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Personal values, consumer behaviour and brand image perceptions

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PERSONAL VALUES, CONSUMER BEHAVIOUR AND BRAND IMAGE PERCEPTIONS

Steven Michael Burgess

A Thesis Submitted to the Faculty of Commerce
University of the Witwatersrand, Johannesburg
for the Degree of Doctor of Philosophy

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Abstract

The purpose of this thesis is to investigate the link between personal values, consumer behaviour and brand image perceptions. Recent developments in consumer research and psychology, such as the wide acceptance of standardized value measurement tools, the dissatisfaction with the predictiveness of race life-style typologies and attitude measurement segmentation techniques and the development of middle range theories which hypothesize the central role of personal values in the belief system, suggest that personal values may be an effective market segmentation technique which partially transcends race.

The personal values of a race and area-stratified probability sample of 1405 urban South Africans were measured using the **Rokeach Value Survey**. Respondents also associated Rokeachian values to brands they use most often or are most likely to use as well as to an ideal brand in eight product categories.

The results of the study showed differences in the relative importance of personal values to South Africans who exhibit different degrees of urbanization, age, education, father's education, occupation, household income, language, marital status, race or employment status. Results also demonstrated great similarities in the relative importance of values to all South Africans, regardless of race. Thus, values may be one important race-neutral segmentation technique marketers could successfully use within the changing South African marketing environment.

The study also showed that personal values are often better segmentation variables than race, age, income or education in many product classes and that every market could be meaningfully segmented using personal values irrespective of the type of problem-solving the decision represents.

Significant associations of personal values with brand images were discovered. However, the strength of the associations seems to support the literature regarding the difficulty respondent's have making meaningful associations between brands and more deeply-seated personal values. Respondent's of different races associated brands to different values which may suggest the effects of differing media-dependency.

Finally, respondents were asked to identify a brand they purchase most often or would be most likely to purchase in eight product classes representing different types of problem-solving behaviour. The respondents were then asked to choose a terminal value and an instrumental value most like the identified brand. Respondents were also asked to make similar associations to an ideal brand. These value associations can be thought of as cognitive representations of brand image. The values chosen to represent brands were significantly more important to respondents who chose them than to those who did not. This suggests that value fulfillment may be an important criteria of brand choice.

Declaration

I declare that this thesis is my own, unaided work. It is being submitted for the degree Doctor of Philosophy in the Faculty of Commerce, University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in any other University.

_____

Steven Michael Burgess

_____ day of _____, 1990.

Dedication

This work is dedicated to inter-cultural understanding in South Africa and to the removal of prejudice of all kinds from our society.

> "You are the fruits of one tree and the flowers of one garden...the earth is but one country and mankind it's citizens."
>
> **Bahá'u'lláh**

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Most deserving of my thanks are my wife, Kate and my three children: Alethe, Richard and Jonathan. They often sacrificed time with me so I could study. I could not have achieved anything were it not for their constant love.

Preface

An emotional debate about racial market segmentation has raged in South Africa for more than two decades. Some point to the visible differences between South Africans of different races and their life-styles. Others suggest that there is no such thing as an "average White" or "average Black" in fast-changing South Africa. Both sides present strong intuitive arguments - but little empirical proof - to support their point of view.

South African consumer research by academic specialists is virtually non-existent and has not contributed to the debate in any significant way. In this vacuum, practitioners have borrowed techniques from the social sciences in an attempt to find answers. The result is that well-known commercial programmes may be offering poorly-borrowed research techniques and many consumer research advances that might help enrich the debate may never be properly researched.

The principal objective of this project is to provide South African marketers with an understanding of personal values, consumer behaviour and brand image perceptions using the latest and most advanced analysis techniques available within the framework of a study unbiased by proprietary constraints.

Excerpts from Chapters 2, 3 and 7 formed the basis of the paper **"Segmenting the 'Black Market': Issues and Options"** presented at the 1989 Black Market Conference sponsored by the South African Marketing Research Association. Excerpts from Chapter 2 and 3 formed the basis of the paper **"Personal Values and Consumer Behaviour: An Historical Perspective"** which has been submitted for publication in an American journal and is now under revision for resubmission. Excerpts from the entire work form the basis of **"Personal Values and Market Segmentation in a Cross-Cultural Environment"**, a paper being presented at the 1990 Society for Consumer Psychology Program for the 98th Annual Conference of the American Psychological Association in Boston during August, 1990.

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CHAPTER 1 - INTRODUCTION

During recent years there has been much debate about market segmentation in South Africa. This debate generally concerns the effectiveness of traditional market segmentation techniques, mainly race, in light of the changing population dynamics, political and economic turbulence, and social change which has characterized South Africa over the last fifteen years.

But the debate has rarely focussed upon the personal values of South Africans. South Africa is a country where the topic of race is guaranteed to provoke interest. So it is not surprising that the attention of marketers has mainly been drawn to the lively discussion regarding the existence of a so-called "Black Market". In essence, the key issue in the debate is market homogeneity. Are social reform, urbanization, and other social change factors leading to relatively continuous non-racial market segments or are they leading to segments which are economically more equal but culturally different with widely divergent tastes and behaviour? The experts disagree.

Harrison, editor of the pioneering **Black Market Book**, decries "the apparent hesitancy on the part of marketers to invest in black market research" and points out that, "Psychographic work is still very much in its infancy. Little is known about what makes Blacks 'tick'. It's all rather like 'The Stars Foretell.'"[1]

Given the lack of empirical evidence, speculation regarding the existence of a "Black Market" generally takes three differing points of view. The first being that it exists and requires a different marketing strategy. Langschmidt, Executive Director of Integrated Marketing Research, seems to take this point of view when he says,

> "We all know that the Black Market is the market of the future. But recently there has been a tendency to romanticize it. The fact is that for the next twenty years Blacks will remain fundamentally poor....People have said we will see Blacks become modernized, westernized, urbanized. Unfortunately, the future is more likely to be like the present and the past."[2]

Another point of view is that a Black Market exists that may or may not require a different marketing strategy due to different economic or cultural circumstances. Reekie points out that culture still plays an important part in South African market segmentation:

"...while South Africans may be growing closer in the material sense in that their patterns of consumption of physical goods are converging, they may well be striving to retain their individual ethnic identities in their (non-tangible) consumption of media...Marketers...will discard the ethnic segmentation concept at their own peril."[3]

The third point of view is that the Black Market does not exist and that a non-racial market should become the focus of marketing in South Africa.

"We speak the archaic language of a South Africa that can never be the same again; we describe the market in terms that are fast losing their meaning and we hold mental pictures of target groups that are no longer sufficiently close to reality."[4]

Markinor's Green says:

"A change of attitude is required and necessary. The marketer must look at the market differently. The strategic plan must change to bring all sectors of the population into the gameplay and not just one."[5]

In fact, there is such a degree of ambivalence regarding the topic of marketing to Blacks, that even Black marketing experts, such as Mafuna, Mphahlele and Nkosi espouse radically different viewpoints.[6]

South African marketers are not the only ones facing the problems associated with multi-cultural marketing. American marketers also experience multi-cultural problems, as noted by Garreau in his book ***The Nine Nations of North America***.[7]

Europeans are also trying to overcome the problems of multi-cultural marketing:

"...marketers have learned to look at the totality of the European market in product marketing terms. They look for common values and products that have usage as a common factor. Market planning starts from this base and only when detailed tactics are planned, are language, cultural, and perceptual difference taken into account. Marketing transcends these differences."[8]

As a result of Apartheid, South African marketers have to contend with a disparity of household income that American and European marketers would not encounter to the same degree. But most marketers would probably agree that many of the cultural problems experienced in these markets are similar to the South African experience.

Hence, South Africans could gain much knowledge by examining advances in technology and the successes and failures of multi-cultural marketing in these environments.

Perhaps Imerman has best described the reality of the South African marketplace:

> "While there are certain needs, aspirations and motivations that are currently predominately evident amongst Black consumers, it is also true to say that at certain income levels and levels of sophistication, there is little or no differentiation between the aspirations of Blacks and Whites. Therefore, segmentation that delineates Black consumers from White consumers is in itself dangerous because many opportunities may be missed purely due to the lack of understanding of the homogeneity of the South African marketplace."[9]

The South African market is changing and raw economics dictate little Black participation in "big ticket item" markets and greater participation in consumer goods and everyday use markets. It appears, that if trends continue,[10] future reality will see Black participation increase in all markets although critics may feel Sinclair is over-romanticizing current realities:

> "The current attitude tends to diminish the impor[illegible]ack, Coloured, and Asian sections, by treating them as secondary market[illegible]ew opportunity is to alter the mind's eye picture that marketers hold of [illegible]nunity; to see it in an integrated and cohesive light. Fraught with segm[illegible]th problems of the segmentation level, yes, but no more so than in the USA, where myriad market sub-sections and minorities form individual opportunities and complications. No more difficult than are the problems faced today by Europe[illegible] marketers who have adopted a pan-European marketing strategy and who even have satellite TV transmissions to cover their market, but who are now beginning to grapple with the multi-ethnic communications problem[illegible] that we in South Africa have been living with for decades."[11]

Unfortunately there is virtually no literature regarding values and consumer behaviour in South Africa. The recent attention and support over given personal values as a result of the development of standardized values research instruments suggests that now is the time to conduct unbiased, empirical research regarding South African personal values and consumer behaviour.[12]

The literature suggests that values determine product class use and brand choice. Other widely accepted international literature, discussed later, also suggests that values determine brand image perceptions. If this is true, market segments based upon corresponding values should predict purchase behaviour regardless of traditional demographic segment criteria, such as race.

Engel, Blackwell and Miniard have noted that "Values research has been used most often for segmentation studies."[13] Pitts and Woodside cite the general acceptance of personal values as, "elemental influences in consumer psychology."[14] Howard goes so far as to say that possession of the knowledge of a consumer's value structure is possession of the basic linkage leading to purchase.[15]

The Importance of Personal Values

It's been over 25 years since Engel, Kollat, and Blackwell convened the first conference on consumer behaviour at The Ohio State University in 1965.[16] Yet, there has been very little work in the field in South Africa until recent years. Perhaps this is due to the fact that traditional marketing methods worked well in "First World" South Africa or perhaps it's due to the First World orientation of most consumer behaviour literature.

Blackwell has been a frequent visitor to South Africa as a guest lecturer, speaker, and consultant. In personal discussions, he suggested that the field of consumer behaviour was one of the few areas where South African marketing lagged behind that of America and Europe and made a number of additional points:[17]

> The main reason for the lack of development in consumer research in South Africa may be the small size of the White-dominated consumer market of the past and the lack of Black spending power in the past.
>
> South Africa is by no means unique and faces many of the problems now being faced by marketers in Europe and the USA. Multi-ethnic, multi-cultural, and multi-national marketing opportunities have lead to increased interest in personal values and life-styles research. The increased awareness of new techniques developed in other fields such as psychology and sociology also underlies this interest.
>
> Blackwell believes that the recognition by marketers of the suitability of many behavioural sciences advances in the early 80s resulted in the birth of the consumer behaviour field. Engel, Kollat, and Blackwell started with a fundamental belief that consumer behaviour was subject to the forces as all other behaviour and that behaviour could be studied, measured, and most importantly, modeled. South African consumer researchers are ideally placed to examine these models under cross-cultural conditions.

Attitude research has enjoyed pride of place in consumer research.[18] However recent advances in the behavioural sciences suggest far more emphasis should be placed on personal values.[19]

The relative lack of attention given to personal values by marketers is no doubt due to the difficulty of focusing on the term "value" as a result of the number of basic and fundamentally different conceptualizations given the term by different disciplines. Some disciplines consider values to be an internal human phenomena and that humans "have a value". Others consider values to be the property of objects, to be external and subjective so that objects can be said to "have value".[20] Only recently have marketers tried to come to terms with the relationship between these two concepts.[21]

For instance, Anthropology assigns the term a definition in line with its interest in culture and life-style and with the widespread underlying assumption that values are social in character and exist independently of individuals. Indicative of this is Thomas and Znaniecki's definition, "...objective, social elements which impose themselves upon the individual as a given and provoke his reaction."[22]

Sociology, on the other hand, designates a definition for the term which reflects that disciplines attention toward society and its customs and ideologies. Bronkowski proposes that, "a value is a concept which groups together some modes of behaviour in our society..."[23]

These differences are explored in detail in Chapter 2 where it will be shown that the advances regarding values are mainly based upon a phenomenological conceptualization of the term such as that of Rokeach:

> "...a centrally-held, enduring belief which guides actions and judgments across specific situations and beyond immediate goals to more ultimate end-states of existence."[24]

Rokeach is perhaps the most seminal scholar on values and his research has revolutionized the field.[25] It is his conceptualization of the term which is referred to in the following quotes which demonstrate the central role played by values in the consumer behaviour process:

> "People are not born with their values. But from the time a baby looks up and begins cooing and smiling, he or she starts forming values through socialization and acculturation. The process continues throughout a lifetime, causing people to adopt general values that influence consumption - such as thrift, pleasure, honesty, ambition, and so forth. These life forces also produce specific preferences - relating to choices of colour, packaging, convenience, hours of shopping, and characteristic interactions with salespeople and many others.

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> Values are learned or passed on from one generation to another in a society and within groups. Some values are relatively permanent in society ... but others undergo continual change. The values in transition are of great interest to marketers because they often create or change the size of market segments for products or create changes in response to advertising and to retailing and service offerings."[26]

> "The values and life-styles of a nation or other entity have great influence on the products that are consumed. Culture and life-styles, it can be said, determine such things as what we eat, where and when we meet, and how often we eat."[27]

> "...we...define culture as the sum total of learned beliefs, values and customs which serve to regulate the consumer behaviour of members of a particular society."[28]

> "Marketing practitioners today are investing considerable sums of money in an effort to understand the changing values orientation of the consuming public. Corporations and consulting organizations are undertaking large scale national studies of consumer values with two purposes in mind. One is to track the direction and velocity of values change in the aggregate population. The second is to segment the population into groups defined on the basis of their predominant values orientation. Findings from applied studies such as these are being used to make critical decisions with respect to marketing strategy and mix programming."[29]

Remarking on a paper by Bauer and Greyser in 1973,[30] Day was able to say:

> "Values are ends, and one controversial view holds that marketing deals with the means of achieving these ends."[31]

It is no longer "controversial" to think of personal values in relation to marketing!

The main hypothesis of this thesis is that the relative difference placed upon personal values by urban South Africans is a fundamental determinant of brand choice. This suggests that market segments formed on the basis of value system differences will be highly predictive of brand choice. This demands a review of market segmentation developments over the past few decades.

Market Segmentation

The idea of market segmentation has evolved as part of a process. Shortly after World War II, American producers found themselves in a market which was no longer controlled by scarcity, the overriding condition experienced during the war. This lead to a change from the wartime production-orientation which emphasized cheap, efficient production and intensive distribution to a product-oriented approach which emphasized technological improvements without regard to the value of the improvement to the consumer. This approach was later replaced by a selling-orientation whereby companies moved the emphasis to an intensive and aggressive sales effort. Finally, in the mid-50s companies began to realize it was easier to sell products if consumers were identified and their wants defined before production. This was known as the marketing concept.[32]

Drucker contends that the marketing concept was first understood around the year 1650 by a member of the Mitsui family who established a retail store in Japan, similar to the Sears and Roebuck retail outlets which appeared in America 250 years later.[33] He also says that McCormick was the first marketer in the West with his International Harvester Company in the mid 1800s.[34] Academia responded with the first university courses over fifty years later.[35]

There are many differing ideas as to when the marketing concept was first grasped. In fact, Kotler decries its lack of acceptance by most firms today.[36] Yet, the important point is that the concept is widely accepted and well-established.

> "The development of the marketing concept gave impetus to the study of consumer behaviour. As marketers began to study the behaviour of consumers, they soon realized that despite overriding similarities, consumers were not all alike; nor did they wish to use the identical products that everyone else used. Rather, consumers preferred differentiated products that they felt more closely reflected their own personal needs, personalities, lifestyles, and so forth. To better satisfy the specialized needs of selected groups of consumers, marketers adopted a strategy of market segmentation."[37]

Definitions show remarkable consistency in the literature:

> "...a strategy ... in which each segment is viewed as a distinct market target with its own requirements for product, price, distribution, and so on."[38]

> "...the act of dividing a market into distinct groups of buyers who might require separate products and or marketing mixes."[39]

"...the process of dividing a potential market into distinct subsets of consumers and selecting one or more segments as a target market to be reached with a distinct marketing mix."[40]

As Wind points out, markets are segmented in innumerable ways, based mainly upon the approach of the marketer to the problem of segmenting the specific market at hand, and the basis of segmentation must be appropriate to the problem at hand.[41]

Many segmentation approaches are evident in the literature. For instance, Dickson suggests that marketers may be ignoring the effect of the buying situation by concentrating their attention on the person alone[42]. Assael and Roscoe propose a backward segmentation approach based upon personal and situational clues, as well as behavioural criteria.[43] Assael and Roscoe agree with the bulk of the literature when they say that market segmentation is not a uniform approach, but rather a technique which is highly specific to the situation at hand. Kahle[44] has found that the US Bureau of Census regions are more predictive of consumer behaviour than the nine geographic regions of the USA proposed by Garreau.[45] Other empirically-based techniques are also very evident in the literature, such as aggregation approaches and approaches based upon consumer elasticities of price.[46][47]

Reference is generally made to six common bases of market segmentation:[48]

Geographic variables: such as region, population density, and climate.

Demographic variables: such as age, sex, and education.

Psychological variables: such as personality, attitudes, values, social class and life-style.

Sociocultural variables: such as race, religion, and social class.

User behaviour variables: such as usage rate and brand loyalty.

Usage situation variables: such as availability of time or credit, or other factors which determine the appropriateness of purchase or use specific to the situation.

The literature is filled with recent articles showing that values are good market segmentation tools[49]. Vinson and Munson contend that values indicate underlying consumer motivations and define market segments pursuing analogous product benefits.[50] Dhalla and Mahatto suggest that values should replace personality traits, life-styles, and other socio-economic variables.[51] Howard asserts that values and choice

criteria are linked directly so that consumers with corresponding values will evaluate products using corresponding choice criteria, with similar resultant consumer behaviour.[62]

It is obvious from this discussion that markets can be segmented and that both the marketer and the consumer benefit from segmentation. The marketer benefits by concentrating his marketing effort and improving economies while the consumer benefits by receiving products more suited to his needs.

The ensuing chapters will now discuss the following topics.

Understanding the role of values in consumer behaviour assumes a thorough understanding of consumer psychology. Chapter 2 will investigate the four main approaches to understanding human behaviour in the field of personality study. The role of values will be examined for each approach and notable consumer behaviour applications of each theory will be detailed.

Chapter 3 will further explore this avenue by investigating Rokeach's Belief System Theory. Rokeach has defined personal values and their relationship to other concepts such as attitudes, beliefs, intentions, social norms, needs, traits, interests, value systems, the Maslovian Hierarchy, and societal values. Terminal and instrumental values will be discussed as will their subdivisions, personal and social values and moral and competence values.

Chapter 4 will research the role of personal values in consumer behaviour. Major consumer models will be discussed with special emphasis on how they treat the concept of personal values in light of previously discussed concepts. The ability of the models to fulfill the acknowledged purposes of modeling extant in the literature will also be discussed.

All consumer models give the concept of life-style a key role in the consumer behaviour process. Chapter 5 will review methods of operationalizing the values construct, such as the Stanford Research Institutes Values and Lifestyles (VALS) typology and the MRA Sociomonitor typology. These life-style typologies [illegible] compared with middle range value theory contributions from theorists like Gutman, Reynolds, Vinson, Munson, Lamont, Kahle, and others. Other approaches will also be identified. The ability of VALS to predict consumer behaviour will be contrasted with the similar ability of List of Values "LOV", an approach based mainly upon Rokeach's values.

Chapter 6 will discuss cross-cultural issues. South Africa is a multi-cultural research environment and the effects of cultural diversity on reliability, validity and research design will be investigated. The steps taken to improve the reliability and validity of this study will also be detailed.

Chapter 7 will discuss data analysis issues and present the results of this study. The continuous, ordinal nature of the values construct will be contrasted with previous analysis and the appropriateness of the techniques used in this study will be explored.

Chapter 8 will present the conclusions of this research and suggest future research.

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CHAPTER 2 - APPROACHES TO UNDERSTANDING HUMAN BEHAVIOUR

The complexity of human behavioural phenomena has encouraged the separation of the behavioural sciences into several "disciplines", mainly for pedagogical purposes. Tumin suggests that this separation is probably more apparent than real.[1] The so-called "disciplines" only differ because they study human behaviour from different perspectives: psychology from an individualistic perspective, sociology from a group perspective, and anthropology from the perspective of cultural and societal structure. Consumer behaviour is the behavioural science which examines behaviour from the perspective of the exchange of goods and services, production and distribution.

Anthropological and Sociological Contributions

Anthropologists have had an influence on the development of the study of consumer behaviour since early consumer behaviour research began.[2] Products form part of the pattern of a culture and anthropologists are interested mainly in the symbolic aspect of products and how products feature as part of social change, innovation and the adoption process.[3]

Mair suggests that two main schools of anthropological thought exist.[4] Social anthropologists are the intellectual descendants of Durkheim and Radcliffe-Brown while cultural anthropologists follow the lead of Tylor and Boas in emphasizing the role of culture over that of society. Because of their emphasis on societal and cultural structure, anthropologists advance definitions of values which take cognizance of other central anthropological concepts, such as roles, status, and social control. As such, both schools would emphasize the normative aspect of societal or cultural values in arriving at a conceptualization of the values term.

Anthropologist Clyde Kluckhohn has probably most affected the work of anthropologists in defining the values concept and has had the greatest affect on Rokeach's work.[5] According to Rokeach, Kluckhohn defines a value "...as a 'conception of the desirable' and not something 'merely desired.'"[6]

Sociologists are willing to sacrifice the fullness of understanding the individual in order to further their understanding of the group because they believe that behaviour can only

be understood in the context of the society at large. Sociological research explores and describes the resources and the experiences that collectively characterize participants in a society and its institutions and culture.[7] Sociologists also try to identify social trends to forecast changing behavioural patterns, such as changing attitudes to leisure.[8] Hence, sociological values definitions are usually social in nature.

Many core sociological concepts have influenced consumer behaviour science, such as norms, identities, status-roles, aggregates, sanctions and resources.[9] Sociologists must also approach a conceptualization of the values concept from a perspective in harmony with these other key sociological concepts. As such, Tumin's definition is representative:[10]

> "Anything held to be worthwhile. May refer to possessions, achievements, personality and character traits, and states of being, such as happiness or peace of mind. Thus, wealth is a value in this society, as are courage, military victories over enemies, high levels of material productivity, high levels of education, beauty, etc. The totality of 'values' of a society helps to indicate that society's conception of the good life and of the desired qualities of people."

Sometimes sociologists assign all normative components of behaviour to the concept of norms and assign only behavioural components to their values concept. Bronkowski suggests that:

> "...a value is a concept which groups together some modes of behavior in our society."[11]

In fact, norms are so important to some sociologists that they relegate values to a subordinate role.[12]

Sociologist David Riesman's work has had a major influence on values and life-style typologies, such as the Stanford Research Institute's Values and Lifestyle Program (VALS) and members of the European Research Institute for Social Change (RISC).

Riesman's contribution was to define three themes in the direction of behaviour based upon a study of political and social history in the United States and Europe.[13] In describing Tradition-directed, Inner-directed and Other-directed types of man, Riesman has provided a framework for linking three basic societal value systems to levels of social, industrial, economic and cultural development. Kassarjian reported empirical validation of many of Riesman's hypotheses concerning social character and differential preference for mass communication[14]. As Wells and Beard note, "Riesman's work suggests another general dimension system along which consumer's may be segmented."[15]

Sociologist Robin Williams' work has also influenced consumer behaviour theory.[16] Williams' definition of the value concept is very similar to that of psychologist Milton Rokeach and he accepts Rokeach's "value as criterion" conceptualization of values.[17]

In essence, anthropologists and sociologists focus on summary constructs of individual behaviour in order to further their understanding of behaviour from a societal perspective. Their work is the primary source of understanding of core societal values.

However, because of its focus on the individual, psychological literature offers a far richer perspective from which to develop a better understanding of the personal values concept.

Psychological Contributions

Personality theory forms the basis of psychology. Personality generally refers to:

> "...the distinctive patterns of behaviour (including thoughts and emotions) that characterize each individual's adaptation to the situations of his or her life".[18]

In other words, personality is the individual's organized patterns of behaviour including emotions and covert mental activities, such as thoughts and cognitions and covert actions.[19] It can consist of a single action or consist of a range of actions.[20] Mischel suggests that psychological theories can be generally classified into four main approaches: the psychodynamic approach, the trait approach, the behavioural approach and the phenomenological approach.

There are major differences between these four approaches and they have had a profound effect on how consumer behaviour theory has evolved. A fundamental understanding of how these approaches conceptualize personality and human behaviour is necessary to examine critically consumer research regarding values.

The Psychodynamic Approach

Sigmund Freud

Freud's Psychodynamic Approach is the oldest and best known psychological approach. Many other well-known psychologists, such as Jung and Erikson, can be classified into this approach.

Freud's approach to personality was formed during more than forty years of active clinical research and writing. His theory is based upon his extensive clinical treatment and observation of disturbed people and on his analysis of himself. Freudian thought has had such a strong influence that it has even been said that, "The Freudian concept of man shaped the world view of this century."[21]

To Freud, personality consists of three parts, the id, the ego, and the superego. The id is the:

> "...mental agency that contains everything inherited, especially the instincts. It is the basis of personality, the energy source for the whole system, and the foundation from which the ego and superego later develop. The id, according to Freud, is the innermost core of personality, and it is closely linked to biological processes."[22]

The id can not tolerate tension, whether as a result of internal or external stimulation, and seeks to immediate tension reduction, regardless of the consequences. The id's tendency to reduce tension by seeking immediate satisfaction of instinctual desires and impulses without logic or reason is called the pleasure principle.[23]

Freud believed the id to be driven chiefly by sexual and aggressive impulses, which he categorized as life and death instincts, respectively.[24] These wishes are often irrational and unconscious.

In seeking to discharge tension the id forms an internal likeness or illusion of the object that it senses will reduce its tension. For instance, internally sensing a level of nicotine too low in the blood, a cigarette smoker may visualize a cigarette or feel the conscious need for one. A baby might visualize her mother's breast upon feeling hungry. "Because mental images cannot by themselves reduce tension, the ego develops."[25]

> "Under the influence of the real external world around us, one portion of the id has undergone a special development. From what was once a cortical layer, equipped with the organs for

> receiving stimuli and with arrangements for acting as a protective shield against stimuli, a special organization has arisen which henceforward acts as an intermediary between the id and the external world. To this region of our mind we have given the name ego."[26]

The ego is a middleman. On one hand, it must safely discharge the tension reducing demands of the id at an appropriate time and place when the individual's survival is not threatened. On the other hand, it must discharge tension in accordance with the moralistic dictates of the superego.

> "The long period of childhood, during which the growing human being lives in dependence on his parents, leaves behind it as a precipitate the formation in his ego of a special agency in which this parental influence is prolonged."[27]

Freud saw development as being exclusively determined in childhood and life thereafter as conflict between the three parts of the personality, there is no provision for value change in Freudian thought. More moralistic behaviour would simply be the manifestation of increased superego influence in the total personality. Yet, the superego may be thought of as the part of the personality in which societal values are internalized to form personal values.

The dynamic conflict between these three parts of personality characterizes the Psychodynamic Approach.[28] In essence, the psychodynamic individual is in constant conflict. The id senses tension and seeks to reduce it. The ego tries to safely reduce the tension created by the id in a way which does not threaten survival and within the confines of the moralistic dictates of the superego. These forces and counterforces propel personality, within the theoretical considerations of this approach which has had an immense impact on the study of consumer behaviour.

> "His work, and the work of his followers, has left little doubt that much behaviour, including much consumer behaviour, is influenced and perhaps even determined by illogical forces of which the individual is at most only partially aware...by pointing out the far reaching implications of sexual motives, he drew attention to an extremely important set of forces...was the father of a line of thinkers who have had a profound influence on our current understanding of the nature of man...And finally...his methods and findings have been applied directly in developing methods of understanding consumer behaviour."[29]

Carl Jung

Jung, was an admirer of Sigmund Freud, who later rejected much of Freud's theory and developed his own psychodynamic approach, which he called Analytical Psychology.

> "In Jung's view, the psyche included not only a conscious side but also a cover or shadow aspect that is unconscious. Personal growth involves an unfolding of this shadow and its gradual integration with the rest of the personality into a meaningful, coherent life pattern."[30]

Jung broadened the concept of psychic energy, and while he accepted the aggressive and sexual motivations of the id, he believed they were only two of many instincts. He was fascinated with dreams and believed they were a window to the inner core of personality.

Jung believed that everyone possessed the collective unconscious which consisted of inherited memories and ancestral behaviour patterns (which could have included the concept of personal values). He believed that the basic elements, or primordial images, that formed the collective unconscious manifested themselves in dreams.

Another important Jungian concept is that of the animus and anima. These represent the characteristics of the opposite sex which are imbedded in the subconscious of every individual and may represent the instrumental values which are most often associated with masculine or feminine behaviour.

Most importantly, Jung also proposed a concept for the transmission of inherited memories and behaviour patterns called the collective unconscious. Because values determine behaviour patterns, the collective unconscious may serve as the vehicle for the transmission of core societal values in the form of archetypical symbols.

While Jung did not offer a coherent theory into which the role of values can be examined but rather "a set of fascinating observations...", he was among the first to "conceptualize a self that actually strives for oneness and unity."[31] This recognition of striving toward an end-state can be viewed as an important first step toward the recognition of personal terminal values.

Erich Fromm

Erich Fromm also helped to define psychodynamic theory. While Freud saw personality development as a reaction to satisfactions and frustrations of physiological drives, Fromm saw people as social beings who could be defined in terms of their relations to others:

> "People have psychological qualities, such as tendencies to grow, develop, and realize potentialities, that result in a desire for freedom and a striving for justice and truth. Thus human nature has a force of its own that influences social processes."[32]

Fromm more closely defined individual development as a striving for end-states, a theory not unlike that of Rokeach. He made an important contribution in defining the role of the dominant character traits of the people who constitute a society in "shaping the social process and culture itself."[33]

Fromm also criticized Freud's theory that character traits were the result of fixations at certain pleasure giving stages during development. Fromm felt that character traits were the result of social interaction with others and that psychosexual problems were rooted in the whole of the personality.

Freud posited that values and ideals were simply rationalizations of biological motives. Fromm felt that truth, freedom, justice, and love were genuine strivings with a force of their own. In essence, Fromm acknowledged the pleasure principle but also made room for more positive personal values.

Alfred Adler

Alfred Adler was among the first psychologists to include the findings of anthropologists of his time in his work. His can be said to be the first of the social-psychological theories. He is best known in society for his concept of the "inferiority complex."[34] He was another admirer of Freud's who later rejected much of his teachings and formed his own psychodynamic school of thought, which he called Individual Psychology.

> "...unlike Jung (and Freud), Adler was not as much interested in cataloging the functional elements of the psyche as he was in working out practical methods for effecting cures."[35]

To consumer behaviourists, his greatest contribution may have been that he recognized the importance of life-style and he was one of the first to work with the concept, which

he called style of life.[36] Adler defined four general styles of life but recognized that no individual neatly fit into a type. Three of the types show no social interest, they are the "ruling type", the "getting type" and the "avoiding type". The fourth type, the "socially useful type", are the epitome of psychological health in Adler's system and are concerned with their relations with others.[37]

The life-style concept used by consumer behaviourists relies more on Kelly's conceptualization of the term. Engel, Blackwell and Miniard suggest that life-style is a summary construct reflecting consumer's values. Consumers use constructs, such as life-style, to generalize situational cues and minimize incompatibility or inconsistency in their values and personality.

Karen Horney

Unlike Freud, Jung, and Adler, Karen Horney did not practice exclusively in Europe even though she was born in Germany. The differences in her European and American patients convinced her to "emphasize the importance of social factors, especially the shaping role played by parents, in the development of personality."[38]

Horney believed that Freud over-generalized the sexual hangups of his twentieth century Viennese patients to all of mankind and that sex was not a determinate of all behaviour. Horney believed the key determinant of behaviour was the neurotic anxiety generated by the child's feeling of being "isolated and helpless in a potentially hostile world." She described three types of needs: the need to move toward others (the need for love, affection and approval), the need to move away from others (the need for self-sufficiency, independence and unassailability), and the need to move against others (the need for power and exploitation of others).[39]

While Horney did not believe that values were the key determinant of behaviour, her definition of three types of needs may actually define three terminal values, if viewed from a slightly different perspective. Her work has strongly influenced Cohen attempts to link personality and consumer behaviour with his CAD research tool.[40]

Harry Stack-Sullivan

Stack-Sullivan's work has provided a basis for a better understanding of how values may be learned through a process of interaction. Stack-Sullivan broke away from contemporary psychoanalytic thought to emphasize and interpret the social aspect of personality. Unlike Freud, Stack-Sullivan did not believe that personality was fully determined at an early age.[41]

Stack-Sullivan's individual is built around the central concept that personality could only be defined in terms of his obvious and hidden reactions to the recurring incidents in life. He called the smallest units of recurring reactions "dynamisms" and felt that these patterns of feelings and behaviour were the components of personality. Dynamisms are defined as enduring and they accumulate through life to form an inventory of dynamisms which are called upon in response to stimuli and situational cues.

The self-system is a dynamism which is charged by the energizing force of anxiety. Like Freud, Stack-Sullivan's system is a tension-reduction system. The source of tension is anxiety and needs.

If values are the cognitive representations and transformations of individual needs and societal and institutional demands, as Rokeach suggests, then Stack-Sullivan's concept of the dynamism must be strongly related to the value concept.

Another interesting concept of Stack-Sullivan's is personification. He believed that individuals generalize the essence of the behaviour patterns of those with whom we come into contact and assume that others will behave the same until proved differently. If the same personification is found among many people, Stack-Sullivan called it a stereotype.

Personification could simply be the way individuals generalize the value systems of others. Interestingly, Wells and Beard suggest that a brand image is the product analog of a personification and a stereotype on a group level[42]. Should this be true, then values may form the basis of brand image.

Henry Murray

Murray felt that detailed studies were a necessary basis for theory development but could not accept that studies centered on the mentally disturbed were anything more than limited in scope. Murray de' 'ped a list of needs from a study of healthy young people and theorized that these needs were felt by all people to differing degrees. Murray defined a need as:

> "...a hypothetical construct which stands for a force in the brain region, a force either internally or externally instigated which organizes other psychological processes."[43]

Murray's need theory of personality has been the basis of such well-known psychological tests as the Edwards Personality Preference Schedule and the Thematic Apperception Test (TAT) which have been used extensively by consumer behaviourists.[44] Murray proposed twelve physiological needs (which he called "viscerogenic") and twenty-eight psychosocial needs (which he called "psychogenic").[45] Rokeach contends that the number of personal values is a direct function of needs a' d that the range of terminal values is somewhere between the twenty-eight psychosocial needs proposed by Murray and the two instincts proposed by Freud.[46]

There are many similarities between Rokeach's value concept and Murray's need concept. Both abstractly describe primary processes underlying behaviour, both are activated from inside and outside of the individual, both serve to organize other psychological processes, both are capable of being felt to differing degrees at different times, both could be organized into systems which allow the most important ones to dominate behaviour, both acknowledge a force which organizes behaviour through control over other psychological processes, and both are capable of creating selective perception of stimuli.

In essence, both scientists could be attempting to describe the same phenomena to a large degree and this makes Murray's work valuable in the search for the role of personal values.

Hjelle and Ziegler suggest that Murray and Kluckhohn's attempts to define how personality is formed have made a significant contribution.[47] Their work is rich with rather rigorous discussions regarding the four sets of determinants of personality; that is, constitutional, group membership, role and situational determinants of personality. These determinants describe basic processes under which values could be transferred and inculcated.

Erik Erikson's ideas have become popular in many parts of our culture and have become a part of our normal speech. Probably the most popular is the concept of the adolescent identity crisis. To Erikson, the individual proceeds through eight psychosocial stages which determine their adequacy as adults. These are interesting because the optimal outcomes of each stage are highly comparable to many of Rokeach's values.[48]

Freud saw development as being determined exclusively in the early years but Erikson sees development as an on-going process. Erikson acknowledges the influence of others on an individual's development. "Important others" impact on how people perceive themselves and what others want them to be. This could be an interesting vehicle for transmission and evaluation of values learned in early childhood and "reflects the growing neo-Freudian emphasis on broad social and cultural forces, rather than instinctual drives alone."[49]

> "The integration...of ego identity is...more than the sum of the childhood identifications. It is the accrued experience of the ego's ability to integrate all identifications with the vicissitudes of the libido, with the aptitudes developed out of endowment, and with the opportunities offered in social roles..."[50]

Erikson believes that all young people must gain a perspective in their life which integrates their childhood memories with their hopes and expectations for adulthood by creating a "central perspective and direction" that gives their life meaning through a sense of unity and purpose.[51]

Erikson bases his view of development upon two key assumptions.

> "...human personality in principle develops according to steps predetermined in the growing person's readiness to be driven toward, to be aware of, and to interact with, a widening social radius..." (and secondly) "...society, in principle, tends to be so constituted as to meet and invite this succession of potentialities for interaction and attempts to safeguard and to encourage the proper rate and the proper sequence of their enfolding..."[52]

In essence, Erikson's contribution is to recognize the influence of social interaction on behaviour and hence, personal values. As the most highly regarded proponent of modern psychoanalytic thought, he represents the final product of the psychological approach that has most affected today's generation and culture.

Stage and Age	Psychosocial Crisis	Optimal Outcome
Oral-sensory (1st year of life)	Trust vs. Mistrust	Basic trust and optimism
Muscular-anal (2nd year of life)	Autonomy vs. Shame	Sense of control over oneself and environment
Locomotor-genital (3rd-5th year of life)	Initiative vs. Guilt	Goal directedness and purpose
Latency (6th year to start of puberty	Industry vs. Inferiority	Competence
Puberty and adolescence	Identity vs. Role Confusion	Reintegration of past with present and future goals, fidelity
Early Adulthood	Intimacy vs. Isolation	Commitment, sharing, closeness, and love
Young and Middle Adulthood	Generativity vs. Self Absorption	Production and concern with the world and future generations
Mature Adult	Integrity vs. Despair	Perspective, satisfaction with one's past life, wisdom

Source: Mischel, W., Introduction to Personality, Fourth Edition, CBS College Publishing, New York, 1984

Figure 1: Erikson's Eight Stages of Psychosocial Development

Erikson's work is important to consumer behaviourists because he is one of the most highly respected modern psychoanalytic theorists and because of the influence the psychodynamic movement has had on most communication media and, indeed, our modern culture. He also had followed Sullivan and Horney in turning away from an exclusive focus on the first years of life and given us a model to help better understand the various stages of life.[53]

In analyzing the results of his Value Survey, Rokeach rejects Freud's concept that development stops at "the end of a period of psychosexual development" and says that his findings are "more in line with Erikson's view of development."[54]

Ernest Dicter

Unconscious motives and deeply-rooted influences of the type studied by psychodynamicists have been shown to be linked to consumer behaviour.[55] However they are not the only influence on consumer behaviour. One approach which may have over-emphasized psychodynamic influences was Motivation Research, a popular approach during the mid-1950s.

As the leading proponent of Motivation Research, Dichter offered original and highly entertaining reasons for consumer behaviour. It was Dichter who suggested that a man bought a convertible as a substitute for a mistress, liked corn flakes because the crunch was representative of crushing his enemy's bones, or feared flying because he anticipated leaving his wife a widow.

The findings of motivation research were largely discredited by Evans 1959 study of Ford and Chevy owners but the psychodynamic approach continues to make significant contributions to marketing today.[56]

The Trait Approach

Trait theorists reject the dynamic tension of Freudian instincts and suggest that behaviour is the result of relatively fixed generalized traits rooted at the core of personality. In essence, different situational cues trigger different traits and a behavioural by-product is produced. Although this is not in agreement with Rokeach's belief system theory, the work of trait theorists has been influential in defining personal values.

According to Engel, Blackwell and Miniard, trait theorists propose that:

> "...traits are common to many individuals and vary in absolute amounts among individuals. It is further assumed that these traits are relatively stable and exert fairly universal effects on behavior regardless of the environmental situation. It follows directly from this assumption that a consistent functioning of personality variables is predictive of a wide variety of behavior. The final assumption asserts that traits can be inferred from the measurement of behavioral indicators."[57]

As Mischel observes, trait theory

> "...postulates that an individual's personality is composed of definite predispositional attributes called traits. A trait is more specifically defined as any distinguishable, relatively enduring way in which one individual differs from another. Traits can alternatively be considered individual difference variables."[58]

The trait approach is not new. In 400 BC, "...the Greek physician Hippocrates assigned persons to one of four types of temperament: choleric (irritable), melancholic (depressed), sanguine (optimistic), and phlegmatic (calm, listless)."[59] It is not uncommon for people to think that a short man will be aggressive or that a fat person will be jolly.

More recently, behaviourist Eibl-Eibesfeldt demonstrated that certain sequences of behaviour are innate when he separated a squirrel from its parents at birth and raised it in a separated environment. The squirrel never experienced solid food or had a chance to observe other squirrels to learn their behaviour and it slept in a cage with a solid floor. Yet, Eibl-Eibesfeldt's squirrel mimicked burying behaviour in its hard-floored cage when presented with nuts and given a chance to eat as many as it wanted.[60] This suggests at least the possibility that a basis exists for the innateness of human traits as well, although there are many obvious criticisms that might be levelled at such a suggestion. Perhaps values are also transmitted to offspring in a similar fashion.

William H. Sheldon

Sheldon, an American physician, suggested three dimensions of physique and their affiliated temperaments in 1942. His typology suggests that endomorphic people, who are soft and round with overdeveloped digestive viscera, are of a viscerotonic temperament, which means they are relaxed, sociable, and love to eat.

Mesomorphic people are muscular, rectangular, and strong. Their somatotonic temperament is energetic, assertive, and courageous.

He described ectomorphic people as long and fragile, with a large brain and sensitive nervous system. Ectomorphic people exhibit a cerebrotonic temperament which is restrained, fearful, introvertive, and artistic.[61]

> "Sheldon's ideas about the association between body build and temperament are supported to some extent when untrained people rate the personality characteristics of others."[62]

This is most probably an indication of the degree individuals base their decisions upon stereotyping when rating others, as opposed to observed behaviour. This rationale forms the basis of many advertising model choices, despite a wide-spread lack of awareness of Sheldon's work.

Carl Jung

Although Jung was as a psychodynamicist, he also grouped people into two traits. These traits have become well-known and have found their way into everyday usage. Extraverts tend to be socially outgoing and confident in stressful situations and social conflict or confrontation. Introverts tend to be shy and withdrawn, especially when confronted with social contact or stress.

Criticisms are levelled at all typologies. For instance, it is easy to recognize the uniqueness of most people. It is rare that any two people in a room will closely resemble each other and no two peoples fingerprints or voice patterns are the same. This makes it difficult to accept such simplistic typologies as valid representations of personality upon which to base predictions of behaviour. Personality and behaviour are complex and highly variable and defy categorization into simple slots such as those proposed by Jung and Sheldon. However difficult it is to accept the typologies of Sheldon and Jung, there is a wealth of interesting work linking traits and values.

Gordon Allport

Allport was perhaps the most outstanding contributor to trait theory. His work influenced the trait approach for more than thirty years.[83] Allport favoured a biophysical description of traits which transcended semantics:

> "...every trait-name (does not) necessarily imply a trait; but rather...behind all (the) confusion of terms, behind the disagreement of judges, and apart from errors and failures of empirical observation, there are none the less bona fide mental structures in each personality that account for the consistency of its behaviour..."[84]

To Allport, traits were general and enduring tendencies or predispositions to respond to stimuli, that produced fairly broad consistencies in behaviour through integrating and uniting what would otherwise be diverse and dissimilar stimuli responses. He defined a trait as:

> "...a generalized and focalized neuropsychic system (peculiar to the individual) with the capacity to render many stimuli functionally equivalent, and to initiate and guide consistent (equivalent) forms of adaptive and expressive behaviour..."[85]

In rare circumstances, Allport believed a trait could develop an overwhelming influence in most aspects of life. These "cardinal traits" influence behaviour to the point that life revolves around them. "Central traits" exist which are still generalized throughout the personality but are not as influential as cardinal traits. Finally, he theorized that "secondary" dispositions or "attitudes" exist. These are narrow traits that are more specific. He defined an attitude as a "neuropsychic state of readiness for mental and physical activity."[86]

Allport believed that traits were unified in a pattern of dispositions, or "personality structure as he called it, which was the determinant of behaviour.[87] Allport's emphasis on this structure, rather than stimulus-response or environmental effect is seen in his stingir rejection of radical behaviouralism: "The same fire that melts the butter hardens th egg."[88]

Allport accepted the uniqueness of people and believed that traits operate in distinctive ways in each individual. He preferred "intensive and long term case studies" of the individual and was critical of most of the statistical methods and quantitative research techniques favoured by other trait theorists.[89]

Allport and Odbert categorized over 18000 trait names.[70] This list was the primal source of Anderson's list of 555 trait names which was used by Rokeach to formulate his list of instrumental values.[71]

While Allport has been highly influential, not much empirical work has been done to validate his theories. This is mainly because of Allport's lack of empirical definition of his theoretical concepts.[72]

Joel Cohen has probably done the most to adapt trait theory to the study of consumer behaviour. Cohen was also one of the first to recognize the importance of personal values and he related them to his compliant, aggressive and detached personality traits in the late 1960s.[73]

Sadly, Wells and Beard report that almost 50 different personality traits have been used in over 90 studies but results have been disappointing.[74] Mischel points out that personality traits generally improve the ability to predict behaviour by only ten percent or less.[75]

Raymond B. Cattell

Cattell differed from Allport in a number of ways. He described common traits, which are shared by everyone, and unique traits which are found only in each individual. Allport believed that traits become roughly generalized through social interaction but did not accept that the common traits were found in all people to the same degree, although he did accept that they might exist in varying degrees.

Cattell believed that the only way to find source traits was by means of the technique of factor analysis.[76] Cattell also distinguished between two types of traits:

> "Surface traits are accidental and changeable groupings of observable human characteristics, which usually have a name in every day language, such as kindness and aggressiveness...Surface traits are easily identified by noting the groupings of the terms usually used to describe individuals...(they)...have no specific causal basis in biological factors and genetic determinants...Source traits, the actual building blocks of personality, are separate underlying entities which literally determine the surface manifestations which are observable in behaviour. The factors that emerge from a factor analysis are called source traits because the mathematical model of factor analysis implies that factors are determiners, and that it is highly probable that factors will have causal status when rotated to simple structure."[77]

Another interesting concept of Cattell's is the erg:

> "...a pattern found among dynamic manifestations by factor analysis, and hypothesized to be an innately determined, goal-directed activity."[78]

Meyer, Moore and Viljoen report that Cattell and Kline distinguished 12 reasonably replicable ergs on the basis of several studies which seem intuitively to mirror many of Rokeach's values:

> "As Cattell and his associates are not consistent in naming ergs, the following list includes the alternative names used for the twelve ergs: sex (mating); assertiveness; security (fear); narcissistic love of comfort; quarrelsomeness (anger, rage) gregariousness; parental compassion and protection; self-resignation; indignation; religious dependence; hunger; inquisitiveness (exploration)."

His development of the F-Scale was among the first simple personality measurement instruments. It was widely used but had little effect on consumer behaviour. Wells and Beard propose that the major contribution Cattell made was inventing the concept of a simple instrument to measure personality so that others may someday develop simple instruments to measure syndromes like opinion leadership or innovativeness[79].

Personality traits were used extensively in the late 1960s and early 1970s to study consumer behaviour. A study by Corder is a good South African example of the technique.[80] Later research has shown the technique to be of little value. Wells and Beard[81] point out that standard personality questionnaires, of the type used to measure traits, do not imply causation but rather correlation. This distinction lost on many marketing practitioners. They also suggest that the nature of marketing research requires brief questionnaires and that this coupled with the reliability of the instrument used, creates a situation whereby low reliability is to be expected. They also question the reliability of the way consumer behaviour is measured; that is, by asking a question (usually about some nebulous future intent to purchase) rather than by measuring actual behaviour. They also call into question the predictive ability of traits, which manifest themselves in so many ways which are so often contradictory.

Despite their criticisms, Wells and Beard are able to cite a wealth of studies which indicate a high degree of correlation between certain personality traits and consumer behaviour.

Others point out other more serious problems. Robertson and Ward point out that traits are generally used to identify alluring but, in reality, usually non-existent types individuals such

as "innovators" or "opinion leaders."[82] Wackman presents evidence which suggests that traits don't accurately predict consumer behaviour because the personality measures used are either unreliable, invalid, or poorly chosen, because the personality traits chosen are inappropriate for the specific consumer behaviour chosen, because people do not want to project negatively valenced information about themselves by projecting less than desirable traits in relation to their self image, and because traits are largely unconscious.[83]

The enduring and general nature of traits, as defined by Allport and Cattell, and the supposition of their biophysical nature, make trait theory an interesting middle ground between the psychodynamicists and later approaches. Traits have been shown to be intercorrelated with the "four temperaments" of Hippocrates by Eysenck and Rachman;[84] and to possess a characteristic of centrality with regard to personality which varies depending upon the amount of information being processed.[85][86]

Again, traits have been shown to be useful for describing some consumer behaviour. For instance, although it's based mainly upon Karen Horney's work, CAD examines personality traits.[87]

However, the concept is not as useful as personal values because it does not allow for the provision of behaviour change in the same fluid way that changing values do. Traits, by their very fixed nature, do not mirror changing and irrational human behaviour and this seriously handicaps the usefulness of the concept.

