.277	5.4
Haircut	-0.150	0.097	1.6
Dry Cleaning	-0.044	0.007	0.1
Life Insurance	0.104	0.048	0.7
Car Service	0.266	0.326	4.8

	AXIS 3		
VARIABLE	CO-ORD	SQ COR	CONT (%)
New Car	0.122	0.049	1.4
Fruit Juice	-0.419	0.237	7.3
Used Car	0.044	0.003	0.2
Suitcase	0.286	0.043	1.6
Furniture	0.168	0.035	1.6
Car Tyres	-0.025	0.001	0.0
TV	-0.018	0.001	0.0
Clothing	0.163	0.066	2.1
Toothpaste	-0.545	0.332	10.9
Rest. Meal	0.023	0.002	0.1
Legal Advice	0.069	0.041	0.6
Nurs.Sch.Care	0.429	0.542	22.5
TV Repair	-0.206	0.194	3.5
Medical Diag.	0.065	0.023	0.6
Photo Devel.	-0.699	0.688	30.1
Moving House	0.047	0.022	0.2
Banking	0.252	0.163	4.9
Haircut	-0.208	0.188	4.7
Dry Cleaning	-0.306	0.354	4.8
Life Insurance	0.102	0.046	1.0
Car Service	-0.131	0.080	1.8

CO-ORDINATES FOR OBSERVATIONS

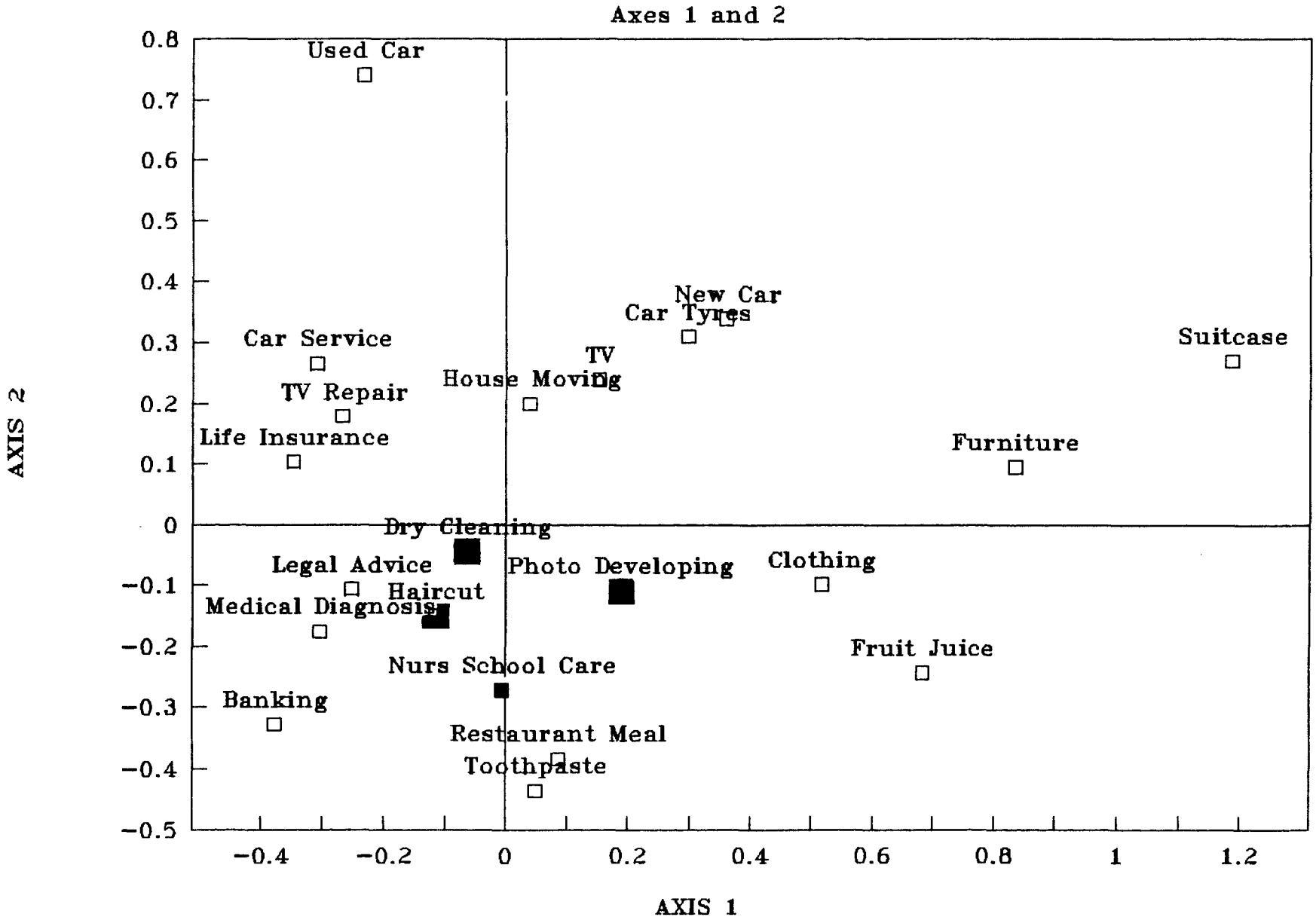
OBSERVATION	QUALITY	MASS	INERTIA (%)
Advice Someone	0.354	0.147	1.5
Price->Qual.	0.968	0.081	22.5
Alternatives	0.009	0.023	4.3
Continue After	0.673	0.086	7.2
Something New	0.141	0.069	3.7
Inability	0.090	0.042	3.4
Risk	0.929	0.097	13.4
Premises	0.457	0.121	5.1
More After	0.914	0.102	14.2
Complaining	0.597	0.042	6.3
Not to Change	0.308	0.095	7.7
Staff->Qual.	0.886	0.094	10.7