The Phenomenological Approach

The Phenomenological Approach is concerned with the:

> "...individual's experience as he or she perceives it, because that is its most basic theme. Some of the positions...have been given other labels also, such as 'self' theories, 'construct' theories, 'humanistic' theories, 'cognitive' theories, and 'existential' theories. Most phenomenological theories are distinctive both in the concepts they reject and in the ones they emphasize. They tend to reject most of the dynamic and motivational concepts of psychoanalytic theories and also most of the assumptions of trait theories. Instead, they emphasize people's immediate experiences and their current relationships, perceptions, and encounters. The person thus is viewed as an experiencing being, rather than as a 'personality structure' or as a set of 'psychodynamics' and long term dispositions. The focus is on the individuals subjective experience, feelings, personal view of the world and self, and private concepts. Most of the approaches...also stress people's positive strivings and their tendencies toward growth and self-actualization..." (they) "...are concerned broadly with cognition - with how we know and understand the world and ourselves..." (and) "...the internal or mental processes through which individuals 'code' and categorize information."[89]

Although he was a major contributor to trait theory, Gordon Allport also contributed to the phenomenological approach. Allport challenged many of the tenets of major psychodynamic and motivational thought.[89] For instance, he discounted the influence of the past on present behaviour, recognized the uniqueness of individuals and of the integrated patterns that distinguish them, and also noted the lack of motivational continuity during the individual's life. He also criticized the Freudian emphasis on the enduring role of sexual and aggressive motives.[90] Allport also de-emphasized the influence of the past on present behaviour saying, "Past motives explain nothing unless they are also present motives..."[91]

Allport's work provides a framework for understanding the uniqueness of the individual in a way similar to that proposed by Rokeach's Belief System Theory. Interestingly, Rokeach was able to validate some of Allport's theoretical propositions.[92]

Allport suggested that habitual behaviour need not be tied to any specific motive. This theory, which is called functional autonomy, may suggest that personal values are not fully activated during Routine Problem Solving purchase behaviour:

> "Motives are contemporary...Whatever drives must drive now...The character of motives alters so radically from infancy to maturity that we may speak of adult motives as supplanting the motives of infancy..."[93]

Allport was also one of the strongest advocates of the self as a determinant of personality and his views are similar to those of Rokeach in many ways. His concept of the self was not that of a little man driving the ship. He introduced a term "proprium" to symbolize his concept of the self and defined it "as the root of the consistency that characterizes attitudes, goals, and values..." and further said that the self is not "...innate..." but rather "...develops in time."[94] Allport defined a value as "a belief upon which a man acts by preference."[95]

The proprium is characterized by bodily sense, self-identity, self-image, self-esteem, self-extension, and rational thought. This is consistent with Allport's focus on a unique, integrated pattern of adaptation that represents the holistic biosocial organism, rather than representing the individual as a bundle of motives and traits.

Sadly, Allport's attitude concept is much less concise than that of Rokeach. He defines it as "...a mental and neural state of readiness to respond that is organized through experience and exerts a directive and/or dynamic influence on behaviour."[96] As such, he does not bind the attitude concept to specific objects or events.

Abraham Maslow

Abraham Maslow is perhaps best known for his Hierarchy of Needs Concept. Maslow's work, with its concept of striving toward self-actualization is mirrored in the positive themes of George A. Kelly and Carl Rogers.

> "According to Maslow, for example, humans are innately good. Growth motivation moves the individual through hierarchically ordered degrees of health to ultimate self-actualization ...Behavior is seen as goal directed, striving, purposeful, and motivated by higher actualization needs rather than by primary biological drives alone."[97]

This is illustrated by the following quote, "Every person is, in part, his own project, and makes himself..."[98]

Without the "substantial effect from educational attainment or intellectual capacity"[99] Maslow believed the individual's progress through five stages was limited by fulfillment of the needs of the previous stage. For instance, the Survival stage is at the lowest end of the hierarchy and is concerned with fulfillment of physiological needs. Once a person fulfills these most basic physiological needs (food, clothing, and shelter) he progresses to the Security stage where his needs for safety and self-preservation are most dominant. Should

he fill these needs, he progresses to the Belonging stage, where his need for love is most dominant. At the next level, the Esteem stage, his dominant need is esteem and once this is fulfilled, the individual is self-actualized.

Maslow's Hierarchy of Needs has been criticized on a number of grounds. First, the theory is rich and descriptive but it was never formulated in terms which could be empirically tested. Second, there is no empirical support in the literature supporting a five-level hierarchy.[100] So while it may seem that people might feel certain values to be most important at each level of the hierarchy, there's no empirical evidence to support this view. Personal experience alone is enough to demonstrate that most people need, for instance, love in differing degrees throughout their lives. Third, because the theory rests on a number of preconditions, such as the freedom to speak and do what one wishes, and because Maslow highlighted a number of cases in which the theory was inoperative, Maslow's theory is also not particularly useful for prediction of specific behaviour. The difficulty of establishing the correct type to which individuals belong is partial demonstration of this problem. It may also be that the behaviour described by Maslow is so general that the concept is much like the astrology column in the daily newspaper; guaranteed to be right every day because it couldn't be wrong but of absolutely no use.

Interestingly, Rokeach reports that the relative importance of certain values could explain the differences in individuals proposed by Maslow.[101]

As such, Maslow's Hierarchy of Needs suffers from the same criticism as all typologies. This calls into question the commercial programmes which are fundamentally based upon Maslow, such as the Stanford Research Institutes VALS typology and the Sociomonitor typology of Market Research Africa.

Commercial market segmentation programmes, such as VALS and Sociomonitor, suggest that Maslow was the father of Values research. However, there is difficulty regarding the role of values in the Maslovian Hierarchy because the organism is driven by needs and satisfied by their fulfillment. As earlier noted, Maslow equated needs with values and, in fact, stated in 1968 his mistaken belief that the values concept would soon disappear due to the confusion regarding its use:

> *"...my belief is that the concept of 'value' will soon be obsolete. It includes too much, means too many diverse things and has too long a history."*[102]

Carl Rogers

Carl Rogers is widely known for his phenomenological approach to personality. He views the individual as self-actualizing and its behaviour as goal-directed.[103] Roger's theory of personality and behaviour is the most advanced comprehensive theory regarding values and demands a more comprehensive review. Rogers summarized his theory of personality and behaviour as follows:[104]

> "Every individual exists in a continually changing world of experience of which he is the center. The organism reacts to the field as it is experienced and perceived. This perceptual field is, for the individual, 'reality.'"
>
> "The organism reacts as an organized whole to this phenomenal field."
>
> "The organism has one basic tendency and striving - to actualize, maintain, and enhance the experiencing organism."
>
> "Behavior is basically the goal-directed attempt of the organism to satisfy its needs as experienced in the field as perceived."
>
> "Emotion accompanies and in general facilitates such goal-directed behavior, the kind of emotion being related to the seeking versus the consummatory aspects of behavior, and the intensity of the emotion being related to the perceived significance of the behavior for the maintenance and behavior of the organism."
>
> "The best vantage point for understanding behavior is from the internal frame of reference of the individual himself."
>
> "A portion of the total perceptual field gradually becomes differentiated as the self."
>
> "As a result of interaction with the environment, and particularly as a result of evaluational interaction with others, the structure of self is formed - an organized, fluid, but consistent conceptual pattern of perceptions of characteristics and relationships of the 'I' or 'me', together with values attached to these concepts."
>
> "The values attached to experiences, and the values which are a part of the self structure, in some instances are values experienced directly by the organism, and in some instances are values introjected or taken over from others, but perceived in distorted fashion, as if they had been experienced directly."
>
> "As experiences occur in the life of the individual, they are either (a) symbolized, perceived, and organized in some relationship to the self, (b) ignored because there is no perceived

relationship to the self structure, (c) denied symbolization or given a distorted symbolization because the experience is inconsistent with the structure of the self."

"Most of the ways of behaving which are adopted by an organism which are consistent with the concept of self."

"Behavior may, in some instances, be brought about by organic experiences and needs which have not been symbolized. Such behavior may be inconsistent with the structure of the self, but in such instances the behavior is not 'owned' by the individual."

"Psychological maladjustment exists when the organism denies to awareness significant sensory and visceral experiences, which consequently are not symbolized and organized into the gestalt of the self-structure. When this situation exists, there is a basic or potential psychological tension."

"Psychological adjustment exists when the concept of self is such that all sensory and visceral experiences of the organism are, or may be, assimilated on a symbolic level into a consistent relationship with the concept of self."

"Any experience which is inconsistent with the organization or structure of self may be perceived as a threat, and the more of these perceptions there are, the more rigidly the self-structure is organized to maintain itself."

"Under certain conditions, involving primarily complete absence of any threat to the self-structure, experiences which are inconsistent with it may be perceived, and examined, and the structure of self revised to assimilate and include such experiences."

"When the individual perceives and accepts into one consistent and integrated system all his sensory and visceral experiences, then he is necessarily more understanding of others and is more accepting of others as separate individuals."

"As the individual perceives and accepts into his self-structure more of his organic experiences, he finds that he is replacing his present value system - based so largely upon introjections which have been distortingly symbolized - with a continuing organismic valuing process."

Like Kelly, his treatment of motivation is interesting, for it is not a special construct but rather an universal quality of being alive:

"...there is one central source of energy in the human organism; that it is a function of the whole organism rather than some portion of it; and that it is perhaps best conceptualized as a tendency towards fulfillment, toward actualization, toward the maintenance and enhancement of the organism."[105]

More interesting is the role of values in the Rogerian concept. Given the organism's tendency and striving to actualize, maintain, and enhance itself, it becomes apparent that:

> "The organism in the course of actualizing itself engages in a valuing process. Experiences that are perceived as enhancing it are valued positively (and approached). Experiences that are perceived as negating enhancement or maintenance of the organism are valued negatively (and avoided)."[105]

Rogers believed that the self and self-concept were the same thing and defined them as an:

> "...organized, consistent, conceptual gestalt composed of perceptions of the characteristics of the 'I' or 'me' and the perceptions of the relationships of the 'I' or 'me' to others and to various aspects of life, together with the values attached to these perceptions..."[107]

As Mischel clearly points out, to Rogers, values are the result of direct exposure to the environment:

> "The experiences of the self become invested with values. These values are the result of direct experience with the environment, or they may be introjected or taken over from others. For example, the young child finds it organismically enjoyable to relieve himself when he experiences physiological tension in the bowel or bladder. However, he may sometimes experience parental words and actions indicating that such behaviour is bad, and that he is not lovable when he does this. A conflict then develops which may result in distortion and denial of experience. That is, parental attitudes may be experienced as if they were based on the evidence of the child's own experience."[108]

In Mischel's example, it is apparent that situations can result where value formation leads to the denial or distortion of reality. This could explain why people remain brand loyal to known and trusted products, despite the introduction of new products which are better in every way than existing brands.

Rogers assumes that every organism has a strong need for positive regard not only from others but also from self. Behaviour which increases positive regard tends to be perceived accurately while those that do not can be subject to gross distortion or denial of awareness.[109] This could be a strong force in the formation of "positive" values that drive the self-actualizing process.

Rogers also believes in the emergence of new societal values in response to the growing technology of the "information age".

> "Our culture, increasingly based on the conquest of nature and the control of man, is in decline. Emerging through the ruins, is the new person, highly aware, self-directing, an explorer of the inner, perhaps more than outer, space, scornful of the conformity of institutions and the dogma of authority. He does not believe in being behaviourally shaped, or in shaping the behaviour of others. He is most assuredly humanistic rather than technological. In my judgement, he has a high probability of survival."[110]

It remains to be seen whether this prediction can be validated.

George Kelly

George Kelly has added much to the understanding of the basis for the individual's search for self-actualization, as well as how human beings assume different roles in response to different situations. According to Kelly's Psychology of Personal Constructs, reality is what we construe it to be and his theory seeks to illuminate how the individual construes reality rather than the clinician's interpretation of the individual, as in psychoanalysis.[111]

The psychology of personal constructs seeks to define the subjective maps that people generate in coping with the psychological situations they encounter in their lives. Constructs can be understood only through their manifestation in behaviour. Kelly recognizes that there are many ways to interpret behaviour, calling these different interpretations "constructive alternativism". So rather than try to verify the validity of a particular construct, Kelly is interested in its convenience or utility in the individual's life. If the construct is not convenient, then it is necessary to find a construct that is more predictive of behaviour. Just as psychologists can be the victim of poor theory, individuals can become trapped by their own poorly thought out constructs. Thus Kelly sees the clinical psychologists job to be helping people discover their own constructs and test them for validity by offering different interpretations. Like many existentialists, he believes that the individual is what he does.[112]

> "Kelly's emphasis on roles and role enactments also merit special attention. Rather than seeing humans as possessing fairly stable, broadly generalized traits, Kelly saw them as capable of enacting many different roles and of engaging in continuous change. A role, for Kelly, is an attempt to see another person through the other's glasses - that is, to look at a person through his or her constructs - and to structure one's actions in that light. To enact a role requires that behaviour be guided by the perception of the other person's viewpoint."[113]

To ascertain which role people were assuming, Kelly developed his **Role Construct Repertory Grid**, or *Rep Test*. This study requires the individual to compare three people or things, and then to say how two of the items are alike and how the other is different. It will be seen later that this technique has had a major influence in recent middle range theory developments such as Gutman and Reynolds Laddering technique.

Kurt Lewin's Field Theory

Kurt Lewin has made a large contribution to the study of consumer behaviour with his Field Theory. Lewin posited that behaviour was determined by the events that exist within the psychological lifespace at the moment. As such, he rejected the influence of past events or situation-free dispositions such as traits and he rejected the usual notion of constantly present needs.[114]

Harold Kassarjian has contributed much to the consumer behaviourists understanding of Field Theory.[115] As Kassarjian points out, Field Theory suggests that the study of the whole individual allows better analysis that the study of individual parts of the individuals psyche. Field Theory, like Roger's theory, is a Gestalt psychology.

Lewin has made the study of consumer behaviour richer is by making consumer behaviourists realize that past experiences are not influential unless they are recalled. Lewin's theory also highlights the fact that understanding consumer attitudes toward the purchase of an object and the influence of important others in their decision process may not be predictive because they represent only limited aspects of the totality of the decision. Lewin rejects the behavioural notion of learning from previous trials.[116]

Kassarjian also points out the contribution Lewin's work has made to understanding group dynamics, stressing the three step process to group behavioural change Lewin posits (unfreezing the present level of behaviour, moving to the new level of behaviour, and freezing the behaviour at the new level) and suggests that Lewin's greatest contribution may be his influence on the development of middle-range theories of consumer behaviour.

Campbell advanced Lewin's theory. His work is rooted in human social behaviour. Because his work encompasses the stimulus-response concept, it is an important bridge between phenomenology and behaviourism. His greatest contributions to consumer behaviourists may be that he builds on Lewin's work and highlights the differences and

similarities between commonly used theories such as dissonance theory, attitude structure components, the adoption process, and many others. His work could be categorized as being from the socio-psychological movement and he can be assumed to have influenced most respected consumer behaviour theorists.[117]

Victor Frankel

Frankel's Existential Theory has not received much attention in consumer behaviour literature but it is "...not only a new approach...(but it)...is also an exceptional view of man as well as a philosophical approach to personality theory."[118] Frankel is the father of logotherapy and one of the foremost representatives of the existential psychology approach fathered by Kierkegaard and Heidegger. According to existential psychologists, man is primarily a spiritual being with freedom and responsibility. These concepts form the core of personality and the spiritual dimension of the whole.[119]

Frankel believes that man has freedom of will and that he has a will to seek meaning outside himself. Meaning is found in values. Frankel believes there is meaning in all of life's circumstances including death, sickness and pain. Personality has three dimensions; physical, psychological and spiritual.[120]

Frankel's theory, which envisions a man driven by values and goals and the will to meaning will influence consumer behaviour in the years to come.

The Phenomenological Approach is probably contributing the most to consumer behaviour science at this time. The values work of Milton Rokeach, the VALS typology, and Sociomonitor are all examples of work which is phenomenologically-based.

The Behavioural Approach

Mazur suggests that the Behavioural Approach (also called the learning approach) was founded in the work of behaviourists Pavlov and Watson. It has been most affected by B.F.Skinner, who has had a major influence in psychology and learning theory.[121] Skinner believes that behaviour is shaped by the external environment, exclusive of any other cause. His behaviouristic view rejects the view that behaviour is the result of "...motives, dispositions, or 'selves' that are 'in' the person."[122]

Skinner explains,

> "Whatever we do and hence however we perceive it, the fact remains that it is the environment which acts upon the perceiving person, not the perceiving person who acts upon the environment."[123]

Hence, Skinner's approach of radical behaviourism offers little in the way of defining the role of personal values because it does not acknowledge their existence.[124] Rokeach observes:

> "Even more recently, behaviorist B.F.Skinner has vigorously denied that men possess values and has instead argued that 'the reinforcing effects of things are the province of behavioral science, which, to the extent that it is concerned with operant reinforcement, is a science of values."[125]

Skinner admits that phenomenologists and humanists severely criticize the behavioural approach on the following grounds:

> "It ignores consciousness, feelings, and states of mind. It neglects innate endowment and argues that all behavior is acquired during the lifetime of the individual. It formulates behavior simply as a set of responses to stimuli, thus representing a person as an automaton, robot, puppet, or machine. It does not attempt to account for cognitive processes. It has no place for intention or purpose. It cannot explain creative achievements - in art, for example, or in music, literature, science, or mathematics. It assigns no role to a self or sense of self. It is necessarily superficial and cannot deal with the depths of the mind or personality. It limits itself to the prediction and control of behavior and misses the essential nature or being of man. It works with animals, particularly with white rats, but not with people, and its picture of human behavior is therefore confined to those features which human beings share with animals."[126]

While these criticisms are valid, as Ray points out, many of the key concepts of classical behaviourism, such as classical conditioning, reinforcement, extinction, stimulus

generalization, stimulus discrimination, and operant conditioning have been shown to be explanatory of some forms of consumer behaviour.[127] It seems to logically follow that consumer behaviourists will have to determine how these concepts relate to the personal values concept. The two perspectives do not have to represent mutually-exclusive points of view.

Most who follow the Behavioural Approach firmly believe in determinism. That is, that environment determines behaviour:

> "Determinism is a philosophical position that all events of the world, including all human behaviours, are determined by physical causes that could, at least in principle, be discovered and analyzed with the techniques of science."[128]

Determinism contradicts the assumptions of every major consumer behaviour theory. These theories assume an active, information-seeking consumer rather than a passive individual who awaits stimulation.

Despite this contradiction, the early verbal learning studies of Ebbinghaus, the work of Hull, Osgood, and Berlyne, and the work of other behaviourists have strongly affected the development of consumer behaviour theorists.[129] In fact, behaviourism has had a major impact on many consumer behaviourists and many of its notions of stimulus-response have been borrowed to form a key part of many consumer behaviour theories.

Although radical behaviourism is far removed from the humanistic viewpoint, recent years have seen the molding of a new kind of behavioural approach. This approach places greater emphasis on cognitive elements and is called social learning.

The most influential early work which helped form a basis for social learning by questioning the rigidity of classical behaviourism was done by Tolman, Hull, and Osgood. According to Ray, the most influential recent work has been done by Rotter; Rotter, Chance and Phares; Bandura; and Mischel[130].

While social learning theorists do not hold that the individual is a passive bundle awaiting stimulation, they only accept the concept of subjective values and do not accept the idea of internal personal values. Mischel says that expectancies and subjective values have remained central concepts in more recent social learning formulations and that they are "seen as important qualities of the person that help guide choices among available alternatives in the situation."[131]

It is unfortunate that social learning theorists offer little in the way of defining the role of personal values in behaviour and are much more interested in the concept of subjective value, which can best be defined as the answer to the question, "What's it worth?" Rotter explores this concept of value in great detail.[132]

Social learning and behaviourism do not represent an organized theory of personality so much as an exploration of the effect of the environment of the individual. While the behavioural approach has done very little to influence the development of the values concept, as Blackwell suggests, behaviourism has a role to play as the shaper of the individual to the demands of societal values.[133]

Conclusions

Psychodynamic, Trait, Behavioural and Phenomenological theorists have all contributed to the development of consumer research. Still, there is little common ground upon which a fully-comprehensive theory of human behaviour might be built.

Radical behaviourism is based upon determinism: the environment determines all behaviour. Psychodynamicism suggests that hidden internal conflicts which are largely determined at an early age guide behaviour. Trait psychology proposes that fixed predispositions guide behaviour and growth. There is empirical support for each of these viewpoints and evidence to reject them as well.

Phenomenology has been criticized on a number of grounds such as its reliance upon personal growth, its relative neglect of applications for severely disturbed persons and its relative bias towards client self-evaluation. However, the Phenomenological Approach offers the most useful concept of personal values as determinants of personality but also the most interesting holistic concept of personality of all the major approaches.

A number of hypotheses are suggested by psychological theorists. Jung's concept of a collective unconscious suggests people may place the same relative importance on a majority of personal values. Roger's theory of personality and behaviour suggests that brands may become symbols that are distorted according to the self-structure. This suggests that people with similar value systems may use the same brands. He suggests that routine behaviour may not be motivated - so values may only be activated or consulted in cases of extended problem solving. Values might be a part of the brand image and may be meaningfully associated with brand images in the symbolization process.

The joint implications of deeply rooted values transmitted in some biophysical way, the stereotyping process and a symbolizing cognitive process suggest most people will associate the same values with a brand and that the values associated will generally tend to be more important to the people who associate them to a brand than they are to those who do not.

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CHAPTER THREE - ROKEACH'S BELIEF SYSTEM THEORY

The previous chapter suggests phenomenological thought has contributed most to the study of personal values. This is mainly due to the underlying assumptions which form the basis of other approaches. Phenomenology conceptualizes man as a striving, goal-oriented individual and although there are differences in the theories of phenomenologists, such as Rogers, Frankl or Maslow; most phenomenologists would agree that man strives to achieve goals and these goals are values.

Phenomenologist Milton Rokeach has been referred to as "...perhaps the most seminal scholar on values."[1] Rokeach is widely recognized as the world's leading authority in the study of personal values and consumer research relating to values has been influenced most by his work.[2] This chapter will investigate Rokeach's Belief System Theory.

Rokeach believes values form the core concept to understanding human behaviour, regardless of perspective:

> "...the concept of values, more than any other, is the core concept across all the social sciences. It is the main dependent variable in the study of culture, society, and personality, and the main independent variable in the study of social attitudes and behaviour. It is difficult for me to conceive of any problem social scientists might be interested in that would not deeply implicate human values."[3]

Rokeach's work redefines the work completed earlier this century by other behavioural scientists who defined the role of attitudes in much the same way as Rokeach phenomenologically defines values. These earlier pioneers established the link between attitudes and values but mainly acknowledged only the social component of values while de-emphasizing their personal, moral, and social components.[4] The sometimes subtle, yet nearly always substantive, differences in the use of the term value has already been noted as a source of confusion and disagreement.

While it is widely accepted that personal values play a key role in behaviour, the centrality of this role, like its definition, is widely debated due to differences of perspective, semantics, and approach to understanding human behaviour. Careful analysis shows a far greater tendency toward agreement than toward disagreement

among the contending points of view, as long as the observer focuses on concepts rather than terminology.

Sociologist Williams' suggests values function as criterion.[5] Rokeach agrees, saying that a value is:

> "...an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence."[6]

Rokeach bases his Belief System Theory on "...five assumptions about the nature of human values...":[7]

1) The total number of values that a person possesses are relatively small.

2) All men everywhere possess the same values to different degrees.

3) Values are organized into value systems.

4) The antecedents of human values can be traced to culture, society and its institutions, and personality.

5) The consequences of human values will be manifested in virtually all phenomena that social scientists might consider worth investigating and understanding.

While Maslow and Rokeach would find much to disagree about (see Needs later in this chapter), they would agree that the term value has been used to mean far too many things[8]. The most common traditional definitions leave much to be desired in the areas of precision and usefulness.

Typical of the traditional definitions would be the one cited by Gordon Allport, originated by sociologists Thomas and Znaniecki, "any datum having an empirical content accessible to the members of some social group and a meaning with regard to which it is or may be an object of activity." Allport further cites their point of view that values are usually social in nature and are objects of common regard amongst all men.[9] The difficulty of using this definition is self-evident as is its lack of precision.

This semantic confusion of personality terms, noted earlier so many times, also affects the definition of the term attitude. Influential attitude theorist Allport's attitude concept exhibits many of the components of Rokeach's value concept:

> "...a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations to which it is related."[10]

Attitudes and values are both conceptual components of the belief system. They are simply different kinds of beliefs that differ in their transcendency and centrality. In attempting to describe these beliefs, Allport and Rokeach may simply be "cutting the cake" in different places and there is a high degree of "overlap" between their viewpoints. Their main non-semantic differences would most probably concern attitude and value change and formation, the existence of internal personal values and the existence of intent as a concept.

Attitudes have long held the central position in the study of consumer behaviour.[11] Many, such as Allport and Fishbein, would argue that attitudes should occupy a position of centrality in the study of social psychology [illegible] its wide acceptance.

Rokeach argues for the wider and more primary role of values, saying in part:

> "These (five) assumptions (detailed above) also represent a set of reasons for arguing that the value concept, more than any other, should occupy a central position across all the social sciences - sociology, anthropology, psychology, psychiatry, political science, education, economics, and history. More than any other concept, it is an interweaving variable that shows promise of being able to unify the apparently diverse interests of all the sciences concerned with human behaviour."[12]

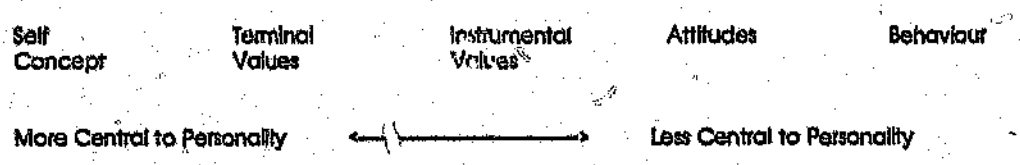


Figure 2: Centrality of Concepts in Rokeach's Belief System

Rokeach's Belief System Theory appears at first glance to be in conflict with Fishbein's Theory of Reasoned Action, however, there are considerable similarities between the two theories.

Both Rokeach and Fishbein posit that attitudes are a function of values. Both recognize personal and social influences on attitudes toward behaviour with Rokeach calling both influences values and Fishbein calling the personal factor "attitude toward the behaviour" which is influenced by "behavioural beliefs" and the social factor "the subjective norm" which is influenced by "normative beliefs."

A major conceptual difference is that Fishbein does not attach importance to attitudes toward objects or events but rather places primary importance on attitudes toward behaviour while Rokeach maintains that attitudes are solely attached to objects and events.

However, there appears to be many similarities between both attitude concepts. For instance, they both acknowledge affective, cognitive, and behavioural components.

It may be possible to suggest that Rokeach's value concept and Fishbein's attitude concept are describing the same behavioural phenomena in strikingly similar ways; but it appears the two are fundamentally differentiated by more than semantics.[13]

In a personal discussion, Rokeach seemed to indicate he did not take this viewpoint. Rokeach acknowledged that many behavioural scientists might find the exclusion of the concept of intention from his work as a weakness, but he argued that many more might find Fishbein's work suffered from the lack of a true values concept.[14]

As was stated earlier, Rokeach's concepts are widely acknowledged, but Fishbein's work is as well. And there is evidence to empirically prove both theories. Fishbein's work has received the lion's share of marketing attention as evidenced by the number of studies investigating multi-attribute and expectancy-value models.[15]

The similarity between the concepts serves to further validate an examination of Rokeach's expansive work in greater detail. While Rokeach's concepts are widely acknowledged, his work is less exposed and requires deeper investigation.

The Nature of Values

Rokeach finds values to be enduring, yet he acknowledges their viscosity:

> "If values were completely stable, individual and social change would be impossible. If values were completely unstable, continuity of human personality and society would be impossible. Any conception...must be able to account for the enduring character of values as well as for their changing character.
>
> It may be suggested that the enduring quality of values arises mainly from the fact that they are initially taught and learned in isolation from other values in an absolute all or none manner."[16]

Rokeach maintains that values are beliefs of a specific kind. He distinguishes three kinds of beliefs, descriptive or existential beliefs which are capable of being true or false, evaluative beliefs wherein some object is judged to be good or bad, and prescriptive or proscriptive beliefs in which the desirability of some means or end of action is judged.

According to Rokeach a value is a prescriptive or proscriptive belief:

> "Values, like all beliefs, have cognitive, affective, and behavioural components...(they are) a cognition about the desirable, ..(and are) affective in the sense that he can feel emotional about it, be affectively for or against it,...(and are behavioural in the sense that they) lead to action when activated."[17]

Values can refer either to a mode of conduct or an end-state of existence. Rokeach refers to these as two types of values as "terminal values" and "instrumental values."[18] This definition is widely accepted by psychologists, sociologists, and consumer behaviourists.[19]

Rokeach further delineates two types of terminal and instrumental values. He says that terminal values can be social values or personal values:

> "...terminal values may be self-centered or society-centered, intrapersonal or interpersonal in focus. Such end-states as salvation and peace of mind, for instance are intrapersonal while world peace and brotherhood are interpersonal. It seems reasonable to anticipate that persons may vary reliably from one another in the priorities they place on such social and personal values; that their attitudes and behaviour will differ from one another depending on whether their personal or their social values have priority; that an increase in one social value will lead to increases in other social values and decreases in personal values; and, conversely, that an increase in a personal value will lead to an increase in other personal values and a decrease in social values."[20]

Instrumental values can be either moral values or competence values:

> "The concept of moral values is considerably narrower than the general concept of values...moral values refer mainly to modes of behaviour and do not necessarily include values that concern end-states of existence...moral values refer only to certain kinds of instrumental values, to those that have an interpersonal focus, which when violated, arouse pangs of conscience or feelings of guilt for wrongdoing...competence or self-actualization values, have a personal rather that an interpersonal focus and do not seem to be especially concerned with morality. Their violation leads to feelings of shame about personal inadequacy rather than to feelings of guilt about wrongdoing."[21]

Societal pressure to adhere to moral values is expressed more strongly as a value becomes more widely accepted by society. Rokeach describes this as a feeling of "oughtness", saying that it is not a characteristic of all values:

> "The more widely shared a value the greater the societal demands placed upon us and therefore the greater the 'oughtness' we experience. The 'oughtness' of certain values is seen to originate within society, which demands that all of us behave in certain ways ... In contrast, society seems somewhat less insistent in its demands concerning competent modes of behaviour or concerning terminal end-states. Such values do not seem to be characterized by the same degree of 'oughtness' that characterizes moral values."[22]

Values are preferences as well as conceptions of what is preferable and are applied by the individual to herself as well as to others. In addition, values can be applied differentially. A person claiming to be in favour of the equality of men and women may not be able to accept a new female boss. A person claiming that "South Africans must be free" may not be including members of races other than his own.

> "Indeed, one of the most interesting properties that values seem to have is that they can be employed with such extraordinary versatility in everyday life. They may be shared or not shared and thus employed as single or double (or even triple) standards."[23]

Value Systems

Values are rarely applied singly, but rather as clusters activated from an integrated values system. Eminent sociologist Robin Williams, explains this fundamental conditions underlying the fifth assumption of Rokeach, that is, that values are ordered in value systems:

> "It is the rare and limiting case if and when a person's behaviour is guided over a considerable period of time by one and only one value...More often particular acts or sequences of acts are steered by multiple and changing clusters of values."[24]

Rokeach illustrates the process by which value systems are organized:

> "Gradually, through experience and a process of maturation, we all learn to integrate the isolated, absolute values we have been taught in this or that context into a hierarchically organized system, wherein each value is ordered in priority or importance relative to other values."[25]

> "After a value is learned it becomes integrated somehow into an organized system of values wherein each value is ordered in priority with respect to other values. Such a relative conception of values enables us to define change as a reordering of priorities and, at the same time, to see the total value system as relatively stable over time. It is stable enough to reflect the fact of sameness and continuity of a unique personality socialized within a given culture society, yet unstable enough to permit rearrangements of value priorities as a result of changes in culture, society, and personal experience."[26]

That different individuals have different value systems is self-evident. No two individuals are alike, nor do any two individuals react in exactly the same way to all environmental stimuli:

> "Variations in personal, societal, and cultural experience will not only generate individual differences in value systems but also individual differences in their stability. Both kinds of individual differences can reasonably be expected as a result of differences in such variables as intellectual development, degree of internalization of cultural and institutional values, identification with sex roles, political identification, and religious upbringing."[27]

It seems obvious from an intuitive sense that the value system would be unmanageable unless Rokeach's assumption that the number of values is relatively small had validity.

As detailed earlier, discounting semantic differences, Freud proposed two terminal values, aggression and sex.[28] Maslow has proposed five: survival, security, belonging,

esteem and self-actualization.[29] Murray has proposed twenty-eight.[30] Rokeach estimates the total number of terminal values to be somewhere within the range of these estimates and the total number of instrumental values to be several times the number of terminal values.

This means that relatively few values are responsible for a very large number of attitudes and an infinite number of individual behaviours.

The limitation of values to a relatively small number does not, however, fail to allow for the richness of human diversity. Even Rokeach's list of only 18 terminal values can be arranged $6{,}4 \times 10^{13}$ different ways ($4{,}1 \times 10^{33}$ ways including the instrumental values), more than enough to account for the differences in the Earth's population which is approximately $1{,}2 \times 10^{4}$ times smaller (or $8{,}2 \times 10^{23}$ smaller than the number of ways both lists can be arranged.

It also seems apparent that only a few values are operative at any one time due to the fact that some situations and events simply are not germane to some values, and to the fact that individuals seem to be only able to cope with a small number of values at once.

> "Since a given situation will typically activate several values within a person's value system rather than just a single one, it is unlikely that he will be able to behave in a manner that is equally compatible with all of them. A given situation may, for example, activate a conflict between behaving independently and obediently or between behaving politely and sincerely; another situation may activate a conflict between strivings for salvation and hedonic pleasure or between self-respect and respect from others. A value system is a learned organization of principles and rules to help one choose between alternatives, resolve conflicts, and make decisions...It is a generalized plan that can perhaps best be likened to a map or architects blueprint. Only that part of the map or blueprint that is immediately relevant is consulted, and the rest is ignored for the moment. Different subsets of the map are activated in different social situations."[31]

While Rokeach does not tell us how many values are activated upon average, it seems likely that two or three are most strongly influential and that a total of four or five are activated on average. We can base this upon the following assumptions and beliefs.

Rokeach believes that most people can keep "seven plus or minus two" pieces of information in their immediate span of attention.[32] The median change of values ranked first or second or seventeen or eighteenth changed far less than half as much as items ranked ninth or tenth in the Value Survey when it was readministered at a

later time. This is an indication that values ranked at the extreme poles, whether positive or negative, are most stable and hence, felt most strongly.[33] And finally, because Rokeach defines instrumental and terminal values as being associated but separate[34], because the individual can only hold five to nine items in her immediate attention span, and because we can assume that roughly half of the values will be most strongly felt in the value system and will thereby dominate the individual behavior sequence; that a maximum of two or three instrumental and two or three terminal values will be most important in any behavioural decision process.

Value systems are important to consumer behaviourists because they are largely influenced by culture and represent the personal adoption of core societal values. Having a Black friend stay overnight at your home may be socially acceptable in Sandton but may cause severe problems in Krugersdorp only a few kilometers away. Core societal values

> "...define how products are used in society...provide positive and negative valences for brands and communications programmes...and...define acceptable market relationships."[35]

The Function of Values

According to Rokeach[36], values perform a number of functions and serve to maintain and enhance self-esteem. Our values determine our positions on social issues, our favoured political or religious ideology, guide our presentation of the self to others[37],act as standards to evaluate and judge ourselves and others, and serve as tools to compare how moral and competent we are and how we compare to others.

Rokeach further asserts that values are:

> "...standards employed to persuade and influence others, to tell us which beliefs, attitudes, values, and actions of others are worth challenging, protesting, and arguing about, or worth trying to influence or to change...values are standards that tell us how to rationalize in the psychoanalytic sense, beliefs, attitudes, and actions that would otherwise be personally and socially unacceptable so that we will end up with personal feelings of morality and competence, both indispensable ingredients for the maintenance of self-esteem."[38]

Any situation can mobilize any number or combination of values and hence there is the possibility of conflict between different values in any circumstance. In this light, it is easy to see the role of values in decision making and as general plans for conflict resolution:

"A value system is a learned organization of principles and rules to help one choose between alternatives, resolve conflicts, and make decisions...It is a generalized plan that can perhaps best be likened to a map or architects blueprint. Only that part of the map or blueprint that is immediately relevant is consulted, and the rest is ignored for the moment."[38]

Because of their cognitive, affective, and behavioural components, values guide our immediate actions in daily life:

"...knowing a person's values should enable us to predict how he will behave in various experimental and real-life situations...What can legitimately be called behaviour? If a certain value is found to predict a specific action, say, voting for a particular candidate or cheating in a particular situation, we would have a clear instance of a relation between a value and behaviour. But behaviour can also have a more general focus. It can range from a single, molecular act at one extreme, to a whole set of acts at the other."[39]

In the longer term values can also serve a strongly motivating function:

"Instrumental values are motivating because the idealized modes of behaviour they are concerned with are perceived to be instrumental to the attainment of desired end-goals...Terminal values are motivating because they represent the supergoals beyond immediate, biologically urgent goals...They are in the final analysis the conceptual tools and weapons that we all employ to maintain and enhance self-esteem."[41]

In serving self-esteem, values perform adjustive, ego-defensive, and knowledge or self-actualization functions. The adjustive function of some values concern the way we deal with others, such as obedience and politeness. The ego defensive function of values allow us to rationalize socially non-acceptable needs, feelings and actions. An example might be religious values. Values like wisdom and a sense of accomplishment perform a self-actualization function.[42]

Rokeach, while disagreeing with Maslow's concept of values (which approximate his concept of needs), points out that it is:

"...perhaps appropriate to suggest that values serving adjustive, ego-defensive, knowledge, and self-actualization functions may well be ordered along a continuum ranging from lower- to higher-order, as is suggested by Maslow's well known hierarchical theory of motivation."[43]

Values Compared to Other Concepts

Attitudes – Most consumer behaviour research has concerned the role of attitudes in the decision process. "Marketers have long acknowledged the importance of attitudes and attitude change in the study of marketing and consumer behaviour."[44]

Rokeach defines an attitude as "an organization of several beliefs about an object or situation."[45] This differs strongly from a value which is a single prescriptive or proscriptive belief of a very specific kind and from Fishbein's earlier stated definition.

According to Rokeach, values and attitudes differ in a number of additional important respects. Values transcend objects and events while attitudes are tied to them. Attitudes do not act as standards, while values do. Attitudes number in the thousands while values number only in the dozens. Values occupy a more central position within personality and the cognitive system and are determinants of attitudes as well as behaviour. Value is a more dynamic concept that is more immediately linked to motivation. The essence of a value may directly perform adjustive, ego-defensive, or self-actualizing functions while attitudes may only be related to these functions only by a process of deduction.[46]

> "Values and attitudes are both intervening variables...they are presumed to be the main genotypes that underlie or determine social behaviour...A relatively small number of terminal and instrumental values is conceived to underlie many if not all social attitudes; moreover, a given value is conceived to determine several or many attitudes and a given attitude to be determined by several or many values."[47]

Dichter suggests that:

> "The examination of values provides a more meaningful and interpretative analysis of the underlying motives that structure attitudes and behaviour. Almost every time we are confronted with an attitude scale, we bring our values into play."[48]

An interesting American study in racial prejudice seems to indicate that attitudes do not always act as good predictors of behaviour. In the early 1930s, Richard LaPiere accompanied a young Chinese couple on a tour of the United States. During the tour, the trio visited 251 restaurants, hotels, and other establishments and were refused service only once. However, on completing the trip, LaPiere wrote all of the establishments asking, "Will you accept members of the Chinese race as guests in your establishment?" Over 90% of the 128 replies were answered "no."[49]

The activation and strength of multiple values in different situations (i.e. a face-to-face visit and a letter), perhaps in this case "courtesy" and "equality," would obviously provide us with a sufficient reason to explain the contradictory behaviour noted.

It is just as apparent that a similar problem may arise when asking consumers about their attitudes towards products and specific brands. This could be because attitudes are directly tied to objects and events and specific situational clues may not be felt the same when answering a questionnaire as when actually contemplating the behaviour, such as a purchase decision at the supermarket shelf. Attitudes play their greatest role during the period of alternative evaluation of criteria leading to product purchase.[50]

Attitudes strongly affect attention through affecting psychological tension. Cognitive consistency theories[51] such as the balance theory and the congruity theory, posit that the individual constantly tries to maintain balance and congruity in his attitude and belief system. Inconsistency leads to psychological tension which is expressed as a need. Similarly, the theories of perceptual vigilance and perceptual defense hold that words and symbols that connote important values are recognized more quickly, while those that have negative connotations are recognized less quickly. This tendency to defy changes in attitudes and beliefs represents a major problem for marketers.[52]

Engel and Light suggest that the influence of attitudes on a particular behavioural sequence is subject to the individual's involvement. They suggest that attitudes are easiest to change when the amount of information about the attitude the individual has stored is small. That is, that the less complex the information about the attitude that has to be analyzed the easier change will be. They also suggest that attitudes that are less centrally held are easiest to change as are those which are least connected to other attitudes.[53] Engel and Light based their research on Fishbein's attitude concept, as his work is highly supportive of Rokeach.

As stated before, attitudes have been at the forefront of market research since the 1960s. The "U+A" (Usage and Attitude study, also called AAU or Awareness, Attitude, and Usage in North America) has become the bible of most marketers. Many times marketers combine the study of attitudes with the study of activities, interests, and opinions; thereby giving the researcher a look at the respondent's "life-style." This will be discussed in greater depth in Chapter 5.

Social Norms - Values also differ significantly from social norms. Social norms can be thought of as the visible manifestation of core societal values by the individual. Social norms can be easily seen to heavily influence value systems and vice-versa.

According to Williams:

> "Values are standards of desirability that are more nearly independent of specific situations. The same value may be a point of reference for a great many specific norms; a particular norm may represent the simultaneous application of several separate values ... Values, as standards (criteria) for establishing what should be regarded as desirable, provide the grounds for accepting or rejecting particular norms."[54]

Rokeach points out that while values refer to a mode of behaviour or an end-state of existence, social norms refer only to a mode of behaviour. While values and social norms are both prescriptive or proscriptive, social norms, like attitudes, are situation-specific. Another important difference is that values have the ability to be internal and personal, social norms, on the other hand, are "external and consensual."[55]

This highlights a weakness of Thomas and Znaniecki's definition of values; which is, in essence, a recognition of only the socially normative aspect of the value concept and thereby disregards the latter aspects of the total value concept .[56]

Social norms are important aspects of group dynamics and are influential in the purchase process. Generally, work has shown that groups tend to enforce norms through "penalties" of different kinds, such as verbal chastisement and wise-cracking and even more serious injuries. The influence of group leaders has also been demonstrated to be extremely important in brand choice in certain instances.[57] The work of Lewin and others in the study of group dynamics was discussed earlier.

Needs - The difference between values and needs was referred to earlier in connection with Abraham Maslow's Hierarchy of Needs. Maslow and others have proposed that values and needs are equivalent,[58] but Rokeach disagrees:

> "If values are indeed equivalent to needs, as Maslow and many others have suggested, then the lowly rat, to the extent that it can be said to possess needs, should to the same extent also be said to possess values."[59]

In this light, Rokeach further argues that values are the major characteristic distinguishing man from animal:

"Man is the only animal capable of having values ... Values are the cognitive representation and transformation of needs, and man is the only animal capable of such representations and transformations ... Values are the cognitive representation not only of individual needs but also of societal and institutional demands. They are the joint results of sociological as well as psychological forces acting upon the individual ... The need for sex, which is so often repressed in modern society may be cognitively transformed as a value for love, spiritual union, or intimacy..."[80]

Needs are important determinants of attention. Physiological and psychological needs "...have a strong influence on those stimuli that receive attention and those that do not."[81]

Traits - Traits can also be compared to values. It was demonstrated earlier that the Trait Approach suffers from a number of weaknesses. Rokeach affirms these basic deficiencies pointing out that traits are highly fixed and not changeable, they are hard to manipulate experimentally, not amenable to change through education or psychotherapy. Fishbein and Rokeach agree that:

"About the only operations that one can easily perform on traits are to correlate them with other traits and factor-analyze them."[82]

Traits define the individual from the perspective of the outside. It is equally possible that, with a small change of perspective, the same individual who is rated as aggressive can be seen phenomenologically as one who places relatively high importance on related values, like ambition, honor, and family or national security while placing relatively low importance on being polite, or on equality.

Rokeach also describes the major benefits to be gained as a result of taking the phenomenological approach:

"A major advantage gained in thinking about a person as a system of values rather than as a cluster of traits is that it becomes possible to conceive of his undergoing change as a result of changes in social condition. In contrast, the trait concept has built into it a characterological bias that forecloses such possibilities for change in advance."[83]

Most consumer behaviour study focusing on personality or psychographics, generally center on the trait concept and most early studies used the Edwards Personal Preference Schedule to measure them. Personality traits have been shown to correlate with consumer behaviour. However, for reasons previously noted, the trait concept is weak and not very useful.

Interest - Interest is a concept which also shares some of the qualities of values, such as guiding actions, cognitively representing needs, and serving adjustive, ego-defensive, and self-actualizing functions, yet it is a much narrower concept because it cannot function as an idealized mode of behaviour or end-state of existence. The same interests are also not shared by all men in differing degrees, nor are they arranged into systems for decision making and conflict resolution.[84]

Interest has not been the object of any major consumer behaviour research in the literature.

Intention - Largely through the work of theory developed by Martin Fishbein, intention has become a major consumer behaviour concept. Theorists, like Engel, Blackwell, and Miniard, argue that intention is the best measurement of consumer behaviour because uncontrollable factors, such as the unavailability of a product or lack of ability to purchase it can interfere with final behaviour. Engel, Blackwell, and Miniard define intention as, "...the immediate determinant of actual purchase."[85]

Antecedents and Consequences of Values

Values are the consequence of encounters with cultural, institutional, and personal forces that act upon, and are internalized by, the individual during his lifetime. In pointing out sources of reduction in the possible variation of personal values, Rokeach is tracing the path to some more specific antecedents of values. He cites similarities in culture, sex, age, social class, race, religious upbringing, and political identification as processes which, through a process of socialization, "shape the value systems of large numbers of people in more or less similar ways" and this viewpoint is shared by most prominent consumer behaviourists. Studies indicate a role in value formation for such factors as age, life stage, life status, culture, race, social class, education, nationality, and life-style.[86]

It is difficult to determine the significance of many of Rokeach's findings regarding the antecedents of value system formation because of two fundamental problems in his analysis. First, he used the Median Test because he felt it yielded the best information after trying other parametric and non-parametric techniques including the Kruskal-Wallis One Way Analysis of Variance. Advanced texts report that the Median Test is a much weaker test than the Kruskal-Wallis test because it uses less of the available information from the data.[87] Second, Rokeach did not adjust α levels to account for

multiple testing: he simply reports findings which are significant at .05, .01 and .001. It should be remembered that Rokeach fielded his research in the late 1960s in an analysis environment almost devoid of computer analysis programmes for non-parametric tests; so he probably used tables. Yet, one cannot say which of his findings are significant at an appropriately adjusted α level of.0028. Data analysis issues are reviewed more intensively in Chapter 7.

Values are the guide and foundation of social attitudes and ideology, in addition to controlling social behaviour. This includes:

> "...virtually all kinds of behaviour that could be called social behaviour - of social action, attitudes and ideology, evaluations, moral judgments and justifications of self and others, comparisons of self with others, presentation of self to others, and attempts to influence others."[48]

Summary

Values have been seen to be relatively small in number, to be possessed by everyone in differing degrees, to be organized into a value systems which is activated differently by different stimuli, and to be traceable to culture, society and its institutions, and personality.

Values have been shown to predict behaviour better than attitudes, although the apparently large differences between apparent opposing points of view like those of Rokeach and Fishbein, were shown to be minimized once one discounts semantics.

Values are enduring and refer to modes of behaviour or idealized end-states. They can be personal or social, moral or competence related.

No two individuals exhibit the same values systems. Value formation and stability is influenced by personal, societal, and cultural phenomena as well as individual differences like intellectual development and how deeply one internalizes cultural values.

Values serve to maintain and enhance self-esteem. They act as standards, as decision making tools, and plans for conflict resolution. In a psychoanalytic sense, they serve to rationalize internal feelings and beliefs as well as actions which would be socially unacceptable.

Serving cognitive, affective, behavioural, and motivational functions: values control our short and long term actions. Serving adjustive, ego-defensive, and self-actualization functions they smooth our way through life and give us fulfillment.

Behaviour, be it consumer behaviour or otherwise, has been seen to be subject to the same general processes. Because values are the basis of behaviour, the study of values, rather than that of attitudes, should form the basis of the study of consumer behaviour.

Rokeach's Belief System Theory suggests a number of hypotheses. If the antecedents of values noted in past research are seen to be South African antecedents; then South Africans of the same race, home language, age, education, father's education, occupation household income, marital status, employment status or residential area should place similar relative importance on values and should purchase the same brands. In an urban-rural environment experiencing rapid social change, such as South Africa, urban people should place similar relative importance on values. South Africa and America share many common cultural antecedents and American values are constantly exhibited to South Africans on television, this should mean that Americans and South Africans will rank Rokeach's values in a similar fashion but that South Africans of different races should be more like each other than their American counterparts. People should be able to be segmented by the relative importance they place on values.

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CHAPTER FOUR - PERSONAL VALUES AND CONSUMER BEHAVIOUR THEORY

The first three chapters of this work have discussed a number of key factors recognized by other disciplines to be at the heart of the study of personal values and consumer behaviour:

> Personal values operate at the nucleus of personality, and while they are relatively few in number they play a multiplicity of fundamental roles which shape behaviour.
>
> Consumer behaviour does not differ in any remarkable way from any other kind of behaviour.
>
> Humans can be phenomenologically viewed as a system of values which undergo change as a result of a number of factors such as environmental stimuli and social conditions.
>
> Attitudes influence behaviour but are less central than values and less predictive of behaviour.
>
> Personal values are the core concept across all the social sciences and should therefore represent a core concept to any consumer behaviour theory.

Consumer behaviourists have faced the arduous task of assembling comprehensive theories of buyer behaviour from a myriad of eclectic borrowings from other behavioural sciences. This chapter will examine the building of consumer behaviour theories and role played by personal values in each.

There are many consumer behaviour theories and most of them are represented by models. This is not unexpected. As Engel, Blackwell and Miniard point out,

> Everyone has a concept or 'model of consumer behaviour' that hypothesizes those forces motivating and shaping it. Here is an example: 'People can be induced to act against their will and own best interests by advertising.' Although admittedly oversimplified, there is a theory expressed... A model is nothing more than a replica of the phenomena it is designed to represent."[1]

> "...a consumer behaviour model shows the structure of the behaviour of consumers. Usually the modeled behaviour is the decision making process. A model tells us something about the properties or activities of the phenomena of consumer behaviour. Thus it is a framework, a schema, a representation of what is believed to actually occur when consumers make decisions about purchases."[2]

Consumer behaviour modeling was first given impetus:

> "...in the 1960s by the publication of several systematic and comprehensive models of consumer behaviour building on advances of the social sciences. These models had similarities because each was a complex flow chart explaining the consumer decision process."[3]

Early attempts to develop consumer behaviour models borrowed extensively from other phenomena:

> "The major theories designed to explain consumer behaviour are highly eclectic, borrowing extensively from psychology and other behavioural sciences."[4]

In a private interview,[5] Blackwell conveyed his opinion that early eclecticism gave consumer behaviour science a rich and diverse basis but also resulted in an over-emphasis of the deterministic nature of consumer behaviour models. This over-emphasis lead to great debate among the proponents of different models regarding empirical and theoretical validity. This debate was virtually impossible to resolve because of the lack of proven research techniques for measuring internal consumer response during the purchase process and the amount of supposition that was necessary to determine the theoretical link between the variables in the models. Blackwell said that while debate was, at times, "counter-productive" during the infancy of the development of consumer behaviour science, it did not arrest model development as new facts came to light.

Lunn has remarked on the need to strike a balance between academic focus and the requirement that consumer behaviourists borrow extensively from other sciences:

> "Narrowness of perspective may help the advancement of academic knowledge, but it can be destructively limiting in a problem-oriented field such as marketing."[6]

Blackwell has further said, in correspondence, that the trend today is to produce more simplified models for "pedagogical purposes rather than as a comprehensive model of a deterministic nature."[7]

According to Engel, Blackwell, and Miniard, models serve a number of purposes. They are used to illustrate and explain complex consumer behaviour theories, both for pedagogical and practitional purposes. And they can act as a basis for management information systems. But most importantly for this thesis, they act as a frame of reference for research, highlighting gaps in information and knowledge. They will specifically be used to demonstrate the position of personal values in consumer behaviour theory and how well the major theories mirror the advances made in other disciplines regarding values.[8]

Evaluating Consumer Behaviour Models

Zaltman and Wallendorf provide a concise and illustrative insight into the various purposes of consumer behaviour models and in the process enumerate what can also be viewed as standards by which models can be evaluated:[9]

> A model should be:
>
> 1. Capable of explanation as well as prediction
> 2. General
> 3. High in heuristic value
> 4. High in unifying power
> 5. Internally consistent
> 6. Original
> 7. Plausible
> 8. Simple
> 9. Supported by facts
> 10. Testable, verifiable

These purposes, enumerated above, are also advantages of modeling. Modeling simplifies and explains, describes, guides research, unifies and originates.

There are also distinct disadvantages to modeling. Perhaps the most ominous disadvantage concerns oversimplification. As detailed earlier, one of the main purposes of models is to simplify larger concepts, but in the process of simplification some models loose too much richness and the result is far less than a meaningful tool. Zaltman and Wallendorf suggest:

> "...many of the models are greatly simplified and make the study of consumer behaviour appear less complex than it truly is ... models (also) draw artificial distinctions between concepts which in actuality are inseparable. For instance, where can one find an attitude without any connection to a personality?"[10]

The eclectic basis of the development of consumer behaviour science also implies another disadvantage. Consumer behaviour models are dependant upon the maturation of other sciences for future growth, if not totally, at least to some degree. For instance, not enough is known about the actual inner workings of the brain during the process of search or evaluation or of even more basic concepts, such as personality. Zaltman and Wallendorf seem to agree:

> "We must be careful, however, to realize that even the comprehensive (consumer behaviour) models are not all-inclusive. To model each and every aspect of an individual's behaviour, including what affects it and what effects it has, is beyond our capabilities."[11]

Approaches to Modeling

It should be noted that the type of descriptive models discussed here are not the only kind of consumer behaviour models which exist. Models of a different kind exist which attempt to predict consumer behaviour by use of mathematical equations.[12] These models are more concerned with research of specific consumer behaviour phenomena rather than a holistic representation of the consumer behaviour process. They are not referred to when the term "consumer behaviour model" is used in this thesis.

There are also "middle-range theories" to be considered. Ward and Robertson point out the need for middle range theories that do not attempt to describe the entire consumer behaviour process but add significantly to our understanding of it.[13] Some middle range theories deal specifically with values and these will be discussed in greater detail in Chapter 5.

There are a number of ways to approach modeling. Lunn describes three; the A Priori Approach, the Empirical Approach, and the Eclectic Approach.[14]

According to Lunn, the A Priori Approach includes the work of motivational researchers and attitude theorists like Festinger and Fishbein among its ranks. This approach mainly deals with the introduction of "concepts and theories from other disciplines, mainly the behavioural sciences." The A Priori theorists have explored the ability of extant concepts and theories to improve the understanding the consumer.[15]

This approach suffers from a number of limiting factors which severely limit its usefulness. While the strength of this approach is that it harnesses knowledge already developed, this is also its main downfall. Most of the theoretical premises upon which the knowledge used is based were formed in conditions far removed from the consumer behaviour process, such as in laboratory situations with experimental subjects or animals.

Also this work leans strongly toward "restricted aspects of human behaviour" such as learning and perception, rather than toward a more encompassing viewpoint. While this work is useful in specific situations, it is far too limited to provide a framework for the understanding of the consumer behaviour process.[16]

Lunn says that theoreticians who have embraced the Empirical Approach have adopted the opposite approach to that taken by those who follow the A Priori Approach, that is, consumer behaviour itself is their main focus and they attempt to establish laws based upon their observations. It is obvious that this approach suffers from too many restrictions which limit its progress by not taking advantage of advances made in other disciplines.[17]

The Eclectic Approach, as evidenced by earlier assertions, is that taken by leading consumer behaviourists like Engel, Blackwell, Kollat, and Miniard, Nicosia, and Howard and Sheth.

Lunn aptly describes the strengths and weaknesses of the Approach:

> "The strength of this approach is the comprehensiveness of its perspective. But this comprehensiveness is also a potential source of weakness, for it imposes a herculean task on researchers. It is hard enough to establish an agreed outlook among specialists within a discipline (e.g. learning theorists within psychology). It is harder still to achieve among representatives of

different aspects of a major discipline (e.g. learning theorists and psycholinguisticians), and even harder among representatives of quite different disciplines such as psychology, sociology, and economics. There is, moreover, a danger of undue complexity, of having too many variables and interrelationships."[18]

Ward and Robertson also comment on the problems encountered trying to borrow theory from other disciplines and point out the problems earlier enumerated with personality and trait theory and its applicability to consumer behaviour study. They also point out that borrowing is the easiest way to advance our understanding of consumer behaviour as long as there is justification, relevance, legitimation, proper context, appropriate complexity, and recognition of situational constraints.[19]

All of the models presented for evaluation will be eclectic models because these are the models that have received the greatest amount of acceptance and for other reasons already noted.

A Review of Major Consumer Behaviour Models

As noted earlier, everyone has a model of consumer behaviour, some consisting of uni-dimensional precepts and others of complex holistic theories. The tendency, noted by Blackwell, to formulate greatly simplified consumer behaviour models for pedagogical purposes, has resulted in a number of new models which add little enrichment to the science. Consumer behaviour models by Andreason[20], Kotler,[21] Kerby,[22] Hawkins, Coney and Best,[23] and Schiffman and Kanuk,[24] Wilkie,[25] and others serve the purpose for which they were created but still represent this type of model.

By far the most commonly acknowledged examples of the Eclectic Approach are the models of Engel, Blackwell, and Miniard (originally developed as the Engel, Kollat, and Blackwell Model of Consumer Behaviour and commonly referred to as the EKB Model), Nicosia, and Howard and Sheth. These models bear far more detailed examination.

The Nicosia Model

Underlying Assumptions

The Nicosia Model was the first of the major models to follow the Eclectic Approach and was a project of the University of California at Berkeley Consumer Research Group. Like all Eclectic Approach models, the Nicosia Model makes the basic assumption that man is a purposeful and goal-oriented being driven by psychological processes to fulfil wants and needs. Dynamic rather than passive, Nicosia's consumer seeks out information rather than waiting to be influenced by marketing men, and carries out her purchasing activity from within the context of day to day life.[26]

Nicosia's consumer is influenced by variables which may be ordered along two dimensions. The first, namely the determinants of behaviour are seen to be internal or external variables. The second, namely the motives leading to purchase, are seen to be either primary or selective. External variables would include concepts such as "geography, occupation, education, religion, race, income, prices, products, advertising, and so on."[27] Internal variables may be rational and irrational in nature, such as impulses, drives, motives, and habits. Primary motives are mainly orientations toward products or product classes while selective motives are orientations toward specific brands.[28]

Nicosia acknowledges the fundamental work of three "schemes" of consumer behaviour, these being the Katona School, the Lazarsfeld School, and the March and Simon Scheme; as well as the work of the Stimulus-Response school (classical behaviourists), before proposing that all of this past work can best be summarized by what he calls the "Funnel Scheme".[29]

The "Funnel Scheme" posits three main concepts descriptive of the consumer behaviour process: predispositions, attitudes, and motivations. A large number of predispositions are said to trigger a smaller number of attitudes which trigger a minute number of motivations which trigger the act of purchase. Hence, the stimuli of an experience or problem is said to stimulate the purchase decision by way of a funnelling process.

Dimensions	Characteristic of each Dimension							
Dynamism	Passive				Driving			
Time	Present		Future		Present		Future	
Scope	General	Specific	General	Specific	General	General	Specific	Specific
Cell Number	1	2	3	4	5	6	7	8

Figure 3: The Funnel Scheme
Source: Adapted from Nicosia, F.M., Consumer Decision Processes, Marketing and Advertising Implications, Prentice Hall, Englewood Cliffs, 1966

"Predispositions are non-driving, passive structures, i.e. in equilibrium; are concerned with present or future situations; and refer to general or specific items - e.g. a product or a certain brand of a product (see cells 1,2,3,4).

Attitudes are weak driving forces, i.e. structures near but not at a point of equilibrium; are concerned with present or future situations; and refer to general items - e.g., a product (see cells 5 and 6).

Motivations are strong driving forces, i.e. structures in intense disequilibrium; are concerned with present or future situations; and refer to specific items - e.g. a brand (see cells 7 and 8)."[30]

Finally, Nicosia takes what he calls a "teleological view" of the consumer behaviour process. He contends this view is similar to the classical behavioural approach but differs in that:

"...it stresses the role of an independent variable internal to the consumer. Behaviour is seen as an act, or a series of acts, determined by one or more purposes of the actor, which he or at least the observer understands as meaningful."

He further states that the process leading to purchase, "includes only one type of variable: goals."[31]

The Nicosia model is the only major model which specifically includes the selling firm in the consumer behaviour process, although this is inferred by the other models. Because of the inclusion of the selling firm, Nicosia's Model is said to take a Dyadic Approach.[32]

Nicosia's Model proposes that the consumer behaviour process can be represented by four fields:[33]

Field One - This field is broken into two sub-fields.

Subfield One - This field encompasses everything from the source of the message to the consumers attitude. This would include the firm, the product and brand, environmental factors, mass media and in-store promotion, the message and its form, attributes of the consumer such as personality, demographics, psychographics, lifestyle, shopping habits, socio-economic status, social class, past history including family values, and the encoding and transmission of the message resulting in exposure to the message and attitude formation in Subfield Two.

Subfield Two - Should the consumer become exposed to the message, environmental conditions, past experience, and previous cognitions interact within the decoding process. This physical and cognitive decoding results in either a message being stored for future use, the loss of the message, or an attitude toward the brand.

Field Two - The formation of an attitude is the basis of the start of the search for and evaluation of the means-ends relations regarding purchase. This search is dependant upon the subjects range of values and interests and the strength of his commitment to them. The search is both internal and external and the resulting outcome is the evaluation of the means-ends relations regarding the purchase. This outcome may be a halt to the process (best typified by the phrase "this is not for me"), by a revision of the criteria by which the search has been conducted (best illustrated by the phrase,"I have this need but I now see that another criteria is important to the decision"), or by a motivation to purchase brand X.

Field Three - The act of purchase. This field encompasses the actual act of purchase and the influence of consumer attributes and temporal and spatial discrepancy on the action. Nicosia points out that the decision to purchase is a psychological reality, not an objective reality. In other words, the decision to purchase Johnson's Baby Powder may be modified if it does not exist on shelf at the time of the purchase activity (dependant upon the evaluation of alternative brands and brand loyalty. Therefore, non-availability may result in substitution of a less-desired brand or postponement of the purchase action.

This field also recognizes that desire to purchase may be strongly created but reality may preclude it happening. For instance, an advertising message might

stimulate the desire to purchase a new Porsche, but the economic reality of monthly salary too low or the purchase last month of another new car may preclude the motivation resulting in a purchase. The outcomes of this stage again, either the halt of the process, the revision of the criteria by which the process is happening, or the purchase of Brand X.

Field Four - Purchase is not the end of the purchase procedure. This field rep the post-purchase experience with the product. This results in beliefs about t which markets and advertises Brand X, its competitor's products, and feedb which affects the consumers original predispositions about the brand, his att toward it, and his motivations toward the advertised brand.

The Comprehensive Scheme: A Summary Flow Chart

Field One: From the Source of a Message to the Consumer's Attitude

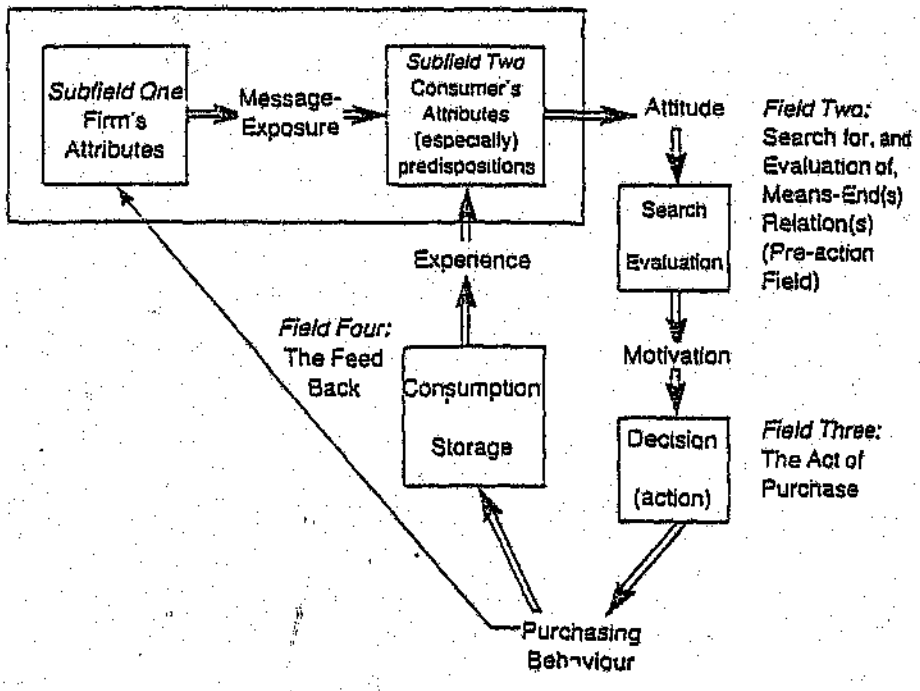


Figure 4: The Nicosia Model of Consumer Behaviour

Source: Nicosia, F.M., Consumer Decision Processes, Marketing and Advertising Implications, Prentice Hall, Englewood Cliffs, 1966

Strengths of the Nicosia Model

The Nicosia Model is a rich, strongly descriptive and comprehensive model of the flows of the consumer behaviour process. This, and the fact that it is the only major model which specifically includes the firm in the consumer behaviour process makes the model general, high in heuristic power, high in unifying power, internally consistent, original, plausible, and simple.

> "In addition to including the firm, the Nicosia model has various other strengths, several of which are connected to the explanation offered by the model. Primarily, the model recognizes the many steps which lie between attitude formation and actual behaviour. Such a conceptualization helps us understand the problems that researchers have when they find that attitudes do not always predict behaviour..."[34]

The model is also richly descriptive of the intra-personal processes which occur during the consumer behaviour process.[35]

Weaknesses of the Nicosia Model

The Nicosia Model had a strong impact when it was published but "...it has never received necessary elaboration and empirical support..." The model has also "...never been revised to reflect changes in this discipline."[36]

The model also suffers from a lack predictive power. "The linkages..." (between the various components of the model) "...show flows rather than causation."[37] This fact also presents problems with regard to the criteria of being supported with facts and being testable and verifiable. Unfortunately, this lack of empirical support renders the model unusable for the purposes of prediction or better understanding of the role of values in the purchase decision.

Further the model attempts to view the consumer as a "computer programme":

> "The Nicosia Model is an elaborate consumer flowchart of the consumer decision making process."[38]

Lunn suggests that:

> "The search and evaluation process as represented is over-rational, and although applicable to infrequently purchased high-cost products, it has less relevance to frequently purchased low-cost

goods. Moreover, the definitions of attitude and motivation seem to be unsatisfactory and the attempt to formalize the model mathematically appears as prematurely ambitious."[39]

Robertson and Ward criticize Nicosia's lack of definition of the relationships between the various components of his model.[40]

Nicosia did, however, note at the time of publishing his model, the frustrating lack of agreed definition of psychological terms noted earlier in this thesis, saying of the consumer decision process:

"...conceptualizations of this decision process are neither clear nor uniform. Some authors emphasize only geographic, demographic, cultural, and ethnic factors, paying very little attention to motives, drives, and habits. However, others do emphasize such internal stimuli, and many of them, though differing in terminology, implicitly define consumer behaviour as the result of an interaction between external and internal stimuli, and between rational and irrational orientations."[41]

The Representation of Values in the Nicosia Model

The Nicosia Model does represent the role of personal values in the consumer decision process. It is important that Nicosia's conceptualization sees the striving toward goals as being the main drive of the consumer. This is consistent with Rokeach's view of the striving nature and goal-orientation of the individual. Nicosia does not specifically represent the role of personal values in his model and given the centrality of personal values, this is indeed a serious omission. But it must be recognized that little was known of the role of values in the mid-1960s when his model was published.

Nicosia does, nevertheless, specifically mention values as part of the consumers attributes.[42] These attributes are called into action during exposure to the message, decoding of the message for selective perception, during the process of search and evaluation, during the act of purchase, and during post-purchase feedback.

As such, Nicosia Model could be construed to provide a framework by which the centrality of the role of personal values can be seen to operate. However, it is obvious from a review of his work that Nicosia did not visualize this centrality and this occurs mainly by coincidence rather than by design: "However, for all the possible objections, Nicosia has provided an invaluable pioneering contribution."[43]

The Howard and Sheth Model

Another valuable contribution has been made by Howard and Sheth. Drawing upon a team of researchers such as Paul Lazerfeld, to whom Nicosia's earlier discussion referred; Howard and Sheth combined to formulate the Howard and Sheth Model of Consumer Behaviour.

In setting out their goals in formulating a model, Howard and Sheth note a number of functions of theory; namely, the descriptive, delimiting, generative, and integrative functions which appear compatible with earlier stated evaluative criteria adopted for the purposes of this thesis.[44]

Underlying Assumptions

The Howard and Sheth Model, being an Eclectic Approach model, makes many of the same assumptions that the Nicosia Model does. In other words, Howard and Sheth assume a purposeful and goal-oriented individual driven by psychological processes to fulfill wants and needs. Their individual is information seeking and carries out the consumer behaviour process as part of an everyday life. The model also assumes that most buying decisions are repetitive in nature and that the consumer usually attempts to simplify the decision, even if it is a complex and non-routine decision, in a number of different ways.

Howard and Sheth's consumer is influenced, like Nicosia's, by internal and external variables.

Howard and Sheth identify a number of conflicts in theory development. These include realism vs. idealism, objectivism vs. subjectivism, introversion vs. extroversion, and formality vs. informality.

They reject the psychodynamic approach of Freud based upon the fact that it is too idealistic and too introspective.[45] They also reject the behavioural approach of B.F.Skinner:

> "Skinner represents an extreme example of the realistic outlook. To him principles 'in theory' are meaningless; he would say that as scientists we manipulate behaviour in order to identify the parts and see the structure. The research in economics on intention to buy represents a highly realistic view."[46]

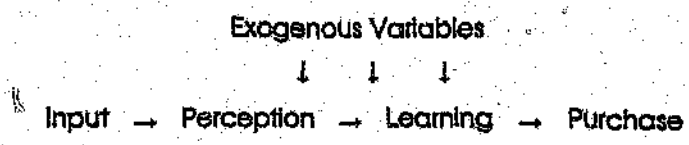


Figure 5: Simplified Howard and Sheth Model

Input variables are called stimuli. Significative and symbolic stimuli; such as quality, price, distinctiveness, service, and availability affect the search process and perception as do social stimuli; such as family, reference groups, and social class. Together, the input variables and output variables are called intervening variables.

Probably the most significant difference between the assumptions of Howard and Sheth and Nicosia is the treatment of the internal variables and the perceptual process. Nicosia assumes a fairly neat "marketing stimulus - consumer response" process while Howard and Sheth assume that stimulus is ambiguous until defined and the process of definition is highly biased by the individual.

> "When a buyer is just beginning to purchase a product class, such as making a purchase required by a change in his life cycle, he lacks experience; he has neither well-defined choice criteria nor any knowledge of the various brands and their potential. He, therefore, actively seeks information from his commercial and social environments. The information that he either actively seeks or even accidentally receives is subjected to perceptual processes that not only limit the intake (magnitude) of information but modify it (change its meaning) to suit his own frame of reference. These modifications are significant to understand, since they distort the neat and simple "marketing stimulus - consumer response" relation."[47]

Meaning is a central concept to the Howard and Sheth Theory and they acknowledge that the usefulness of their theory is related to the facts collected in line with an assumption that behaviour can be modelled.

> "When formulating constructs and propositions, we impose a structure, an intention to accomplish something, a meaning at the very beginning...That we impose meaning at the very outset is a terribly important, nonobvious point that is often overlooked. It is illustrated in the self-designated practical man who says, 'don't bother me with the theory, just give me the facts.' What he is really saying is, 'Give me a set of facts so I can fit them to my theory and so understand the phenomenon.' What he does not realize is that if the facts had been collected in terms of his theory in the first place, they would probably have been more useful."[48]

In the Howard and Sheth model, internal variables include perceptual constructs and learning constructs. Together these are referred to as hypothetical constructs because

they can not be directly observed although their existence is predicated upon the changes that occur to the observable intervening variables.

Howard and Sheth's final major assumption is the existence and influence of exogenous variables. These should not be confused with endogenous variables:

> "The hypothetical constructs and intervening variables are often put together in theory development and labeled 'endogenous variables.' These are variables the changes in which are explained by the theory. For a number of reasons ... it is also useful to postulate variables that influence the endogenous variables the changes in which are not explained by the theory. These are called 'exogenous variables.' The reader should bear this in mind because 'exogenous' is sometimes used (by psychologists like Cattell) to refer to events outside the body."

Exogenous variables are considered to be outside the hypothetical constructs, to be constant during observation and to have an indirect affect on the output variables through their influence on the hypothetical constructs.[49]

Exogenous variables include the intensity of valuation of a product class, personality traits, social class, culture, reference groups, and more current factors such as the amount of time available to devote to the purchase and financial status.[50]

In essence internal variables concern the two major areas of the theory; namely, perception and learning. As earlier noted, collectively these are also known as the hypothetical constructs. Howard and Sheth's formulation of the hypothetical constructs is a result of integrating Hull's *Learning Theory*, Osgood's *Cognitive Theory*, and Berlyne's *Theory of Exploratory Behaviour*.[51] These theories, although of the behavioural approach, are not consistent with the Classical Behavioural Approach which is condemned by Howard and Sheth. Nor could these theories be considered products of learning research, which they condemn for its "atomistic nonintegrative tendencies."[52]

Howard and Sheth also define major perceptual constructs. These are: *Overt Search, Stimulus Ambiguity, Attention, and Perceptual Bias.*

To Howard and Sheth, the perceptual process is subject to bias and distortion. Due to what they call the "psychology of simplification", buyers attempt to simplify inputs into meaningful terms and relationships, this processed information is stored for later use or acted on, and the consumer attempts to routinize his behaviour.

Howard and Sheth depict three kinds of consumer decision processes: Extensive Problem Solving, Limited Problem Solving, and Routinized Response Behaviour. The major difference is the degree of complexity and past experience with the purchase.

The more simplified and routinized the buying decision, the less search that takes place:[53]

> "Extensive Problem Solving refers to the early stages of repetitive decision making, in which the buyer has not yet developed well-defined and structured choice criteria. The buyer has no strong predispositions toward any of the brands he is considering as alternatives. Limited Problem Solving is the next stage, in which the choice criteria are well-defined and structured but the buyer is undecided about which of a set of brands is best for him. The buyer has moderately high predispositions toward a number of brands, but does not have very strong preference for any one brand. Routinized Response Behaviour is the last stage, in which the buyer not only has well-defined choice criteria, but also strong predisposition toward one brand. At this stage, although the buyer may consider several brands as possible alternatives, he has, in fact, only one or two brands in mind as the most probable choice alternatives."[54]

Simplification is a key concept of the theory. Choice criteria, develop by learning and past experience to order and give structure to motives, thereby simplifying motivation and arranging competing motives into a hierarchy to be exercised on the basis of importance and urgency, as well as ordering specific and underlying general motives.[55] Alternative brands are simplified into an "evoked set"[56] which consists of far fewer brand alternatives than the number of brands of which the consumer is aware.

Consumers also simplify through a process of generalization, generalizing stimuli and/or responses. This can result in an advertisement actually stimulating a competitor's sales more than those of the brand it is intended to serve. According to Howard and Sheth, consumers generalize packages, brands, advertising, and even behaviour.

Strangely enough, Howard and Sheth also hypothesize a "psychology of complication" which applies mainly to grocery and personal care items:

> "The buyer, after attaining routinization of his decision process, may find himself in too simple a situation. He is likely to feel monotony or boredom associated with such repetitive decision making. It is also very likely he is satiated with even the most preferred brand. In both cases, he may consider all existing alternatives including the preferred brand to be unacceptable."[57]

While not representing the firm directly in the model, marketer stimuli are acknowledged as affecting choice criteria, the evoked set, awareness, brand comprehension, and attitude, as well as occasionally creating inhibitors.[58]

The major learning constructs are Motives, Choice Criteria, Brand Comprehension, Confidence, Attitude, Intention, and the by-product of purchase, Satisfaction.

Howard and Sheth believe learning happens as a by-product of past experience and information:

> "There are three broad sources of learning: (1) generalization from similar buying situations, (2) repeat buying of the same product class, and (3) Stimulus Display."[59]

Motives are seen to determine personality and to be affected by personality traits. They are seen to express the self-concept during purchase and to be a central concept to the model.[60]

Further, Howard and Sheth reject Freud's concept of motivation and his theory of instinct as unworkable. They accept the idea of motivational equilibrium. This concept holds that disequilibrium results when a need arises and that the system attempts to find equilibrium by satisfying the need. Innate and learned motives are assumed to exist.[61]

Attitude is a central concept to learning because, to Howard and Sheth, learning is the process by which attitude is formed and changes.[62]

The output variables are Purchase, Intention', Attitude', Brand Comprehension', and Attention'. It appears that four of these concepts are duplicated in the model, but it is not so:

> "We differentiate the two types of construct - intervening and hypothetical - by adding a prime to the word. Thus a construct called Attitude is a hypothetical construct, and another construct called Attitude' is an intervening construct or variable. This is to indicate that the hypothetical construct is a further abstraction of the intervening construct, which itself is an abstraction of reality...Although hypothetical constructs give free play to imagination, measurement is obviously essential at some point. We believe that it must play a central role now in systematic theory development. For this reason intervening variables are essential. They are intended to provide isomorphism between the hypothetical construct and reality."[63]

An obvious and important point that is sometimes ignored by marketers, but well portrayed by the model, is that stimulus may have an effect other than purchase. For instance, a person viewing an advertisement for a new snow ski may give the advert full attention, may comprehend the message and brand image well, and may form a favourable attitude toward purchase. But if that person lives in Durban and has no plans or financial ability to go to a climate where there is sn[illegible] there is little chance a purchase can be made. This applies every bit as consistently to brands which are not affordable to the consumer and has interesting implications for strategies which attempt to develop the so-called "Black Market."

The Purchase concept:

> "...grows out of the integration of the Lewinian view of motivation which postulates that motives are created by the situation and the behaviouristic view which postulates motivation as an internal process. Further, "situation" can be thought of as consisting of two parts: the judgement task and the social setting of the task in interpersonal relations. Importance or (sic...of) Purchase incorporates the former aspect and Social and Organizational Setting, the latter."[24]

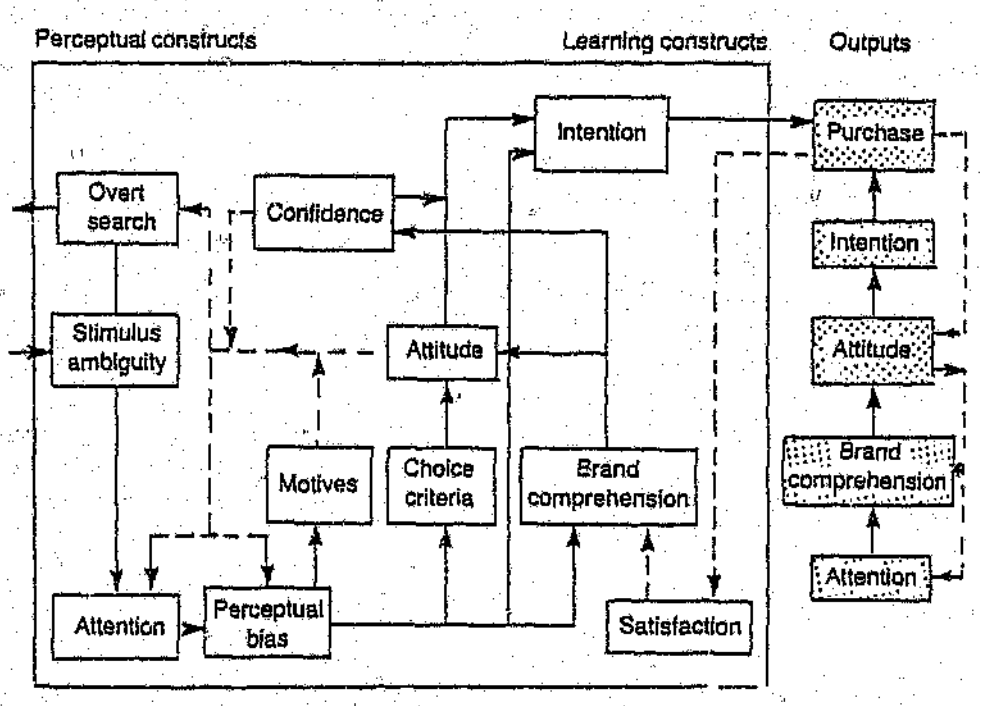


Figure 8: The Howard and Sheth Model of Consumer Behaviour

Source: Howard, J.A. and Sheth, J.N., The Theory of Buyer Behavior, Wiley, New York, 1969

Strengths of the Howard and Sheth Model

As stated earlier, the Howard and Sheth Model has made a significant contribution toward the understanding of consumer behaviour. In many ways, its greatest strength is the description of the perceptual and learning processes. The model appears to be high in heuristic power, high in unifying power, original, and plausible. The model is also supported by facts, in the sense that it mirrors many proven relationships established previously to its publication.[65] Further, the model has been updated from time to time to take advantage of new facts and advances in the literature.

The model is also rich in defining symbolism and motivation as concepts as well as mediation, perceptual vigilance and defense, and the means-end chain. It also makes some recognition of social influences like reference groups, social class, the family, and culture.

The model, with the Engel, Kollat, and Blackwell model, has received the lion's share of review and has thus contributed to the science by stimulating discussion.

Weaknesses of the Howard and Sheth Model

Undoubtedly the greatest weakness of the model is that it ignores the concept of values. Values do not play a serious enough role to Howard and Sheth to be included in their model, and when they are mentioned in the text they are seen as a by-product of culture.

Howard and Sheth seem to recognize only the social values concept and do not at any point mention the concept of personal values in their book, **The Theory of Buyer Behaviour**. In fact, a values concept is not defined in the few times its mentioned. On this basis alone, the model would have to be rejected for the purposes of this thesis.

They do accept, while defining Attitude', the role of values in attitude formation and accept a definition of attitude similar to that "...of the Michigan researchers..." including Fishbein as an example. Fishbein's attitude concept was examined and rejected earlier.

Howard and Sheth seem to infer the influence of some concept of value in their discussion of the purpose of the exogenous variables, "the intensity of the valuation of

the product class." They also recognize the influence of the concept of personality traits[66]. And they rightly exclude the value concept among exogenous variables (it is an intervening variable[67]), despite their definition of the four essential criteria by which they define the exogenous variables which could easily have included values:

> "(1) First and foremost it contributes to the explanation of behaviour. (2) It's inclusion is expected to reduce the error significantly in most situations. (3) It is efficiently measurable. (4) It is expected to be applicable over a wide range of product classes."[68]

Values are mentioned as a minor component of culture:

> "...Culture is a selective, man-made way of responding to experience, a set of behaviour patterns. More generally, Culture consists of **patterns of behaviour**, transmitted from member to member by symbols and constituting the distinctive achievement of human groups. The essential core of culture consists of traditional **ideas** and especially their attached **values**; culture systems may, on the other hand, be considered as products of action and, on the other, as conditioning further elements of action."[69]

Values are also linked to behaviour but they believed that not much work was done at the time Howard and Sheth wrote their book. "Only now, however, are studies being made that show the direct relation between values and behaviour."[70] This comment is made in reference to a paper, **"Attitudes and Opinion"** by Moscovici which appeared in **"Annual Review of Psychology"** six years before the publication of Howard and Sheth's book which makes the reference.

The definition of Attitude and Attitude' suffer from a similar weakness.[71] Despite claiming the centrality of the Attitude concept, a weak definition is offered which completely ignores the role of values. There is a general agreement with Allport's definition in many respects, although the concept is linked only to evaluative behaviour by Howard and Sheth. A strength is that the Howard and Sheth definition acknowledges attitude change through experience and information, while Allport acknowledges the role of experience only.

Zaltman and Wallendorf point out other deficiencies such as the model's "problems with explanation as well as prediction", it's inability to tell how the different variables operate, the "tangential way" it treats social influences, and it's treatment of some variables as exogenous that could also be endogenous.[72]

Most researchers usually consider the empirical testing of the model to be a strength. However, the purpose of the model's development is said to be to meet the "practical ends" of the company executive and policy makers and was intended to "contribute to the empirical work" only through the measurable intervening variables.[73] The twelve equation model used to test the model by Howard's Columbia associates defines relationships between the hypothetical constructs as well.

Also, as Engel and Blackwell point out, the empirical testing did not validate all of the relationships (for instance, Farley and Ring had problems with the link between attention and the inputs[74]), most of the studies dealt only with a very small portion of the 12 equation system, most validations concern only bi-variate relationships although multi-variate relationships are hypothesized, there is no consistent agreement between the different studies in the literature on which relationships are valid because some validate a relationship and others invalidate the same relationship. And finally, none of the studies can consistently explain more than 10% of the variance observed, a fact they call "particularly discouraging."[75]

The Representation of Values in the Howard and Sheth Model

While Howard and Sheth do visualize a striving individual, they recognize striving to be a function of motives and needs. The omission of the personal values concept is an extremely serious flaw. Further argument would be repetitive.

The model reviewed is now over fifteen years old and it can be assumed that the authors attitudes toward the values concept has changed, despite an update of the model including the concept. In fact, Howard has recently become a very strong advocate of the personal values concept and has presented it's effect on solving buyer behaviour problems in model form.[76]

> "The Howard-Sheth Model, despite its flaws, was a significant contribution towards understanding consumer behaviour. It unified many unrelated findings and provided the groundwork for future research. Also it included many of the basic components of consumer behaviour."[77]

The Engel-Blackwell-Miniard Model of Consumer Behaviour

The Engel-Blackwell-Miniard Model (EBM Model) of Consumer Behaviour is the most recent revision to the Engel-Kollat-Blackwell Model which appeared in the first real text in consumer behaviour, the first edition of **Consumer Behaviour** by Engel, Kollat, and Blackwell.

To this date, the EBM model remains the only major model of consumer behaviour to specifically recognize personal values and to accord it a rightful place as a central concept to their theory. It is incredible to realize that the original EKB model appeared in early 1968 and included personal values and attitudes as intervening variables. It is more incredible to think that despite the evidence to the contrary, other models still do not make the necessary recognition.

As stated earlier, with Howard and Sheth, the EBM Model has received the lion's share of mention and attention in the literature. As noted earlier, the latest edition of the model has been designed for pedagogical reasons. It is this model which will be evaluated.

Underlying Assumptions

The EBM Model also follows the Eclectic Approach. As such, it makes the basic assumptions of a purposeful, goal-oriented being driven by psychological processes to fulfill wants and needs, responsive to internal and external phenomena enacted as part of everyday existence and capable of distorting and biasing information and stimuli as part of the process of perception.

Whereas Nicosia and Howard and Sheth consider motives to be of utmost importance, the consumer described by the EBM Model could best be described as a "problem-solver."

Engel, Blackwell, and Miniard consider most purchase behaviour to be fairly routine, and with slight semantic differences, Extended Problem Solving, Limited Problem Solving, and Routine Problem Solving are recognized as in the Howard and Sheth Model. They accept the concepts underlying Ajzen and Fishbein's **Theory of Reasoned Action** which was shown earlier to disregard the psychodynamic description of the individual who is in constant conflict being controlled by unconscious impulses. Rather,

the EBM Model depicts a process whereby an individual actively reasons each decision with differing degrees of intensity and involvement. Their representation of personality is highly eclectic and borrows from all four main approaches detailed in earlier chapters by Mischel.

> "There are three significant factors which influence the degree of active reasoning that will be undertaken by the consumer: (1) involvement; (2) alternative differentiation; and (3) time pressures."[78]

Flows in the EBM Model are easily understood and easy to follow. The model consists of four main areas; namely, Inputs, Information Processing, the Decision Process, and Decision Process Variables.

Input consists of Stimuli and the products of External Search. Stimuli can be considered to be marketer dominated such as advertising and promotion or can be regarded as other forms such as word-of-mouth, other information sources such as editorial, or personal and vicarious experience.

Input is channelled into the Information Processing structure. This structure consists of Exposure, Attention, Comprehension/Perception, Yielding/Acceptance, and Retention.

The Decision Process consists of Problem Recognition, Search, Internal Search, Memory, Alternative Evaluation, Beliefs, Attitude, Intention, Purchase, Outcomes, Satisfaction and Dissatisfaction.

Decision Process Variables include Individual Characteristics; such as Motives, Values, Life-style, and Personality, Social Influences; such as Culture, Reference Groups, Family, and Situational Influences; which are specific to the context in which the behaviour is taking place.

"Any type of decision begins with problem recognition."[79] With this in mind it is best to start a description of the model at that stage as well.

Problem Recognition occurs as a result of comparing an ideal state and the actual state of existence. Their approach would best be described as borrowing from cognitive consistency theory. It is also interesting to note that it is not inconsistent with Rokeach's concept of values and behaviour and behavioural change.

There are two sources of Problem Recognition; motive activation and persuasion. Persuasion includes inputs which have been channelled through the Information Processing structure and into the Memory. Motive activation occurs as a result of the influence of the Decision Process Variables."[60]

Once a problem is recognized the Search mechanism is activated. This first activates Internal Search which evaluates whether enough is known about the alternatives to make a decision. If not, External Search is mobilized to acquire more alternatives and information about the decision. Search is also heavily influenced by the Decision Process Variables."[61]

Once Search identifies enough information and alternatives to make a decision given the circumstances under which the behaviour is occurring, Alternative Evaluation begins:

> "Now, what happens as this information is processed and considered? The usual chain of effect begins with the formation of change in **beliefs** about the product or brand, followed by a shift in ***attitude*** toward the act of purchasing that alternative. All things being equal, this leads to an **intention** to act consistent with attitude and finally to purchase."[62]

Information Processing is depicted by the model as a process whereby Exposure to a message is accorded Attention which is referred to as "information processing capacity." Many messages fall at this point because consumers apply "selective attention" to items which interest them or of pertinent content. "Everyone must sift through a barrage of competing messages and select only a subset that will be further processed."[63]

At this stage the message is stored in short-term memory for comprehension and perception. This process is visualized to be biased and subject to perceptual distortion. "Everything can short-circuit at this stage..."[64] and the message can be rejected as inappropriate or irrelevant due to misunderstanding even if the message is very relevant.

> "As it is compared against existing beliefs, evaluative criteria, attitudes, and other factors stored in memory, any or all of these could be changed or modified in some way. If so, we can conclude that **yielding or acceptance** has taken place. But once again, quite the opposite could also occur. If there is a perceived incompatibility, the message will have little impact on existing beliefs and attitudes."[65]

Assuming that this does not occur, the message will be retained.

After Purchase occurs, the Outcomes of the decision are evaluated. The consumer asks: "Is this what I thought would occur? Does this perform as I believed it would? Am I satisfied with my decision?" Should the answer to these or similar questions by yes, then Satisfaction will occur and Beliefs will be changed. Should the answer be no, Dissatisfaction will occur and beliefs will be changed and a process of External Search could begin to find the correct solution to the problem.

Engel, Blackwell, and Miniard do not believe that their entire model is activated on every purchase. During Routine Problem Solving, Problem Recognition stimulates Internal Search which, because of the habitual nature of such a purchase, activates Intention which flows directly to Purchase and Satisfaction. An interesting point made is that brand loyalty is greater when the original purchase is made under the conditions of Extended Problem Solving. This has interesting ramifications for intensely personal products, such as women's sanitary protection and birth control products, as well as for commodity markets."[86]

During Limited Problem Solving, Problem Recognition is:

> "...straight forward ... the decision process largely skips the search stage and moves the majority of alternative evaluation to after trial. If satisfaction occurs, preliminary beliefs and attitudes toward the brand are positively reinforced, as is an intention to repurchase ... In this kind of situation, advertising plays a critical role of building awareness of brand name and registering some information on salient attributes."[87]

The model accounts for motivation and the concept of risk as well as the integrating function of self-concept.[88]

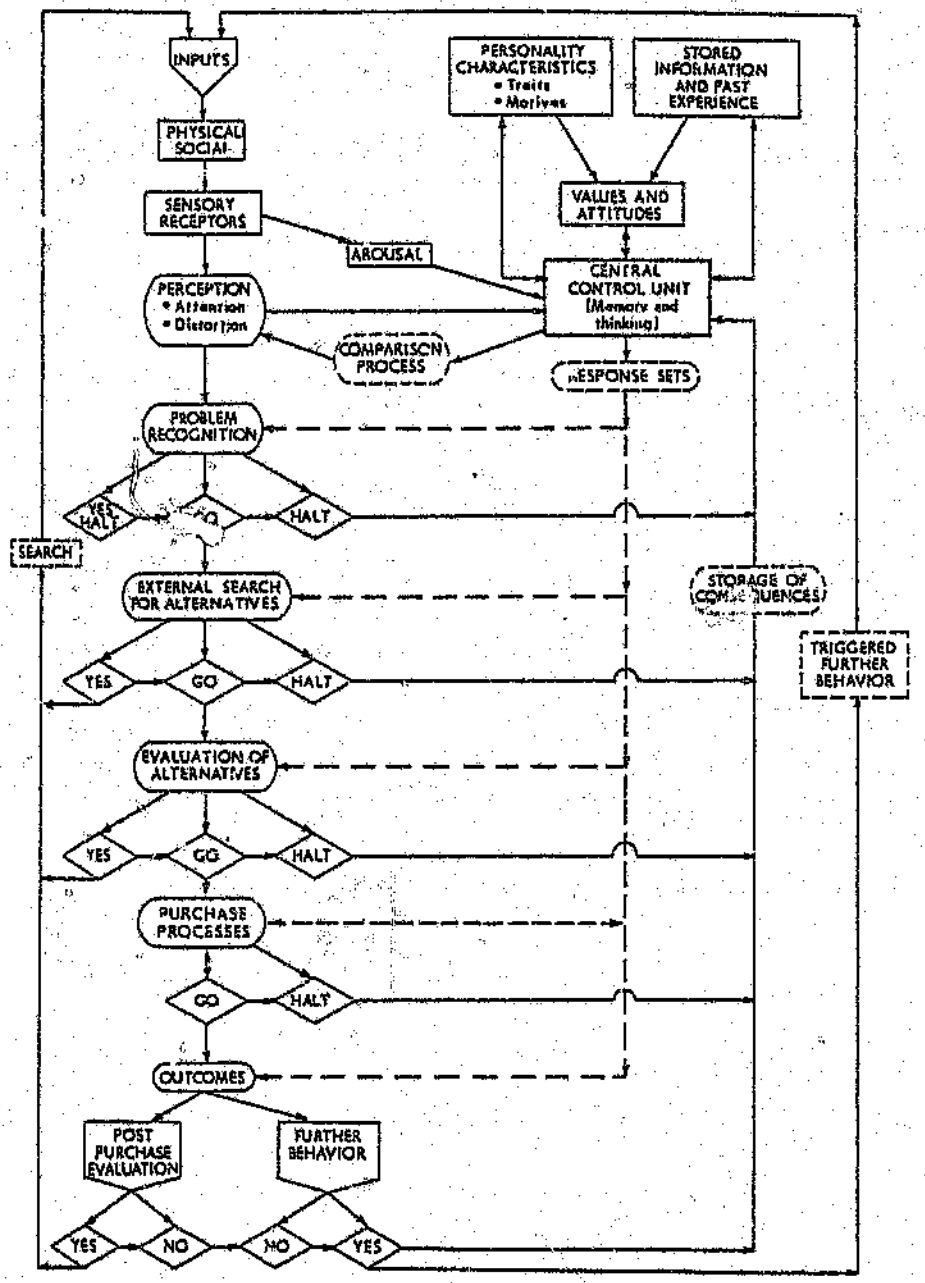


Figure 7: The Original Engel, Kollat and Blackwell Model of Consumer Behaviour

Source: Consumer Behavior: Selected Readings, J.F. Engel, ed., American Marketing Association Reprint Series, Homewood, Illinois, Irwin, 1968

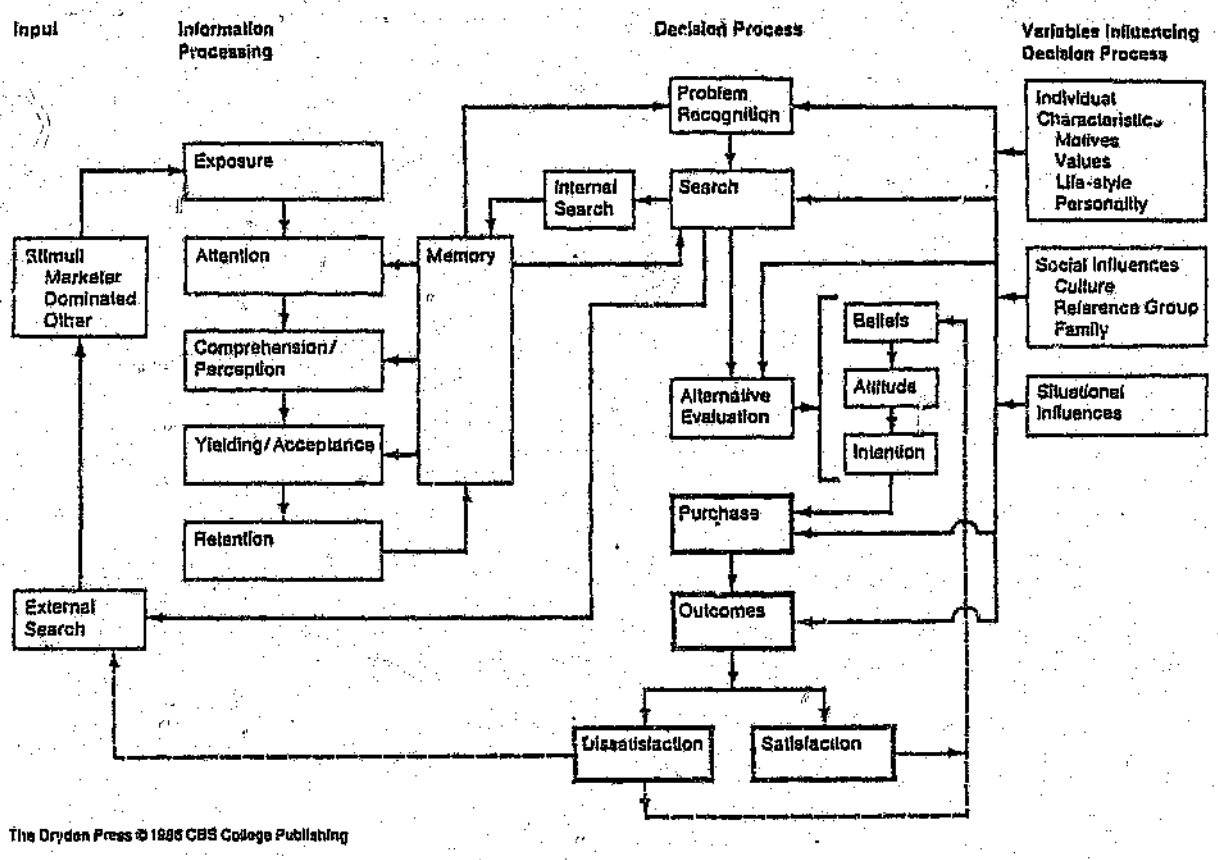


Figure 8: The Engel, Blackwell and Miniard Model of Consumer Behaviour

Source: Engel, J.F., Blackwell, R.D. and Miniard, P.W., Consumer Behavior, 5th Edition, Dryden, New York, 1986

Strengths of the Engel, Blackwell, and Miniard Model

The greatest strength of the EBM Model is it's emphasis of the role of personal values, personality, and social factors while incorporating them into an easily understood and highly functional problem solving process.