	AXIS 1		
OBSERVATION	CO-ORD	SQ COR	CONT (%)
Advice Someone	-0.083	0.185	0.9
Price->Qual.	0.959	0.914	65.7
Alternatives	0.004	0.000	0.0
Continue After	0.023	0.002	0.0
Something New	-0.153	0.120	1.4
Inability	-0.017	0.001	0.0
Risk	-0.322	0.209	8.9
Premises	0.056	0.020	0.3
More After	0.253	0.128	5.8
Complaining	-0.547	0.556	11.2
Not to Change	-0.213	0.153	3.8
Staff->Qual.	-0.149	0.054	1.8

	AXIS 2		
OBSERVATION	CO-ORD	SQ COR	CONT (%)
Advice Someone	0.068	0.125	0.8
Price->Qual.	0.164	0.027	2.5
Alternatives	-0.023	0.001	0.0
Continue After	0.430	0.612	18.1
Something New	0.009	0.000	0.0
Inability	-0.094	0.030	0.4
Risk	0.594	0.711	39.0
Premises	-0.183	0.220	4.6
More After	-0.237	0.112	6.5
Complaining	-0.115	0.024	0.6
Not to Change	-0.207	0.146	4.6
Staff->Qual.	-0.462	0.520	22.8

	AXIS 3		
OBSERVATION	CO-ORD	SQ COR	CONT (%)
Advice Someone	0.041	0.044	0.4
Price->Qual.	0.167	0.028	4.0
Alternatives	-0.072	0.008	0.2
Continue After	0.133	0.058	2.7
Something New	-0.063	0.020	0.5
Inability	-0.131	0.059	1.3
Risk	-0.069	0.010	0.8
Premises	0.182	0.217	7.0
More After	-0.581	0.675	60.8
Complaining	-0.093	0.016	0.6
Not to Change	-0.053	0.009	0.5
Staff->Qual.	0.357	0.311	21.2

WHITE CONSUMERS, 12 CONSTRUCTS



Appendix 11:

Correspondence Report with 12 Original Zeithaml Constructs (Price Attribute Supplementary)

TRACE =0.299137

AXIS	EIGEN VALUE	% TRACE	CUM. % TRACE
1	0.095836	32.0	32.0
2	0.066395	22.2	54.2
3	0.047717	16.0	70.2
4	0.032766	11.0	81.1
5	0.021945	7.3	88.5
6	0.013179	4.4	92.9

3 FACTOR SOLUTION

CO-ORDINATES FOR VARIABLES

VARIABLE	QUALITY	MASS	INERTIA (%)
New Car	0.511	0.049	3.6
Fruit Juice	0.917	0.020	5.2
Used Car	0.949	0.063	13.9
Suitcase	0.042	0.007	1.0
Furniture	0.511	0.026	3.9
Car Tyres	0.466	0.030	3.9
TV	0.731	0.026	2.3
Clothing	0.456	0.041	4.9
Toothpaste	0.807	0.022	6.4
Rest. Meal	0.847	0.097	9.9
Legal Advice	0.385	0.077	2.1
Nurs.Sch.Care	0.739	0.069	8.6
TV Repair	0.401	0.050	2.7
Medical Diag.	0.745	0.081	3.6
Photo Devel.	0.746	0.035	9.0
Moving House	0.476	0.038	1.3
Banking	0.769	0.048	4.4
Haircut	0.555	0.065	4.4
Dry Cleaning	0.349	0.030	2.3
Life Insurance	0.594	0.062	3.3
Car Service	0.671	0.065	3.2

	AXIS 1		
VARIABLE	CO-ORD	SQ COR	CONT (%)
New Car	0.296	0.397	4.5
Fruit Juice	-0.513	0.343	5.5
Used Car	0.752	0.850	36.9
Suitcase	0.053	0.006	0.0
Furniture	-0.135	0.039	0.5
Car Tyres	0.295	0.225	2.8
TV	0.247	0.232	1.7
Clothing	-0.258	0.185	2.8
Toothpaste	-0.454	0.235	4.7
Rest. Meal	-0.423	0.581	18.0
Legal Advice	-0.034	0.014	0.1
Nurs.Sch.Care	-0.247	0.164	4.4
TV Repair	0.215	0.288	2.4
Medical Diag.	-0.080	0.047	0.5
Photo Devel.	-0.213	0.059	1.7
Moving House	0.204	0.422	1.6
Banking	-0.195	0.137	1.9
Haircut	-0.123	0.075	1.0
Dry Cleaning	-0.056	0.014	0.1
Life Insurance	0.193	0.233	2.4
Car Service	0.309	0.639	6.4