The new model scores highly in most areas of evaluation established earlier. It is capable of explanation, it is general, it is high in heuristic power and unifying power, it is internally consistent, original (although it uses many previously established relationships), it is plausible, simple to understand, and is supported by facts.

The model is thought to be capable of prediction, although this has only been tested in a limited way, and as Engel and Blackwell point out:

> "...it was never our intention that the model would be tested in the same manner as the Columbia group has done with the Howard model."[48]

Reviews in the literature completely ignore the inclusion of the personal value concept in the EBM and EKB Models. However, it should be considered that the literature simply reflects the lack of focus until recently by consumer behaviourists on the study of personal values. Marketers are only now beginning to wake up to the central role played by personal values in the consumer behaviour process.

This is one of the strengths, extant since the original EKB model was developed in 1968, which makes the EBM Model by far the most comprehensive and useful consumer behaviour model available at the current time.

There are no serious evaluations of the most recent update of the EBM model in the literature. However, this update differs only in a minor fashion from the last edition of the EKB model that preceded it; specifically in the sense that previously referred to external influences like cultural norms and values have been incorporated in a more central role to behaviour as Decision Process Variables, Internal Search has been added, the concept of normative compliance and informational influence has been included in other Decision Process Variables as has Motive, and the flow of the Decision Process Variables has been greatly simplified.

Loudon and Della Bitta comment on the strengths of the EKB Model saying that it considers many variables influencing the purchase decision and emphasizes the

conscious decision making process. They also recognize the ease of flow and flexibility of the model:

> "Also the flow of the model is easy to follow and is quite flexible. For example, the authors recognize that in numerous purchase decisions, many of the detailed steps are passed through very quickly or are bypassed, as in the case of habitual purchase behaviour."[90]

Zaltman and Wallendorf, commenting on the second revision which differs significantly in some respects, say:

> "...the model, and the text in which it appears, serve as frameworks for integrating and reporting findings of reporting findings of empirical research in consumer behaviour. Thus, the strength and the major contribution of the model lie in its unification of concepts and propositions, rather than in the originality inherent in its linkages."[91]

Zaltman and Wallendorf also suggest:

> "The description of an active information and evaluative process is the major contribution of the Engel, Kollat, and Blackwell model."[92]

Weaknesses of the Engel, Blackwell and Miniard Model

The most recent update, as previously noted, has not been reviewed in the literature as were past versions. Loudon and Della Bitta criticize:

> "... the vagueness regarding the role of some variables. For example, the influence of environmental stimuli is noted but their role in affecting behaviour is not well specified."[93]

This deficiency has been corrected by including these variables in the Decision Process Variables in the new model.

Zaltman and Wallendorf highlight the lack of testing of the model saying that it's not sure the model could be tested.[94] As earlier noted, the type of testing that the Columbia group gave the Howard model was never envisioned for the EBM model. Having stated this fact, in both the third and fourth editions of their **Consumer Behavior**, the author team provided empirical formulae for testing and descriptive formula. This seems to indicate that Zaltman and Wallendorf were either unaware of this fact or feel the model is untestable for another reason which they do not make clear, especially considering that the third edition of **Consumer Behavior** was available in 1978.

One criticism not made in the literature and probably valid is that personal values, due to their central role in behaviour, should be included in the EBM model as intervening variables in the Belief-Attitude-Intention triad. Values are prescriptive and proscriptive beliefs and their influence is well documented, but they appear to play less of a role in the current model than in previous editions. This does not, however, cast any serious negative light on the validity of the model but rather highlights a possible future improvement.

The Role of Personal Values in the Engel, Blackwell, and Miniard Model

Engel, Blackwell, and Miniard do say that personal values are particularly important during the problem recognition stage and that they answer the question, "Is this brand for me?"[85]

The Engel, Blackwell, and Miniard Model is the only model that depicts the role of personal values. This strength of the model makes it the most comprehensive and useful consumer behaviour theory the understanding the central role of personal values in the consumer behaviour process.

Values have been shown above to play a central role in the EBM model and are active throughout the Decision Process from Problem Recognition through the Outcomes of purchase.

Summary

It has been established that most consumer behaviour theories are represented by models. Model development has now been occurring for over twenty years and has borrowed extensively from other disciplines. This has been a strength and a weakness.

The trend today is for models to be simplified for pedagogical purposes. This does not, however, affect their validity as tools to understand the consumer behaviour process. In fact, it is impossible to model each and every aspect of an individual's behaviour. But models can also over-simplify and this is a danger to be considered.

Of the various approaches to modelling, the Eclectic Approach shows the greatest promise due to its non-atomistic and unifying techniques. Of the eclectic models, the Nicosia, Howard and Sheth, and Engel, Blackwell, and Miniard models are the most often recognized. The Engel, Blackwell and Miniard Model offers the most comprehensive theory of consumer behaviour due to its inclusion of the concept of personal values and its view of the purchase process as a problem solving situation. The approach is flexible and accounts for all types of buyer activity.

The Engel, Blackwell and Miniard Model suggests a number of hypotheses. Value system differences should correlate to brand choice regardless of the type of problem-solving and consumers should be able to associate values to brand images regardless of the type of problem solving involved. Brand images should be at least partially composed of personal value associations. All of these hypotheses should apply to normal purchase behaviour as well as intent to purchase.

Howard suggests that terminal value differences might correlate more significantly to product class use and instrumental value differences might correlate more significantly to brand choice within a category.

These major consumer behaviour theories have synthesized the findings of other researchers working on middle-range theories. The next chapter investigates the numerous ways middle-range theorists have operationalized values.

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CHAPTER FIVE - OPERATIONAL METHODS OF MEASURING VALUES

Earlier discussion highlighted the significant impact that the work of typologists such as Jung, Sheldon, Erikson, and Maslow have had on psychology, despite the inherent weaknesses of each theorist's attempt to simplify the basic complexity of human nature. Life-style typologies have had no less dramatic influence on marketing during the past two decades.

This chapter will discuss the major life-style typologies used by marketers with a major emphasis on two main typologies and the contributions of many middle-range theorists. First reviewed will be what is probably the world's best known typology, the Stanford Research Institute's Values and Lifestyles (VALS) Typology. Second reviewed will be South Africa's best known typology which has borrowed extensively from VALS, the Sociomonitor Typology. Finally, the work of a number of influential and current middle-range theorists will be examined.

The Life-style Concept

The life-style concept, while widely used by marketers, is another term that suffers from vagueness due to varied and differing interpretations. Major marketing theorists mainly approach a definition of the term life-styles in two ways. The first approach is to link life-styles to the activities, interests, and opinions of the individual:

> "A person's lifestyle, then, is the person's pattern of living in the world as expressed in the person's activities, interests, and opinions. Lifestyle portrays the 'whole person' interacting with his or her environment."[1]

Another popular approach, which is probably more consistent with the marketing concept, is to define life-styles as the way people choose and use possessions.

> "Life-styles are defined as the patterns in which people live and spend time and money. They are a function of consumers' motivation and prior learning, social class, demographics, and other variables. Life-style is also a summary construct reflecting consumers' values..."[2]

This definition highlights an obvious, but easily forgotten fact, that the life-style concept is a construct. As such, the life-style concept helps marketers understand consumer behaviour by simplifying and generalizing certain aspects of personality and behaviour.

Unfortunately, this means that life-style typologies suffer the same weaknesses that other typologies do. These weaknesses, examined earlier, mainly concern the loss of richness experienced when simplifying the complex nature of mankind. The end result may be a typology that is like the prediction of the gypsy palm reader, too appealing to dismiss and too general to be testable or wrong. Yet, there is evidence that life-style typologies can be helpful, when their limitations are recognized and avoided.[3]

The VALS Typology

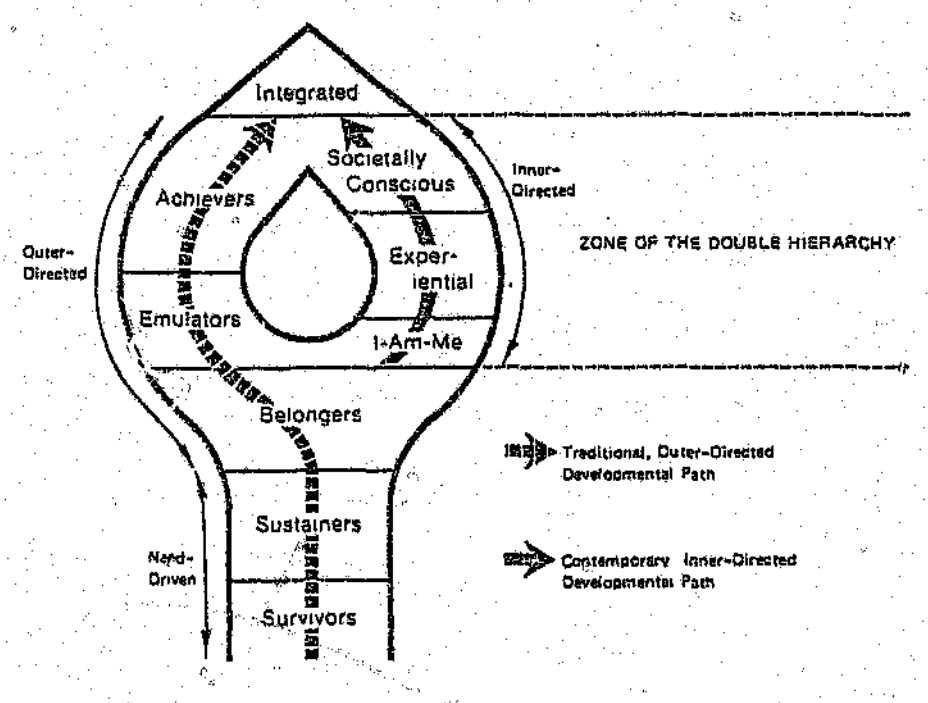


Figure 9: The VALS Typology

Source: Mitchell, A., The Nine American Lifestyles, Warner Books, New York, 1983

While another American typology exists, the **Yankelovich Monitor**, the **Values and Lifestyles** (VALS) Typology developed by Arnold Mitchell at the Stanford Research Institute, in May 1978, was the first life-style typology to be widely used by marketers and remains the most popular,[4] for these reasons and because both are American life-style typologies, only VALS will be examined. VALS forms the basis of the RISC typology and the Sociomonitor typology, both of which can be said to differ from it in no significant way.

VALS is rooted in the developmental approach of psychologist of Abraham H. Maslow and the social approach of David Riesman.

> "The needs hierarchy of Abraham Maslow ...has contributed most notably to the VALS typology."[5]

> "The typologies theoretical roots lie largely in Maslow's need hierarchy and in the (Riesman's) concept of social character."[6]

Mitchell, in fact, interestingly compares VALS to a number of the major developmental psychology theories.[7]

VALS accepts Maslow's premise that individuals move through stages of life and progress through a hierarchy of stages:

> "The values and lifestyle typology explicitly considers psychological maturity. Very generally, psychological maturity is marked by a progression from partial toward full realization of one's emotional, intellectual, and spiritual potentials. It involves a steady widening of perspectives and concerns and a steady deepening of the inner reference points consulted in making important decisions. In general, progression is step by step, with no omissions. There may be exceptions, however; if there are, the personal and social consequences may be severe..."[8]

VALS, like Maslow, lacks a true value concept which from the outset weakens the entire framework of the typology. Earlier discussion clearly show that the VALS value definition demonstrates a lack of focus and is not supported in the literature:

> "By the term 'values' we mean the entire constellation of a person's attitudes, beliefs, opinions, hopes, fears, prejudices, needs, desires, and aspirations that, taken together, govern how one behaves."

This lack of focus should be kept in mind when reviewing the major points of the typology. The work is extremely descriptive and rich, including the activities, interests, and opinions of each life-style group.

Riesman's work provides a more acceptable basis for VALS. Riesman developed the concepts of tradition-directedness, other-directedness, and inner-directedness. As was earlier noted, he draws a picture of man moving from primitive society's tradition-directedness to an inner-directed where behaviour is driven by individual needs. This individual is now being replaced by the other-directed individual who lives his life to fulfill his needs for approval and acceptance by others, which leads to self-esteem.

The VALS typology enumerates three main types of individual types which are then broken down into nine categories. Borrowing from Riesman, the three main types of individuals are defined as Need-Driven, Outer-Directed, and Inner-Directed.

Need-Driven individuals are of two types, Survivors and Sustainers. Outer-Directed individuals are of three types, Belongers, Emulators, and Achievers. Inner-Directed individuals are of four types, I-am-me, Experiential, Societally Conscious, and Integrated. These can be best understood by a more detailed look.

Mitchell's portrayal of the Need-Drivens is descriptive:

> "At the lowest levels of the lifestyles typology come the the (sic) Need-Driven groups, called the Survivors and Sustainers. The two groups are very different, but they share the burden of being poverty-stricken, so that their lives are driven by need. The luxury of choice in many economic matters is a relative rarity. This means, in effect, that they are less able to express their values in everyday living in the contemporary American society than are more affluent people. This overwhelming fact shows up dramatically in their activity and consumption patterns of the Need-Drivens: Their poverty forces them into patterns that deviate greatly from national averages, and the greater the poverty, the larger the deviations. One might say, then, that the Need-Drivens are, from an economic perspective, a values-based group more in the sense of denial of values than of expression of them. But happily there are many exceptions. Thus, many Need-Drivens occasionally splurge - accounting, for example, for many color TVs and splendid automobiles in "poor" neighborhoods. More significantly, many activities - such as gardening or baking - and virtually all the emotional and spiritual aspects of life do not involve appreciable income, and in these the Need-Drivens are as able as others to find rewards and self-expression."[9]

Mitchell characterizes Survivors, who are located in the least favoured position of the typology as poor, poorly educated, unskilled:

> "...despairing, depressed, withdrawn, mistrustful, rebellious about their situation, lacking in self-confidence, and finding little satisfaction in any aspect of their lives."

There are two types of Survivors, those who live and die in "unchanging, paralyzing poverty," and those who have lead a life as a Sustainer or Belonger and have slipped back into the lifestyle.[10]

Sustainers are "...angry, distrustful, rebellious, anxious, combative people who often feel left out of things - but unlike Survivors, they have not given up hope."

Mitchell proposes a number of distinct types of Sustainers, "...the street smart operator of urban slums and ghettoes," the crafty individual that "...makes ends meet through

barter, side jobs done for cash, and, sometimes, adroit manipulation of the welfare system", the recent immigrant trying to start over in a new land, and the mother of an impoverished family struggling to keep on going by supplementing her minimum wage with food stamps and welfare.[11]

Outer-directeds are by far the largest VALS category, approximately two-thirds of Americans are classified into this category. Again, Mitchell's portrayal is quite descriptive:

> "The common denominator of these three groups is what we call Outer-Direction. Outer-directed people respond intensely to signals, real or fancied, from others. They conduct themselves in accord with what they think others will think. Since 'out-there' is paramount, this tends to create ways of life geared to the visible, tangible, and materialistic.
>
> Attributes shared (especially by Belongers and Achievers) include a sense that most people are honest, a lack of rebelliousness, a sense of being 'with it,' conventional behaviour, and an insistence that the family is the most important thing in their life."[12]

Classifying Belongers as "Traditional, conforming, conservative, 'moral,' non-experimental, family-oriented,..." and as a "...mighty force for stability in a world of tumbling change", Mitchell points out that Belongers are the people who cherish traditional institutions like the family, the church, loyalty to the nation, their job, and old associations. They are patriotic and sentimental. But most important to the Belonger lifestyle is the conscious attempt to blend into the woodwork of life: "...to fit in - not to stand out."[13]

Emulators, on the other hand, are very different people. They are striving to attain the life-style of those they admire most; that is they are trying hard to emulate the Achiever lifestyle. They are "ambitious, competitive, ostentatious, unsubtle, and 'macho.'" Emulators are more likely than any other group to have attended a technical school, many have attended university but failed to complete a degree, and many are Black or Hispanic. Because the education level of the father is relatively high in this group, Mitchell implies that the category may be a stopping off place for upwardly mobile members of minority groups. The category has a high disregard for the "Establishment."[14]

Mitchell also points out the volatile side of Emulators:

"Psychologically, Emulators represent a turbulent transition stage between the established, solid, self-confident, well-adjusted, life-styles of Belongers and Achievers. Scornful of the first, Emulators have not yet attained the second emotionally, intellectually, economically, or socially."[15]

Achievers are "...a diverse, gifted, hard-working, self-reliant, successful, and happy group." These are the people at the top of the Outer-Directed heap. They built the system and they are driving the ship. Mitchell points out many different types of Achievers, from Ronald Reagan and Michael Jackson, to the skilled professional, the gifted lawyer, the entertainer, or the star athlete.[16].

Achievers are staunchly conservative, resist change, and are generally satisfied with the world around them. The children of Achievers were those who spearheaded the most recent change to Inner-Directedness.[17]

The VALS use of the term, "Inner Directed" is far different than that of Riesman's use, which meant self-centered or self-absorbed. Mitchell explains that, by Inner-Directed, VALS means driven by internal forces rather than by what is "out there."[18]

Inner-Directeds are seeking inner growth. Sometimes through conventional religion or institutions, but more often through "...transcendental meditation, yoga, Zen, and other Eastern spiritual practice...". Most seek intense involvement in whatever they do. They are prevalent in such causes as consumerism, conservation, environmentalism, artistic pursuits, and other causes that their sensitivity to the world around them makes them feel.

Inner-Directeds are not driven by material gains, they are indifferent to money and social class. They support modern trends like marijuana use, dual career families, working women, and sex between non-married partners. "They tend to be self-expressive, individualistic, concerned with people, impassioned, diverse, complex."[19]

The most explosive of the Inner-Directed stages is that of the I-Am-Mes. These are the youngest of all the groups and this stage is a short-lived and tumultuous change from the Outer-Directed stage under "which they were raised to inner-direction, involving discovery of new interests and setting of new life goals."[20]

"This is a stage of tumultuous transition ... it is usually short-lived - no more than a few years - and marked by spectacular ups and downs and sidewise veerings. It is a stage of much anxiety brought on by fear of losing the old and uncertainty concerning the new. As a frantic result, I-

> Am-Mes are both contrite and aggressive, demure and exhibitionistic, self-effacing and narcissistic, conforming and wildly innovative."[21]

Next come the group called the Experientials who above all else seek direct and vivid experience:

> "For some what matters most is deep personal involvement in ideas or issues, for others it is intense hedonism; for some it is the challenge and excitement of great physical exertion, like rock climbing; for many the quest of inner exploration is all-important; for a few the core of existence is a lifestyle of voluntary simplicity - what Emerson called 'plain living and high thinking.' For most of the Experientials life at one moment is a noisy parade and at the next a journey, often touched with the mystic, through the silent inner domains of thought, feeling, and spirit. For them, the secondhand, the inhibited, the unfeeling is not living. Action and interaction with people, events, and ideas - pure and strong - is the essence of life."[22]

Most Experientials have passed through the I-Am-Me stage and may later develop into the next stage, so rooted in social consciousness, but at this stage it is the emotional that counts. They are the most inner directed of all the groups.

> "Their independence and self-reliance goes deep, enabling them to try anything once, if only for the experience of it. So this inventive, experimental group is given to the unusual, the one-of-a-kind, the daring, the dramatic, the impulsive, the quaint. Their self-understanding makes the Experientials excellent judges of what is authentic and decisive about rejecting what comes across to them as fraudulent...one of the most powerful forces in the lives of most Experientials is a feel for the mystic. Usually this is not connected with the formal Western religions, but is more likely to reflect personal insight and perhaps the study of Zen, Yoga, and the Tao Te Ching or other ancient works."[23]

The final stage of Inner-Directed development is the stage of the Societally Conscious. This stage of development is focussed on social issues, trends, and events. The explosion of single interest groups is probably due to these people:

> "The range of concerns and the styles of dealing with them are great. Consumer issues are foremost for some people, who become leaders or supporters of movements concerned with such issues as pricing, additives, labeling, and advertising. Other individuals concentrate on conservation; their concerns range from the national park lands to energy, packaging, and a host of practices regarded as wasteful. Other concerns are with issues of product safety, environmental pollution, protection of wildlife. Stylistically the Societally Conscious range from aggressive political antagonism, to the more muted collaborative resistance of networks with a common interest, to withdrawal to lives of voluntary simplicity."

Mitchell notes that the group is having a substantial and growing impact on American politics and corporate life and that they are a well-educated, well-off, liberal group.[24]

The final group, which combines Inner and Outer-Directedness, is the Integrateds. These people are those who have been able to combine the decisiveness of Outer-Directedness with the introspection and penetration of Inner-Directedness. They can take the best, or most appropriate, qualities of each and apply them as needed.

> "Psychologically mature, the Integrateds have an unusual ability to weigh consequences, to consider subtlety along with flamboyance, to see the small within the large and the potential within what has gone wrong.
>
> These qualities of mind and spirit enable Integrateds, we think, often to pluck the best from opposing views and combine them into a solution that subsumes both perspectives...Such people elude common ways, hence are recognized less by exterior measures than are members of the other categories. Most of us know some few people who seem to have a kind of inner completeness, a kind of deep-core certainty, that commands respect, admiration, sometimes awe, and not infrequently love. These are the people one truly trusts and seeks to be like. These are the people who seem to have more wisdom than the rest of us."[25]

Mitchell notes that the Integrated I are the smallest group and that they are difficult to study. SRI estimate that two percent of the population probably fit this group. VALS does not quantify Integrateds by demographics or life-style for this and some other reasons. Other reasons include the fact that Integrateds are a highly diverse group who are "subtle in their responses, complex in their outlook", and also because the issues and problems that affect Integrateds involve "subtleties and perspectives ... that either are not understood at all or are badly misinterpreted by people of other lifestyles."[26]

Mitchell characterizes Integrateds as:

> "...open, self-assured, self-expressive, keenly aware of nuance and shadings, and often possessed of a world perspective ... quick with laughter and generous with tears, to have found ways to meld work and play, to combine close relationships with people with the drive to accomplish (rather than to visibly achieve)...they are both makers and movers, observers and creators - people who believe in themselves and in what they are doing."[27]

The VALS typology assumes that people generally move through the hierarchy in either an Inner-Directed or Outer-Directed way. Change from one group to another is mainly a function of events and circumstances, age, historical and generational influences, unresolved childhood and other experiences, changing paradigms and cultural influences, natural development, and evolution. These influences are seen to cause

deep dissatisfaction which utilizes physical and psychological energy and psychological insight.[28]

VALS has also addressed the question of social change showing the progression of societies from stage to stage related to value formation and disintegration and likened to the four seasons. They support their theory on the basis of the work of Toynbee, Sorokin, Spengler, and Quigley and on the analysis of Davies and Johnson who emphasize "the role of frustrated expectations - that is, unfulfilled values."[29]

Of greatest interest to South Africans who feel that our market is little like that of the United States, is the description of the VALS groups in other countries; namely, France, Italy, Sweden, the United Kingdom, and West Germany. The activities, interests, and opinions differ remarkably from country to country as do the percentage of the population found in each group.[30]

VALS has also been used to predict possible scenario for the future much like those presented in Clem Sunter's **The World and South Africa in the 1990s**,[31] but lacking in the depth of analysis of Sunter's work.

Mitchell suggest four future scenarios:[32]

> **Renaissance** - A future that reflects an extension of many existing trends, but with crucial discontinuities flowing naturally into a new spring of a unified society based upon core values.
>
> **Bouncy Prosperity** - A future based upon booming good times and a rapidly growing consumer economy that would reverse the trend toward Inner-Directedness.
>
> **Hard Times** - A future transformed by constant shortages, inflation, unemployment, and the lack of economic growth. In such a future security would be of paramount importance as would the family and other close associations. Fear and insecurity would colour everyday life and simplicity and risk aversion would be abundant trends.
>
> **Transformation** - A future involving a massive shift toward Inner-Directedness and a simpler life-style. While creative and inventive talents would prosper, chaos would reign politically during a period of so much change and governing would be quite difficult.

A book has been recently published which projects seven possible future scenarios based upon SRI studies.[33]

Strengths of VALS typology

Probably the greatest strength of the VALS typology is that it advances a richly descriptive picture of various groups of people. This richness imparts an intensely human picture which is much easier to understand than demographics alone.

Engel, Blackwell, and Miniard point out that the increasing trends toward global marketing, spawned by the technological advances which increasingly unite mankind in a global village, will require the use of multi-cultural tools like typologies:

> "As firms develop sophisticated, global strategies, they will need to use typologies such as this to develop products that appeal to segments of markets in many countries. Both print and electronic media are reaching throughout the world as people subscribe to magazines on a world-wide basis and listen to satellite television. Thus product design and communications strategies might be developed for the achievers of other affluent and ever-growing societies."[34]

As Holman observes, "VALS is a better way to humanize those people than many other conceptualizations currently available." She also cites VALS strong conceptual base and ability to predict future trends.[35]

Engel, Blackwell, and Miniard cite a number of examples of VALS users such as Merrill Lynch Pierce Fenner & Smith, Clairol, General Foods, and Lees Carpets. Merrill Lynch repositioned from their "Bullish on America" theme to a theme that better reached the Achiever target audience they sought to reach. The new theme, "A Breed Apart" depicted a solitary bull rather than the herd depicted in the earlier campaign. "As a result, the thundering herds were replaced in the ads by a lone bull that wandered through the canyons of Wall Street or huddled in a cave where it found shelter..." Clairol developed themes for consumers from both Inner-Directed and Outer-Directed orientations. General Foods made Belonger women their target with a Jello campaign themed on a "make some fun" platform. Lees Carpets, like many other home furnishers, set up a full life-style programme that included in-store displays for their retailers and a sales training programme.[36]

Consumer researchers cite the successful use of VALS by the American Telephone and Telegraph Company,[37] the New York Times, Penthouse, Atlantic Richfield, Boeing Commercial Airplane Co., American Motors, the Rainier National Bank,[38] Midway Airlines, Medical Products Corporation (a division of Timex), and the Lincoln-Mercury division of the Ford Motor Company.[39]

Weaknesses of the VALS Typology

VALS suffers from the same weakness as any other typology. These have been enumerated many times in previous chapters and are mainly a function of trying to generalize complex behaviour into neat and easily understood categories.

VALS suffers from a number of other problems. First, it borrows extensively from concepts advanced by Maslow that assume that man advances through different stages of life based upon the satisfaction of needs, concepts shown to be flawed earlier. Second, it borrows badly from the work of Riesman, thereby increasing confusion of the terms surrounding the directedness of the individual. Third, it borrows badly from the work of psychologists and sociologists and thereby proposes a totally unacceptable definition of values. It is difficult to accept that VALS is really a values and life-style study.

VALS supporter Holman explains away one criticism:

> "...it would be possible to generate as many lifestyle subtypes as there are people. In truth, this is an accurate assessment of the diversity of individuals, but it is hardly actionable from a marketing perspective...VALS is a better way to humanize those people than many other conceptualizations currently available."[40]

And she admits that:

> "At the individual level, the VALS typology, as it is observationalized and theorized, is too broad a generalization, almost stereotypical."[41]

Like all descriptive typologies, it is the "humanness" imparted to the VALS category which is most seductive.

> "Part of the lure of VALS comes from the vivid, perspicuous individual portraits that advocates paint of members of the various groups. Consider Holman's (1984) description of an emulator named "Chet." Chet seemed personable and dressed stylishly, yet the symbolism of his life always exceeded the reality. He owned a flashy car like the one pictured in his bedroom, but the glamorous model pictured with the car eluded Chet's reality. Chet was clearly trying to prepare for success but lacked the savvy to attain it. Life had been fairly good to Chet, but it was often a bit too big for him to manage with competence. Because we all know a Chet, Holman's description of the emulator category seems compelling."[42]

But the key reason for using VALS must be that its use improves market segmentation for the user. In other words, it seems obvious that to be worthwhile, VALS must impart

value in terms of it's predictive ability of consumer behaviour and it is on this point that VALS seems to be most disappointing:

> "For instance, Wilkie (1988) reports that VALS is able to distinguish between the behavioral patterns of different types of imported wine purchasers. Why doesn't it predict behavior for all California wine buyers? Why do so many of the types seem to purchase wine in such similar ways? Could personal values, or perhaps some demographic variable, segment the market better?"[43]

Mitchell reports the quantitative results of only 87 questions from the 1980 VALS survey, although he points out that over 800 questions were answered.[44] Holman validates this saying that respondents answered more than 800 questions in addition to the 36 questions used for purposes of the algorithm (the mathematical procedure that places people in each of the VALS categories).[45] As Kahle, Beatty, and Homer observe:

> "Thus only about 80 reported items were criterion variables to be cross-tabulated with the VALS categories. Even assuming that all reported differences in Mitchell (1983) were indeed statistically significant (no tests were reported), it should be remembered that with 800 items, 40 would be significant at the 0.05 level purely by chance, by normal random fluctuations in data. Thus, it is possible that some of these reported findings in Mitchell (1983) are less important than others."[46]

Kahle, Beatty, and Homer also observe that VALS was less predictive than LOV (a values analysis concept more in agreement with Rokeach). In fact, LOV predicted brand choice better than VALS 74% of the time and explained more of the variance within the sample, as will be later seen.

In summary, many theoretical problems underlie the VALS typology. These include the almost total lack of a values concept, an over-reliance on Maslow's theory, poor borrowing from Riesman and other problems. The VALS typology is probably not a useful way to segment markets and it probably does not predict brand choice very well. VALS has served a purpose of widening knowledge of the impact of life-styles on behaviour and, as Kahle, Beatty, and Homer acknowledge, it displays some utility and improves upon ignorance.[47]

The Research Institute for Social Change (RISC)

RISC was founded in 1978 under the aegis of Alain de Vulpain in Paris. RISC has members in 17 countries, including Market Research Africa (MRA) in South Africa, and is interested mainly in social trends. Christine A. Ralph MacNulty, a British mathematician, economic researcher, and futurist worked with the RISC members of France, Italy, Sweden, the United Kingdom, and West Germany to see how well the VALS categories applied to other Western nations. Unfortunately, specific surveys were not used and it appears that existing data bases were analysed. The results were published in VALS Report No. 20 and in Mitchell's book.[48]

MRA, in it's Sociomonitor handbook, reports that "...(RISC) has taken Mitchell's work one step further and has linked the different value systems identified by him to different societies."[49]

In reality, it was Riesman who, back in the 1950's, linked evolutionary societal types to his concept of tradition/other/inner-directedness and Toffler who developed the concept of the First/Second/Third Wave of societal development and linked it to differing values and life-styles. However, the chart developed by RISC does make comparison easier and does bring these concepts further into the mainstream.

In most ways, the RISC typology is identical to the VALS typology. It is based upon Maslow's Hierarchy of Needs and Riesman's work. VALS Survivors become RISC Subsistence Strugglers and RISC Mental Strugglers, VALS Sustainers become RISC Security Minded, VALS Belongers become RISC Group Faithful, VALS Emulators become RISC Status Seekers, VALS Achievers become RISC Movers, VALS I-Am-Me become RISC Self-Faithful, VALS Experientials become RISC Experience Seekers, and VALS Societally Conscious become RISC Reformers. The RISC typology does not recognize Integrateds, probably due to their small number in RISC member countries and adds a further category called Sociables who are defined as people who do not fall into any specific group, but rather move from one group to another.

The RISC typology adds little to the VALS typology and because it is so similar has the same inherent strengths and weaknesses. It is very hard to consider the RISC typology as a serious effort to define a new typology. RISC is probably more easily thought of as having been developed for proprietary reasons rather than developmental reasons.

The Sociomonitor Typology

MRA has pioneered life-style research in South Africa. In fact, the first Sociomonitor (SCM) was completed in 1976, a full two years before VALS or RISC became public surveys. (It should be noted that SRI was working and publishing data as early as 1960, much of it related to what became VALS.)[50]

Sociomonitor borrows extensively from RISC and, hence, from VALS. It accepts the same basic definition, or as has been noted, lack of a basic definition of values. It acknowledges Maslow and Riesman as sources and borrows as well, or as badly, as VALS and RISC.[51]

While SCM borrows from these works, it takes a far more original approach than RISC. Like VALS, SCM is based upon the belief that people can be typed but SCM is essentially a trait-factor approach.

A number of criticisms are immediately evident. As noted earlier, trait psychologists probably never intended their research tools to be used for consumer research and fundamental errors in borrowing have resulted in poor predictive ability. The trait approach is inflexible and of little use to consumer behaviourists. One advantage is that SCM's excessive reliance on the *trait* approach avoids the mistake of proposing a hierarchy of classifications.

SCM's methodology is confidential, but the 1986 sample size was 2174 homes which yielded approximately 2000 respondents.[52] Sample design was an area-stratified probability sample of 1652 homes boosted disproportionately by 522 homes in key urban areas like East London and Port Elizabeth so that media data from these areas would be useful. Three calls were made before substitution occurred and a Parker Rollerball pen was given to each respondent to reward them for their time. Field work was conducted between March and May 1986 and is conducted every two years.

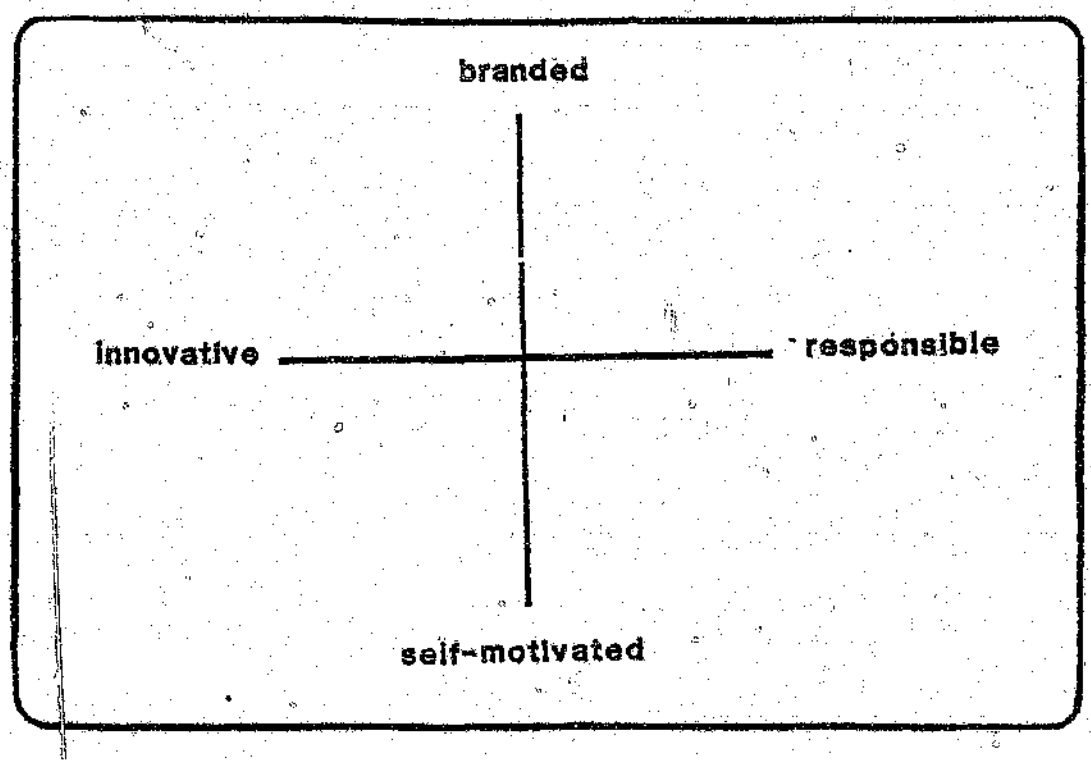


Figure 16. The Sociomonitor Value Groups

Source: The Sociomonitor Users Handbook: Whites, 1986/7, Market Research Africa, Johannesburg, October, 1986

As such, SCM proposes four main value groups; namely, Branded, Responsible, Self-Motivated, and Innovative. It appears obvious that these groups can be thought of as being ordered along two axes, one based upon consumption and the other based upon the desire for change.

SCM basically describes the groups as follows:

Responsibles (28%) - conservative, traditionalists, motivated by essentially protestant values and a desire for security and stability.

Branded (27%)- conservative but materialistic, motivated by status, esteem and conspicuous consumption.

Innovatives (23%)- hold radical views and believe in taking risks and living for now. They tend to hold more liberal views and to be pro-reform.

Self-Motivateds (24%) - tend to be inward looking and concerned with self expression and fulfillment

Source: Sociomonitor Handbook, Whites, 1988/7, p.2

SCM reports that these original four groups proved to be "too broad" for use by their clients. So these four groups were broken down into 10 groupings referred to as "marketing segments."

The use of the term "marketing segments" may be confusing in this case and should not be confused with market segments. While the ten types of people proposed by the typology may indeed represent distinct and useful segments for some products, they will not represent a valid segment for a product unless product usage differs between the various types of people for the specific product being analyzed, as was seen in Chapter One.

This being stated, the term "marketing segments" will be used to remain consistent with Sociomonitor's use of the term.

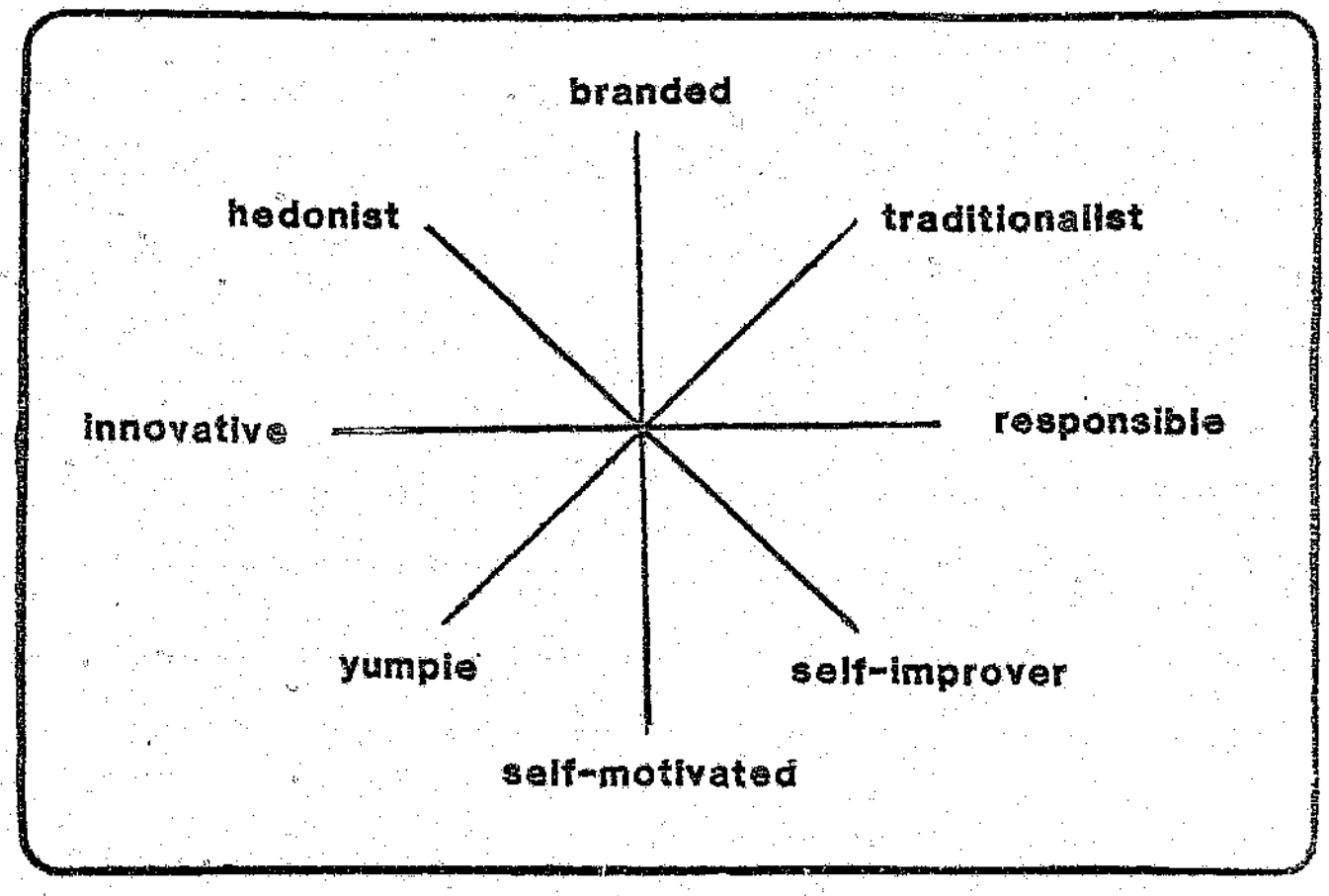


Figure 11: The Sociomonitor Marketing Segments

Source: The Sociomonitor Users Handbook: Whites, 1986/7, Market Research Africa, Johannesburg, October, 1986

SCM describes the ten marketing segments as follows:

Responsible (11%) - Our traditional South African group. Patriotic, nostalgic with a strong concern for planning for a secure future. Very reluctant to experiment, they tend to stick to tried and trusted routes rather than risk disapproval of family, friends and neighbours. Their creativity will have a strong family approval/economy bias.

Traditionals (13%) - The most conservative and threatened segment. Increasingly looking to the past and feeling that their materialistic lifestyle and status is threatened, return to their more protestant and authoritarian roots. They tend to be very chauvinistic in their desire for traditional roles for women and for members of other race groups.

Branded (12%) - Conspicuous consumers who are driven by need for status as expressed via more, better and the latest goods or services. Their desires are thwarted by income restrictions leading to the use of credit. They are worried about the future and tend to see other race groups as scapegoats (and competitors) and as contributing to their declining standard of living.

Hedonists (8%) - Place high emphasis on possessions and image. They tend to be young and bent on living life to the hilt without considering the future. They have no commitments and no responsibilities. They tend to be aggressive, anti-authority and to seek novelty, excitement, sensation, and pleasure in their lives.

Innovative (13%) - Retained free thinking liberal and progressive values of the 1960's although they are well into their thirties. They are clearly successful and have a clear idea of where they are going - they value a meaningful job which allows them autonomy as well as the opportunity to achieve their goals. In keeping with this is their tendency to dispense with formality and to by-pass traditional bureaucratic structures.

Yumpie (7%) - Want to change things - particularly roles of women and of members of other racial groups. Uncomfortable consumers - they ask questions and expect quality and understanding of their needs. Aesthetics are of great importance. Their lifestyle is informal, relaxed and self-indulgent with a strongly integrated approach to work, health and looking and feeling good. Convenience is a key factor.

Self-Motivated (13%) - Very secure and settled group whose life revolves around themselves and their families. They are very appearance/taste/aesthetically oriented. In personal terms this translates into an interest in health, fitness, diet and looking and feeling good.

Self-Improvers (8%) - Whilst clearly rooted in the Responsible group they display a greater tolerance and a rejection of over materialism. Likely to be capable, intelligent women with time on their hands to develop new hobbies and interests. A strongly creative and cultural bias emerges as does a greater interest in personal fitness and keeping attractive.

Transitional (7%) - Appear to be in the transition phase - pulled by status and materialism on the one hand and the more subtle intrinsic and self-expression linked status on the other.



Non-Conformist (8%) - They believe things are not as good as they used to be. This applies to products and services which they believe have deteriorated hence their preference for tried and trusted products and their reluctance to experiment. They tend to live very much in the present - having little faith in the future. They clearly resent big bureaucratic structures and prefer a more informal approach in their c tives.

Source: **Sociomonitor Users Handbook, Whites, 1985/7**, pgs. 4-5 and 161-254

Sociomonitor's Strengths

SCM provides it's clients with highly descriptive information for each marketing segment that is every bit as rich as that provided by VALS. This information is generally related to demographics, life-style, key concerns, responses to SCM trends, SCM defined values, leisure, and media habits.[53]

The SCM typology has been widely used. SCM's list of clients includes most major banks, advertising agencies, magazine publishers, alcoholic beverage producers, motor car manufacturers and others.

Earlier discussion has enumerated the weaknesses attached to typologies in great detail and the SCM typology suffers from these same weaknesses. But SCM's far greatest strength may not related to the SCM typology.

SCM monitors a wide range of social trends and these trends form the basis of the value groups and marketing segments. Simply put, various questions are related to trends. Answers to the fundamental questions are weighted to compute an index. The index is weighted for each trend against hypothetical maximum scores and an index of relative trend strength is computed. A number of criticisms could be directed at this complicated analysis techniques and the obvious underlying assumptions regarding the data. However, SCM do not report regarding data assumptions or why they don't simply standardize the data given the assumptions they are making.

One advantage of the index is that it is does generate an indicator which is probably sensitive to movements in the strength of a trend. Quartiles based upon responder's are also compared:

> "By examining the quartiles in terms of scores ... we find that on a trend like National Identity in 1984 54% of our sample (1084 people) fell into the top quartile in terms of scores. However, only 0.8% or 12 people fell into the top quartile for an 'unpopular' trend like Rejection of Authority."[54]

Using quartiles based upon respondents, respondents within the top 25% are called "trend leaders", the middle 50% are called "fence sitters", and the bottom 25% are called trend "laggards."[56] SCM measure quartiles based upon respondents so that the numerical quantities of people necessary to achieve a normal distribution is always present in a sub-category, such as the trend leaders in Rejection of Authority. In essence, this allows SCM users to identify the real strength of each trend and, within the context of a trend, to identify "sufficient numbers of trend leaders to provide an adequate base for analysis."[58] Of course, there is also the danger of assigning too much importance to a weak trend if one looks at trend leadership alone and the fact that unequal variances and normal distributions may not exist anyway, but this does not appear to be a concern to SCM.

Trends are further analyzed using R-mode factor analysis to investigate "the relatively few dimensions underlying the trends and accounting for the correlations between them." SCM reports that although three to eight factors are "studied for their marketing consistency," past surveys have shown four dimensions to be most descriptive. No explanation is given regarding what methodolgy was used to validate this assertion.[57]

The trends are analyzed using Q-mode factor analysis which produces four "value groups" (again; as defined by trends not values) which correspond to the four factors of the R-mode factor analysis and each respondent is scored on all four value groups.

> "From these scores, an allocation is then made of each respondent to the highest loading value group, and from this allocation (sic), the trend profiles are checked for their correspondence to the R-mode factors, and the structure of the value groups as regards demographic variables determined."[58]

Thus are the value groups and marketing segments produced.

Seen as a trend and life-style instrument, SCM would probably be useful for a wide range of uses. Because of it's wide measurement of trends and it's long-standing use, it is richly descriptive of the current strength and the direction of social trends. Based upon this it is useful and richly descriptive.

Sociomonitor Weaknesses

A number of serious theoretical shortcomings seriously influence how SCM should be used. First, all of the criticisms levelled at typologies apply to SCM. In addition, SCM suffers from the lack of a true values concept and exhibits serious errors in terms of the data analysis techniques used to produce the SCM typology. SCM is simply not measuring personal values as defined by most consumer researchers and there is no empirical evidence to suggest that the SCM typology is predictive of brand choice. Despite the theoretical background in which the programme is couched, astrology signs may be as useful for market segmentation in many markets.

SCM may suffer from trying to expand it's uses too widely. Certainly it may be a useful descriptive tool to help humanize and understand diverse South African life-styles, but many articles, already cited, caution against the use of typologies, such as SCM, to segment markets. Q-mode factor analysis is also a very poor choice as is discussed in detail in Chapter 7.

It is doubtful that the answers to questions asked in the **Sociomonitor Handbook**, such as "Is your packaging, creative stance, advertising message (sic) appropriate to and in keeping with the values of your prime prospect?"[69] could be fully answered using SCM. However, this may be the impression given. Other uses, which are encouraged, such as measuring the values of front line employees and comparing them to the market they serve, suffer in a similar way. This is especially true considering the true lack of a value concept in the SCM Typology.

However, despite these serious and troubling criticisms, Market Research Africa has produced a product which may be extremely useful as a descriptive tool for social trends, as long as the marketer understands the limitations of the programme.

While Market Research Africa have pioneered the study of South African life-styles and social trends, it is sad that they have been unable to overcome the racial bias of their programme and unite the Black and White SCM reports into one report.

Middle Range Theories of Values and Consumer Behaviour

Life-style typologies represent useful descriptive tools which can be very useful when used properly. They have enjoyed their greatest popularity during the 1980's and will probably continue to grow in popularity during at least the short-term future.[60]

But, as has been seen, the most popular values and life-style typologies do not really analyze values and, as has also been seen, values are the best descriptors of consumer behaviour.

A number of middle-range theorists have attempted to investigate the role of values in consumer behaviour. Their concepts have proved useful and powerful. Importantly, their work is freely available in the public domain, making it freely available to anyone who wishes to use it, and it relates more closely to consumer behaviour than life-style typologies.[61]

Most middle-range values theorists have based their work on the work of Milton Rokeach, who has had the greatest effect on consumer research relating to values.[62] Some of these theorists have tried to test the relation between values and consumer behaviour using the **Rokeach Value Survey**. Others have tried to simplify or improve upon Rokeach's work. Yet others have tried to expand upon Rokeach's work.

Indeed, in 1973, Rokeach reported that the **Rokeach Value Survey** could differentiate between the buyers of Chevrolet, Ford, and Plymouth motor cars in the same price range and to differentiate between laundry detergent brand users, although the levels of significance and statistical techniques used were not reported.[63]

Early work in assessing the role of values in the consumer behaviour process was most strongly influenced by the desire to understand the role of culture in consumer behaviour.

In an early study of international culture and it's effect on marketing strategy, Dunn investigated the apparent resurgence of national identity in Western Europe in a 1976 journal article. Dunn asked executives to rate 194 environmental variables which might be useful for formulating advertising strategy. It is interesting that values were not among the 31 variables deemed to be useful by the executives, although it's not clear if they were tested.[64]

Recent articles still appear concerning international cultural differences and marketing strategy, typical of this would be Mueller's article on Japanese and American advertising differences. Like most recent articles of this type, Mueller considers values to be critical to the definition of culture.[65]

However, as late as 1981, Kaynak and Mitchell, discussing Canadian, British, and Turkish communications practices, noted the need for understanding culture better in 1981 without specifically mentioning the need to study values.[66] Likewise, during the same year, Hornik and Rubinow proposed the use of the opinions of small groups local experts to understand cross-cultural differences; but do not mention specifically studying values.[67]

It will be remembered that although the original 1968 Engel, Kollat, Blackwell Model demonstrated the central and active role of values in the consumer behaviour process, little research work was done to validate the relationship until nearly a decade later. Once the major consumer behaviour models had been proposed, there was sufficient emphasis to eclectically borrow from other disciplines to test the relationships posited by each model.

Walter A.Henry

Henry was an early theorist who based his work on the earlier work of anthropologist Clyde Kluckhohn[68]. Kluckhohn was also acknowledged by Rokeach as having had a major influence on his work.[69]

In a 1976 article detailing his research, Henry reports that he set himself two objectives. First, to test "...the assumption that specific culture dimensions are useful predictors of consumer behaviour..." and second to test "...the relative importance of these dimensions with respect to other standard demographic correlates of automobile ownership."[70] To do this he used the following value orientation matrix developed by Florence Kluckhohn and Strodtbeck:[71]

As can be seen, Kluckhohn and Strodtbeck proposed four main value dimensions, each of which could be further stratified into three alternatives. The major differentiating device underlying the alternative dimensions is whether the individual takes control of his life or simply takes events as they come.[72]

Value Dimension	Alternatives		
Man's Relation to Nature	Subjugated by	In Harmony with	Mastery over
Time Dimension	Past	Present	Future
Personal Activity	Being	Being-in-Becoming	Doing
Man's Relations to Others	Lineal	Collateral	Individualistic

Source: Henry, W.A., "Cultural Values Do Correlate With Consumer Behavior", in Journal of Marketing Research, Vol.13, May, 1976, pg.122

Figure 11: Kluckhohn and Strodtbeck's Value Dimensions

Henry sadly made some basic assumptions which were later disproved:

> "...values could not predict brand choice within product categories, but the selection between a full size and a subcompact auto could be strongly correlated with strongly held specific values."[73]

This assumption, that brand choice is not related to values, is not empirically, but rather, is intuitively substantiated.

Henry's study showed that there was empirical support for the theory that culture, and therefore values, was an underlying determinant of consumer behaviour. He also demonstrated that the personal value orientations could be used to segment the automobile market. His use of the Automatic Interaction Detector (AID), a statistical technique developed at the University of Michigan, showed significant interaction between the number of automobiles owned or operated by a family and their personal value orientations."[74] However, AID is a parametric technique and it is unclear whether Henry violated the assumptions of the tool. AID is discussed in greater detail in Chapter 7.

Henry most recently published an article showing that value differentiations are most probably responsible for the vastly different development of the Japanese and American retail food store industries.[75]

Vinson, Scott, and Lamont's Value-Attitude Model

Vinson, Scott, and Lamont were among the first to publish an article which recognized the work of Milton Rokeach. In a meaningful attempt to build upon Rokeach's paradigm, they proposed a "Value-Attitude System" model and tested the link between the components they proposed and consumer behaviour, utilizing research of a small convenience sample of undergraduate marketing majors

> "...47 students from a western university well known for the liberal attitudes and viewpoints of its student body and faculty...(and) 80 subjects...from a conservative southern university known for its more traditional approach to education."[76]

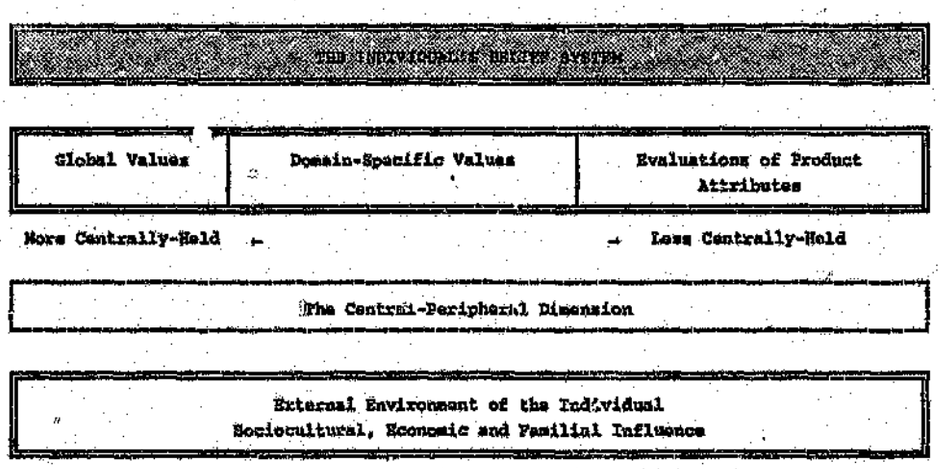


Figure 13: The Vinson, Scott and Lamont Model of the Consumer Belief System
Source: Vinson, D.E., Scott, J.E. and Lamont, L.M., **"The Role of Personal Values in Marketing and Consumer Behavior"**, Journal of Marketing, No.44, April, 1977, pp.46-7

The model includes the following definitions:[77]

Global Values - "enduring beliefs concerning desired states of existence or modes of behaviour - dozens"

Domain-Specific Values - "beliefs relevant to economic, social, religious and other activities - hundreds"

Evaluations of Product Attributes - "evaluative beliefs about product attributes (e.g. beliefs used in expectancy-value research) - thousands"

Global values are actually defined as consisting of Rokeach's terminal and instrumental values, according to Vinson, Scott, and Lamont. As such, terminal and

instrumental values are seen to exist in a dynamic environment whereby they influence each other and the domain-specific values:

> "Note that the conceptual model...suggests that people have many thousands of evaluative beliefs, hundreds of domain-specific values, but only dozens of global values. Those beliefs and values do not exist as sharply separated and unconnected elements; they coexist in an interconnected hierarchical structure with the more durable and closely held global values exerting influence on each other as well as affecting the more peripherally located domain specific values. These domain-specific values, in turn, are inter-connected along the central-peripheral dimension and further influence the individual's evaluative beliefs associated with the attributes of products or brands."[78]

Vinson, Scott, and Lamont suggest that value acquisition is "a socio-cultural process and that differential value orientations will lead to variations in preferences for products and brands."[79] To test this suggestion, they measured the global values of respondents using the **Rokeach Value Survey** (which utilized a 7 point Likert scale to measure values), while also measuring appropriate domain-specific values, automobile attributes, the appeal of 10 consumer products and services, and attitudes toward 15 current social issues. The issue of ranking or rating Rokeach's values is addressed in Chapter 7.

While the small size of the convenience sample and the way it was drawn are disappointing, Vinson, Scott, and Lamont were able to demonstrate significant differences between the two groups within every dimension surveyed:

> "The results indicated that the subjects were significantly different with respect to their basic value orientations and that each of the three constructs representing the value-attitude system were logically structured. That is, global values, consumption related values and the evaluation of product attributes were consistent with preference for the consumer products or services as well as for the perceived importance of the selected social issues."[80]

The Vinson, Scott, and Lamont model of the Value-Attitude System is a pioneering concept. It was the first model to utilize the work of Rokeach, the first to propose testing domain-specific values as part of a hierarchical value system and to demonstrate that Rokeachian constructs could be used to represent a logically structured consumer value system. As they show, their work has potential impact in market analysis and segmentation, product planning, promotional strategy, and public policy and societal relations. This model, and another by Lessig,[81] have not received the attention they deserve.

Alfred S. Boote also reported validation of a technique using domain-specific values (although he called them instrumental values) in a 1981 article.[82]

Munson and McIntyre,[83] Vinson, Munson, and Nakanishi,[84] Reynolds and Jolly,[85] and others have also tested the **Rokeach Value Survey** and validated it's use for market segmentation.

In similar studies, Pitts and Woodside were able to demonstrate that the **Rokeach Value Survey** could differentiate between 6 classes of automobile purchasers and 5 classes of underarm deodorant users and Becker and Connor were able to link personal values to store-choice behaviour.[86] Most recently, Valencia demonstrated the cross-cultural use of the **Rokeach Value Survey** and determined important differences between White and Hispanic Americans.[87]

Laddering Theory and the Means-End Chain Model

The qualitative research techniques of Jonathan Gutman and Thomas J. Reynolds have also made a major contribution to values research.[88]

Gutman and Reynold's research is based upon the **Rokeach Value Survey** and Kelly's Repertory Grid, while acknowledging the Vinson, Scott, Lamont Value-Attitude System Model, Howard's Means-Ends Chain Model, and the Grey Benefit Chain.[89]

In essence:

> "...the means-end chain can be conceived of as a series of connected matrices...a Values-by-Consequences matrix, a Consequence-by-Situation matrix, a Relevant Consequences-by-Grouping Distinctions matrix, and a Relevant Consequences-by-Product matrix."[90]

The methodology requires a respondent to state why two products of three are the same and why the other differs, and then, after sufficient probing, a laddering procedure is used to generate values-level distinctions. This ladder is discussed with the respondent and further probing attempts to discover the respondent's preference for different 'legs' of the ladder network.

Gutman reports that respondents quite frequently reach a level where they are talking about terminal values, like those indicated by Rokeach.[91]

The Means-End Chain Model acknowledges the effects of situational influences and of three types of distinctions that consumers use when categorizing products. Grouping level distinctions follow "...Howard's notion of semantic structure or Lunn's organization of ways of satisfying consumer needs by product types, product variants and brands." Consequence-level distinctions are those that correlate product benefits with personal values, like those of Rokeach. Distinguishing distinctions are those that lead to preferences between brands held in the "evoked set" of brands which are considered as acceptable for purchase.[32]

The Means-End Chain Model

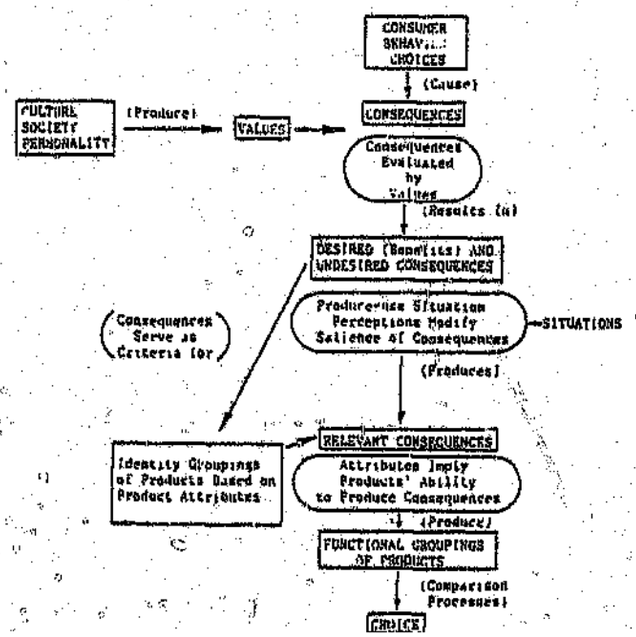


Figure 12: The Means-End Chain Model

Source: Gutman, J., "A Means-End Chain Model Based on Consumer Categorization Processes", Journal of Marketing, 46, Spring, 1982, pp.60-72

The Means-End Chain proposes that consumer categorization follows certain levels of abstraction.

"Put simply, 'levels' refer to a way of categorizing the contents of association about a product class which extend from physical aspects of a product to personal values. To amplify, one way to operationalize 'levels' is to think in terms of subcategories of attributes, consequences, and values..."[403]

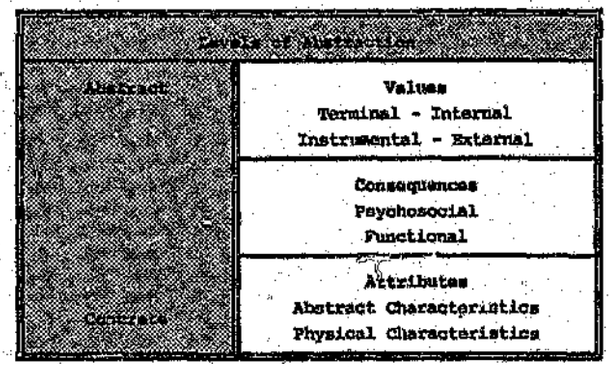


Figure 13: Levels of Abstraction

Source: Reynolds, T.J. and Gutman, J., "Advertising is Image Management", in Journal of Advertising Research, Vol.24, No.1, Feb/Mar, 1984, pg.29

Laddering has been used for a number of different markets such as breakfast cereal, toothpaste, mouthwash, chewing gum, snack chips, restaurants, beer, wine coolers, airlines, hot and cold beverages, and soft drinks.

The major benefit of laddering is:

"...the technique's usefulness in developing an understanding of how consumers translate the attributes of products into meaningful associations with respect to self-defining attitudes and values."[404] (Laddering also appears) "...to bridge the gap between qualitative approaches that can't be quantified and the excessively quantitative models that lack depth of meaning."[405]

List of Values (LOV)

Another approach that has received some attention is the **List of Values** approach developed at the University of Michigan Survey Research Center. LOV is based upon the work of Feather, Maslow, and Rokeach.[96]

In terms of predictive ability, there are significant indications that LOV represents an advance on VALS, but there are also indications that LOV suffers many serious drawbacks due to its data analysis techniques, despite it's more sound fundamental orientation to values.

LOV presents respondents with a list of nine values:

> "self-respect, security, warm relationships with others, sense of accomplishment, self-fulfillment, sense of belonging, being well respected, fun and enjoyment in life, and excitement. These values can be used to classify people on Maslow's hierarchy and they relate more closely to the values of life's major roles (i.e. marriage, parenting, work, leisure, daily consumption) than do values in the Rokeach Value Survey."[97]

Like VALS, LOV recognizes the distinction between internal and external locus of control. LOV also notes the importance of people in value fulfillment.[98] These are strengths of the approach.

However, five basic weaknesses appear. First, LOV is rooted in Maslow's Hierarchy of Needs. Second, LOV is guilty of perhaps attempting to over-simplify. Third, the documented distinction between Terminal and Instrumental Values is not recognized. Fourth, LOV ignores the continuous, ordinal nature of values in its rating procedure. Fifth, LOV appears to not adjust α levels for multiple testing, which indicates that many of the significant relationships reported by Kahle and his associates may not be significant after all.[99] Nonetheless, LOV has made a contribution to advancing the understanding of values and consumer behaviour.

Probably the best-known contribution was demonstrating that LOV was more predictive of consumer behaviour than VALS. As was earlier discussed in detail, this research helped validate the strength of the values approach when compared to a life-styles and social trends approach to market segmentation.

LOV also was used to demonstrate that Joel Garreau's **Nine Nations of North America**,[100] which proposed a geographic basis for segmenting the North American market (and which was described in detail earlier in this chapter), was invalid.[101] It has also been used to document value changes in the USA during the 80's.[102]

LOV has made an impact on values research and as Richard Pollay said: "Values are desirable, by all definitions."[103]

Summary

Values have been operationalized by consumer researchers in a number of ways. Life-style typologies, such as VALS and SCM, and other middle-range theory developments have received much interest in recent years.

Life-style typologies offer a number of key strengths to marketers. They are strongly descriptive of social trends and life-styles, they add a human dimension to consumer groups and make them easier to understand. These programmes also measure a wide number of opinions, beliefs, activities and social-trends which may be of interest to many marketers.

However, despite claims to the contrary, life-style typologies are not necessarily good tools for segmenting markets, nor are they good predictors of consumer behaviour. Because of the lure of their descriptive detail, it's easy to assume that the life-style typologies can be used as much more than descriptive tools, and this is a danger to be avoided.

Many consumer researchers have linked personal values to consumer behaviour. Quantitative techniques have been concerned with establishing the ability of personal value orientations to predict brand choice. Qualitative techniques have been most concerned with establishing the links between attributes, consequences and personal values. Most quantitative researchers have used the **Rokeach Value Survey** and Vinson, Scott and Lamont's Value-Attitude System Model is probably the most elegant result of this type of research. Gutman and Reynold's Means-Ends Chain Model and Laddering Theory probably represents the highest accomplishment of qualitative research in the field.

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CHAPTER 6 – CROSS-CULTURAL ISSUES

The literature reviewed in previous chapters highlights wide agreement regarding the nature of personal values. Personal values are not felt absolutely, but rather are felt in terms of their relative importance to each other. Personal values are also capable of being felt in infinitely different degrees of importance. This suggests that the underlying nature of the values construct is continuous and ordinal and that the **Rokeach Value Survey** is isomorphic to the construct. However, not much consumer research has been done regarding personal values or regarding the use of the **Rokeach Value Survey** in a cross-cultural environment.

South African consumer research takes place in a truly multi-cultural environment. A wide number of racial, tribal, religious and language groups comprise South African society and most of these groups have distinctive cultural heritages.

Culture is widely documented to impact on the way consumers comprehend and perceive stimuli.[1] Even South African primary school children of different cultures have been shown to have vastly different perceptions of simple scenes, such as stick men and scenes which depict motion.[2]

Cross-cultural research environments demand careful attention to research designs to avoid the very special biases that can result if appropriate cross-cultural research techniques are not used. This chapter reviews how cross-cultural issues influence research design and implementation. Chapter 7 includes an in-depth review of the data analyses employed in this study.

Hypotheses

The literature review suggests a number of hypotheses may be formulated based upon the findings of other researchers. These might be summarized as follows:

Hypothesis 1: Urban South Africans with different individual characteristics or who are subject to different social and situational influences place different levels of relative importance on personal values. These characteristics and influences include race, home language, age, education, father's education, occupation, household income, marital status, employment status or residential area.

Hypothesis 2: Urban South Africans generally place similar relative importance on the majority of personal values, regardless of individual characteristics or social and situational influences.

Hypothesis 3: The relative difference placed upon personal values by South Africans of different races is more similar than the relative importance placed upon personal values by South Africans and Americans of the same race.

Hypothesis 4: Differences in the relative importance of personal values are more fundamental determinants of brand choice and market segment membership than individual characteristics or social and situational influences.

Hypothesis 5: Consumers who purchase or intend to purchase different brands in a product class can be meaningfully segmented based upon value system differences.

Hypothesis 6: There are more significant associations between personal values and consumer behaviour in product classes which require extended problem solving.

Hypothesis 7: Consumers can meaningfully associate personal values with desirable brand images.

Hypothesis 8: There are more significant associations between personal values and brand image perceptions in product categories which require extensive problem solving behaviour.

Hypothesis 9: The same relatively small number of personal values will be associated with brand images in a product class by most people regardless of cultural differences.

Hypothesis 10: The personal values which consumers associate with an ideal brand or a desirable existing brand will generally be relatively more important to them than to others.

Hypothesis 11: Brand images are at least partially composed of personal value associations.

Hypothesis 12: Differences in the relative importance placed upon terminal values correlate only to product class use and differences in the relative importance placed upon instrumental values correlate only to differences in brand choice.

These hypotheses represent a synthesis of the contributions of other researchers reviewed in the previous chapters. While the following table is not exhaustive because of the underlying psychological, sociological and anthropological contributions which underlie the noted sources; it does indicate the major theoretical sources which lead to the formulation of each hypothesis:

Table 1: Major Theoretical Sources of Hypotheses

Hypothesis	Major Theoretical Sources
Hypothesis 1	Rokeach / Engel, Blackwell and Miniard / VALS / Vinson, Scott and Lamont / LOV
Hypothesis 2	Rokeach / Engel, Blackwell and Miniard / VALS / Vinson, Scott and Lamont / LOV
Hypothesis 3	Rokeach / Engel, Blackwell and Miniard
Hypothesis 4	Gutman and Reynolds / Vinson, Scott and Lamont / LOV and other middle range theories
Hypothesis 5	Vinson, Scott and Lamont / LOV / Engel, Blackwell and Miniard
Hypothesis 6	Engel, Blackwell and Miniard
Hypothesis 7	Gutman and Reynolds / Rokeach
Hypothesis 8	Engel, Blackwell and Miniard / Gutman and Reynolds
Hypothesis 9	Rokeach
Hypothesis 10	Lewin / Engel, Blackwell and Miniard / all cognitive consistency or balance theories
Hypothesis 11	Rokeach / all middle range theorists
Hypothesis 12	Howard

Research Design

Churchill defines three main types of research design:[3] exploratory research, descriptive research and causal research. Exploratory research is mainly concerned with developing a better understanding of research problems. It does not necessarily have to be formally or quantitatively structured.

Causal designs are highly formalized studies that utilize experimental manipulation in an attempt to establish the exact causal relationships among variables. Green and Tull suggest that anyone can visualize the laboratory researcher "scientifically" controlling one variable at a time in an experiment to determine appropriate causation factors.[4] Unfortunately, the idea that experimental designs can only yield pure and rational answers is a fallacy. In truth, as Green and Tull point out, there are many problems with experimental designs, such as the effects of artificial environment on respondent behaviour, which suggest that the right answers will not often be discovered. As a result, field experimentation is receiving more attention from marketing researchers.

Relatively little is known about personal values and their link to other consumer behaviour concepts, so descriptive research is needed. Descriptive research is used to describe the characteristics of groups, to estimate the proportion of people in a specified group who behave in a certain way or to make specific predictions about a group of people. The primary objective of this research project is to describe the link between South African personal values, consumer behaviour and brand image perceptions using the **Rokeach Value Survey**.

Descriptive studies require formal design and structure to accomplish the goal of describing the population.[5] Descriptive studies can take a number of forms but the survey, which is also called the statistical method, is the form most often used in marketing research.

As DeFleur and Ball-Rokeach point out,[6] quantitative studies of populations have been conducted throughout history, but the first sociological attempt to link classes of people with behaviour was Durkheim's classic study of suicide in 1897. Durkheim's approach evolved into early sample survey work in the 1920s which differs little from the bulk of the research that marketers do today.

As in this study, the types of information most often collected in surveys include the respondent's individual characteristics such as personality, attitudes, and personal values as well as the social and situational influences that the marketer believes may influence brand choice.[7]

While descriptive research may encompass a number of research techniques, reliability and validity can be enhanced no matter which technique is used. Wimmer and Dominick suggest that four conditions must characterize research designs if they are to produce reliable and valid results.[8]

First, research must be conducted in a naturalistic setting as close to normally encountered environmental conditions as possible. This helps enable the study to be externally valid. In the context of this study, this suggests an in-home or in-store personal interview.

Second, intervening or spurious independent/dependent variable relationships must be ruled out so that clear cause-and-effect relationships might be established. Previous discussion suggests that brand images are composed of personal values but also attitudes, beliefs, opinions, evaluations and many other things. This makes it difficult, if not impossible, to isolate these variable relationships. On the other hand, if people are aware of their values and if values underlie attitudes and all other aspects of the belief system, then strict isolation may not be necessary.

Third, unobtrusive and valid measurements should be used so that respondents can not identify the purpose of the study and therefore respond in a way consistent with their perceptions of what the researcher would like them to say but inconsistent with their true beliefs.

There is little doubt that an in-home interview is at least somewhat obtrusive, especially if the interviewer is not well-trained. This is one reason a professional research company was chosen to do the fieldwork for the study.

There was also a fear that the original instruction set assumed a degree of independent free thought that could make some South African respondents uncomfortable. The professional administrators of the questionnaire shared this belief and indicated they felt that the poorly-educated and those without a good grasp of English or Afrikaans were

most likely to be affected despite the instrument's proven use in America and other countries where these differences are far less pronounced than in South Africa.

This is one reason it was decided to modify the instruction set using context and redundancy so that respondents realized that the interviewer was only interested in their true feelings regardless of any linguistic or educational differences which might exist.

Fourth, the research design must be realistic. Respondent time, expense and the proper training of interviewers must be considered. For this reason a well-respected and competent research company, Research Surveys (Pty) Ltd was chosen to handle the field work.

Questionnaire design

After standard filters, the study measured each respondent's values using the value statements and defining phrases from the **Rokeach Value Survey** Form D.[9] The **Rokeach Value Survey** is a copyrighted research document and the rights for its use were purchased from the publishers, Consulting Psychologists Press. Modifications included significant changes to the instruction set and the presentation of the value statements on cards rather than sticky labels and in random order rather than alphabetical order. This was followed by a battery of questions for eight product classes in which the respondent identified the brand either purchased most often or most likely to be purchased, the terminal and instrumental value most like the brand chosen and the terminal and instrumental value most like an ideal conceptualized brand.

Standard demographic and information was recorded using culturally-appropriate classifications modelled closely on the Stanford Research Institute's **Values and Lifestyles Program** and the questionnaire was piloted to twenty respondents by the administrators prior to fielding.[10]

Brislin, Lonner and Thorndike suggest that questionnaire design is of utmost importance to cross-cultural research for a number of reasons.[11] Probably the most important reason for proper questionnaire design is that translation problems and cultural mistakes will always be plausible rival hypotheses unless the researcher can empirically prove otherwise.

Cultural variables can be best understood in terms of "Emic" and "Etic" distinctions. These terms are borrowed from linguistic terminology. Phon*Emic* notation describes sounds that

are meaningful in a given culture and phon*Etic* notation refers to a general system which describes all sounds in all languages. The "Emic" part of research refers to understanding a culture in its own terms. The "Etic" part of research refers to general theory building.[12]

Berry suggests that research design be revised so that[13]:

> Only functionally equivalent behaviour patterns are studied between cultures.
>
> The imposed "Etic" derived by using descriptive categories from past research be overcome by the use of "Emic" descriptions.
>
> Shared commonalities of description be used to derive "Etic" and this derived "Etic" be used to form the conceptual basis for cross-cultural research tools.

It will be seen that this process was followed closely in establishing this research design. Essentially, "Emic" and "Etic" distinctions are strongly linked to meaning. The issue of the meaning of the tested constructs, such as the value statements and defining phrases used in the research tool, are extremely important and this question will be addressed in this chapter.

Other helpful guidelines were also followed. The questionnaire was first designed in English following (as closely as possible) these ten rules developed by Brislin, Lonner and Thorndike for writing translatable English[14]:

> Use short, simple sentences of less than 16 words.
>
> Employ the active rather than the passive voice.
>
> Repeat nouns instead of using pronouns.
>
> Avoid metaphors and colloquialisms. Such phrases are least likely to have equivalents in the target language.
>
> Avoid the subjective mode, for example, verb forms with could or would.
>
> Avoid adverbs and prepositions telling "where" or "when" (e.g., frequent, beyond, upper).
>
> Avoid possessive forms where possible.

Use specific rather than general terms (e.g., the specific animal, such as cows, chickens, pigs; rather than the general term "livestock").

Avoid words which indicate vagueness regarding some event or thing (e.g. probably and frequently).

Avoid sentences with two different verbs if the verbs suggest different actions.

Redundancy and Context

Redundancy and context are two important tools which are used in cross-cultural research to enhance respondent comprehension of questions.[15]

Redundancy was employed in the instruction set and questions. This increased the "wordiness" of the survey but the pilot study showed a 100% understanding of the objective of the communication (ranking values in the order of importance to you). Redundancy was used throughout the survey. Product class words (i.e. shampoo, banks and etc.) were repeated to ensure that respondents did not forget the product class to which they were associating values. The same value lists were used in every product class.

Context was employed in the wording of questions in a number of ways to encourage the respondent to share true feelings and to go slowly, think carefully and put the values in the order most important to the respondent - not the interviewer.

In essence, Section A of the questionnaire was a simple repetition of past research using the set of values developed by Rokeach for the **Rokeach Value Survey** (Form D).[16] The modified instruction set was generally just an expansion of Rokeach's original instruction set. The use of cards instead of gummed labels was designed to communicate the same lack of permanence that Rokeach found gummed labels provided in American culture. Presenting the cards in random order was done to preclude any order effects that might occur as a special result of an unknown South African cultural peculiarity. The slight changes were thought to be more appropriate in South Africa's multi-cultural environment. Form D was chosen because Rokeach reported greater reliability with this version of the survey.[17] Gummed labels were rejected because it was felt they would imply too high a degree of permanence. These issues are discussed later in this chapter in greater detail.

Redundant phrases and contextual phrases, which were meant to make the questionnaire more easily understood by respondents who did not speak Afrikaans or English as a primary language, are underlined in the following revised instruction set for the **Rokeach Value Survey**, which was used in the study:

Section A Instruction Set

"There are 18 values listed on the cards in front of you arranged at random. Your task is to arrange them in order of importance to YOU, as guiding principles in YOUR LIFE. Each value is printed on a card so you can freely arrange them and rearrange them until you are happy they are in the order you wish them to be.

Study the list carefully and pick out the one value which is most important to you. Place this value here (INDICATE).

Next pick out the value which is second most important to you. Place it below the first. Then do the same for each of the remaining values. The value which is least important to you goes last.

Work slowly and think carefully. If you change your mind, feel free to change your answers. You may rearrange the cards as often as you like. The end result should show how you truly feel.

If you have any questions about what to do, be sure to ask me. Again, take your time and work slowly.

The only thing that is important is that your finished list reflects how you feel and that the values that you feel are most important in your life are at the top of the list. There are no right or wrong answers and this is not a test. Your responses will be held in the strictest confidence.

INTERVIEWER: DO NOT RECORD ANYTHING UNTIL RESPONDENT HAS COMPLETED THE ENTIRE TASK. THEN RECORD ORDER BY WRITING THE NUMBER INDICATING THE RANK POSITION NEXT TO EACH VALUE. NO TWO VALUES CAN BE GIVEN THE SAME RANK I.E. RECORD RANKING FROM 1 - 18.

(The interviewer then presented the 18 terminal values on 6cm x 3cm cards.)

Now, we would like you to do the same with this set of cards. (SHOW SET B).

There are 18 values listed on the cards in front of you arranged at random (SHOW SET B). Your task is to arrange them in order of importance to YOU, as guiding principles in YOUR LIFE.

Please do this exercise in the same way as just completed the one before.

> Work slowly and think carefully. If you change your mind, feel free to change your answers. You may rearrange the cards as often as you like. The end result should show how you truly feel.
>
> If you have any questions about what to do, be sure to ask me. Again, take your time and work slowly.
>
> **INTERVIEWER: FOLLOW SAME INSTRUCTIONS AS Q.4."**

The instruction set may seem tedious due to the amount of repetition and redundancy. However, The administrators reported that interviewers found that a wide number of respondents spontaneously mentioned that they felt that the exercise was "fun" and that they "enjoyed learning about themselves." Rokeach has reported similar findings.[18]

Section B Instruction Set

Section B of the questionnaire asked respondents to identify a brand they purchase most often or would be most likely to purchase and to associate it with one terminal and one instrumental value most like that brand. Similarly, respondents were asked to associate personal values and an ideal brand. Our feeling that the concept of an ideal brand might be a hard one for some respondents to understand lead us to add the phrase "...whether it exists or not."

As was the case with Section A, there were also a number of respondents who spontaneously commented that they enjoyed this section of the questionnaire. Key points were repeated in the instruction set and the intentionally-redundant phrases are again underlined below:

> "In the first section of the interview, you arranged two lists of values in terms of their importance to you and in terms of how they act as guiding principles in your life.
>
> In this section of the questionnaire, you will be able to share how you feel about certain selected products and brands.
>
> What's important is how you feel about the products. There are no right or wrong answers, so take your time and tell me how you feel about these products."

Section B Typical Product Class Questions (from Shampoo)

"8a(i) Here are the names of some popular brands of shampoo. **SHOW CARD A** Would you please tell me which one brand you buy most often for your own use? **SINGLE MENTION.**

8a(ii) If none at 8a(i), **ASK:** If someone were to offer you a bottle of shampoo, which one of these brands would you choose? **SHOW CARD A, SINGLE MENTION.**

8b Thinking now of this brand which value from LIST A would you say is most like....? **(BRAND MENTIONED IN Q.8a(i) OR Q.8a(ii) SINGLE MENTION.)**

8c Now, in the same way, which value from LIST B is most like .....? **(BRAND MENTIONED IN Q.8a(i) OR Q.8a(ii) SINGLE MENTION.)**

8d We can all visualize an ideal product which we would buy if only some company would make it. Which value from LIST A would you say is most like your ideal brand, whether it really exists or not. **SINGLE MENTION.**

8e Now in the same way, which value from LIST B is most like your ideal brand? **SINGLE MENTION."**

It's obvious that context and redundancy was also used extensively in this set of questions to overcome cultural problems and improve general understanding by respondents who spoke neither English or Afrikaans as a primary language.

Discussion with the professional administrators of the questionnaire resulted in some amendments to the questionnaire. The most significant contribution was the wording of question 8a(ii) and the similarly worded questions in the battery for each product class.

The objective of the wording followed in this type of question, such as "If someone were to offer you a bottle..." or "If you were in a vehicle that needed petrol and you had to choose the brand..." is to contextually put respondents without product category experience in a position where they could feel confident about making a brand choice. The wording is projective and doesn't force respondents to simply provide an answer for the sake of providing an answer. Rather, the technique portrays a situation consistent with the respondent's life-style and encourages a realistic response. This technique is not original and has been used in cross-cultural questionnaire for some time.[19]

It is also obvious that respondent lack of experience with product categories does not necessarily imply lack of understanding of brand images. Few can afford to buy a Rolls-Royce motor car but most can associate this brand with quality and success and other values.

Because of budget constraints and because some of Rokeach's value statements do not easily or directly translate into the vernacular, the questionnaire was administered in English and Afrikaans only. Black interviewers explained the value statements in the vernacular if the respondent expressed a lack of understanding or asked for help in reading the values but the administrators reported that this was not a problem.

Translation of the questionnaire was crucial. The Afrikaans translation was coordinated by Nel and colleagues at the University of Pretoria. Nel was chosen because he is both an Afrikaner and a marketing academic.

Changes were made to the original English copy to accommodate a more equivalent translation. Nel and his colleagues then translated and back-translated the questionnaire until they were happy with the quality of the work. The administrators were also consulted as each draft was prepared. Finally, the questions were discussed with Greenacre to ensure that they met the conditions of the original research methodology and test statistics. The questionnaire was then pre-tested by the administrators using 20 respondents. The administrators reported that there were no spontaneous comments regarding the quality of the translation and Afrikaans-speaking respondents indicated that the instructions were easily understood when probed. The questionnaire was then fielded. This procedure meets and exceeds the procedures Brislin, Thorndike and Lonner recommend to ensure equivalent and culturally-appropriate questionnaire design.[20]

Proper translation techniques are only one facet of the process that must be applied during questionnaire design to create an appropriate cross-cultural research instrument. Questions which encourage culture-specific response biases or interviewer-respondent communication problems must also be removed from the questionnaire. Brislin, Lonner and Thorndike have called attention to a number of possible causes of these types of bias[21]:

Rudeness bias: Interviewers can forget that they are interrupting others when they ask questions and this can be perceived as rudeness. The questionnaire employs common courtesy words, such as please and thank you, to help overcome this problem.

"I-can-answer-any question" bias: A humourous segment of the **Candid Camera** television programme featured Americans giving their opinions on the new television series **Space Doctor**. Respondents commented on how well they liked the programme and even about the clothes and hairstyles of the main actors who were a crew on a spaceship. Unfortunately, the programme didn't exist! American respondents have also had definite opinions about fictitious legislation. Allowing respondents to answer "none" to product questions certainly helped reduce the threat of this bias.

Courtesy bias: In many cultures respondents may answer questions in a way which they hope will please the interviewer. To help eliminate this bias, questions were designed so it was obvious that the interviewer would be pleased only if the respondent shared what was important to her.

Sucker bias: In some cultures the interviewer represents great sport and the local people try to deceive him. Interviewers of the same race were used to overcome the possibility of this bias but this behaviour is not part of South African culture and was not really considered a threat.

Hidden Premises bias: Respondents may try to [illegible] the interviewer represents and respond in an appropriate fashion. For instance, as a result of the historic discriminatory housing laws and forced removals, a White interviewer would probably not get a correct answer to a question about how many people live in a township dwelling. In a similar fashion, a White person who places a low value on equality may not accurately reflect this if he is interviewed by a Black man. Interviewers were chosen of the same race as the respondents who they were to interview and were trained by the administrators over a period of years to overcome this kind of bias.

Reticent-Loquacious bias: People from some cultures love to talk and others are very shy. Again, past training of the research company's field force enabled them to overcome this problem when it was encountered. For instance, although the interviews were conducted in English or Afrikaans, they were usually opened in the vernacular to establish rapport with Black respondents.

Social Desirability bias: Respondents may respond to questions in a manner which is calculated to be socially desirable. Rokeach reports that his research and the research of others has adequately demonstrated that response to the **Rokeach Value Survey** is probably not significantly influenced by social desirability.[22]

Status Difference bias: Respondents may also respond in a different way due to the perception that the interviewer has a different social status. For this reason, the administrator's professional field force was ideal because they are trained to overcome this kind of bias.

Racial Difference bias: Respondents may respond differently to interviewers of a different race. As noted previously, the race of interviewer and respondent were matched in this study.

Individual-Group bias: People normally respond differently when in groups than they do when they are interviewed alone. The average urban Black household may contain as many as six to twelve people living in a four-roomed house. This suggests that it is difficult to isolate respondents and hence that this bias was a threat to the validity of the study.

However, as Brislin, Thorndike and Lonner suggest, the fact that people are interviewed in the midst of a group may simply mirror their normal behaviour if the type of decision being researched is normally a group decision or is a decision which is normally influenced a great deal by the group. For this reason, this bias was not considered a serious threat.

Reliability

Wimmer and Dominick suggest that an understanding of concepts, constructs and variables is necessary before one can adequately understand reliability theory.[23] A concept is a term that expresses an abstract idea. Concepts are formed by generalizing from particulars or summarizing related observations. For instance, a question which asks the respondent to identify the brand he buys most often from a list of popular brands elicits an answer which is used to form the concept of brand usership.

Wimmer and Dominick define constructs as "...combinations of concepts created for a particular scientific purpose.[24]" Rokeach's value of **A COMFORTABLE LIFE** actually measures a construct which includes the concepts of comfort, prosperity, success and many other concepts, depending on the cognitive processes of the respondent. The ranking of this value might indicate the relative importance of this value construct in the life of the respondent, but it does not indicate which concepts might contribute most to the importance placed on the value. In this study the personal values construct was operationalized as the value statements and defining phrases found in the **Rokeach Value Survey**.

A variable is "...a phenomenon or event that can be measured or manipulated and is used in the development of constructs."[25] Variables are used to operationalize concepts and constructs. Independent variables are systematically varied by the researcher while dependent variables are measured and observed. In multivariate analysis, such as the type employed in this research, many dependent variables are measured and analyzed in a single study.

The independent and dependent variables are operationally defined in Chapter 7 when the results of each statistical test are reported.

Much has been written about reliability but the term may be often confused with validity. According to Churchill:

> "...**validity** is represented in the agreement between two attempts to measure the same trait through **maximally different** methods, **reliability** is the agreement between two efforts to measure the same trait through **maximally similar** methods."[26]

Dillon, Madden and Firtle's definition may be somewhat more accessible:

> "Essentially reliability denotes stability or consistency; that is, reliable measures are consistent - stable form one administration to the next ... Unreliability comes about primarily because the items making up the measurement scale do not measure the same construct."[27]

Building upon the same definition of the concept, Wimmer and Dominick suggest that there are three main ways to measure reliability: intercoder reliability, stability and equivalence.[28] Interestingly, Churchill acknowledges only the latter two but intercoder reliability might be of more importance in cross-cultural research.[29]

Intercoder reliability refers to the ability of different researchers to come to the same result. In the ideal situation, two researchers administering the same instrument under similar conditions should produce similar results. Rokeach reports that McClellan, Homant and Feather were able to establish similar results to his for similar groups of respondents.[30] Munson and McIntyre were also able to report that Rokeach's values were reliable and distinctive.[31] This suggests that a high degree of intercoder reliability exists.

Stability refers to the amount of consistency in results when the same sample is measured at different points in time. One way to measure stability is to administer the same instrument at two different times and test the correlation of the scores. Test-retest reliability

requires that two different tests be administered and the scores from the tests be correlated using the reliability coefficient which "...indicates the amount of systematic variation, relative to the total observed scale variation."[32] The resulting scale measures reliability coefficients on a scale from 0 to 1. A coefficient of 1 would represent perfect agreement and a coefficient of 0 would indicate perfect lack of agreement.

Dillon, Madden and Firtle[33] suggest some well-known problems with this form of reliability. First, the measure is affected by time interval and the longer the period between tests - the lower the reliability coefficient. Second, real changes in the measured phenomenon between tests can be difficult to isolate. This means that a low reliability coefficient may not indicate low reliability. Third, each item on a scale will necessarily be correlated with itself. This obviously inflates the correlation coefficient because an item would be expected to correlate highly with itself but this may hide very poor correlation between different scale items. Anastasi also points out that short periods between tests may inflate reliability coefficients due to respondent's remembering what they answered during the first test.[34]

Despite these criticisms, test-retest reliability is the measure of stability used most often. Rokeach also reports that McClellan, Homant and Feather established similar test-retest reliability for both the terminal and instrumental value scales among similar samples of young American and Australian subjects.[35]

All of these studies indicate that test-retest reliabilities are extremely high for the **Rokeach Value Survey**. Terminal value reliability coefficients are reported in excess of .65 and as high as .80 for periods as long as 14-16 months and instrumental value reliability coefficients are reported from .53 to .70 for the same time period.[36] These reliability coefficients are as good or better than the test-retest reliability scores reported by Anastasi for other well-known and often-used self-report inventories, such as Cattel's **Cattel's Sixteen Personality Factor Test**, the **Minnesota Multiphasic Personality Inventory** or the **Edwards Personality Preference Schedule** over much shorter test-retest periods. In fact, the **Rokeach Value Survey** test-retest reliability scores over a 14-16 month period compare favourably with the scores for these other tests over a 7-21 day period.[37] Unfortunately, due to budgetary constraints, a retest using the **Rokeach Value Survey** was not possible and this form of reliability was not used in this study.

Stability can also be measured by examining internal consistency of a study, that is the equivalency of different parts of the measurement instrument. The technique that is

employed splits the measurement scale in two, usually by grouping odd and even numbered items or by a random process, and then comparing correlation coefficients of the two subsamples.

Dillon, Madden and Firtle suggest that of the number of problems that are evident with this approach, the most serious is deciding on how to split the scale. Obviously, splitting the scale in different ways will produce different results and this leaves a question regarding which result is the true correlation coefficient.

Techniques for measuring split-half reliability are fundamentally based upon the concept of the data mean and/or variance, whether they use a statistic such as the Pearson Product-Moment Correlation Coefficient or Cronbach's alpha.[38]

As Keller, Warrack and Bartel suggest, the concept of a mean and the dispersion of data about the mean are meaningless when applied to ordinally-scaled data.[39] Other problems also exist which may affect the value of a split-half reliability coefficient these include the ipsativity of the **Rokeach Value Survey**.[40] Therefore, this test was not applied to the data set.

However, another way to measure inter-test reliability of ranked data is by measuring Kendall's Coefficient of Concordance *W*.[41] This statistic basically establishes the degree of inter-respondent reliability by measuring the amount of homogeneity present in the total sample and in subsamples and is explained in detail later in this chapter. The test was done by splitting respondents into subsamples based upon demographic category membership and measuring the coefficients of concordance of each subsample. The differences in the amount of homogeneity in the subsamples implies differences in ranking consistency by category members.

Homogeneity was an important measurement in this study because of the fear that some respondents, especially those who spoke English as a second language or who had little education, might be responding in a random manner to mask their lack of understanding of what the value statements meant.

While differences in homogeneity do not necessarily suggest comprehension problems, differences would probably exist if there was a comprehension problem being masked by one or more category of respondents.

A full report of this statistic for all demographic categories measured is included in the Appendix 2. In short, there is little difference in the homogeneity of responses given by members of different categories and it is very likely that the agreement between respondents regarding the relative importance of the values has not occurred as a result of chance. There is an indication that the agreement between Black respondents is less homogeneous than that between members of other groups but this does not appear to be a significant problem because the X^2 test indicates that Black respondents are also very likely to be using the same criteria to rank the values.

Table 2: Homogeneity of Response by Race and Value Type

Race	Kendall's coefficient of Concordance	X^2 Probability
Terminal Values		
White	0.136	p>.00001
Black	0.060	p>.00001
Coloured	0.202	p>.00001
Asians	0.120	p>.00001
Instrumental Values		
White	0.125	p>.00001
Black	0.053	p>.00001
Coloured	0.132	p>.00001
Asian	0.120	p>.00001

Alternative form reliability measures the same subjects with two scales which are designed to measure the same constructs in as similar a fashion as possible .[42] While the development of alternative forms of measuring values was beyond the scope of this study, it is interesting that the test-retest reliability coefficients reported by Anastasi for Allport, Vernon and Lindzey's Study of Values is about the same as that reported by Rokeach.[43]

Obviously, in cross-cultural analysis many additional factors have the potential to affect reliability in addition those that might appear in a standard American marketing research text. It is obvious that the quality of questionnaire translation will affect reliability but it may be less obvious that interpreters from different cultures may interpret the meaning of results differently.[44]

This study attempted to maximize this type of reliability by involving researchers from many backgrounds in the translation of the questionnaire and data analysis. Bester and Lerena of The McCann Group SA (Pty) Ltd were exposed to the analyses of data and contributed their knowledge of past research findings in every product category. Nel lead a group of colleagues who translated the questionnaire at the University of Pretoria. Langschmidt Integrated Marketing Research (Pty) Ltd ran focus groups with Black respondents to ascertain whether the **Rokeach Value Survey** was measuring the same constructs and concepts regardless of culture. His additional validating research are discussed in detail later in this chapter.

Validity

Validity refers to the way that the measurement tool actually measures the constructs it is designed to measure. Wimmer and Dominick suggest that there are four main kinds of validity.[45]

Face validity is "...the most basic kind of validity."[46] In this case, face validity is determined by examining the measurement device to see whether it actually measures values, brand image associations and behaviour. The questionnaire certainly appears to have a great deal of face validity although the issue of what the value statements mean to respondents has never been tested in an environment as culturally and linguistically diverse as South Africa.

The question of meaning is complex. We all know the sky is blue and the tomato is red. But as Bester suggests, although we are taught the names of colours in an absolute way this does not prove that we both see the same colour when we look at the same thing. The blue sky that I see may appear red to you but you call red "blue" because you were taught that the colour of the sky is called "blue." In such a way, an argument about the meaning of each value statement across different cultures could carry on for decades.

Fortunately Rokeach has addressed this issue. He first addresses the question of meaning, especially regarding the meaning of the values in the **Rokeach Value Survey**[47], from the strictly behavioural perspective:

> "Regardless of the meaning of a given value, it represents a specific stimulus and all that matters is whether or not this stimulus leads to predictable and replicable responses."[48]

Rokeach then addresses the question of connotative meaning:

> "...if by 'the meaning' of values we mean connotative meaning, it is possible to measure it with Osgood's semantic differential technique. Homant measured the semantic meaning of each of the 18 terminal values and 18 instrumental values and correlated semantic differential indices with the rank ordering of values. Homant's findings clearly indicated that simple value rankings from 1 to 18 give us essentially the same information about a person as that obtained with the more complex semantic differential [illegible]. His findings also suggest that the value rankings measure essentially the same kind of meaning as that measured by Osgood's evaluative factor and that they do so notwithstanding its simplicity."[49]

Rokeach also reviews his results using the value statements with and without the defining phrases present. He reports virtually identical reliability and validity measurements for the values with or without defining phrases and reports that the systematic relationships between values and attitudes and values and behaviour are also the same for both presentations, saying:

> "If the values employed in the Value Survey were semantically tyrannical, meaning different things to different people, significant results of a systematic kind would not be possible."[50]

Finally, Rokeach addresses the question of psychological significance of the value statements to the respondent. Rokeach suggests that the psychological significance of a value can best be understood by studying the way in which the respondent ranks the value in relation to other values. He says, for example, two ministers may both rank **SALVATION** first on their list but the fact that one ranks **FORGIVING** second and the other ranks it last indicate that **SALVATION** means different things to the two men. Using his content analysis of the writings of Hitler and Lenin, Rokeach says:

> "Both Hitler and Lenin ranked **FREEDOM** low on their scales. Does **FREEDOM** mean the same thing to Hitler and to Lenin? The psychological significance of this fact becomes apparent only when it is noted that Hitler also ranks **EQUALITY** low, whereas Lenin ranks **EQUALITY** high on his scale of values. These findings suggest that in Hitler's case the denial of **FREEDOM** by the state is a weapon to coerce inequality; in Lenin's case the denial of **FREEDOM** is also a weapon, but a weapon to coerce **EQUALITY**. Thus, the psychological significance of **FREEDOM**, or its denial, is obviously different for Hitler and for Lenin, even though both rank it equally low and even though it may be semantically identical to both...Thus, the psychological significance that a particular value has for a particular person must be inferred from observations about the way he relates it to other values within his value system rather than from procedures designed to measure semantic meanings of particular words symbolizing values. In the final analysis, it is probably scientifically more fruitful to be concerned with the question of psychological significance than with the question of the semantic meaning of values."[51]

A focus group was sponsored by Integrated Marketing Research (Pty) Ltd. to investigate what Black respondents felt each value statement and defining phrase meant. The group included Black respondents from many different walks of life, including a domestic worker, a university student, a middle-management executive and six others. Prior to group discussion, group participants were asked to write down what they personally felt each value statement meant. Responses and later group discussion indicated that Black respondents described the same underlying concepts as Whites when asked to describe what each value statement actually meant.