	AXIS 2		
VARIABLE	CO-ORD	SQ COR	CONT (%)
New Car	0.065	0.019	0.3
Fruit Juice	0.662	0.571	13.3
Used Car	0.060	0.005	0.3
Suitcase	0.067	0.010	0.0
Furniture	0.172	0.064	1.1
Car Tyres	0.119	0.037	0.6
TV	0.036	0.005	0.1
Clothing	0.045	0.006	0.1
Toothpaste	0.411	0.193	5.5
Rest. Meal	-0.005	0.000	0.0
Legal Advice	-0.168	0.342	3.3
Nurs.Sch.Care	-0.444	0.530	20.6
TV Repair	0.134	0.113	1.4
Medical Diag.	-0.215	0.344	5.6
Photo Devel.	0.724	0.685	27.8
Moving House	-0.013	0.002	0.0
Banking	-0.396	0.565	11.2
Haircut	0.115	0.065	1.3
Dry Cleaning	0.275	0.334	3.5
Life Insurance	-0.193	0.234	3.5
Car Service	0.068	0.031	0.5

	AXIS 3		
VARIABLE	CO-ORD	SQ COR	CONT (%)
New Car	0.145	0.095	2.2
Fruit Juice	-0.047	0.003	0.1
Used Car	0.249	0.094	8.1
Suitcase	0.106	0.026	0.2
Furniture	0.434	0.407	10.1
Car Tyres	-0.280	0.204	5.0
TV	-0.360	0.493	7.2
Clothing	0.309	0.265	8.2
Toothpaste	-0.577	0.380	15.1
Rest. Meal	0.286	0.266	16.6
Legal Advice	-0.049	0.030	0.4
Nurs.Sch.Care	0.129	0.045	2.4
TV Repair	0.008	0.000	0.0
Medical Diag.	-0.218	0.353	8.0
Photo Devel.	0.032	0.001	0.1
Moving House	0.071	0.052	0.4
Banking	-0.136	0.067	1.9
Haircut	-0.290	0.415	11.4
Dry Cleaning	0.003	0.000	0.0
Life Insurance	-0.143	0.128	2.6
Car Service	-0.016	0.002	0.0

CO-ORDINATES FOR OBSERVATIONS

OBSERVATION	QUALITY	MASS	INERTIA (%)
Advice Someone	0.272	0.160	2.0
Alternatives	0.007	0.025	5.9
Continue After	0.561	0.094	10.4
Something New	0.536	0.075	4.5
Inability	0.180	0.046	4.3
Risk	0.900	0.106	16.1
Premises	0.765	0.132	7.8
More After	0.984	0.111	19.6
Complaining	0.135	0.046	7.0
Not to Change	0.879	0.103	9.1
Staff->Qual.	0.899	0.103	13.2

	AXIS 1		
OBSERVATION	CO-ORD	SQ COR	CONT (%)
Advice Someone	0.086	0.195	1.2
Alternatives	-0.022	0.001	0.0
Continue After	0.398	0.479	15.5
Something New	0.053	0.015	0.2
Inability	-0.090	0.029	0.4
Risk	0.634	0.883	44.4
Premises	-0.205	0.238	5.8
More After	-0.351	0.234	14.3
Complaining	0.029	0.002	0.0
Not to Change	-0.123	0.057	1.6
Staff->Qual.	-0.392	0.399	16.5
SUPPLEMENTARY			
Price->Qual.	-0.090	0.000	0.0

	AXIS 2		
OBSERVATION	CO-ORD	SQ COR	CONT (%)
Advice Someone	-0.037	0.037	0.3
Alternatives	0.064	0.006	0.2
Continue After	0.014	0.001	0.0
Something New	-0.015	0.001	0.0
Inability	0.098	0.034	0.7
Risk	0.059	0.008	0.6
Premises	-0.117	0.078	2.7
More After	0.625	0.742	65.5
Complaining	-0.162	0.057	1.8
Not to Change	-0.104	0.041	1.7
Staff->Qual.	-0.414	0.445	26.5
SUPPLEMENTARY			
Price->Qual.	0.319	0.000	0.0

	AXIS 3		
OBSERVATION	CO-ORD	SQ COR	CONT (%)
Advice Someone	0.039	0.040	0.5
Alternatives	-0.022	0.001	0.0
Continue After	0.164	0.081	5.3
Something New	-0.306	0.519	14.7
Inability	-0.182	0.117	3.2
Risk	0.062	0.008	0.8
Premises	0.281	0.449	21.9
More After	0.063	0.008	0.9
Complaining	-0.188	0.076	3.4
Not to Change	-0.455	0.781	44.8
Staff->Qual.	0.145	0.054	4.5
SUPPLEMENTARY			
Price->Qual.	0.391	0.000	0.0

WHITE CONSUMERS, 12 CONSTRUCTS