The group moderator then presented respondents with 50 terminal values and 75 instrumental values which included an atomized list of the key value words and the defining phrases from the **Rokeach Value Survey** as well as some other values culled from other psychological theorists, such as Erik Erikson, Henry Murray and others. Group participants were asked to individually list any words which actually meant the same thing to them. When the group then discussed how they felt about the lists there was almost unanimous unaided agreement that the defining phrases which accompany each statement were synonymous or at least strongly associated with the primary words describing each value.

Neither the moderator nor the researcher could find any difference between the meanings advanced by the group and their own. It was concluded that meaning differences were not significant enough to invalidate the use of the **Rokeach Value Survey** for measuring personal values in a cross-cultural South African context.

Predictive validity, also called criterion validity is confirmed when predicted results are checked against a future outcome.[52] This study was not intended to measure future behaviour but future studies may try to validate whether people with similar value system orientations purchase the brands predicted by this study.

Concurrent validity checks the measurement tool against a present criterion. Because there is no other physical criterion to measure deeply-rooted personal values against, this type of validity is not possible to measure for this study.

Construct validity is the most often used form of validity in marketing research. It is such an important concept that Churchill says it "...lies at the very heart of scientific progress."[53]

Dillon, Madden and Firtle suggest that non-random error forms the basis of the construct validity concept.[54] The presence of non-random error, or other methodological artifacts, can lead to the end measurement of a survey not representing the original construct. They also suggest that construct validity consists of a number of different kinds of validity.

Content validity indicates how well the measurement instrument represents the construct. Rokeach proposes that values are felt in infinitely varied degrees and are not felt in absolute amounts but rather in relation to each other: that is, they are a deeply rooted continuous ordinal phenomena.[55] The previous literature review shows that most theorists

support his point of view. This suggests that the **Rokeach Value Survey** is an ideal tool for value measurement.

Convergent validity is an indication of how closely related scales which measure the same construct really are. There are no such scales in this survey.

Discriminant validity measures the opposite of this and measures how well scales discriminate against each other. Rokeach reports that the average inter-correlation between the scale items is -.06 on both the terminal and instrumental value scales and suggests that "These findings are exactly what would be expected by chance from ipsative measures." Rokeach also reports that the average inter-correlation between terminal and instrumental values (a non-ipsative measure) is only .01.[56] These reports indicate discriminant validity exists.

Internal validity is another form of validity which refers to the ability of the measurement instrument to actually produce the differences observed in the dependent variable. Wimmer and Dominick and Dillon, Madden and Firtle suggest some common threats to internal validity that create methodological artifacts.[57]

Artifacts refer to any extraneous variable which results from the failure to isolate the test variable:

> "The presence of an artifact indicates a lack of internal validity: the study has failed to investigate its hypothesis."[58]

Common sources of artifacts are:

History: Artifacts can be created by events that happen simultaneously with the experiment when the research design does not control for their presence. Had a very influential advertisement been flighted for one of the brands under study or had an extremely strong event happened that could have affected respondent's value systems, an historical artifact would have been created. The entire study was in and out of the field within ten days to minimize this problem. The timing of the study occurred during October when few new advertisements are traditionally flighted in the researched categories. No significant new campaigns were flighted for products in the categories being studied during the October 1988 period to our knowledge.

Maturation: Artifacts can be created as people become tired, bored or hungry during the administration of the study instrument. Obviously, respondents may give less thought to their responses or even answer questions wrong if they feel they are being "taken advantage of". The fact that no respondents voiced feelings of tiredness, boredom or hunger during the 30-45 minute interview and the fact that so many indicated that they found the situation rewarding indicates that maturation was probably minimized. Rokeach also reported a 5-19% attrition rate among American university students.[59] Not one respondent failed to complete the survey in this study. This may be due to the amended instruction set and the presentation of values on cards instead of sticky labels or the fact that South Africans are more patient than other respondents - we don't know.

Testing: Artifacts can be created by respondents who try to maintain consistency in their answers to questions administered before-and-after exposure to a stimulus. Because this was not a longitudinal study this threat to validity does not exist.

Instrumentation: Artifacts can be created due to inconsistency in setting the calibration of measurement in the study. There was some threat that scores might be incorrectly recorded because the values were printed on cards rather than on sticky labels. These cards were also shuffled and presented to the respondent in random order and this was explained in the instruction set. Interviewers were given clear instructions to wait until the respondent had completely finished the exercise before they recorded their answers and the size of the cards made it difficult to miscode the responses. The chief administrator stressed the importance of the accuracy of this study repeatedly during the briefing of the field force. An exhaustive call-back programme by research company management ensured that interviewers had properly interviewed their assigned respondents.

Instrumentation might also be a threat if respondents from different cultures did not perceive the same meaning from the value statements on each card. To the level possible, pre-testing and qualitative research indicated that Black and White South Africans did get the same meaning from the cards. This was particularly important because some of the values did not translate well into many of the vernacular languages. As previously discussed, the focus groups further verified the validity of the value statements after the top-line results had been first presented and Rokeach has analyzed this question in detail and largely dismissed it.

Statistical Regression: Outliers, that is respondents who achieve very low or very high scores on a test, tend to regress to the sample or population mean during following testing

sessions. Again, because this study does not use before-and-after exposures this threat to validity does not exist in this study.

Experimental Mortality: Respondents fail to complete many studies. Research designs based upon before-and-after measurement are most prone to this threat to validity but Rokeach did report that a small percentage of respondents failed to complete his survey in the USA. The fact that Research Surveys (Pty) Ltd. reported that no respondents failed to complete the study was already discussed as well as our beliefs regarding why we were so successful.

Selection Bias: Bias in the selection of respondents results in non-representative or non-equivalent groups. One of the reasons that Research Surveys (Pty) Ltd was chosen was because of their extensive experience in drawing random samples. Sample characteristics are quite similar to those of the marketing industry's standard survey, the South African Advertising Research Foundation's **All Media and Products Survey 87/88** (AMPS 87/88).[60]

There may be some argument that there was some degree of bias as regards the racial composition of the sample which certainly doesn't reflect the fact that Blacks constitute over 70% of the South African population.

However, a number of factors were considered to develop sampling criteria which together minimize selection bias. First, reliable statistics don't exist for the South African population because racially-discriminatory laws make many Black respondents fearful of honestly reporting accurate figures. Integrated Marketing Research (Pty) Ltd. recently estimated the number of inhabitants of the Transvaal urban townships is 2,95 times higher than the official government figures released from the 1985 census.[61] AMPS 87/88 estimates 20 million adults, which seems fairly accurate given the high South African birthrates and general agreement on a total population between 35 and 40 million people. When one also considers that approximately 60% of Blacks are not urbanized and that most members of other races are, the sample seems highly representative of the spending power of total population of urban adults. For instance, Whites constitute 42,9% of the sample and 49,5% of household income, as computed by AMPS 87/88. This is especially true when one considers that a certain minimum level of disposable income is necessary before people become consumers of sophisticated products, such as many in this study.

The racial composition of the sample of 1405 respondents compares to AMPS as follows:

Table 3: Comparison of Sample to AMPS 87/88

Race	Sample	Rel Freq	'000	Rel Freq	AMPS Mean '000	Rel Freq
White	603	42,9	3601	17,6	2727	49,5
Black	402	28,6	14479	70,8	567	41,3
Coloured	200	14,2	1794	8,8	677	6,1
Asian	200	14,2	572	2,8	1071	3,1

It's obvious that South African researchers use numbers of questionable accuracy and for the purposes of this study it was assumed that the slight over-representation of Coloured and Asian respondents at the expense of Black respondents was warranted to ensure accuracy among the latter two groups. It is also possible that Coloureds and Asians are also significantly undercounted for the same reasons affecting Black census inaccuracy, no one knows. For this reason it was assumed that some degree of sample selection bias exists, as it does in any South African study but that the effects of this bias are minimized to an acceptable level by concentrating on reflection of household income and the use of appropriate distribution-free statistics.

Demand Artifacts: Artifacts are also created during the experiment when respondents answer questions in a way which they think will please the interviewer or appear to be socially desirable or generally admired. Rokeach attempted to minimize this threat to internal validity by emphasizing that respondents rank the values in order of importance to themselves.[82] As earlier noted, the amended instruction set for this study strongly emphasized this.

Rokeach reports that words which could be described as "negative", "extreme", "denoting temporary states", "physical characteristics", "sex-linked", "unfamiliar" or "over-lapping" were not included in his list. Rather, words that were "positive", "...maximally discriminating across social status, sex, race, age, religion, politics...", "meaningful" and which could be readily admitted to without appearing to be "...immodest, vain, or boastful..." were used.[83] These criteria certainly helped to minimize demand artifacts.

Kelly, Silverman and Cochrane studied the effects of social desirability on the way respondents completed the terminal value ranking exercise.[84] The test instrument used was the Marlowe-Crowne Social Desirability Scale:

> "The resulting correlation was only -.09, suggesting that there was no significant relationship between the tendency to respond in a socially desirable manner and rankings of the Value Survey under standard instructions."[85]

Instrumental values were not examined in the Kelly, Silverman and Cochrane study but it is hard to believe that any significant demand artifacts existed in the current study given the complete understanding of the objectives of the ranking exercise voiced by respondents during the pilot study.

Experimenter Bias: Artifacts can be created by the actions of the researcher, such as "...mistakes made in observation, data recording, mathematical computations, and interpretations."[86] As recommended by Wimmer and Dominick[87], interviewers were not told that there was any desired result to the study. They were told that the project was a university post-graduate project and that accuracy was even more important than normal.

The researcher never communicated with the interviewers in any way during the pilot study or during the actual field work because it was feared that his foreign accent could increase the likelihood of demand artifacts and experimenter bias.

Evaluation Apprehension: Artifacts also arise from the respondent's fear of appearing "different" or of being measured. Most people are not eager to appear dramatically different in light of societal norms. This is a problem which is most serious in group research.

This research design utilized personal interviews to minimize this threat to validity. Other factors that suggest that evaluation apprehension was not much of a threat to this design include the amended instruction set and the criteria used by Rokeach for accepting values for his list as described above.

In addition to these traditional threats, Brislin, Lonner and Thorndike suggest that some special threats to internal validity exist when fielding cross-cultural research projects.[88]

Interaction Effects of Testing: Artifacts can be created by pretesting a study among members of a culture and thereby sensitizing them to respond in a certain fashion. This

could most easily be visualized as happening in small verbal societies with little dependency on mass media. Pre-testing was done within the research agency using non-research personnel to avoid this problem.

Multiple Treatment Interference: Artifacts can be created by the effects of a previous part of a study on the latter. In this case, ranking values in order of their importance may have sensitized respondents to more or less important values in a way that would affect their answers. A number of elements of the research design were calculated to minimize this effect. The **Rokeach Value Survey** was utilized in a manner that required respondents to rank values in order of their importance. This means that the value ranked last on the list can still be very important - it's just less important than other values on the list.

One reason we decided against the alternative method of asking respondents to rate values on a numeric scale was because we felt that it might have sensitized them to a false sense of absolute importance toward specific values. We felt this feeling of absolute importance would bias results in the second part of the questionnaire. To also help overcome this bias the instruction set for the second part of the survey clearly summarized the objective of the first part, indicated that the first part was over, stated how the objective of the second part differed from the first, clearly indicated that the most important thing was how the respondent felt about the products and indicated that there were no expectations regarding the respondent's responses to the questions.

Irrelevant Responsiveness of Measures - The question of meaning has been dealt with earlier in this chapter. Words can have different meanings in different cultures and this can create artifacts through irrelevant responses. However, we are confident that this problem does not threaten the validity of this study.

The simplicity of the **Rokeach Value Survey** was not addressed earlier. Simplicity enhances understanding and most of the words in the **Rokeach Value Survey** could probably be found in a simple English dictionary. The Afrikaans translation also attempted to maintain this simplicity. In addition to this, the descriptive phrases attached to the values also encouraged understanding across cultures, as did the designed redundancy and context of the instruction set.

Irrelevant Replicability of Treatments: When the test situation requires a number of special conditions, it may be difficult to replicate. Because the **Rokeach Value Survey** requires only a personal interview and the instrument, this is not a threat to the validity of the study.

Internal validity is not the only consideration regarding the validity of a study. Dillon, Madden and Firtle suggest that statistical conclusion validity concerns drawing valid inference regarding the relationship between variables in a study.[69] They suggest that researchers should be able to show that the measurement instrument is sensitive enough to measure an effect of the desired magnitude, that the study should be able to present sufficient evidence to support the cause and effects of covariation and the strength of the relationship.

The literature review of this thesis documents that Rokeach's Belief System Theory, and the work of other researchers and middle-range theorists, supports the current study's statistical conclusion validity. The use of the most appropriate statistical techniques, such as the Kruskal-Wallis Analysis of Variance by Ranks, the **Classification and Regression Trees** programme and correspondence analysis supported by X^2 analysis will be shown to provide valid statistical analysis.

This discussion confirms the exhaustive considerations which went into the research design to ensure internal validity.

External validity refers to the ability of the results of a study to be generalized "...to and across populations of persons, settings, and times."[70]

Christensen suggests that population validity involves a two-step inferential process of generalization.[71] The first step is generalizing the sample to the experimentally accessible population. The second step involves the generalization from the experimentally accessible population to the target population. While the experimentally accessible population did not include samples from every urban area in South Africa, it did include all of the major urban areas which represent a large majority of the urban population. This suggests that the two-step process of generalization can be inferred from the data.

Cook and Campbell suggest that external validity can be increased by using random samples which are representative of the population, using heterogeneous samples and replicating the study many times and by selecting a sample that is representative of the population to which the results will be generalized.[72] While this study was the first of its kind, the sampling technique employed will be seen to adequately fulfill two of these three suggestions.

As is the case with internal validity, Dillon, Madden and Firtle suggest there are several threats to external validity.[73]

Reactive or Interactive Effects of Testing: Artifacts can arise from the respondent's heightened sensitivity toward one test stimulus as a result of being exposed to another stimulus earlier. For this reason, it was decided to use the **Rokeach Value Survey** for the brand image associations part of the study. Using a different values list or an amended value list might have caused respondents to respond differentially toward the values which were most like those they just ranked versus those values which were most dissimilar from those on the **Rokeach Value Survey**. Christensen calls this "multiple-treatment interference" and suggests that it has it greatest effect on ecological validity.[74]

Interactive Effects of Selection Bias: Improper sample selection techniques can combine with experimental treatment conditions to create misleading results. The administrator's comprehensive neighbourhood data base was used to generate a random sample of adult urban South Africans. This suggests that this study is free of interactive effects of selection bias.

Surrogate Situations: The use of artificial test situations, such as laboratories, can also create artifacts. It was decided to use an in-home personal interview so that respondents would be immersed in the environment closest to their life-style; the best manifestation of underlying values according to Engel, Blackwell and Miniard.[75] It is hard to imagine a better environment for values research.

Christensen suggests other negative effects on external validity[76]:

The Hawthorne Effect: Artifacts are created when subjects behave differently because they know they are being tested. Novelty or disruption also cause a similar kind of artifact. The personal interview is a novelty to most people and artifacts can be created. However, we believe the instruction set overcomes this problem.

The Experimenter Effect: As was earlier discussed, the experimenter can bias his own results and the use of Research Surveys (Pty) Ltd field force was designed to overcome this problem.

Time Effects: Seasonal variation, cyclical variation and personological variation can all create artifacts which affect the ability of the study to be generalized over different time periods. This was minimized by getting the study in and out of the field within two weeks.

The summation of this discussion is that every consideration possible, within reasonable financial constraints, was made to increase the reliability and validity of this study.

Another consideration of the study regards replication. Replication is overwhelmingly advocated by researchers from all backgrounds and it is an excellent way to enhance validity of a study (Wimmer and Dominick 1987, 39).

In his acceptance speech upon being named the co-founder of the study of consumer behaviour by the Association for Consumer Research, Engel noted the distinct ethnocentrism and lack of replication evident in American consumer research.[77] The need to replicate past research across cultures resulted in the original investigation of the work of Milton Rokeach. Many other aspects of the study were aimed at replication and these deserve discussion in greater detail within the confines of the four basic types of replication Wimmer and Dominick report were defined by Lykken and Kelly, Chase and Tucker.[78]

Literal replication involves the exact replication of a previous study, including the sampling procedures, experimental conditions and the like. Operational replication refers only to the duplication of a previous study's sampling and experimental procedures. Instrumental replication attempts to replicate the dependent measure of a previous study and to vary the experimental conditions. Constructive replication avoids the use of either the methods or manipulations of the first study.

Because this was the first time the **Rokeach Value Survey** was used in a consumer research project, literal replication was not possible for this study. Rokeach's sample size of 1409 was replicated as closely as possible and the **Rokeach Value Survey** was used in a form as close as possible to the original.[79] In fact, all of the instructions in the instruction set were included in Rokeach's original work, they were simply explained in more detail using context and redundancy. Rokeach also used in-home personal interviews in his original studies.

An attempt was also used to replicate middle-range theory work. For instance, the demographic and life-style items measured were a South Africanization of the items

measured by the Stanford Research Institute's **Values and Lifestyles Program** (VALS). Very few changes of any significance were necessary to the original VALS list of variables reported by Mitchell.[80] The associational study tried to constructively replicate the results regarding the relationship between personal values and market segmentation, personal values and purchase behaviour and personal values and brand image perceptions. This would include the work of all of the major middle-range theorists discussed previously in the literature review, such as Vinson, Scott, Lamont, Pitts, Woodside, Munson, Nakanishi, McIntyre, Lessig, Henry, Becker, Connor, Boote, Gutman, Reynolds, Olsen, Lolly, Kahle, Beatty, Homer, Poulos, and Sukhdial.

Dillon, Madden and Firtle suggest five steps which enhance the development of sound constructs but report that most researchers do not follow them due to cost and time constraints.[81] These steps provide a good tool to summarize the steps followed in this research methodology regarding reliability and validity. The five steps are as follows:

Specify constitutive definition: Clear precise definitions of the domain of each construct should be established. Personal values were operationalised using the **Rokeach Value Survey**. Major brands in each market were operationalised using available market research data supplied by sponsoring firms. Brands surveyed accounted for at least 85% of unit sales in each category surveyed. Brand images were defined as the deeply-rooted memories of experiences and previously processed information consumers draw upon as part of their cognitive processes when confronted with a brand name. They were operationalised as the Rokeachian value seen to be most like the brand being evaluated. The ideal brand was operationalised as the brand consumers might imagine to exist, whether now in existence or not.

Specify measurement definition: Values are not absolute, they are relative and continuous. They were defined using an ordinal scale, as they were by Rokeach.[82] Brands, brand images, ideal brands, and value associations to these variables are all categorical variables. They were defined using a nominal scale.

Perform item analysis: Much analysis of the items which comprise **Rokeach Value Survey** has been done. Rokeach reports that no significant order effects were found and that the values appear to be correlated in the same fashion as might be expected by chance.[83] To decrease the possibility of order effects, the value statement cards were shuffled and presented in a random fashion and this was noted in the instruction set read to the respondent. Qualitative research was performed to ensure that the value statements of

the survey and the instructions were understood in a similar fashion by respondents from different cultures.

Perform reliability checks: Adequate previous research existed to conclude that a high degree of test-retest reliability exists for the **Rokeach Value Survey**. Siegel and Castellan suggest that homogeneity, as measured by Kendall's Coefficient of Concordance, is an indicator of inter-respondent reliability.[84] All other forms of reliability were considered.

Perform validity checks: Validity was extensively checked and the research study was designed to minimize the creation of artifacts.

Sampling issues

This study began as an attempt to provide some scientific evidence of the real differences, if any, that might exist between South Africans of different races by studying a representative sample of South Africans of different cultures.

Drawing a representative sample from the total population for a study so that conclusions can be drawn about the total population fulfills one goal of scientific research. Measurement error, (that is, error generated by the inconsistencies of the measurement tool) is further compounded by sampling error (that is, the degree to which the sample does not truly represent the population) as part of this process.[85]

There are a number of ways that samples can be drawn. Probability sampling follows the guidelines of mathematical probability and allows sampling error to be calculated. Non-probability sampling does not; but it is generally cheaper and faster.

Dillon, Madden and Firtle suggest that stratified sampling is more complex and more costly than systematic random sampling; but they also believe that it is much more efficient.[86]

Drawing a race-stratified probability sample of urban South Africans offers a number of advantages and disadvantages, as Wimmer and Dominick suggest[87]:

Advantages

1. Representativeness of relevant variables is ensured.
2. Comparisons can be made to other populations.
3. Selection is made from a homogeneous group.
4. Sampling error is reduced.

Disadvantages

1. A knowledge of the population prior to selection is required.
2. The procedure can be costly and time-consuming.
3. It can be difficult to find a sample if incidence is low.

The disadvantages merit some explanation. It was earlier noted that official South African population statistics have questionable accuracy. There is, however, a wealth of data extant regarding the urban South African population, published by private sector information sources such as AMPS. Research Surveys (Pty) Ltd. regularly draws area and race-stratified probability samples from its extensive neighbourhood data base. The computer generates sampling points using an algorithm which randomly generates suburban and urban residential areas for sampling. The probability of an area being chosen is directly proportionate to the population of the area. To ensure the randomness of respondents in each household, the 'birthday rule' was employed; that is, the person who answered the door at the target household was asked to identify the person in the household who was over 18 and who's birthday was next. This procedure is very similar to that recommended by Boyd, Westfall and Stasch.[88]

The procedure was costly and time-consuming but corporate sponsorship allowed the study to be fielded and the progressive sponsors were patient and waited for the extensive analysis to be completed before they were given their results.

There were no problems finding samples because the incidence of all major racial and ethnic groups is quite high.

Sampling Frame

"A sampling frame is simply a list or set of directions...that identifies the target population."[89] As noted earlier Coloureds and Asians were selected in the areas where they are most concentrated in order to maximize any cultural differences that might exist. 68,7% of Coloureds are resident in the Cape and 85,6% of Asians are resident in Natal, according to AMPS 87/88.[90] The sampling frame for this study was comprised of respondents who fit the following criteria:

Residents of South African urban areas subject to the following constraints.

If White or Black, they are resident in any province
If Coloured, they are resident in the Cape Province
If Asian, they are resident in the Natal Province

Over 18 years of age

Who have the next birthday in the household

Who have not answered a survey in the last three months and who do not work for a marketing research company or advertising agency

Sample Characteristics

The split of the sample was compared to the split of the population according to AMPS earlier in this chapter as regards race and income. Although sample characteristics are not directly comparable to AMPS in many cases, they are quite consistent with AMPS in every way and are reported by race in a similar format to AMPS in Appendix 1.

Summary

The underlying nature of personal values makes the **Rokeach Value Survey** an ideal tool for measuring personal value differences. Published research indicates that the tool can be used in cross-cultural research designs but there is no published report of its use in a society as divided as South Africa.

Cross-cultural research design requires more careful planning when significant cultural differences exist in the target population so slight adjustments were made to the instrument so that it might provide more reliable and valid information across cultures. For instance, redundancy and context were incorporated in the questionnaire and the personal value statements and defining phrases were presented on cards and in random order. Where possible, past studies were replicated to enhance reliability and validity.

The question of the meaning of the value statements and defining phrases was given a great deal of attention and a combined in-depth interview and focus group discussion was used to ensure the value statements transcended culture. In addition to the normal sources of bias, the special problems that may create artifacts in cross-cultural research were extensively investigated and taken into account. The questionnaire was subjected to repeated translation and back-translation and pre-tested before it was fielded by a highly-respected private research firm.

An area and race stratified probability sample of urban South Africans over the age of 18 was drawn by the research firm. Sample characteristics are very similar to those reported by AMPS 87/88.

The newness of values research also suggests that careful attention be paid to data analysis issues prior to the development of research designs. If personal values are a continuous, ordinal phenomena as Rokeach suggests, non-parametric techniques are the best techniques for data analysis. The next chapter reviews appropriate data analysis techniques and compares these with the techniques chosen by other contributors.

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CHAPTER 7 - DATA ANALYSIS ISSUES AND RESULTS

The selection of appropriate data analysis techniques is of paramount importance to any research design. Previous discussion suggests the wide agreement regarding the nature of personal values. Personal values are hierarchically-ordered into an organized values system based upon their relative importance. Although we are taught values in an isolated, absolute way, values are not felt in absolute amounts - they are felt in infinitely varying degrees.[1] We learn through a gradual process of maturation, experience and acculturation to evoke different values in different situations; but all of Rokeach's values can be observed in any "full-fledged society.[2] This discussion makes it obvious that personal values are a continuous, ordinal phenomena.

Values research is in its infancy and if cross-cultural research is to add to existing knowledge it must replicate sound statistical practices from past research while it ignores other researcher's less desirable practices. This chapter examines the various ways that researcher's have chosen to analyze personal values data, especially data produced by the administration of the **Rokeach Value Survey**. The major areas of debate include the use of parametric or nonparametric tests, standardizing data and the debate regarding ranking or rating values.

Parametric Versus Nonparametric Techniques

Greenacre suggests that the selection of a statistical technique is far too often seen as an effort to fy how well some general form of parametric statistical model reflects reality and too seldom seen as an investigation of a model's ability to describe the data at hand.[3] Perhaps this is why the literature review has highlighted fundamental data analysis errors by many respected researchers.

Section A of the questionnaire utilizes the value statements and defining phrases from **Rokeach Value Survey**, Form D and yields ordinally-scaled data. The data are isomorphic to the construct because there is no fixed linear distance between values; they are just ordered in terms of relative importance. Because the ranking exercise involves picking out the most important value and then the next most important value until all the values are ranked, the tool also yields ipsative data. Rokeach also reports that resulting data exhibit

neither a normal distribution nor homogeneity of variances.[4] The data generated by this study exhibited the same characteristics.

Section B of the survey asks respondents to identify a brand and identify a value most like the brand, these are both clearly examples of categorical data.

These conditions preclude the use of parametric statistical techniques because the basic assumptions of parametric statistical tests, such as the *t*- test or *F*-test statistics, are that data be independent, be normally-distributed, be at least intervally-scaled and have equal variances.[5]

Still, in the search for increased statistical power-efficiency, some researchers have argued for transforming ranked data from the **Rokeach Value Survey** into normalized scores so that it can be subjected to parametric statistical techniques. Rokeach has suggested this could be done and Feather has utilized this method. Feather argues that this method is appropriate given the difficulty respondents have ranking values at the middle of the scale versus their ease of ranking items at either extreme.[7] However, Winer reports that subjecting transformed scores to an ANOVA will yield different answers than nonparametric tests and suggests that data transformation is an appropriate method of analysis only when the data are shown to be normally distributed.[8]

The reliance on nonparametric tests might be criticized on a number of grounds, such as perceived lack of power-efficiency, unsystematic approach and inconvenience.[9]

As Siegel and Castellan point out, the power-efficiency of parametric tests is often exaggerated - they offer slighly less than 5% more power-efficiency than most of the nonparametric tests used in this study. That means that a parametric test, *with all of its conditions satisfied*, offers the same power-efficiency with a sample 5% smaller than those used for the comparable nonparametric test. Obviously, with a large sample of 1405 respondents, the relatively better statistical precision offered is not much of an issue. While criticisms regarding the lack of systematic approach are partially accurate, there are common themes that run through the various nonparametric techniques. The advent of more accessible computer programmes has made nonparametric tests very easy and convenient to use.[10]

In addition, Siegel and Castellan suggest that nonparametric techniques offer a number of advantages.[11] They can be used on small samples where the distribution is not exactly

known. They require fewer assumptions about the data. They require less precise measurement scales and thereby avoid forcing the researcher to make unrealistic assumptions about the underlying distributions being studied. They can be used with exclusively categorical data; something which no parametric technique can do. Many of the techniques can easily handle data from different samples without cumbersome computations or unrealistic assumptions. Finally, learning and using nonparametric tests is easier than their parametric counterparts and this study hopes to provide useful and understandable information to the wider South African marketing community.

In summary, when the data violate the assumptions of normality, homogeneity of variances or independence; parametric statistical test are inappropriate and unreliable. As Burnett and Barr point out nonparametric statistics are indicated where homogeneity as regards susceptibility to a treatment are questioned.[12] While such variation was discounted as a threat to validity, it was obvious that it exists - at least to a small extent - comparing the homogeneity of response of Blacks to Whites. However, as the X^2 test of significance showed when applied to the Kendall's Coefficient of Concordance ratings, this effect is probably so small as to be entirely discounted.

Hence, for a number of very strong reasons, data from the **Rokeach Value Survey** is analyzed using medians, the Kruskal-Wallis One Way Analysis of Variance, the Spearman Rank Order Correlation Coefficient and Kendall's Coefficient of Concordance.[13] California Software's **Classification and Regression Trees** programme is used to explore the relative importance of demographics and values in market segmentation.

Ranking Versus Rating

Another issue involves disagreement about whether respondents should be asked to rate or rank the values of the **Rokeach Value Survey**. If one rejects Rokeach's arguments regarding the underlying nature of values and believes that people are capable of accurately assessing the absolute importance of values to them, then one might as well argue for an intervally-scaled method of measuring values.

Indeed, an article by Munson and McIntyre is often cited to suggest Rokeach's values should be rated.[14] However, Reynolds and Jolly have criticized the test statistic used by Munson and McIntyre in their analysis and have demonstrated that ranking values yields two main advantages when compared to other comparable methods such as rating and paired-comparisons. First, more reliable data are obtained when respondents use ranking.

Second, ranking takes less time.[15] Finally, if it is true that values are not felt absolutely, but rather in infinitely varying degrees in relation to each other; greater isomorphism is also achieved by ranking. For these reasons, a ranking technique was used in this study.

Section B of the questionnaire yielded categorical data. The only valid operations with this type of nominally-scaled data are those which count or describe the proportion of the counts of the various categorical variables.[16] For this reason, correspondence analysis was primarily used to analyze these data.

The following discussion examines each of the main statistical procedures used in this study and how they compare to similar techniques in many cases.

Kruskal-Wallis One Way Analysis of Variance and the Wilcoxon Rank Sum Test

The Kruskal-Wallis test is the nonparametric "...equivalent of the completely randomized design of the analysis of variance; the only difference...is that the data scale...is ordinal."[17] The test is an extension of the Wilcoxon rank sum test and a generalization of the Mann-Whitney U test.[18] Each of these techniques test whether two populations are located differently. In this study, this statistic will be used to detect differences in the value systems of individuals of different classes.

Data must conform to some basic conditions for these tests to be effective. The data must be ordinally-scaled and the dependent variable should be continuous and the number of observations in each cell is subject to the same constraints as the X^2 test.[19] The numerator and denominator of the Kruskal-Wallis test have the usual analysis-of-variance definitions and when the tested hypothesis is true, and when each $N_j \geq 5$, the sampling distribution of H is approximately distributed as X^2 with k -1 degrees of freedom.[20] The resulting statistic tests the X^2 probability that at least one group differs from another.

Rokeach reports that he used the Median Test for analysis of statistical significance, but the Kruskal-Wallis test is more efficient because it uses more of the information from the observations.[21] The Kruskal-Wallis test has been empirically demonstrated to be the most efficient test when compared to the F-test and the normal scores test to see which was most efficient when the data exhibit non-normality and unequal variances.[22] This test also offers 95,5% of the statistical power-efficiency of the most powerful parametric test, the F -test.[23] The Wilcoxon Rank Sum Test has been shown to also possess 95,5% of the

statistical power-efficiency of the t-test. In fact, in some cases it is even more powerful than the t-test.[24]

Fair-Walsh and Toothaker point out that it should be remembered that the null hypothesis is essentially testing median differences and all hypotheses are cast in these terms in this study.[25]

Multiple Testing

Earlier discussion of the literature highlighted the widespread disregard for adjusting α levels when statistical techniques multiply test the same data. According to LaTour and Miniard, researchers have constantly failed to establish that the data they were testing exhibited the fundamental conditions of parametric testing such as homogeneity of variances or the independence of trials under conditions of multiple testing. Perhaps one of the most serious problems they uncovered is the failure of researchers to adjust α levels for multiple testing.[26] Previous discussion of the findings of other researchers was seriously hampered because researchers did not state the significance of their findings in a way that would allow for proper evaluation in light of multiple testing.

Because the literature regarding multiple testing is not well-known to consumer researchers, a review of theory is appropriate. As Keselman and Toothaker report, a number of studies have been concerned with multiple comparison statistics.[27] Yet, it is not surprising that many consumer researchers have been confused by procedures for multiple testing or that the techniques are often misused[28]:

> "...there are a bewildering array of such methods, each one having features which are slightly different than the others. Thus, the person who has little or moderate experience in statistics can be confused by the number of possible procedures available. Furthermore, a researcher may choose a specific procedure because of certain features, but is forced to use other features which he may not want because they are inherent in that procedure."

However, the basic reasoning underlying the adjustment of α levels is as follows:

> "It is important for researchers to realize that as the number of independent statistical tests increases, the probability of rejecting the null hypothesis, i.e. there are no differences between groups or other phenomena, increases by the formula $1 - (1 - \alpha)^k$ where α = the level of significance and k = the number of tests of significance made."

The adjustment of the α level is a conservative measure[29]:

> "The Type I error rate could be maintained at the desired level by adjusting the α level. The Type I error rate within a set of comparisons appears to be one of the most important error rates of concern. This error rate is the probability of one or more erroneous results with a set of comparisons; for independent comparisons it is equal to $[1 - (1 - \alpha)^c]$ where c refers to the number of comparisons. If perfect positive correlation occurs in the various comparisons, this error rate is α. If the degree of correlation is less than 1.00, and for negative correlation, this error rate varies between α and $[1 - (1 - \alpha)^c]$ and is difficult to determine exactly. However, if comparisons are not independent, the safest procedure is to use $[1 - (1 - \alpha)^c]$ as this error rate because it provides an upper limit."

Although there are a bewildering array of techniques are available for adjusting α levels, the Bonferroni-*t*, Scheffé and Tukey techniques appear to have received the lion's share of attention in the literature. All three provide more power-efficiency than MANOVA tests,[30] but the Bonferroni-*t* test holds in many more situations than other tests and is a good general approach which is simple to use. There are other reasons for rejecting the other two techniques: both techniques assume normality and although the Tukey technique is slightly more powerful than the Scheffé technique, it works only in certain balanced designs.[31] There is also evidence in the literature that suggests that the Bonferroni-*t* technique provides an appropriate and conservative adjustment of α for the Kruskal-Wallis test statistic.[32]

As Fisher and McDonald point out, in cases where statistical independence is not confirmed and multiple tests are made, a conservative estimate of the true p value of each test can be made by multiplying the p value by the number of multiple comparisons.[33] Thus, in this study, significance at the .05 level is maintained for 18 terminal values measured by the Kruskal-Wallis test by adjusting α to .0028 (.05*18=.0504). This closely approximates the true conservative limit suggested earlier: $[1 - (1 - .0028)^{18}] = .049218$.

Spearman's Rank Order Correlation Coefficient r_s

This nonparametric equivalent of Pearson's Product Moment Correlation Coefficient for ordinally-scaled data is well known. The test assumes that data has been randomly and independently selected and that it is at least ordinally-scaled. In this study, r_s is tested for significance using the following formula suggested by Siegel and Castellan for samples of more than 25 respondents. This test statistic is little used but is the most accurate way of testing r_s. It is approximately distributed as Student's t:

$$t = r_s \sqrt{\frac{N-2}{1-r_s^2}}$$

where:

t = Student's t sample statistic

r_s = Spearman's rank order correlation coefficient

N = number of objects or individuals in the sample

Classification and Regression Trees Analysis (CART)

Marketers are familiar with the University of Michigan's **Automatic Interaction Detector** (AID). AID basically performs an ANOVA on the data and determines which variables are most predictive of population differences.[34] Unfortunately, AID requires that predictor variables be at least intervally-scaled.[35] CART is a nonparametric equivalent of AID which was recently developed after ten years of work by California Statistical Software.[36] The programme is resident on the computers of the University of South Africa and all analysis using the programme was completed by Greenacre at UNISA.

Of primary interest is the ability to construct a decision rule to test the importance of personal values versus traditional market segmentation techniques, such as race, income, education or age. As California Statistical Software says[37]:

> "The standard statistical methods used in classification are discriminant analysis or log' regression. In regression the standard approach is through the use of linear regression in some form. In either case the prediction rules are given in the form of algebraic expressions that are often difficult to understand and interpret – much less explain to anyone without a statistical background.

> CART takes a completely different approach. The prediction rules it constructs are given in the form of binary decision trees -- easy to understand, use, explain, and interpret. But in spite of their simplicity, the prediction trees constructed by CART are seldom less accurate, and often much more accurate than the algebraic rules constructed using standard methods. In fact, "the more complex the data are and the more variables are present, then the more successful CART is as compared to other methods."

In essence, CART does not analyze the data, assume some kind of common distribution and then apply a statistical test. Rather, CART separates the data into tenths and then analyzes 90% of the data for the best possible classificatory rule. When it establishes a possible rule, it cross-validates the rule on the remaining 10% of the data. CART then rotates each 10% partition of the data into the role of "cross-validator". Greenacre suggests that this results in extremely conservative decision rules.

Simply put, CART classifies data into sets which are maximally discriminating. These sets can be composed of members of different races, ages or a set of respondents who ranked **A COMFORTABLE LIFE** higher than 3, or lower than 6,5. Unfortunately, in some instances the data are too complex for analysis or predictor rules simply do not exist.

CART offers a number of analysis options. For instance, it allows a choice of classificatory or regressionary methods of forming trees and a choice between univariate splits or linear combinations for forming the actual splits. The nature of the data obviously required that this study utilize the classificatory method and univariate splits.

At each nodal split of a CART tree, CART generates share of sample information for the dependent variables. This was obviously a most important part of the analysis in this study because this information could be generated to estimate the "market share" of each brand in each CART-created segment. CART also gives an indication of other decision rules which compete at each nodal split and estimates their effectiveness compared to the selected criteria. These surrogate splits give an indication of possible alternative decision rules.

The Variable Importance list which indicates the relative importance of all analyzed variables in relation to the most important variable. This list is also an important tool in determining the importance of variables which may not be the most important at any one node but are important surrogates at many nodes. Without a measure of relative importance such variables might be mistakenly thought to be without importance[38].

> In order to remedy this, a measure of importance for each variable was designed for CART based largely on the concept of surrogate splits. It has been fairly successful in uncovering variables which remain hidden when one simply examines the splits in the selected tree. This measure, normalized to a maximum of 100, is printed out near the end of the CART printout. But because any measure of variable importance is a bit ad hoc, the exact numerical values listed should not be taken too literally."

When a tree cannot be created, the programme offers an exploratory mode which is also sometimes useful. This mode is analogous to running a stepwise regression without any levels of significance. The resulting exploratory segments are not cross-validated.

In this study, CART is used to predict market segment membership and possible variable importance. Although the measure is a "bit ad hoc", it is used as an indication of the existence of a so-called "Black Market." Neither CART, AID, nor any other similar programme has been used before to analyze the importance of personal values in relation to other more traditional forms of market segmentation to our knowledge.

Pearson X^2 Test Statistic and Cramer's V

Brand image perceptions and brands are arranged in contingency tables and tested for statistical independence using the X^2 test statistic.[39] Cramer's V (sometimes also referred to as Cramer's C[40]) is used as a measure of association between brands and the personal value associated with them.[41]

There are some basic assumptions and conditions that underlie the X^2 test. There must be a fixed number of trials. The respondents must be randomly and independently selected so that the probability remains equal for each trial and each respondent fits into only one cell of the contingency table. The respondents must be independent. Because the test uses discrete data to approximate a continuous distribution, the expected frequency of each cell should be more than five, or more than ten if there are only two rows or columns.[42] Siegel and Castellan suggest that the last rule is overly-conservative and propose other rules which allow smaller observed frequencies. They suggest that less than 20% of the cells should have an expected frequency below five and that none should have an expected frequency below 1.[43] To achieve this standard, all brands and personal value associations had to fulfill the following criteria to be included in a contingency table: at least 30 respondents had to choose a brand and at least 20 respondents had to associate a personal value with the qualifying brands.

The main use of X^2 in this study is to determine the significance of relationships which are mapped in each correspondence exercise. This procedure is recommended by Greenacre (X^2 and inertia are directly related).[44]

Pearson's mean-square contingency coefficient, X^2/n, is referred to often in correspondence analysis as inertia. Dividing inertia by the square root of whichever is less, rows minus one or columns minus one, yields a statistic with a value from zero to one.

While X^2 tests the independence of the two categorical variables being tested, it does not give any indication of the association between them. The problem is that X^2 is affected by the total frequency and that given "...a sufficiently large value of *n*, any null hypothesis will almost certainly be rejected."[45] Cramer's V (also called Cramer's C by Siegel and Castellan[46]) helps put X^2 differences into perspective by using the X^2 statistic to calculate an overall measure of association.

Cramer's V is "...purely descriptive..." and "...has significance only in comparative terms...", yet it offers the advantage of an index which is zero when there is no association and unity when association is perfect. The assumptions which underlie X^2 apply to this statistic as well.

The Kendall Coefficient of Concordance *W*

It is also desirable to determine the amount of association between the ranks of all respondents in various categories. The *W* statistic is a good measure of interjudge or intertest reliability but also provides a good measure of the homogeneity of the sample. This information could be compiled by computing r_s or *T* for all possible pairs within a data set. Obviously, this would not be very easy in a large sample such as used in this study.

For *k* respondents, it can be shown that *W* is linearly related to r_s and that the average r_s for all possible pairs of *k* is equal to:

$$\text{ave}(r_s) = \frac{kW - 1}{k - 1}$$

The *W* statistic is scaled from 0 to 1, with a value of 1 indicating perfect agreement. This test statistic assumes that the sample must be randomly and independently selected and the measurement scale must be at least ordinal.[47]

Like the Spearman Rank Order Correlation Coefficient, Kendall's Coefficient of Concordance *W* is 91% as powerful as the Pearson Product-Moment Correlation Coefficient, the most powerful parametric technique of this type.

Multivariate Analysis

There are a wide range of techniques available for multivariate analysis. Correspondence analysis has not been used for many published marketing research studies. A number of these techniques have been used in consumer research, often badly, and the reasons underlying their rejection in this study are as follows:

Principal components analysis: This factor analytic technique accounts for "...the total variation among...*n* subjects in a *p* dimensional space by forming a new set of orthogonal and uncorrelated *composite* variates."[48] As Cooper and Weekes point out[49], principal components analysis does not cope with categorical variables, but correspondence analysis does and it is based on a principal components approach.

Factor analysis: This linear reduction technique assumes that there is an underlying inherent structure to the data and that the relationships in the data can be reduced to a smaller number of factors which will produce the exact correlation found in the original larger set of variables.[50]

Factor analysis can take the form of a number of modes, depending on whether variables, people or occasions are the variables by which factors are loaded, the variables by which indices are computed or the variables by which data are collected. Q-mode and R-mode are often used for marketing research.[51] A local example might be the use of both by the commercially successful **Sociomonitor** programme.[52] However, this is not an indication that this is a valid use of the technique[53]:

> "Q factor analysis is often a principal tool employed in market segmentation studies. Its use has continued despite repeated criticisms and its disappointingly poor record of reliability. The use of Q factor analysis for the identification of segments or types is one of the paramount abuses of factor analysis."

While Cattel would suggest that R-mode factor analysis would be an acceptable operation with "normative ipsative data" such as that by the **Rokeach Value Survey**, Gulliford would caution against its use because the technique requires independent data.

Rokeach settles on the use of the technique while cautioning that results must take into account the violation of the assumption of independence.[54]

There are additional problems with the use of factor analysis. These include the complicated process necessary to determine whether data are amenable to factor analysis, the subjectivity involved in choosing the number of factors the computer analysis programme must generate, the subjectivity regarding axis rotation techniques and the subjectivity involved in naming the factors generated by the programme.[55]
Many would suggest that intuition can be used to work through these methodological problems. However, Armstrong and Soelberg have demonstrated that the factor analytic solution of a random number list can have impelling intuitive appeal.[56] There is also no guarantee that a factor analytic solution has any meaning.[57]

Cluster analysis: This technique has achieved the same degree of ubiquity in marketing journals as factor analysis and, as Punj and Stewart point out, it is often as badly used as factor analysis. However, cluster analysis can be employed to identify homogeneous groups of people, such as market segments.[58] In fact, Green and Tull suggest using cluster analysis for product positioning studies.[59] Greenacre has also used cluster analysis with correspondence analysis of readership data.[60]

There is also a similar degree of subjectivity involved in cluster analysis, even though clusters are "...more concrete, immediately evident, and easier to understand than a factor."[61] Subjectivity is involved in the selection of the number of clusters that are produced (although a review of Milligan and Cooper will reduce the confusion of any user to a large degree[62]), naming clusters and choosing from the vast number of cluster programmes.

Sadly, there is general agreement that the use of cluster analysis on ordinally or nominally-scaled is "quite ad hoc."[63] This is because, simplistically put, cluster analysis works by reducing the distance between points to find points closest to each other. Obviously, the distance between points on an ordinal scale is undefined. Dillon, Madden and Firtle point out that this distorts the distance between points and renders the result invalid.[64]

Other methods: A number of other methods are widely used in consumer research but don't apply to the type of data being analyzed, examples of which include multiple regression, canonical correlation analysis and discriminant analysis (all of which require intervally-scaled data[65]), ANOVA, MANOVA, ANCOVA and MANCOVA (all of which are

inappropriate for this study because they are parametric techniques) and multidimensional scaling which assumes ratio-scaled order can be applied to the data.[66]

Correspondence Analysis

Correspondence analysis is a special form of principal components analysis appropriate for categorical data. Although developed in America decades ago, the technique was relatively unknown among Anglo-American researchers until recently due to the differences in statistical notation used by statisticians in France - where correspondence analysis has been most used. Recent articles have demonstrated both the interest in and misunderstanding of marketers in this "new" technique.[67]

Correspondence analysis carries out a principal components analysis on a transformed version of the row proportions of a contingency table. This transformation includes dividing the values in each column of the row proportions by the square root of the marginal relative frequency of the same column and weighting each row by the total row relative frequency. The resulting relative weight of each row vector is called the row mass. This allows the simultaneous analysis of the row and column proportions.[68]

Correspondence analysis attempts to reduce the dimensionality of a cloud of points in k-dimensional space by finding a subspace of lower dimensionality which comes close to the original cloud of points.[69] Personal value systems obviously motivate behaviour, but the personal values components of brand image perceptions do as well and correspondence analysis is used to achieve a better understanding of how well the personal value statements of the **Rokeach Value Survey** describe what brand images mean to respondents.

The following concepts, definitions and expansions serve to explain the theory underlying correspondence analysis and the implications of this theory.[70]

Correspondence analysis is essentially a geometric analysis technique applied to a contingency table. Row and column vectors (called profiles in correspondence analysis) can be represented by a point vector in three-dimensional Euclidean space. The transformation described above also creates a table where the row profiles and column profiles both total to 1, that is they are normalized. Because they are normalized, linear dependency exists: therefore the points can be represented in a two dimensional simplex which is a triangle with vertices fixed at the unit points along all three axes.

Distance is plotted from the average row profile, using a weighted Euclidean metric called the X^2 metric. The average row profile is also called the centroid:

> "The centroid of a set of points v1 ... v_i is a particular combination $\alpha_1 v_1 + ... + \alpha_i v_i$ where the coefficients add up to 1...(such a combination is often called a *barycentre*)...we shall think of the centroid...as a weighted average vector, where the coefficients $\alpha_1 ... \alpha_i$ are proportional to weights (or masses) assigned to respective vectors in the linear combination. Thus the ordinary mean vector is the centroid when equal weight is assigned to all the vectors."[71]

No basis vector, that is the axes which make up the display, is a linear combination of another. Each "...vector defines a new dimension in space because its movement cannot be obtained by combining movements of the other basis vectors."[72] Basis vectors are orthogonal (their scalar product is zero) and because they have unit lengths they are orthonormal. As such, they provide an orthonormal basis for two-dimensional Euclidean space. Simply put, the centroid is the origin of the correspondence analysis map and the average point of all the dimensions. Points which lie near the origin can be thought of as being "more average" than those which lie at the distant edges of the map. Outliers can be thought of as "more distinct".

Because correspondence analysis has such a close association to X^2 analysis, the conditions regarding the use of this statistic generally apply. The use of the X^2 metric and transformation has the attractive benefit of allowing row profiles with small marginal frequencies which violate the underlying X^2 distribution to be added together without affecting the resultant geometry of the display. This is called the principle of distributional equivalence. These conditions also have the benefit of allowing row-column independence of the contingency table to be tested[73]:

> "...X^2/n can be defined geometrically as the weighted average of the squared (chi-squared) distances of the row profiles to their centroid. The quantity X^2/n crops up frequently in correspondence analysis and is called the *total inertia* of the data matrix."

It is obvious that *n* times the total inertia statistic yields the X^2 statistic. The X^2 test statistic has (r-1) x (c-1) degrees of freedom. Inertia is also referred to as Pearson's mean-square contingency coefficient. Inertia reaches it's minimum value, zero, when there is no difference between the observed and expected frequencies.

Total inertia is composed of the principal inertias, which may also be thought of as eigenvalues but are normally referred to as dimensions. The number of these dimensions is equal to the lesser of r-1 or c-1 for each contingency table analyzed. Each principal

Inertia is the weighted average of the X^2 distance from the centroid to the projects of the row profiles on that particular principal axis and an absolute measure of dispersion in this dimension.

Each principal inertia can be further decomposed into components due to each row profile. These are called contributions to inertia and are important in understanding what contributes most to the dispersion in each dimension. Adding together the contributions to inertia for a point which is displayed in a two-dimensional map gives the quality of the planar display of the point and the relative contribution of the plane to the point.

The correlation of each row profile's deviation vector can also be studied in conjunction with the display. This is essentially a measurement of the squared cosine of the angle between the row profile deviation vector and the centroid. This is called the contribution of the axis to the inertia of the point.

Interrow and intercolumn distances are meaningful when analyzed from the display printed by the correspondence analysis programme. They can be thought of as approximate X^2 distances. The distances between row and column profiles is meaningless and a near co-incidence may not suggest anything; but they do direct the attention to areas of the contingency table for further analysis. Points that do tend to share similar differences when compared to the total data set, but one-way marginal frequencies should not be over-interpreted. In this light, the researcher should always bear in mind that correspondence analysis is an investigative technique.

Another nice feature of most correspondence analysis programmes is the ability to plot supplementary points. Supplementary points are plotted as if they were part of the analysis but are assigned zero mass. As such, supplementary points don't affect the display of other points and allow the researcher to violate X^2 restrictions on the analysis. Because respondents identified a personal value with their usual brand and an ideal brand, the assumption of independence underlying X^2 is violated - plotting the ideal brand as a supplementary point avoided this problem and yielded a very interesting display benefit.

The correspondence analysis programme used for analysis was the **PASS Correspondence Analysis Programme** by Proactive Statistical Software which is resident on the personal computer of the Research Department of the McCann Group SA (Pty) Ltd. Again, to avoid violating the rules regarding small observations per cell, brands with less than thirty respondents and values with less than twenty respondents were omitted from analysis.

Summary of Data Analysis Issues

The personal values construct is continuous and ordinal. This strongly suggests that analysis of personal values data should be done using nonparametric techniques. The small loss of statistical power cited by many researchers may not exist if the data do not fulfill all of the underlying assumptions of parametric techniques.

There is some debate regarding values measurement tools. The debate largely centers on the issue of ranking versus rating. Ranking offers a number of advantages. It is more isomorphic to the construct, it is more reliable and it takes the respondent less time to do. The **Rokeach Value Survey** offers the advantages of ranking and interiester reliability.

The issue of multiple testing is one which has received very little attention in values literature. Value measurement instruments which require the respondent to rank data are not only ipsative, but they may also cause the researcher to use highly inflated family-wise α levels due to the multiple testing of the same respondent for each value. Bonferroni's – t offers a conservative and appropriate way to adjust α levels per comparison.

The range of statistical tests has been discussed thoroughly and the appropriateness of each technique has been compared to similar, but less desirable techniques.

Any experiment requires that the researcher carefully define the constructs, concepts and variables he is testing. The next section defines the key constructs, concepts and variables used in this study.

Operational Definitions

Language is an exercise in symbolism. Even the simplest of terms, such as the word "table", can mean many different things to different people. To the mathematician, the word may immediately symbolize a table of figures. To the furniture salesman, it may represent a luxurious dining room table. To the squatter camp dweller, it may represent the box upon which a cloth has been thrown. For this reason, it is necessary that researchers carefully define each concept and construct tested so that reported results are best understood.

In this study eighteen terminal values, eighteen instrumental values, ten individual characteristics or social and situation influences and eight product classes were investigated. The respondent's self-perceptions of behaviour were assumed to accurately mirror true behaviour. The respondent's perceptions regarding the one terminal value and the one instrumental value most like an idealized brand were considered to be representative of the respondent's ideal brand.

Reviewers of the following results should be aware that the concepts and constructs tested in the hypotheses were operationalized in the following ways:

Personal Values

Terminal Values - Respondents ranked the 18 terminal values in the **Rokeach Value Survey**.

Instrumental Values - Respondents ranked the 18 instrumental values in the **Rokeach Value Survey**.

Individual Characteristics, Social Influences and Situational Influences

Urbanisation - The sampling frame includes only people from urban areas. However, within the urban areas different degrees of urbanisation can be discerned. Classifications for eight classes of urban environment, based mainly upon the size of the metropolitan area, were adapted from the VALS programme.

Age - Respondents were asked to identify the group of ages into which their age fell from a card. The age classifications were adapted from the VALS programme.

Race and Ethnic Group - Respondents were asked to identify the ethnic group of which they considered themselves to be part. The classifications were split into the four traditional races and further split into major language groups adapted from AMPS.

Working Status - Respondents were asked to identify their major activity during the past week, choices ranged from full-time employement to unemployment. The classifications were adapted from the VALS programme.

Occupation - Respondents were asked to identify one of fourteen classes which best described their occupation. The classifications were adapted from the VALS programme.

Education and Father's Educa... - Respondent's were asked to identify the highest level of formal education they or their father's attained. Classifications were adapted from the VALS programme.

Household Income - Respondents were asked to identify the income group into which the total household income of all wage-earners living in the household fell from a classifications Volkskas Ltd. use in their regular tracking studies.

Marital Status - Respondent's were asked to identify their marital status from a classifications list adapted from the VALS programme.

Product Classes - Existing Brand Lists

Product classes and brand names are also concepts and constructs. A stokvel performs many financial services for some Black consumers. The concept of a "cool drink" may include much more than carbonated soft drinks to many consumers. It is hard to say how significant much past research has been because of the limited number of brands which were tested in many product categories. This study attempted to offer respondent's exhaustive lists of brands to ensure that their true brands were available to be chosen. No one truly knows how extensive stokvels or mashonisas are in the Black financial sector or if they are used in addition to a more traditional building society or bank. There are no reliable published figures regarding the size of a brand such as SADIE deodorant which is sold in significant quantities only through hawkers. This study always offered respondents a chance to choose "other" as their brand to help overcome this problem.

Another problem is that many Black consumers have never purchased a motor car, or petrol or opened a bank account. As discussed earlier, the questionnaire gave these respondents the opportunity to respond within a functionally-equivalent context.

Banks and Building Societies - The brand tested in the Banks and Building Societies product classes represent over 90% of the market according to tracking studies done by Volkskas Ltd. There is a strong racial bias to product usage according to **AMPS 87/88**:

Table 3: Financial Institutions and Services Personally Made Use of (AMPS 87/88)

Type of Account	Whites	Blacks	Coloureds	Asians
Cheque Account	45,7%	0,8%	2,5%	10,8%
Savings Account	73,5%	31,6%	26,5%	46,2%

Shampoo - Shampoo brands tested represent over 90% of the market according to the IBIS July/August 1988 report. There is a strong racial bias among users of shampoo according to **AMPS 87/88**.

Table 4: Consumer Products Used - Shampoo (AMPS 87/88)

Description	Whites	Blacks	Coloureds	Asians
Use At All	92,3%	9,7%	51,9%	51,3%

Deodorant - CART has limitations regarding the number of brands and values it can analyze. This limited the CART analysis to six brands per market. No six brands command enough market share to be considered representative of the total deodorant market so the traditional segments manufacturers and retailers talk about were analyzed. Total brands analyzed represented over 90% of the market according to IBIS July/August 1988. Respondent's did not pick brands from each product class, but rather picked the brand they most often buy from the total list. Respondents were split into groups later in the analysis.

Deodorants are generally available in three delivery systems in South Africa: as roll-ons, aerosol sprays and stick deodorants. Most brands also come in a deodorant and anti-perspirant variant. Because this study concerns brand image perceptions and consumer behaviour, the latter distinction was considered to be inconsequential.

Unlike the other health and beauty aid tested, deodorants enjoy wide usage with all segments of the South African population. As the following chart shows, Whites prefer

aerosols while Blacks prefer roll-on products but this is probably due to the wide variance in the price of the two types of products. Refills can be purchased for roll-ons and they are much cheaper to use than aerosol spray or stick products. Stick deodorants, especially stick anti-perspirants, are a new innovation in the South African market and have not been very successful.

Table 5: Consumer Products Used - Deodorants (AMPS 87/88)

Use of Product	Whites	Blacks	Coloureds	Asians
Roll-on	29,1%	49,9%	40,7%	14,1%
Aerosol	69,6%	34,5%	57,0%	57,5%
Stick	4,0%	1,5%	1,8%	1,7%

Motor Cars - While many respondents will never buy a new car in their life, they may purchase a used car. The values attached to a brand may be different in these two different buying situations or may not be. Determining this distinction was beyond the scope of this study. Delta Motor Corporation (Pty) Ltd. provided brands which comprise over 90% of new car sales according to published industry figures.

Soft Drinks - National Beverage Services (Pty) Ltd. provided brands which comprise over 90% of carbonated soft drink sales from which respondents chose the brand they purchase most often.

Petrol - Information concerning the sale or supply of petroleum products is restricted by law in South Africa. Lerena of the McCann Group estimated brands which comprised 90% of sales of petrol from past research for respondent choice.

Food Stores - Johnson & Johnson (Pty) Ltd. provided the names of food stores which it believes comprise 90% of the sales of shampoo and deodorant based upon Ibis (Pty) Ltd. Universe figures.

Ideal Brand - Respondent associations of personal values to an ideal brand "whether it exists or not" were considered evidence of an association to the respondent's ideal brand.

Results

Statistical tests of the hypotheses stated in Chapter 6 yielded the following results:

Hypothesis 1:

Urban South Africans with different individual characteristics or who are subject to different social and situational influences place different levels of relative importance on personal values. These characteristics and influences include race, home language, age, education, father's education, occupation, household income, marital status, employment status or residential area.

The various classes of each characteristic or influence are cast as *k* independent samples and locational differences are calculated using the Kruskal-Wallis test.

The null hypothesis of no locational difference was universally rejected. The results of the test show that the median rank of at least one value was significantly different for at least one class of each characteristic or influence.

It is not surprising that there are greater differences in terminal values, given the situational differences people of different races live under as a result of Apartheid.
Cultural differences explained the most difference in value system orientations but many of the value differences which might be attributed to race were significantly different in other categories as well. For instance, the terminal values **A COMFORTABLE LIFE, AN EXCITING LIFE, EQUALITY, FAMILY SECURITY, INNER HARMONY, NATIONAL SECURITY, PLEASURE, SALVATION, SOCIAL RECOGNITION** and **WISDOM** are ranked differently in five or more of the ten categories of individual differences, social and situational influences. Similarly, **AMBITIOUS, BROADMINDED, HONEST** and **OBEDIENT** were ranked differently in five or more categories.

It should be remembered that most of the categories are in some way influenced by race due to the results of over forty years of racially-discriminatory laws in South Africa. For instance, Blacks and Whites could have been expected to choose different living areas (i.e. urban townships are exclusively a Black living area), language is largely tied to race, Blacks are younger, Whites are more educated and earn larger household incomes.

Depending on one's point of view, this can show that race is an all pervasive influence or show that race is a summary construct of special importance in South Africa.

Appendix 3 presents the value of the Kruskal-Wallis test statistic for each characteristic or influence by value. The following table summarizes the information in Appendix 3 and indicates the number of values which were ranked differently by at least one class of each characteristic or influence:

Table 6: Significant Value Differences By Category

Characteristic or Influence	Terminal Values Ranked Differently	Instrumental Values Ranked Differently
Urbanisation	10	7
Age	6	1
Education	7	7
Father's Education	3	2
Occupation	9	9
Household Income	3	1
Language	15	11
Marital Status	8	4
Race	16	11
Employment Status	8	6

Hypothesis 2

Urban South Africans generally place similar relative importance on the majority of personal values, regardless of individual characteristics or social and situational influences.

This hypothesis tests the same basic problem as the first. Each of the various classes of each characteristic or influence are cast as *k* independent samples and locational differences are calculated using the Kruskal-Wallis test.

The discussion regarding the first hypothesis highlighted the fact that the majority of values are ranked the same by most people regardless of the individual characteristics, social and situation influences used to classify them.

Only 14 of the 36 values, that is **A COMFORTABLE LIFE, AN EXCITING LIFE, EQUALITY, FAMILY SECURITY, INNER HARMONY, NATIONAL SECURITY, PLEASURE, SALVATION, SOCIAL RECOGNITION, WISDOM, AMBITIOUS, BROADMINDED, HONEST** and **OBEDIENT** were ranked differently in five or more categories.

This may indicate the existence of an urban culture that transcends the types of characteristics and influences tested. Given the arguments discussed in hypothesis one, it may also indicate that the existence of an urban culture that transcends race.

The null hypothesis of no locational difference in the majority of personal values of each type is accepted for all characteristics and influences except race, language and occupation.

There is evidence to suggest that the majority of values are not given the similar relative importance by people of different racial groups, language groups and occupational groups:

Table 7: Significant Value Similarities by Category

Characteristic or Variable	Terminal Values Ranked Differently	Instrumental Values Ranked Differently
Urban/Rural	8	11
Age	12	17
Education	11	11
Father's Education	15	16
Occupation	9	9
Household Income	12	17
Language	3	7
Marital Status	10	14
Race	2	7
Employment Status	10	12

The following page indicates that South Africans of different races tend to rank the eighteen instrumental values in a very similar fashion but rank the eighteen terminal values somewhat differently.

Hypothesis 3

The relative difference placed upon personal values by South Africans of different races is more similar than the relative importance placed upon personal values by South Africans and Americans of the same race.

This hypothesis can be tested by comparing the rankings of terminal and instrumental values of the four combinations and testing the significance of Spearman's Rank Order Correlation Coefficient r_s:

Table 8: Comparison of South African and American Race Groups and Relative Rankings

Terminal Values

Type of Comparison	International		Intranational	
Comparison	SA WHITES USA WHITES	SA BLACKS USA BLACKS	SA WHITES SA BLACKS	USA WHITES USA BLACKS
Spearman's Rank Order Correlation Coefficient = r_s	.254901	.686274	.552115	
Significance	p>.05	p<.0005	p<.025	.01
Siegel's Large Sample Approximation of Student's t	1.1812	4.9010	3.3990	7.5368
Significance	t < 0	p<.0005	p<.005	p<.0005

Instrumental Values

Type of Comparison	International		Intranational	
Comparison	SA WHITES USA WHITES	SA BLACKS USA BLACKS	SA WHITES SA BLACKS	USA WHITES USA BLACKS
Spearman's Rank Order Correlation Coefficient = r_s	.791537	.642930	.799793	.882352
Significance	p<.001	p<.005	p<.001	p<.001
Siegel's Large Sample Approximation of Student's t	6.9345	4.3037	7.1499	10.2899
Significance	p<.0005	p<.0005	p<.0005	p<.0005

Table 9: Relative importance of terminal personal values (rankings of median rankings)

ROKEACH VALUES	SOUTH AFRICAN			AMERICAN		
TERMINAL VALUES	White	Black	Coloured	Asian	White	Black
A Comfortable Life	10	1	11	3	12	5
An Exciting Life	15	9	16	13	18	18
A Sense of Accomplishment	11	16	12	11	8	11
A World at Peace	7	4	10	4	1	1
A World of Beauty	14	14	15	15	15	16
Equality	18	8	7	9	11	2
Family Security	1	5	1	1	4	4
Freedom	12	7	8	8	3	3
Happiness	5	2	2	2	4	7
Inner Harmony	8	15	9	10	13	12
Mature Love	9	12	13	14	14	14
National Security	13	17	15	17	9	13
Pleasure	16	10	17	16	17	17
Salvation	4	18	6	18	7	9
Self-Respect	3	6	4	6	5	6
Social Recognition	17	13	14	12	16	15
True Friendship	6	3	5	5	10	10
Wisdom	2	11	3	7	6	8

Probably the most significant impression from these tables of values is the overall similarity of the rankings. When compared to American Whites, South African Whites place greater relative importance upon **SELF-CONTROLLED**, but less relative importance upon **EQUALITY, FREEDOM, BROADMINDED** and **COURAGEOUS**. When compared to American Blacks, South African Blacks place greater relative importance upon **SALVATION**, but less relative importance upon **AN EXCITING LIFE, PLEASURE, TRUE FRIENDSHIP** and **LOVING**.

South African Blacks place greater relative importance upon **A COMFORTABLE LIFE, EQUALITY** and **AMBITIOUS** than South African Whites. However, South African Whites place greater relative importance upon **INNER HARMONY, SALVATION** and **WISDOM**.

Table 10: Relative importance of instrumental personal values (rankings of median rankings)

SCHWARTZ VALUES	SOUTH AFRICAN				AMERICAN	
INSTRUMENTAL VALUES	WHITE	BLACK	COLOURED	INDIAN	WHITE	BLACK
Ambitious	9	1	9	3	3	2
Broadminded	15	9	14	11	5	8
Capable	11	15	18	10	10	13
Cheerful	10	13	11	14	12	12
Clean	7	7	3	5.5	8	3
Courageous	14	12	13	15	6	7
Forgiving	6	8	10	7	4	5
Helpful	5	3	7	4	7	6
Honest	1	2	1	1	1	1
Imaginative	18	17	18	17	18	18
Independent	12	10	4	9	13	10
Intellectual	16	16	15	16	15	16
Logical	17	18	17	18	17	17
Loving	3	6	5	5.5	9	15
Obedient	13	11	12	13	16	14
Polite	8	14	6	1	14	11
Responsible	2	5	2	2	2	4
Self-controlled	4	4	8	12	11	9

The null hypothesis of no association between rankings is supported only for the comparison of terminal value rankings by South African Blacks and Whites. There is strong evidence to suggest that the alternative hypothesis of association is true for all other comparisons. There is also evidence that the instrumental value rankings of South African Whites are more strongly associated to the rankings of South African Blacks than they are the rankings of American Whites.

Hypothesis 4

Differences in the relative importance of personal values are more fundamental determinants of brand choice and market segment membership than individual characteristics or social and situational influences.

This hypothesis must actually be tested eight times, once for each product class. The data was tested using the Decision Rules generated by CART.

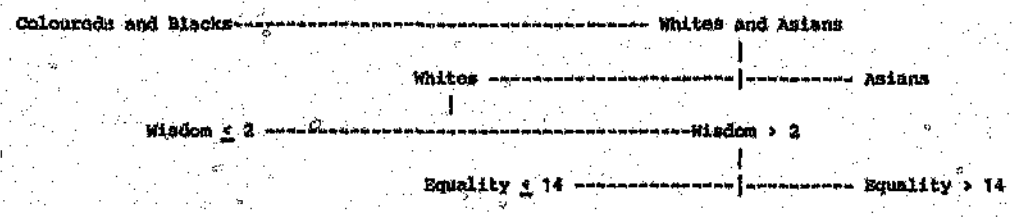
In some product classes, the data was too complex for CART to establish a decision rule which split the data into segments. While the Variable Importance list is an ad hoc measurement, it is a useful guide that suggests the true importance of the various variables. In one product class (motor cars) it did not establish the relative importance of variables.

CART has certain data processing limitations. The most serious is that it can only process approximately six to seven brands when it is measuring 40 variables per brand. This meant that the deodorant category had to be split into three traditional categories, male aerosols, female aerosols and roll-ons for analysis even though brand image perceptions indicated that these categories probably do not exist in the consumer's mind. This is discussed in greater detail later in this chapter.

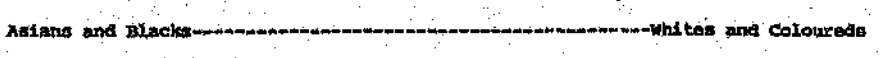
CART generated trees for only five of the ten product classes analyzed. In these six product classes, CART generated the following nodal splits:

Table 11: CART Trees Generated for Product Categories

Building Societies



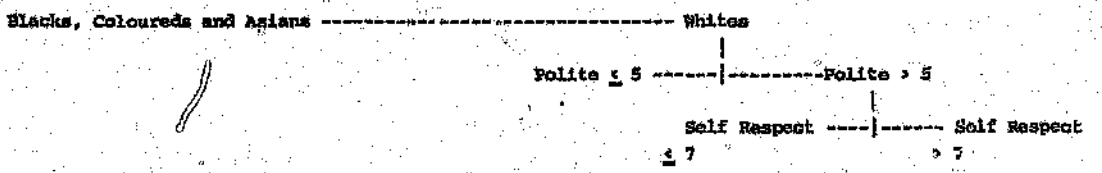
Petrol Brands



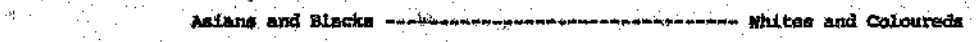
Male Aerosol Deodorants



Roll-on Deodorants



Food Stores



This analysis seems to indicate that individual characteristics are more fundamental determinants of brand choice and segment membership. Yet the Variable Importance list generated by CART seems to indicate that the relative importance placed upon values could be underlying differences and that race and age may just be a summary construct for these underlying value differences.

The table on the following page indicates the relative importance of the variables in each product class:

Table 12: CART Variable Importance List by Product Class

Personal Value	Shampoo	Banks	Bld Soc	Petrol	Deo Men Aer	Deo Fem Aer	Deo R/O	Food	Soft Drink	Motor Cars
A Comfortable Life	19	0	73	100	80	100	77	38	5	n/a
An Exciting Life	9	3	74	77	80	7	72	41	4	n/a
A Sense of Accomp	9	2	100	79	78	42	76	48	0	n/a
A World at Peace	7	0	68	64	61	21	98	53	1	n/a
A World of Beauty	2	0	71	75	84	9	71	50	5	n/a
Equality	4	19	75	58	85	3	74	33	1	n/a
Family Security	8	0	74	53	90	12	84	45	2	n/a
Freedom	15	0	79	76	69	0	86	47	9	n/a
Happiness	1	0	78	58	96	7	70	49	2	n/a
Inner Harmony	43	0	90	70	61	12	57	41	4	n/a
Mature Love	8	0	100	59	73	25	87	49	2	n/a
National Security	12	0	54	82	64	16	67	54	2	n/a
Pleasure	7	0	71	67	64	21	80	50	10	n/a
Salvation	9	11	76	53	60	23	84	43	0	n/a
Self-Respect	10	0	87	58	67	10	81	52	15	n/a
Social Recognition	12	19	63	49	84	15	69	50	2	n/a
True Friendship	7	0	93	79	74	64	70	55	6	n/a
Wisdom	6	0	83	65	86	18	70	49	3	n/a
Ambitious	11	0	80	76	62	8	84	46	15	n/a
Broadminded	16	9	80	43	53	8	86	36	4	n/a
Capable	7	4	64	62	77	11	97	61	5	n/a
Cheerful	13	0	82	93	69	0	74	53	0	n/a
Clean	5	0	67	81	80	96	71	58	1	n/a
Courageous	7	0	81	63	73	50	82	52	1	n/a
Forgiving	1	0	71	86	76	31	74	50	2	n/a
Helpful	2	0	85	69	100	93	70	38	1	n/a
Honest	14	2	55	78	56	8	97	60	0	n/a
Imaginative	8	0	79	62	75	21	85	35	14	n/a
Independent	1	0	58	44	60	18	71	32	1	n/a
Intellectual	8	0	66	86	67	3	69	46	0	n/a
Logical	8	0	86	86	82	0	80	41	1	n/a
Loving	10	1	73	64	97	16	72	52	0	n/a
Obedient	6	1	70	66	88	15	71	36	1	n/a
Polite	8	0	72	87	89	47	100	44	9	n/a
Responsible	3	0	78	72	70	6	74	49	3	n/a
Self-Controlled	3	0	99	61	73	16	92	33	2	n/a
Age	4	8	48	52	38	8	64	28	12	n/a
Education	55	3	67	50	34	6	53	39	14	n/a
Household Income	37	25	82	86	87	15	68	100	73	n/a
Race	100	100	96	65	67	0	44	76	100	n/a

Race is the most important variable in only three product classes: shampoo, banks and soft drinks. It is the second most important variable for food stores and the fourth most important for building societies.

However, there are alternative explanations for the strength of race in these categories.

In the bank, building society and shampoo product classes, there may be so little Black participation because the products offered may not answer Black needs. Shampoo made for White hair does not foam well in Black hair. Most Blacks do not qualify for a cheque account. Many food store chains, such as Pick 'n Pay, are not conveniently located for the majority of Black consumers who do not own personal transportation, such as a motor car.

Other factors may also be responsible for the importance of race as a segmentation variable. For instance, two soft drink brands are targeted at Black consumers and enjoy strong franchises. If these brands were removed from the analysis, it appears that brand preferences would not be significantly different based upon race.

There appears at first glance to be more evidence supporting the belief that race and age are more fundamental to brand choice and segment membership than personal values but this may simply be the result of underlying value differences. In essence, there is evidence that the null hypothesis of no difference in importance between characteristics and influences and the relative importance of personal values can be neither accepted nor rejected.

Hypothesis 5

Consumers who purchase or intend to purchase different brands in a product class can be meaningfully segmented based upon value system differences.

This hypothesis can be tested using the Kruskal-Wallis One Way Analysis of Variance to see if there are significant value differences between respondents who choose different brands. It can also be tested by analyzing the CART analysis for large differences in brand shares in the predicted segments.

Each market must be analyzed separately and any significant influences upon brand choice or ideal brand associations based upon age, household income, education, father's education or marital status should be examined simultaneously to ensure that the significance is not a manifestation of an underlying difference in characteristics or influences.

The eight product classes were selected based upon they types of problem-solving behaviour they represented and the traditional markets they serve. Portions of the full SAS printouts appear in Appendix 4. A full analysis and commentary of the CART analysis and Kruskal-Wallis analysis of each product class, including graphs which detail the H statistic scores for each brand, appear in Appendix 5.

The following table summarizes Appendix 5. There is evidence in every product class to reject the null hypothesis of no significant difference, either as a result of the Kruskal-Wallis test or the CART analysis. Of greatest interest are the share differences in the segments generated by the CART analysis and the patterns of value system similarity shown by different brands, such as Brands C and D in the motor car product class, in the Kruskal-Wallis test.

There is strong evidence to support the alternative hypothesis that markets can be meaningfully segmented based upon differences in the relative importance placed upon personal values.

Table 13: Summary of Kruskal-Wallis and CART Analysis

Product Class	Values p<.0028	Summary of CART Analysis
Shampoo	1	No tree created. Race and education most important variables.
Banks	6	Clear share differences between segments differentiated by value in exploratory mode. EQUALITY and Household Income most importan exploratory mode variables. Race and income most importan variables in normal analysis which did not generate a tree.
Building Soc	3	Clear share differences between segments differentiated by values MATURE LOVE and A SENSE OF ACCOMPLISHMENT most important variables
Petrol	3	One node tree split by race only. A COMFORTABLE LIFE and CHEERFU most important variables.
Deo Male Aer	0	Clear share differences between segments differentiated by value HELPFUL and LOVING most important variables.
Deo Fem Aer	0	No tree generated. A COMFORTABLE LIFE and CLEAN most importar variables.
Deo Roll-on	1	Clear share differences between segments differentiated by value POLITE and HONEST two most important variables.
Food Stores	2	One node tree generated split by race only. Household Income ar Race two most important variables.
Soft Drinks	6	No tree generated. Race and Household Income most importar variables.
Motor Cars	4	No tree generated. No variable importance list generated.

Hypothesis 6

There are more significant associations between personal values and consumer behaviour in product classes which require extended problem solving.

This hypothesis tests whether there are more significant differences in the relative importance placed on values by users of different brands within product classes generally thought to require different types of problem solving.

Differences in the relative importance placed upon values can be tested using the Kruskal-Wallis One-Way Analysis of Variance. Although every product class might represent extensive problem-solving to some individuals, the motor car, bank and building society categories are considered to be extended problem solving categories.
For this hypothesis to be properly tested a far higher number of categories would have to be tested and the respondent's involvement and perception of differences between alternatives and time pressures would also need to be measured. Unfortunately this was not possible in this study.

The small number of product classes tested in this study is also a cause for concern regarding these findings. The number tested is certainly too few to be considered to be representative of the three types of problem solving. A Wilcoxon Rank Sums Test of the following table indicates that there is a significant difference at the .005 level of significance. Therefore, there is an indication the null hypothesis of no difference should be rejected. Again, more research is needed.

Table 14: Personal Values and Problem Solving

Category	Number of Significant Associations - Positive on Limited Problem Solving Product Changes	Number of Significant Associations - Extended Problem Solving Product Changes
Shampoo	1	
Bonds		6
Building Societies		3
Paints	3	
DIY - Male Aged	0	
DIY - Female Aged	0	
DIY - Retired	1	
[illegible]	2	
Soft Drinks	6	
Motor Cars		4
Average Significant Associations	1,857	4,33

Hypothesis 7

Consumers can meaningfully associate personal values with desirable brand images.

This hypothesis can be tested using Pearson's X^2 test and Cramer's V and a full list of these statistics for the four traditional race groups appears in Appendix 6. Previous discussion of results indicates that race has been shown to be the best predictor of value differences. But the discussion has also indicated the difficulty of isolating race as a predictor of behaviour from the underlying inequities inherent in South African social structure.

Different South African race groups also have different media dependencies, information sources and life-styles. Many Black South Africans are unable to read and many who can read can only read in the vernacular. This seems to indicate that differences in brand perception may not only be due to the influence of various characteristics and influences, but may also be due to different knowledge about the product classes. To control for these differences, brand image perceptions are analyzed by race.

It should be noted that this exercise tests only the brand perceptions of the brands that consumers identified as the one they purchase most often or would be most likely to purchase. A full comparison of the brand image perceptions of all brands by all respondents was beyond the scope of this study.

1 of the 32 terminal value contingency tables indicates that there is a significant association between brands and terminal values at the .05 level of significance. One would expect 1,7 brands to be significant by chance, so the null hypothesis of no association is accepted at the .05 level of significance for terminal values for all races. However, 4 of the 32 terminal values are significant at the .10 level of significance so at this level the null hypothesis would be rejected. Given that the questionnaire was administered only in English and Afrikaans, a .10 level of significance seems more realistic. The null hypothesis is rejected for terminal values at both levels of significance if White respondents are analyzed alone.

4 of the 33 instrumental value contingency tables demonstrate significant associations at .05 and 7 show significant associations at .10. In both cases, the null hypothesis is rejected. Similarly, Asian and White respondents show significant associations if analyzed alone. There is evidence that the alternative hypothesis may be true. The relatively higher number

of significant value associations by Asians and Whites seems to indicate that race may be acting as a summary construct to explain differences in education, household income, occupation or media dependency. Many other hypotheses are probably also possible.

However, while associations may exist, the associations appear to be only of moderate to weak strength according to Cramer's V. In all cases, Cramer's V ranges between .05 and .30 and the "average" strength of association appears to be approximately .2. This suggests that this method of analyzing value associations to desirable brands is far less useful than the method developed by Gutman and Reynolds.

Table 15: Value Associations to Desirable Brands

Type of Value Probability	Whites	Blacks	Caucasoids	Aryans
Terminal Values				
p< .05	1	0	0	0
p< .10	4	0	0	0
Total number of Values analyzed	9	9	8	8
Instrumental Values				
p< .05	2	0	0	2
p< .10	3	1	1	2
Total number of Values analyzed	9	9	8	8

Hypothesis 6

There are more significant associations between personal values and brand image perceptions in product categories which require extensive problem solving behaviour.

This hypothesis is similar to hypothesis 5 but tests the values associated to brand images rather than the relative importance of the values.

One way to test the overall significance of the X^2 tests (which appear in summary form in Appendix 6) is to subject the significance levels to a Wilcoxon Rank Sum Test. This analysis tests the null hypothesis of no association between the X^2 level of significance of product by value matrices and types of problem-solving.

The following table indicates the results of subjecting the levels of significance for the X^2 tests to a Wilcoxon Rank Sum Test in this manner. Results are reported by terminal and instrumental values and these results are further analyzed based upon race:

Table 16: Value Associations and Problem Solving

Type of Value	Whites	Blacks	Coloureds	Indians
Terminal	.7754	.6961	.3582	.3725
Instrumental	.0694	.3642	.0358	.8584

The test presents little evidence to reject the null hypothesis of no difference as regards the significance of value associations and extended problem solving. Only the differences associated with types of problem-solving in the instrumental value associations of Whites and Coloureds are significant at α=.10 and only the similar differences in the instrumental value associations of Coloureds are significant at α=.05. The link between problem-solving and the significance of brand image perception matrices is at best tenuous. The significance of the brand image perceptions matrix for Coloured respondents may be explained by the relatively smaller sample size.

Hypothesis 9

The same relatively small number of personal values will be associated with brand images in a product class by most people regardless of cultural differences.

Appendix 7 lists the values associated most often with brands in each product class. The values which represent over 8% of the product class brand image associations are presented by race. In every product class it is obvious that a number of values were associated with brand images.

One way to investigate, but not test, whether the same values are associated to brands regardless of race is to look for similarities in the way personal values are associated to brands in a significantly different w y. This can be accomplished best by performing a correspondence analysis on the 64 brand x value associations contingency tables. Information regarding the correspondence analysis maps appear in Appendix 8.

The results of the correspondence analysis appear to support the null hypothesis of no association. As noted earlier, distance measurements between row and column points have no meaning in correspondence analysis. However, points on the same vector from the origin of the map do share the same characteristics.

There is not one brand that shows a similar association to any one value across all four race groups for either terminal values or instrumental values in any of the eight product classes. Similarly, there is not one dimension which encompasses similar brands and values across all four race groups in any of the eight product classes, even when contributions to total inertia are ignored.

The associations generated by correspondence analysis show great differences by race. There is such great difference in the maps that it is extremely rare to find two brands or two values which are in close proximity on the map of one race group in a product class and then find the same two brands or two values to be located within the one quadrant of any other map in a product class.

There are a number of reasons why this may have occurred. First, the sample was larger for White respondents and than all other races. Second, Black, Coloured and Asian consumers exhibited far more random associations of brands and personal values.

Another factor influenced the maps due to the X^2 limitations which underlie correspondence analysis. A decision rule was adopted by which brands were included in the brand x value matrices: 20 respondents had to choose a personal value before it could be included and 30 respondents had to choose a brand. This decision obviously affected the comparability of maps because it resulted in a much greater number of brands and values being included in the White respondent contingency tables.

Although the statistical analysis techniques may have affected the results of the test, this does not mean that conclusions can not be drawn from the correspondence analysis of the brand x value matrices. For instance, if Brand A in one of the product classes was associated to the personal value of **AN EXCITING LIFE** in the same disproportionate way by respondents of different races, Brand A and **AN EXCITING LIFE** would appear on similar vectors from the origin of each map. Even in a situation where **AN EXCITING LIFE** was associated to many brands in the same product class by other races, the analysis would probably at least show Brand A and **AN EXCITING LIFE** in the same quadrant of the maps of respondents of other races.

Because there is virtually no association of brands and values which transcends personal values, there is little chance that the alternative hypothesis is true - for current or ideal brands.

Hypothesis 10

The personal values which consumers associate with an ideal brand or a desirable existing brand will generally be relatively more important to them than to others.

This hypothesis tests whether consumers are more likely to choose brands when they can associate the brand to their most important values or whether, perhaps through a process of projection, consumers see attractive and ideal brands in "their own image."

This hypothesis can easily be tested by comparing how important each value was to those who associated it to a brand in a product class versus how important the value was to those who did not associate it to a brand in a product class. The following chart summarizes this analysis and full results appear in Appendix 9.

Table 17: Relative Importance of Associated Values

Type of Value	Most Often or Most Likely Brand							
	Shampoo	Bank	Building Society	Petrol	Deo	Food	Car	Soft Drink
Terminal	7	5	5	2	1	5	4	3
Instrum.	3	2	5	1	0	1	2	0
Mean significant terminal values:			4,0	Mean significant instrumental values:			1,75	

Type of Value	Ideal Brand							
	Shampoo	Bank	Building Society	Petrol	Deo	Food	Car	Soft Drink
Terminal	5	4	7	4	3	6	5	1
Instrum.	6	2	3	1	1	1	3	1
Mean significant terminal values:			4,375	Mean significant instrumental values:			2,25	

Obviously, comparing 18 values at a .05 level of significance, one would expect 0.9 brands to be significant by chance. In every case, the number of significant values exceeds this by a wide margin. In fact, the number of significant terminal values exceeds expected chance occurences by a factor of over four for both types of brand comparisons.

For both terminal and instrumental values, the associations to ideal brands were slightly more significant than the associations to existing brands. This is what would be expected if the hypothesis were indeed true.

Based upon this evidence, the null hypothesis of no difference is rejected. It can be concluded that there is strong evidence that the values consumers associate to brands are more important to them that the same values are to others. This is especially true in the case of terminal values associated to brands.

Therefore, the null hypothesis of no difference is rejected. There is strong evidence to suggest that the values consumers associate to brands are more important to them than to others and this is especially true in the case of terminal values.

Hypothesis 11

Brand images are at least partially composed of personal value associations.

This hypothesis is best tested by asking people to associate a brand with a personal value. Brand image is the sum of the beliefs a consumer has about a brand and how that brand performs regarding certain criteria or attributes.[74]

Earlier discussion demonstrated that personal values are beliefs of a very specific kind. Given this definition of brand image and personal values, it seems obvious that if a person can associate a value to a brand, then their perception of the brand and set of beliefs about the brand are at least partially formed by an association to that value. It logically follows that personal values then must be part of the brand image.

The administrators reported that respondents did sometimes have difficulty associating only one personal value to the brand but that there was not one report of a respondent not being able to associate at least one value to every brand chosen and every ideal brand in every product class.

The results of the analysis testing hypothesis 7 show that these brand image perceptions; that is the brand/value associations, are also significant. Therefore, the null hypothesis of no association is rejected. There is strong evidence that the alternative hypothesis is true.

Hypothesis 12

Differences in the relative importance placed upon terminal values correlate only to product class use and differences in the relative importance placed upon instrumental values correlate only to differences in brand choice.

This study does not test the influence value system differences regarding terminal values and product class use because users and non-users are not isolated. However, were this hypothesis to be true, one would expect the Kruskal-Wallis tests to show far more instrumental values to be significantly correlated to brand choice differences than terminal values.

The full Kruskal-Wallis tests of personal value system differences and brand choice appear in Appendix 5. They are summarized in the following table. The results indicate that, if anything, terminal values are more significant.

Table 16: Value Significance by Product Class

Product Class	Terminal Values $p < .0025$	Instrumental Values $p < .0025$
Shampoo	0	1
Banks	5	1
Building Societies	2	1
Petrol	3	0
Deodorant Aerosol	0	0
Dog Foods Aerosol	0	0
DIY Emulsion	0	1
Food Stores	2	0
Motor Cars	2	2
Soft Drinks	6	0
Total	20	6

There is strong evidence to reject the null hypothesis. There is evidence that both terminal and instrumental values influence brand choice. Differences in the relative importance placed upon terminal values are over two times as likely to be correlated to differences in brand choice as similar relative differences in the importance placed upon instrumental values.

Summary of the Results

The analysis showed that individual characteristics and social and situational influences are linked to differences in the relative importance placed upon personal values. However, the value systems of urban South Africans show many similarities across these major influences.

South African Blacks and Whites may be striving for different end-states, but they place very similar levels of relative importance on modes of conduct. They are much like each other and much like their American counterparts.

Personal value differences were shown to be linked to differences in brand choice and to be important market segmentation tools. They are often more important variables than the demographic variables which many marketers often use: in fact, these demographic variables may simply be summary constructs for underlying value differences.

The results of the study were inconclusive regarding types of problem-solving.

Respondent's did associate values to brands in a significantly meaningful way, but these associations were not strong and the brand image perception methodology does not offer a useful alternative to laddering techniques.

One important finding is that consumer's who associate a value to a brand find that value to be relatively more important than others do. Another important finding is that terminal and instrumental values are linked to brand choice.

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CHAPTER 8 - CONCLUSIONS

Are South Africans becoming more alike due to socio-political change factors? What is the basis of consumer behaviour and brand image perceptions? Do people of different races really belong to different market segments and, if they do, will they remain so? Is there a "Black Market"?

The literature review showed that human behaviour is a complex phenomenon which can be seen from many different perspectives. No major approach to understanding human behaviour can claim explanatory or predictive authority because all offer superior explanations of human behaviour under some conditions. Phenomenology, as voiced by Rogers, Frankl, Maslow, Rokeach and others, appears to be the psychological approach contributing most to the understanding consumer behaviour at the present time. However, any theory of consumer behaviour must stand up to the empirically-proven theories of every approach to understanding human behaviour. The lack of even inter-disciplinary agreement implies that any consumer behaviour theorist faces a herculean task. The Engel, Blackwell and Miniard Model is the only comprehensive theory which suggests the central role played by personal values in brand choice.

Consumer behaviourists borrow extensively from other behavioural sciences in an effort to eclectically develop consumer behaviour theories. Borrowing has allowed consumer behaviour to reach a healthy stage of adolescence in less than twenty-five years, although the discipline is relatively undeveloped in South Africa. Fast growth creates its own special problems and some statistical techniques, research tools, and middle-range theories have been badly borrowed or misapplied.

The phenomenological approach has contributed most to the study of personal values, especially the work of Rokeach. His work is widely acclaimed to form the basis of consumer research regarding personal values and consumer behaviour. Consumer research regarding values is in its infancy but already there is strong evidence that markets can be segmented by personal values, that choice criteria are related to values and that the perceptual process regarding brand images is driven by deeply-rooted values associations.

There have also been commercially successful attempts to take advantage of the predictiveness of values. Sadly, commercial success does not necessarily guarantee empirical validity, as was the case in the 1950s with Motivation Research. Values and life-style typologies generally borrow badly from the behavioural sciences, lack true values definitions, use invalid, unreliable and inappropriate statistical techniques and suffer other theoretical flaws which suggest serious problems regarding their efficacy, reliability and validity.

The study tested a number of hypotheses regarding personal values and consumer behaviour and the results were very consistent with expectations from the literature review. While most Urban South Africans place similar relative importance on personal values, there is strong evidence that people subject to different social or situational influences or who exhibit different personal characteristics manifest different value system orientations. Racial and linguistic differences do point most strongly to underlying value differences but this does not suggest that race or language can be thought of as segmentation factors. In fact, race has been shown to be of little importance in some markets.

Given the socio-economic disparity created by Apartheid and the very different cultural heritages of their ancestors, it's not surprising that Black and White Urban South Africans place different relative importance on terminal values. The very similar relative importance placed upon instrumental values by Black and White Urban South Africans strongly suggests an urban culture may be already exist which transcends race. The strong similarity between South African and American value systems is an interesting result.

Another interesting result indicates that differences in the relative importance placed upon terminal values may be much more predictive of brand choice differences than the relative importance placed upon instrumental values. This suggests that Howard's hypothesis regarding the link between terminal values and product class use and instrumental values and brand choice criteria can not be supported.

The results of this cross-cultural research project are reliable and valid. They suggest that that the importance of race is inconsistent from one market to the next but that values are significant in all markets. If the socio-economic and cultural change factors presently at work in the country are to continue - and there is every indication they will - marketers must begin to focus on value differences and strategies for translating these differences into practical and useful segmentation tools.

Further, there are a number of indications that race may simply be a summary construct created by Apartheid and that rapid social change may diminish the correlation of this variable to brand choice. These indications include the following:

> The irregular importance of race as a predictor variable on the CART variable importance list. This extends even to related categories such as shampoo and deodorant and even to defined markets within the deodorant product category.
>
> The high significance of the relationship between the relative importance placed upon values and past brand choice or intent to purchase regardless of race. At least one value and as many as six were significant in every product class tested.
>
> The clearly demonstrated share differences exhibited by brands in CART segments which differ only in terms of the relative importance placed upon a particular value or groups of values. For instance, respondents who placed less than average importance upon **A COMFORTABLE LIFE** but higher than average relative importance upon **INNER HARMONY, HONEST** and **RESPONSIBLE** are almost three times more likely to purchase Motor Car Brands B and D than the total sample.

Although the apparent large differences indicated in this study must now be rejected, it's even possible that future research will show that differences in the relative importance placed upon personal values will be correlated most highly with brand choice and intent in product classes which entail extensive problem solving behaviour.

The ability of respondents to associate personal values to brands was consistent with expectations from the literature review. Values are a part of brand image and consumers can associate them in a meaningful and significant way to brand images. But the associations are not overwhelmingly strong. Past experience suggests the association of attributes and attitudes would probably have been more significant. The implication suggests that values underlie the perceptual process but they are probably too centrally-held for many consumers to reliably associate them to a brand as part of a survey. In other words, this study did not find a short-cut to Gutman and Reynold's Laddering Technique. There is also the possibility that results might have been better had respondents been able to pick more than one value per brand.

The association of values to brand images does not seem to be consistent across cultures nor does the study suggest that the associations are more significant in extensive problem solving categories.

The study showed that the value respondents associate to a desirable brand in a product class are relatively more important to the respondent than to respondents who associated a different value to a product in the product class. Another way to express this is that the orientation of personal values in the belief system correlates highly with values associated with desirable and ideal brands. In essence, this suggests the dominant role of personal values not only as a frame of reference for which brands are desirable but as an influence upon how brand images are perceived.

The results of this study confirm the findings of others. The Vinson, Scott and Lamont model suggests that Rokeachian values are centrally-held influences upon the evaluations of desirable products. The results of this study are consistent with this conceptualization. The Means-End Chain proposes that values are the evaluative criteria by which brand attributes and consequences are translated into desirable benefits and by which products are grouped into an evoked set. This study confirms that values are evaluative criteria and that certain brands such as motor car brands B and D, appeal to people with similar value system orientations.

Engel, Blackwell and Miniard suggest that values are an influence on every major stage of the decision process. This study validates a relationship between personal values and the cognitive processes of SEARCH, the desirability of ideal brands and desirable brands in ALTERNATIVE EVALUATION and INTENT to purchase or reported past behaviour regarding PURCHASE.

A Belief System Model

While this study validates all of Engel, Blackwell and Miniard's proposed links which were tested, the conclusions of this thesis suggest an opportunity exists to model the role of the Belief System as the driving force behind Alternative Evaluation.

The values construct is an intervening variable. Values are the primary influence upon behaviour and, more specifically, brand choice. But values can not be separately singled out by consumers or marketers. They are part of a tightly-interwoven system of the self-concept, needs, values, attitudes and beliefs. Perhaps the dissatisfaction with the

predictiveness of attitude research and the lack of real progress with values research in the last decade is due to the atomistic nature of past research into the functioning of the consumer's total BELIEF SYSTEM.

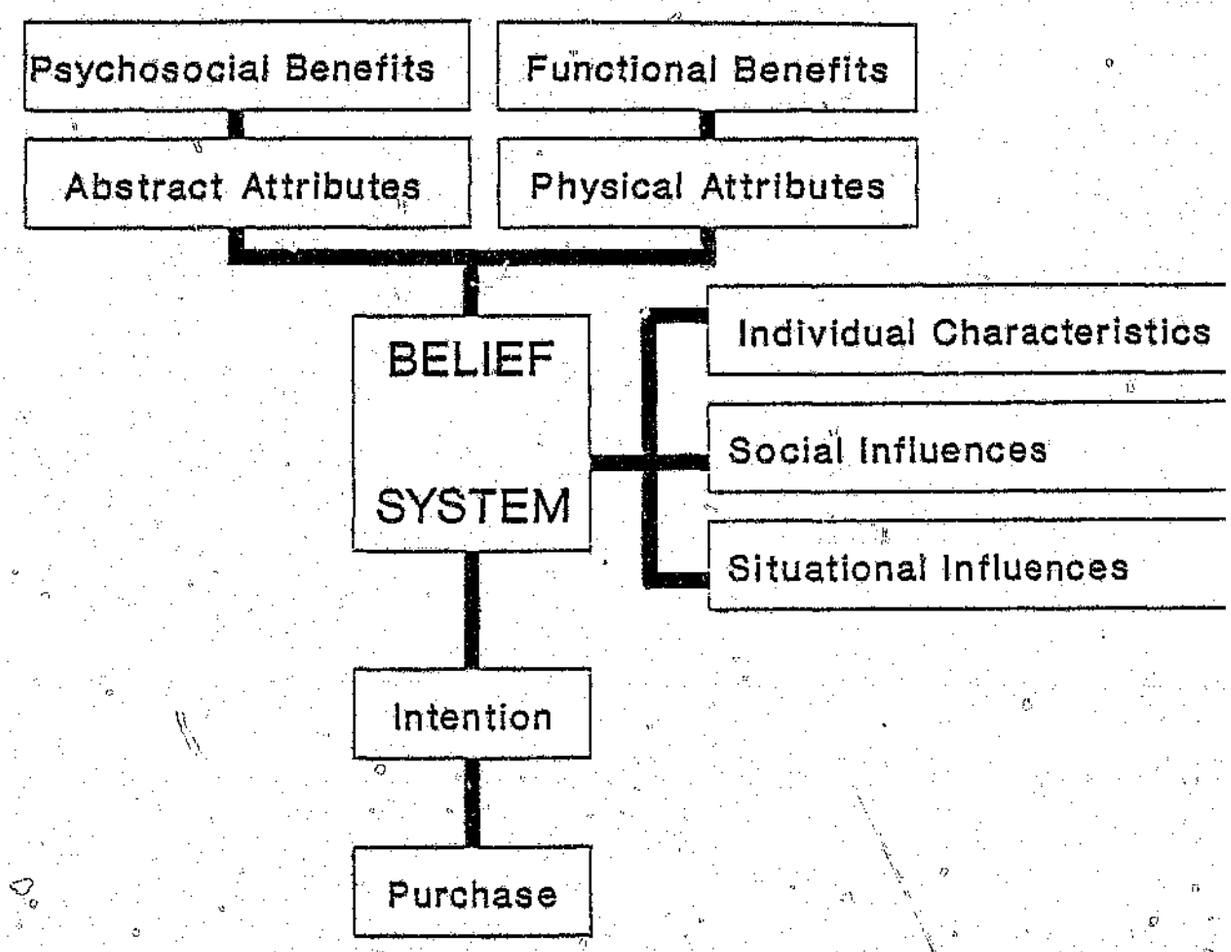
SEARCH yields processed information about alternative products which answer the problem or need which has been recognized. This information consists of the attributes of various brands. **PHYSICAL ATTRIBUTES** consist of the perceived physical characteristics of the brand such as the colours in which it is available. **ABSTRACT ATTRIBUTES** relate to the perceived intangible characteristics of a brand such as the Mercedes Benz motor ca brand name.

There is a consequence, or consequences, that are related to each attribute. A benefit is a personally-relevant consequence. A **PHYSICAL ATTRIBUTE**, such as a hotel chain's firm bedding, translates into a **FUNCTIONAL BENEFIT**, ch as a good night's sleep. An **ABSTRACT ATTRIBUTE**, such as the Mercedes Benz brand name, translates into a **PSYCHOSOCIAL BENEFIT** such as a esteem. C[illegible]ners can easily identify brand attributes and benefits - although benefits are more ce[illegible]ally-held and may be analyzed often below the threshold of awareness; as values most often are.

These attributes and benefits are perceptually distorted by the **BELIEF SYSTEM**, which consists of the self-concept, needs, terminal values, instrumental values, attitudes and beliefs as defined by Rokeach. Beliefs include beliefs about products. The process of distortion may cause the individual to pro[illegible] perceptual-distortion regarding the desirability of the most desirable brand in the [illegible]d set by associating the brand to the most important values. Durin[illegible] this process ideal and desirable brands may become cognitively transformed symbols of centrally-held values which are themselves the cognitive transformation and representation of needs.

The orientation of the **BELIEF SYSTEM** is subject to processes of maturation, experience and other forms of learning. **INDIVIDUAL CHARACTERISTICS**, **SOCIAL INFLUENCES** and **SITUATIONAL INFLUENCES**, as defined by Engel, Blackwell and Miniard and Rokeach, serve as influences and antecedents of the relative importance placed upon various elements of the **BELIEF SYSTEM**.

The outcome of the **BELIEF SYSTEM** is an **INTENTION** to purchase and **PURCHASE** as envisioned by the Engel, Blackwell, and Miniard as the following model shows:



The Belief System during Alternative Evaluation

Figure 15: The Belief System During Alternative Evaluation: A Model

Future Research

A wide variety of research regarding the role of personal values, consumer behaviour and brand image perceptions is suggested by this thesis. The links proposed by the Belief System Model provide a rich area for research. Qualitative research should investigate the way consumers relate values to both kinds of attributes and benefits. More research is needed regarding the relationship between personal values and problem solving, the relative importance of personal values and purchase behaviour, the relationship between individual characteristics, social influences, situational influences and personal values and the process by which important personal values become perceptually distorted to represent brands.

Answers to questions regarding value changes and socio-political change will only be answered when this study is replicated. South African consumer researchers should focus on the creation of techniques which help marketers focus on Belief System differences as the basis of market segmentation.

Appendix 1

Sample Characteristics

RACE=WHITE

AREA	Frequency	Percent	Cumulative Frequency	Cumulative Percent
CITY>750	38	6.3	38	6.3
TOWNSHIP/CITY	45	7.5	83	13.8
SUBURB/CITY	305	50.6	388	64.3
50<TOWN<250	54	9.0	442	73.3
TOWNSHIP/TOWN	42	7.0	484	80.3
SUBURB/TOWN	91	15.1	575	95.4
TOWN<50	12	2.0	587	97.3
RURAL	16	2.7	603	100.0

AGE	Frequency	Percent	Cumulative Frequency	Cumulative Percent
18-24	91	15.1	91	15.1
25-29	102	16.9	193	32.0
30-34	111	18.4	304	50.4
35-44	125	20.7	429	71.1
45-54	89	14.8	518	85.9
55-64	47	7.8	565	93.7
65+	38	6.3	603	100.0

LANG	Frequency	Percent	Cumulative Frequency	Cumulative Percent
AFRIKAANS	349	57.9	349	57.9
ENGLISH	250	41.5	599	99.3
OTHER	4	0.7	603	100.0

EMPLOYMENT	Frequency	Percent	Cumulative Frequency	Cumulative Percent
FULLTIME	304	50.4	304	50.4
PARTTIME	45	7.5	349	57.9
DAYOFF	12	2.0	361	59.9
LOOKING	6	1.0	367	60.9
STUDENT	13	2.2	380	63.0
RETIRED	42	7.0	422	70.0
HOUSEWIFE	165	27.4	587	97.3
OTHER	16	2.7	603	100.0

OCCUPATION	Frequency	Percent	Cumulative Frequency	Cumulative Percent
PROFESSIONAL	96	15.9	96	15.9
MANAGER	21	3.5	117	19.4
SALES	36	6.0	153	25.4
CLERICAL	93	15.4	246	40.8
CRAFTS	54	9.0	300	49.8
MACHINIST	26	4.3	326	54.1
LABOURER	1	0.2	327	54.2
FARMER	1	0.2	328	54.4
SERVICES	23	3.8	351	58.2
OTHER GOVERNMENT	10	1.7	361	59.9
HOUSEWIFE	172	28.5	533	88.4
OTHER	49	8.1	582	96.5
NONE	21	3.5	603	100.0

EDUCATION	Frequency	Percent	Cumulative Frequency	Cumulative Percent
STD5<STD8	189	31.3	189	31.3
STD9-10	63	10.4	252	41.8
MATRIC	166	27.5	418	69.3
1YR UNIV/TECH	17	2.8	435	72.1
TECH GRAD	49	8.1	484	80.3
2-4YR UNIV	18	3.0	502	83.3
UNIV GRAD	53	8.8	555	92.0
OTHER POST MATRI	48	8.0	603	100.0

FATHER'S EDUACT'N	Frequency	Percent	Cumulative Frequency	Cumulative Percent
<=STD4	13	2.2	13	2.2
STD5<STD8	194	32.2	207	34.3
STD9-10	28	4.6	235	39.0
MATRIC	92	15.3	327	54.2
1YR UNIV/TECH	7	1.2	334	55.4
TECH GRAD	12	2.0	346	57.4
2-4YR UNIV	4	0.7	350	58.0
UNIV GRAD	39	6.5	389	64.5
OTHER POST MATRI	20	3.3	409	67.8
DON'T KNOW	194	32.2	603	100.0

INCOME	Frequency	Percent	Cumulative Frequency	Cumulative Percent
R150-R499	20	3.3	20	3.3
R500-R999	37	6.1	57	9.5
R1000-R1249	37	6.1	94	15.6
R1250-R1499	42	7.0	136	22.6
R1500-R1749	35	5.8	171	28.4
R1750-R1999	43	7.1	214	35.5
R2000-R2249	51	8.5	265	43.9
R2250-R2499	41	6.8	306	50.7
R2500-R2749	44	7.3	350	58.0
R2750-R2999	34	5.6	384	63.7
R3000-R3249	40	6.6	424	70.3
R3250-R3499	28	4.6	452	75.0
R3500-R3749	26	4.3	478	79.3
R3750-R3999	17	2.8	495	82.1
R4000-R4499	35	5.8	530	87.9
R4500-R4999	21	3.5	551	91.4
R5000-R5499	20	3.3	571	94.7
R5500-R5999	11	1.8	582	96.5
R6000+	21	3.5	603	100.0

MARITAL	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1ST MARRIAGE	391	64.8	391	64.8
2ND MARRIAGE	38	6.3	429	71.1
LIVE TOGETHER	8	1.3	437	72.5
DIVORCED	41	6.8	478	79.3
WIDOW	27	4.5	505	83.7
SEPARATED	4	0.7	509	84.4
SINGLE	94	15.6	603	100.0

---------- RACE=COLOURED ----------

AREA	Frequency	Percent	Cumulative Frequency	Cumulative Percent
CITY>750	1	0.5	1	0.5
TOWNSHIP/CITY	8	4.0	9	4.5
SUBURB/CITY	134	67.0	143	71.5
50<TOWN<250	56	28.0	199	99.5
SUBURB/TOWN	1	0.5	200	100.0

AGE	Frequency	Percent	Cumulative Frequency	Cumulative Percent
18-24	72	36.0	72	36.0
25-29	28	14.0	100	50.0
30-34	20	10.0	120	60.0
35-44	43	21.5	163	81.5
45-54	23	11.5	186	93.0
55-64	5	2.5	191	95.5
65+	9	4.5	200	100.0

LANG	Frequency	Percent	Cumulative Frequency	Cumulative Percent
CAPE MALAY	23	11.5	23	11.5
OTHER	177	88.5	200	100.0

EMPLOYMENT	Frequency	Percent	Cumulative Frequency	Cumulative Percent
FULLTIME	102	51.0	102	51.0
PARTTIME	10	5.0	112	56.0
DAYOFF	5	2.5	117	58.5
LOOKING	9	4.5	126	63.0
STUDENT	16	8.0	142	71.0
RETIRED	8	4.0	150	75.0
HOUSEWIFE	32	16.0	182	91.0
OTHER	18	9.0	200	100.0

OCCUPATION	Frequency	Percent	Cumulative Frequency	Cumulative Percent
PROFESSIONAL	37	18.5	37	18.5
MANAGER	3	1.5	40	20.0
SALES	17	8.5	57	28.5
CLERICAL	31	15.5	88	44.0
CRAFTS	19	9.5	107	53.5
MACHINIST	2	1.0	109	54.5
LABOURER	3	1.5	112	56.0
SERVICES	8	4.0	120	60.0
DOMESTIC	3	1.5	123	61.5
HOUSEWIFE	32	16.0	155	77.5
OTHER	10	5.0	165	82.5
NONE	35	17.5	200	100.0

EDUCATION	Frequency	Percent	Cumulative Frequency	Cumulative Percent
<=STD4	9	4.5	9	4.5
STD5<STD8	83	41.5	92	46.0
STD9-10	33	16.5	125	62.5
MATRIC	24	12.0	149	74.5
1YR UNIV/TECH	13	6.5	162	81.0
TECH GRAD	5	2.5	167	83.5
2-4YR UNIV	13	6.5	180	90.0
UNIV GRAD	7	3.5	187	93.5
OTHER POST MATRI	13	6.5	200	100.0

FATHER'S EDUCAT'N	Frequency	Percent	Cumulative Frequency	Cumulative Percent
<=STD4	10	5.0	10	5.0
STD5<STD8	75	37.5	85	42.5
STD9-10	12	6.0	97	48.5
MATRIC	11	5.5	108	54.0
TECH GRAD	4	2.0	112	56.0
2-4YR UNIV	7	3.5	119	59.5
UNIV GRAD	5	2.5	124	62.0
OTHER POST MATRI	5	2.5	129	64.5
DON'T KNOW	71	35.5	200	100.0

INCOME	Frequency	Percent	Cumulative Frequency	Cumulative Percent
R150-R499	10	5.0	10	5.0
R500-R999	18	9.0	28	14.0
R1000-R1249	25	12.5	53	26.5
R1250-R1499	26	13.0	79	39.5
R1500-R1749	20	10.0	99	49.5
R1750-R1999	13	6.5	112	56.0
R2000-R2249	23	11.5	135	67.5
R2250-R2499	17	8.5	152	76.0
R2500-R2749	11	5.5	163	81.5
R2750-R2999	5	2.5	168	84.0
R3000-R3249	13	6.5	181	90.5
R3250-R3499	4	2.0	185	92.5
R3500-R3749	2	1.0	187	93.5
R3750-R3999	4	2.0	191	95.5
R4000-R4499	2	1.0	193	96.5
R4500-R4999	2	1.0	195	97.5
R5000-R5499	3	1.5	198	99.0
R6000+	2	1.0	200	100.0

MARITAL	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1ST MARRIAGE	94	47.0	94	47.0
2ND MARRIAGE	3	1.5	97	48.5
LIVE TOGETHER	2	1.0	99	49.5
DIVORCED	7	3.5	106	53.0
WIDOW	6	3.0	112	56.0
SEPARATED	2	1.0	114	57.0
SINGLE	86	43.0	200	100.0

---------- RACE=ASIAN ----------

AREA	Frequency	Percent	Cumulative Frequency	Cumulative Percent
CITY>750	6	3.0	6	3.0
TOWNSHIP/CITY	31	15.5	37	18.5
SUBURB/CITY	61	30.5	98	49.0
50<TOWN<250	24	12.0	122	61.0
TOWNSHIP/TOWN	12	6.0	134	67.0
SUBURB/TOWN	61	30.5	195	97.5
TOWN<50	4	2.0	199	99.5
RURAL	1	0.5	200	100.0

AGE	Frequency	Percent	Cumulative Frequency	Cumulative Percent
18-24	52	26.0	52	26.0
25-29	39	19.5	91	45.5
30-34	28	14.0	119	59.5
35-44	47	23.5	166	83.0
45-54	23	11.5	189	94.5
55-64	7	3.5	196	98.0
65+	4	2.0	200	100.0

LANG	Frequency	Percent	Cumulative Frequency	Cumulative Percent
HINDU	160	80.0	160	80.0
MOSLEM	17	8.5	177	88.5
OTHER	23	11.5	200	100.0

EMPLOYMENT	Frequency	Percent	Cumulative Frequency	Cumulative Percent
FULLTIME	112	56.0	112	56.0
PARTTIME	14	7.0	126	63.0
DAYOFF	2	1.0	128	64.0
LOOKING	14	7.0	142	71.0
STUDENT	7	3.5	149	74.5
RETIRED	2	1.0	151	75.5
HOUSEWIFE	41	20.5	192	96.0
OTHER	8	4.0	200	100.0

OCCUPATION	Frequency	Percent	Cumulative Frequency	Cumulative Percent
PROFESSIONAL	39	19.5	39	19.5
MANAGER	2	1.0	41	20.5
SALES	11	5.5	52	26.0
CLERICAL	31	15.5	83	41.5
CRAFTS	14	7.0	97	48.5
MACHINIST	17	8.5	114	57.0
LABOURER	5	2.5	119	59.5
SERVICES	3	1.5	122	61.0
DOMESTIC	1	0.5	123	61.5
OTHER GOVERNMENT	6	3.0	129	64.5
HOUSEWIFE	43	21.5	172	86.0
OTHER	17	8.5	189	94.5
NONE	11	5.5	200	100.0

EDUCATION	Frequency	Percent	Cumulative Frequency	Cumulative Percent
<=STD4	17	8.5	17	8.5
STD5<STD8	61	30.5	78	39.0
STD9-10	25	12.5	103	51.5
MATRIC	40	20.0	143	71.5
1YR UNIV/TECH	8	4.0	151	75.5
TECH GRAD	8	4.0	159	79.5
2-4YR UNIV	10	5.0	169	84.5
UNIV GRAD	19	9.5	188	94.0
OTHER POST MATRI	12	6.0	200	100.0

FATHER'S EDUCAT'N	Frequency	Percent	Cumulative Frequency	Cumulative Percent
<=STD4	32	16.0	32	16.0
STD5<STD8	60	30.0	92	46.0
STD9-10	14	7.0	106	53.0
MATRIC	10	5.0	116	58.0
1YR UNIV/TECH	2	1.0	118	59.0
TECH GRAD	1	0.5	119	59.5
2-4YR UNIV	1	0.5	120	60.0
UNIV GRAD	3	1.5	123	61.5
DON'T KNOW	77	38.5	200	100.0

INCOME	Frequency	Percent	Cumulative Frequency	Cumulative Percent
R0-R149	1	0.5	1	0.5
R150-R499	10	5.0	11	5.5
R500-R999	43	21.5	54	27.0
R1000-R1249	33	16.5	87	43.5
R1250-R1499	20	10.0	107	53.5
R1500-R1749	17	8.5	124	62.0
R1750-R1999	6	3.0	130	65.0
R2000-R2249	17	8.5	147	73.5
R2250-R2499	5	2.5	152	76.0
R2500-R2749	7	3.5	159	79.5
R2750-R2999	6	3.0	165	82.5
R3000-R3249	9	4.5	174	87.0
R3250-R3499	4	2.0	178	89.0
R3500-R3749	2	1.0	180	90.0
R3750-R3999	1	0.5	181	90.5
R4000-R4499	11	5.5	192	96.0
R4500-R4999	2	1.0	194	97.0
R5000-R5499	2	1.0	196	98.0
R5500-R5999	1	0.5	197	98.5
R	3	1.5	200	100.0

MARITAL	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1ST MARRIAGE	134	67.0	134	67.0
2ND MARRIAGE	4	2.0	138	69.0
DIVORCED	1	0.5	139	69.5
WIDOW	9	4.5	148	74.0
SINGLE	52	26.0	200	100.0

RACE=BLACK

AREA	Frequency	Percent	Cumulative Frequency	Cumulative Percent
CITY>750	26	6.5	26	6.5
TOWNSHIP/CITY	210	52.2	236	58.7
SUBURB/CITY	16	4.0	252	62.7
50<TOWN<250	23	5.7	275	68.4
TOWNSHIP/TOWN	100	24.9	375	93.3
SUBURB/TOWN	15	3.7	390	97.0
TOWN<50	7	1.7	397	98.8
RURAL	5	1.2	402	100.0

AGE	Frequency	Percent	Cumulative Frequency	Cumulative Percent
18-24	122	30.3	122	30.3
25-29	105	26.1	227	56.5
30-34	78	19.4	305	75.9
35-44	67	16.7	372	92.5
45-54	13	3.2	385	95.8
55-64	14	3.5	399	99.3
65+	3	0.7	402	100.0

LANG	Frequency	Percent	Cumulative Frequency	Cumulative Percent
N SOTHO	59	14.7	59	14.7
S SOTHO	64	15.9	123	30.6
TSWANA	70	17.4	193	48.0
XHOSA	48	11.9	241	60.0
ZULU	116	28.9	357	88.8
OTHER	45	11.2	402	100.0

EMPLOYMENT	Frequency	Percent	Cumulative Frequency	Cumulative Percent
FULLTIME	162	40.3	162	40.3
PARTTIME	35	8.7	197	49.0
DAYOFF	13	3.2	210	52.2
LOOKING	84	20.9	294	73.1
STUDENT	66	16.4	360	89.6
RETIRED	7	1.7	367	91.3
HOUSEWIFE	33	8.2	400	99.5
OTHER	2	0.5	402	100.0

OCCUPATION	Frequency	Percent	Cumulative Frequency	Cumulative Percent
PROFESSIONAL	38	9.5	38	9.5
MANAGER	1	0.2	39	9.7
SALES	18	4.5	57	14.2
CLERICAL	48	11.9	105	26.1
CRAFTS	18	4.5	123	30.6
MACHINIST	43	10.7	166	41.3
LABOURER	23	5.7	189	47.0
SERVICES	9	2.2	198	49.3
DOMESTIC	14	3.5	212	52.7
OTHER GOVERNMENT	2	0.5	214	53.2
HOUSEWIFE	39	9.7	253	62.9
OTHER	86	21.4	339	84.3
NONE	63	15.7	402	100.0

EDUCATION	Frequency	Percent	Cumulative Frequency	Cumulative Percent
<=STD4	15	3.7	15	3.7
STD5<STD8	141	35.1	156	38.8
STD9-10	121	30.1	277	68.9
MATRIC	78	19.4	355	88.3
1YR UNIV/TECH	12	3.0	367	91.3
TECH GRAD	5	1.2	372	92.5
2-4YR UNIV	7	1.7	379	94.3
UNIV GRAD	3	0.7	382	95.0
OTHER POST MATRI	20	5.0	402	100.0

FATHER'S EDUCAT'N	Frequency	Percent	Cumulative Frequency	Cumulative Percent
<=STD4	77	19.2	77	19.2
STD5<STD8	111	27.6	188	46.8
STD9-10	34	8.5	222	55.2
MATRIC	31	7.7	253	62.9
TECH GRAD	2	0.5	255	63.4
2-4YR UNIV	3	0.7	258	64.2
UNIV GRAD	4	1.0	262	65.2
OTHER POST MATRI	2	0.5	264	65.7
DON'T KNOW	138	34.3	402	100.0

INCOME	Frequency	Percent	Cumulative Frequency	Cumulative Percent
R0-R149	4	1.0	4	1.0
R150-R499	41	10.2	45	11.2
R500-R999	123	30.6	168	41.8
R1000-R1249	99	24.6	267	66.4
R1250-R1499	48	11.9	315	78.4
R1500-R1749	27	6.7	342	85.1
R1750-R1999	17	4.2	359	89.3
R2000-R2249	20	5.0	379	94.3
R2250-R2499	6	1.5	385	95.8
R2500-R2749	2	0.5	387	96.3
R2750-R2999	3	0.7	390	97.0
R3000-R3249	5	1.2	395	98.3
R3500-R3749	2	0.5	397	98.8
R3750-R3999	2	0.5	399	99.3
R4000-R4499	2	0.5	401	99.8
R5500-R5999	1	0.2	402	100.0

MARITAL	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1ST MARRIAGE	137	34.1	137	34.1
2ND MARRIAGE	9	2.2	146	36.3
LIVE TOGETHER	6	1.5	152	37.8
DIVORCED	12	3.0	164	40.8
WIDOW	7	1.7	171	42.5
SEPARATED	3	0.7	174	43.3
SINGLE	228	56.7	402	100.0

Appendix 2

Sample Homogeneity

Kendall's Coefficient of Concordance - W

TERMINAL VALUE CONCORDANCE

	OBS	FREQ	W	CHI	PROB
AREA	1	71.000	0.056	68.02	0.00000
	2	294.000	0.076	378.93	0.00000
	3	516.000	0.140	1226.71	0.00000
	4	157.000	0.132	353.05	0.00000
	5	154.000	0.048	126.67	0.00000
	6	168.000	0.111	317.30	0.00000
	7	23.000	0.090	35.20	0.00585
	8	22.000	0.053	19.91	0.27865
AGE	1	337.000	0.071	407.82	0.00000
	2	274.000	0.071	328.88	0.00000
	3	237.000	0.088	356.39	0.00000
	4	282.000	0.111	529.90	0.00000
	5	148.000	0.130	327.80	0.00000
	6	73.000	0.160	205.04	0.00000
	7	54.000	0.165	151.10	0.00000
LANGUAGE	1	349.000	0.144	852.98	0.00000
	2	250.000	0.146	622.24	0.00000
	3	4.000	0.308	20.93	0.22944
	4	23.000	0.179	70.12	0.00000
	5	177.000	0.213	641.26	0.00000
	6	160.000	0.191	518.49	0.00000
	7	17.000	0.130	37.43	0.00294
	8	23.000	0.185	72.27	0.00000
	9	59.000	0.124	124.54	0.00000
	10	64.000	0.071	77.44	0.00000
	11	70.000	0.086	102.25	0.00000
	12	48.000	0.054	43.96	0.00035
	13	116.000	0.038	75.64	0.00000
	14	45.000	0.124	94.73	0.00000
RACE	1	603.000	0.136	1389.68	0.00000
	2	200.000	0.202	687.21	0.00000
	3	200.000	0.169	573.04	0.00000
	4	402.000	0.060	407.39	0.00000
WORK STATUS	1	680.000	0.086	995.52	0.00000
	2	104.000	0.107	189.38	0.00000
	3	32.000	0.062	33.90	0.00865
	4	113.000	0.075	144.78	0.00000
	5	102.000	0.060	103.69	0.00000
	6	59.000	0.141	141.01	0.00000

	7	271.000	0.132	609.32	0.00000
	8	44.000	0.196	146.63	0.00000
OCCUPATION	1	210.000	0.126	449.11	0.00000
	2	27.000	0.127	58.14	0.00000
	3	82.000	0.122	170.12	0.00000
	4	203.000	0.120	415.85	0.00000
	5	105.000	0.099	177.25	0.00000
	6	88.000	0.068	102.39	0.00000

	OBS	FREQ	W	CHI	PROB
	7	32	0.07672	41.736	0.00073
	8	1	1.00000	17.000	0.45437
	10	43	0.05774	42.208	0.00063
	11	18	0.08284	25.349	0.08717
	12	18	0.13873	42.451	0.00058
	13	286	0.12579	611.591	0.00000
	14	162	0.06798	187.217	0.00000
	15	130	0.08082	178.612	0.00000
EDUCATION	1	41	0.10899	75.965	0.00000
	2	474	0.08386	675.776	0.00000
	3	242	0.08251	339.430	0.00000
	4	308	0.08329	436.106	0.00000
	5	50	0.13162	111.874	0.00000
	6	67	0.11831	134.759	0.00000
	7	48	0.16079	131.205	0.00000
	8	82	0.13311	185.553	0.00000
	9	93	0.15607	246.745	0.00000
FATHER'S EDUC	1	132	0.07498	168.248	0.00000
	2	440	0.09695	725.171	0.00000
	3	88	0.06279	93.937	0.00000
	4	144	0.10549	258.249	0.00000
	5	9	0.17568	26.879	0.05986
	6	19	0.10512	33.955	0.00851
	7	15	0.19943	50.855	0.00003
	8	51	0.13824	119.856	0.00000
	9	27	0.19805	90.904	0.00000
	10	480	0.08584	700.438	0.00000
INCOME	1	5	0.18910	16.073	0.51863
	2	81	0.07185	98.937	0.00000
	3	221	0.07725	290.228	0.00000
	4	194	0.06766	223.143	0.00000
	5	136	0.09387	217.027	0.00000
	6	99	0.10847	182.555	0.00000
	7	79	0.08424	113.134	0.00000
	8	111	0.09080	171.340	0.00000
	9	69	0.13096	153.616	0.00000
	10	64	0.12905	140.406	0.00000
	11	48	0.11252	91.816	0.00000
	12	67	0.11519	131.201	0.00000
	13	36	0.14657	89.701	0.00000
	14	32	0.19539	106.292	0.00000

	15	24	0.19756	80.604	0.00000
	16	50	0.11495	97.707	0.00000
	17	25	0.13863	58.918	0.00000
	18	25	0.19051	80.967	0.00000
	19	13	0.25230	55.758	0.00001
	20	25	0.18427	78.315	0.00000
	21	1	1.00000	17.000	0.45437
MARITAL STATUS	1	756	0.11347	1458.29	0.00000
	2	54	0.09598	88.11	0.00000
	3	16	0.06452	17.55	0.41785
	4	61	0.09066	94.01	0.00000
	5	49	0.11972	99.73	0.00000
	6	9	0.31776	48.62	0.00007
	7	460	0.06359	497.28	0.00000
INSTRUMENTAL VALUE CONCORDANCE					
AREA	1	71	0.07474	90.22	0.00000
	2	294	0.09342	466.93	0.00000
	3	516	0.11445	1003.93	0.00000
	4	157	0.12688	338.64	0.00000
	5	154	0.07105	186.02	0.00000
	6	168	0.09039	258.17	0.00000
	7	23	0.21034	82.24	0.00000
	8	22	0.05505	20.59	0.24516
AGE	1	337	0.08649	495.52	0.00000
	2	274	0.06543	304.76	0.00000
	3	237	0.10616	427.70	0.00000
	4	282	0.09410	451.12	0.00000
	5	148	0.14227	357.94	0.00000
	6	73	0.13615	168.96	0.00000
	7	54	0.10626	97.54	0.00000
LANGUAGE	1	349	0.12476	763.95	0.00000
	2	250	0.14109	599.64	0.00000
	3	4	0.37126	25.25	0.08935
	4	23	0.10407	40.69	0.00103
	5	177	0.14072	423.43	0.00000
	6	160	0.12161	330.77	0.00000
	7	17	0.15248	44.07	0.00033
	8	23	0.15687	61.33	0.00000
	9	59	0.07916	79.39	0.00000
	10	64	0.08583	93.39	0.00000
	11	79	0.06445	76.69	0.00000
	12	40	0.08130	50.02	0.00004
	13	116	0.02962	38.41	0.00000
	14	45	0.10747	82.22	0.00000

RACE	1	603	0.12460	1277.24	0.00000
	2	200	0.13226	449.70	0.00000
	3	200	0.11973	407.08	0.00000
	4	402	0.05304	362.50	0.00000
WORK STATUS	1	680	0.08895	1028.25	0.00000
	2	104	0.08919	157.69	0.00000
	3	32	0.06298	34.26	0.00777
	4	113	0.09324	179.12	0.00000
	5	102	0.06562	113.78	0.00000
	6	59	0.09373	94.01	0.00000
	7	271	0.15654	721.20	0.00000
	8	44	0.09115	68.18	0.00000
OCCUPATION	1	210	0.08270	295.24	0.00000
	2	27	0.17138	78.66	0.00000
	3	82	0.13777	192.05	0.00000
	4	203	0.10494	382.15	0.00000
	5	105	0.09208	164.36	0.00000
	6	88	0.09648	144.33	0.00000
	7	32	0.08618	46.88	0.00013
	8	1	1.00000	17.00	0.45437
	9	43	0.10735	78.47	0.00000
	10	18	0.07847	24.01	0.11911
	11	18	0.10013	30.64	0.02208
	12	286	0.15458	751.57	0.00000
	13	162	0.06990	192.50	0.00000
	14	130	0.06368	140.73	0.00000
EDUCATION	1	41	0.09188	64.04	0.00000
	2	474	0.12510	1008.03	0.00000
	3	242	0.06690	275.22	0.00000
	4	308	0.10587	534.35	0.00000
	5	50	0.07210	61.28	0.00000
	6	67	0.06296	71.71	0.00000
	7	48	0.09632	78.59	0.00000
	8	82	0.01706	23.79	0.12533
	9	93	0.13588	214.82	0.00000
FATHER'S EDUC	1	132	0.06500	145.86	0.00000
	2	440	0.10691	799.69	0.00000
	3	88	0.07515	112.42	0.00000
	4	144	0.09323	228.22	0.00000
	5	9	0.12676	19.39	0.30640
	6	19	0.07265	23.47	0.13471
	7	15	0.13573	34.61	0.00699

	8	51	0.15490	134.30	0.00000
	9	27	0.09961	45.72	0.00019
	10	480	0.10383	847.22	0.00000
INCOME	1	5	0.14716	12.51	0.76841
	2	81	0.08857	121.96	0.00060
	3	221	0.08346	313.56	0.00000
	4	194	0.08946	295.04	0.00000
	5	136	0.09776	226.02	0.00000
	6	99	0.12047	202.75	0.00000
	7	79	0.10311	138.48	0.00000
	8	111	0.11298	213.19	0.00000
	9	69	0.14163	166.13	0.00000
	10	64	0.09401	102.28	0.00000
	11	48	0.10992	89.69	0.00000
	12	67	0.09615	109.51	0.00000
	13	36	0.11898	72.82	0.00000
	14	32	0.14697	79.95	0.00000
	15	24	0.17396	70.98	0.00000
	16	50	0.14262	121.23	0.00000
	17	25	0.07484	31.81	0.01590
	18	25	0.12807	54.43	0.00001
	19	13	0.22248	49.17	0.00006
	20	25	0.09464	40.22	0.00120
	21	1	1.00000	17.00	0.45437
MARITAL STATUS	1	756	0.11033	1417.97	0.00000
	2	54	0.08423	77.32	0.00000
	3	16	0.11484	31.24	0.01869
	4	61	0.11822	122.59	0.00000
	5	49	0.14482	120.63	0.00000
	6	9	0.16595	25.39	0.08632
	7	460	0.06853	536.09	0.00000

Appendix 3
Significant Value System Differences
Kruskal-Wallis One Way Analysis of Variance

Kruskal-Wallis One-Way Analysis of Variance by Ranks
(At least one group differs from the others when a statistically significant result is achieved.)

Personal Value (from Rokeach Value Survey)	Probability by Urbanisation	Probability by Age Group	Probability by Education	Probability by Father's Educatn	Probability by Occupation
A COMFORTABLE LIFE	.0001	.0116	.0001	.0001	.0016
AN EXCITING LIFE	.0001	.0001	.2223	.0227	.0040
SENSE OF ACCOMPLISHMENT	.0004	.4552	.0001	.0241	.0097
A WORLD AT PEACE	.0046	.0309	.0380	.0308	.0002
A WORLD OF BEAUTY	.9078	.0200	.2719	.8613	.0463
EQUALITY	.0050	.0451	.0562	.0001	.0001
FAMILY SECURITY	.0001	.0001	.6626	.0980	.0001
FREEDOM	.1067	.0018	.0060	.0075	.0116
HAPPINESS	.0071	.4476	.8413	.9326	.2316
INNER HARMONY	.0001	.2795	.0001	.0002	.0001
MATURE LOVE	.2540	.0001	.3913	.8595	.0851
NATIONAL SECURITY	.5189	.0166	.0001	.4519	.0001
PLEASURE	.0001	.0001	.0001	.0454	.0001
SALVATION	.0001	.0001	.0001	.2670	.0001
SELF-RESPECT	.0005	.1053	.1040	.0089	.0144
SOCIAL RECOGNITION	.0005	.1210	.0665	.0175	.3035
TRUE FRIENDSHIP	.0954	.3789	.7846	.4581	.5743
WISDOM	.0001	.0720	.0016	.0034	.0020
NUMBER SIGNIFICANT AT .0028 (ADJUSTED α=.05, BONFERRONI)	10	6	7	3	9

Personal Value (from Rokeach Value Survey)	Probability by Income	Probability by Language	Probability by Marital Status	Probability by Race Group (4)	Probability by Work Status
A COMFORTABLE LIFE	.0001	.0001	.8685	.0001	.0001
AN EXCITING LIFE	.0077	.0001	.0001	.0001	.0002
SENSE OF ACCOMPLISHMENT	.0098	.0014	.0004	.0001	.0092
A WORLD AT PEACE	.4525	.0456	.0046	.0034	.0044
A WORLD OF BEAUTY	.0347	.0108	.9078	.0003	.1798
EQUALITY	.3056	.0001	.0050	.0001	.0001
FAMILY SECURITY	.0049	.0001	.0001	.0001	.0001
FREEDOM	.0983	.0001	.1067	.0001	.0006
HAPPINESS	.5340	.0001	.0071	.0001	.1171
INNER HARMONY	.0001	.0001	.0001	.0001	.0001
MATURE LOVE	.0814	.0001	.2540	.0001	.0386
NATIONAL SECURITY	.9101	.0001	.5189	.0001	.0003
PLEASURE	.0009	.0001	.0001	.0001	.0054
SALVATION	.1886	.0001	.0001	.0001	.0001
SELF-RESPECT	.1908	.0001	.0005	.0001	.0001
SOCIAL RECOGNITION	.0045	.0001	.0005	.0001	.5486
TRUE FRIENDSHIP	.9504	.7011	.0954	.2310	.1982
WISDOM	.0057	.0001	.0001	.0001	.0122
NUMBER SIGNIFICANT AT .0028 (ADJUSTED α=.05, BONFERRONI)	3	15	8	16	8

Kruskal-Wallis One-Way Analysis of Variance by Ranks
(At least one group differs from the others when a statistically significant result is achieved.)

Personal Value (from Rokeach Value Survey)	Probability by Urbanisation	Probability by Age Group	Probability by Education	Probability by Father's Educatn	Probability by Occupation
AMBITIOUS	.0001	.0084	.0800	.0342	.0016
BROADMINDED	.0001	.2903	.0278	.2799	.0040
CAPABLE	.0007	.0205	.0001	.2394	.0097
CHEERFUL	.0048	.3321	.3970	.3750	.0002
CLEAN	.1772	.1944	.0001	.1324	.0453
COURAGEOUS	.9780	.6576	.2284	.0439	.0001
FORGIVING	.3420	.0861	.0513	.0624	.0001
HELPFUL	.2353	.0314	.0142	.0172	.0116
HONEST	.0001	.0013	.0015	.0234	.2318
IMAGINATIVE	.0090	.1119	.0568	.0539	.0001
INDEPENDENT	.5535	.3216	.8726	.8562	.0851
INTELLECTUAL	.2809	.0822	.0001	.0425	.0001
LOGICAL	.0001	.0186	.0001	.0001	.0001
LOVING	.0442	.5193	.0297	.3730	.0001
OBEDIENT	.0001	.6213	.0001	.0005	.0144
POLITE	.0360	.0080	.0020	.0081	.3035
RESPONSIBLE	.0001	.1635	.0600	.1157	.5743
SELF-CONTROLLED	.1084	.4612	.7641	.5032	.0020
NUMBER SIGNIFICANT AT .0028 (ADJUSTED α=.05, BONFERRONI)	7	1	7	2	9

Personal Value (from Rokeach Value Survey)	Probability by Income	Probability by Language	Probability by Marital Status	Probability by Race Group (4)	Probability by Work Status
AMBITIOUS	.4985	.0001	.0024	.0001	.0004
BROADMINDED	.5616	.0001	.0007	.0001	.0008
CAPABLE	.0440	.0363	.3247	.0032	.0225
CHEERFUL	.9501	.7609	.0323	.1173	.0020
CLEAN	.0216	.0930	.7622	.0093	.0081
COURAGEOUS	.4556	.0001	.8956	.0008	.9506
FORGIVING	.5388	.0001	.8503	.4024	.1487
HELPFUL	.1164	.3760	.1656	.0109	.8505
HONEST	.0136	.0001	.0001	.0001	.0003
IMAGINATIVE	.0204	.0001	.0280	.0001	.2978
INDEPENDENT	.9206	.0021	.0167	.0012	.0663
INTELLECTUAL	.1386	.0035	.0198	.0003	.0005
LOGICAL	.0138	.1781	.1007	.0126	.0065
LOVING	.8998	.0036	.0005	.0013	.0096
OBEDIENT	.0014	.0018	.3419	.1520	.2702
POLITE	.0600	.0005	.0046	.0001	.0035
RESPONSIBLE	.0802	.0001	.4204	.0001	.0009
SELF-CONTROLLED	.5024	.0003	.3932	.0001	.1231
NUMBER SIGNIFICANT AT .0028 (ADJUSTED α=.05, BONFERRONI)	1	11	4	11	6

Appendix 4

Kruskal-Wallis One Way Analysis of Variance
Analysis of Brand Users by Product Class

Banks
Kruskal Wallis One Way Analysis of Variance
Test Results - .002 Level of Significance
Average Rank = 702
UNISA Statistics Dept BMDP Statistical Software
Chi Square Test Statistic using 5 Degrees of Freedom

A COMFORTABLE LIFE				Dev. From	:Ascending	Ascending
Brand	Freq	Rank Sum	Mean Rank	Avg.Rank	:Mean Ranks	Brand
A	458	292862.00	639.44	-62.56	: 639.44	A
B	129	94959.50	736.12	34.12	: 668.74	E
C	163	138983.50	852.66	150.66	: 671.13	D
D	336	225498.50	671.13	-30.87	: 736.12	B
E	186	124385.00	668.74	-33.26	: 826.09	F
F	131	108217.50	826.09	124.09	: 852.66	C

Kruskal-Wallis Test Statistic = 50.05
Level of Significance = 0.0000

NATIONAL SECURITY				Dev. From	:Ascending	Ascending
Brand	Freq	Rank Sum	Mean Rank	Avg.Rank	:Mean Ranks	Brand
A	458	334328.50	995.03	293.03	: 468.49	B
B	129	87140.00	468.49	-233.51	: 475.56	F
C	163	97222.50	742.16	40.16	: 538.15	D
D	336	246470.50	538.15	-163.85	: 742.16	C
E	186	142227.50	1102.54	400.54	: 995.03	A
F	131	77517.00	475.56	-226.44	: 1102.54	E

Kruskal-Wallis Test Statistic = 30.14
Level of Significance = 0.0000

SELF-CONTROLLED				Dev. From	:Ascending	Ascending
Brand	Freq	Rank Sum	Mean Rank	Avg.Rank	:Mean Ranks	Brand
A	458	337865.00	1005.55	303.55	: 501.16	D
B	129	95036.00	510.95	-191.05	: 510.95	B
C	163	96557.50	737.08	35.08	: 528.31	F
D	336	229533.50	501.16	-200.84	: 737.08	C
E	186	139800.00	1083.72	381.72	: 1005.55	A
F	131	86114.00	528.31	-173.69	: 1083.72	E

Kruskal-Wallis Test Statistic = 21.62
Level of Significance = 0.0006

HAPPINESS				Dev. From	:Ascending	Ascending
Brand	Freq	Rank Sum	Mean Rank	Avg.Rank	:Mean Ranks	Brand
A	458	321937.50	958.15	256.15	: 430.48	B
B	129	80069.50	430.48	-271.52	: 486.36	D
C	163	130122.00	993.30	291.30	: 606.89	F
D	336	222753.00	486.36	-215.64	: 958.15	A
E	186	131100.50	1016.28	314.28	: 993.30	C
F	131	98923.50	606.89	-95.11	: 1016.28	E

Kruskal-Wallis Test Statistic = 19.89
Level of Significance = 0.0013

Building Societies
Kruskal Wallis One Way Analysis of Variance
Test Results - .002 Level of Significance
Average Rank = 702
UNISA Statistics Dept BMDP Statistical Software
Chi Square Test Statistic using 5 Degrees of Freedom

PLEASURE				Dev. From	:Ascending	Ascending
Brand	Freq	Rank Sum	Mean Rank	Avg.Rank	:Mean Ranks	Brand
A	455	187811.00	412.77	-289.23	: 408.28	C
B	9	6560.50	728.94	26.94	: 412.77	A
C	358	146166.00	408.28	-293.72	: 728.94	B
D	276	295844.00	1071.90	369.90	: 770.34	E
E	95	73182.50	770.34	68.34	: 1071.90	D
F	208	272537.00	1310.27	608.27	: 1310.27	F

Kruskal-Wallis Test Statistic = 18.75
Level of Significance = 0.0021

LOGICAL				Dev. From	:Ascending	Ascending
Brand	Freq	Rank Sum	Mean Rank	Avg.Rank	:Mean Ranks	Brand
A	455	322252.50	708.25	6.25	: 637.57	C
B	95	60609.50	637.99	-64.01	: 637.99	B
C	358	228251.50	637.57	-64.43	: 683.22	E
D	276	199073.50	721.28	19.28	: 708.25	A
E	9	6149.00	683.22	-18.78	: 721.28	D
F	208	165765.00	796.95	94.95	: 796.95	F

Kruskal-Wallis Test Statistic = 23.81
Level of Significance = 0.0002

WISDOM				Dev. From	:Ascending	Ascending
Brand	Freq	Rank Sum	Mean Rank	Avg.Rank	:Mean Ranks	Brand
A	455	194926.00	706.25	4.25	: 634.01	E
B	95	8441.00	937.89	235.89	: 640.65	F
C	358	160976.50	773.93	71.93	: 706.25	A
D	276	328174.50	721.26	19.26	: 721.26	D
E	9	60231.00	634.01	-67.99	: 773.93	C
F	208	229352.00	640.65	-61.35	: 937.89	B

Kruskal-Wallis Test Statistic = 21.49
Level of Significance = 0.0006

Shampoo

BROADMINDED-Whites Only 1

NPAR1WAY PROCEDURE

Wilcoxon Scores (Rank Sums) for Variable 12
Classified by Variable SHAMPOO

SHAMPOO	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
A	129	39367.0000	38958.0	1748.91843	305.170543
C	6	969.5000	1812.0	423.30005	161.583333
D	27	7245.0000	8154.0	882.02045	268.333333
E	39	13010.0000	11778.0	1048.95627	333.589744
F	26	9787.0000	7852.0	866.28363	376.423077
G	12	5205.0000	3624.0	595.62085	433.750000
H	5	1380.5000	1510.0	386.74181	276.100000
I	9	3239.5000	2718.0	517.13033	359.944444
J	47	13571.5000	14194.0	1143.33067	288.755319
K	14	4420.0000	4228.0	642.25456	315.714286
L	21	6076.5000	6342.0	781.90982	289.357143
M	17	6321.0000	5134.0	705.92538	371.823529
N	62	20532.0000	18724.0	1295.32875	331.161290
O	38	10046.5000	11476.0	1036.33831	264.381579
P	10	2283.0000	3020.0	544.64419	228.300000
Q	41	13024.5000	12382.0	1073.60769	317.670732
R	20	3489.0000	6040.0	763.72113	174.450000
S	21	5932.5000	6342.0	781.90982	282.500000
T	59	16206.0000	17818.0	1267.10027	274.677966

Average Scores were used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ= 40.459 DF= 18 Prob > CHISQ= 0.0018

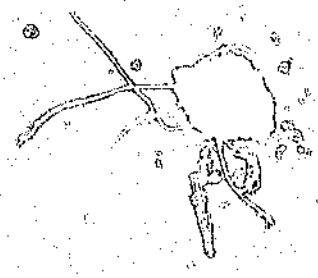
N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable I2
Classified by Variable SHAMPOO

SHAMPOO	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
A	372	254838.500	261516.0	6697.57992	685.049731
B	6	5415.000	4218.0	989.87591	902.500000
C	12	7776.500	8436.0	1396.89079	648.041667
D	44	27725.000	30932.0	2643.94048	630.113636
E	51	43077.000	35853.0	2839.16540	844.647059
F	101	74846.500	71003.0	3920.99020	741.054455
G	22	19132.500	13466.0	1884.59791	869.659091
H	10	7930.000	7030.0	1276.09609	793.000000
I	18	15059.000	12654.0	1707.14636	836.611111
J	100	67295.000	70300.0	3903.02677	672.950000
K	24	19406.000	16872.0	1966.97452	808.583333
L	38	26809.500	26714.0	2462.47783	705.513158
M	26	22329.500	18278.0	2045.80898	858.826923
N	103	78104.500	72409.0	3956.58389	758.296117
O	59	40252.000	41477.0	3044.70212	682.237288
P	19	11790.000	13357.0	1753.29377	620.526316
Q	66	53953.500	46398.0	3211.87422	817.477273
R	33	14396.500	23199.0	2298.95409	436.257576
S	44	31066.500	30932.0	2643.94048	706.056818
T	257	166512.000	180671.0	5868.59014	647.906615

Average Scores Were used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ= 50.387 DF= 19 Prob > CHISQ= 0.0001



SELF-CONTROLLED

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable I18
Classified by Variable ROLLONS
AVERAGE SCORES WERE USED FOR TIES

LEVEL	N	SUM OF SCORES	EXPECTED UNDER HO	DIFFERENCE UNDER HO	MEAN SCORE
A	24.00	2491.50	3516.00	-1024.50	103.81
B	54.00	7714.00	7911.00	-197.00	142.85
E	56.00	7493.00	8204.00	-711.00	133.80
F	48.00	8358.00	7032.00	1326.00	174.13
I	61.00	10336.50	8936.50	1400.00	169.45
J	50.00	6678.00	7325.00	-647.00	133.56

Kruskal-Wallis Test (Chi-Square Approximation)
ChiSQ=18.25 DF=5 ChiSq=0.0026

Motor Cars
Kruskal Wallis One Way Analysis of Variance
Test Results - .002 Level of Significance
Average Rank = 702
UNISA Statistics Dept BMDP Statistical Software
Chi Square Test Statistic using 9 Degrees of Freedom

A COMFORTABLE LIFE Brand	Freq	Rank Sum	Mean Rank	Dev. From Avg.Rank	:Ascending :Mean Ranks	Ascending Brand
A	79	53993.50	683.46	-18.54	: 577.87	I
B	61	51561.00	845.26	143.26	: 630.90	H
C	257	181473.00	706.12	4.12	: 674.41	F
D	105	90056.00	857.68	155.68	: 681.62	J
E	50	36593.00	731.86	29.86	: 683.46	A
F	210	141625.50	674.41	-27.59	: 706.12	C
G	173	124784.00	721.29	19.29	: 721.29	G
H	118	74446.00	630.90	-71.10	: 731.86	E
I	79	45652.00	577.87	-124.13	: 845.26	B
J	271	184719.00	681.62	-20.38	: 857.68	D

Kruskal-Wallis Test Statistic = 36.83
Level of Significance = 0.0000

INNER HARMONY Brand	Freq	Rank Sum	Mean Rank	Dev. From Avg.Rank	:Ascending :Mean Ranks	Ascending Brand
A	79	60350	763.92	61.92	: 498.16	B
B	61	30387.5	498.16	-203.84	: 621.90	D
C	257	180426.5	702.05	0.05	: 669.94	E
D	105	65299.5	621.90	-80.10	: 693.92	J
E	50	33497	669.94	-32.06	: 702.05	C
F	210	149691.5	712.82	10.82	: 712.82	F
G	173	125300.5	724.28	22.28	: 724.28	G
H	118	87952	745.36	43.36	: 745.36	H
I	79	63948	809.47	107.47	: 763.92	A
J	271	188053.5	693.92	-8.08	: 809.47	I

Kruskal-Wallis Test Statistic = 29.49
Level of Significance = 0.0005

HONEST Brand	Freq	Rank Sum	Mean Rank	Dev. From Avg.Rank	:Ascending :Mean Ranks	Ascending Brand
A	79	61158	774.15	72.15	: 562.79	D
B	61	38767	635.52	-66.48	: 635.52	B
C	257	187448.5	729.37	27.37	: 675.91	I
D	105	59093	562.79	-139.21	: 680.75	G
E	50	36152	723.04	21.04	: 700.25	J
F	210	158717	755.80	53.80	: 700.29	H
G	173	117770.5	680.75	-21.25	: 723.04	E
H	118	82634.5	700.29	-1.71	: 729.37	C
I	79	53397	675.91	-26.09	: 755.80	F
J	271	189767.5	700.25	-1.75	: 774.15	A

Kruskal-Wallis Test Statistic = 22.64
Level of Significance = 0.0071

RESPONSIBLE Brand	Freq	Rank Sum	Mean Rank	Dev. From Avg.Rank	:Ascending :Mean Ranks	Ascending Brand
A	79	54227.5	686.42	-15.58	: 581.86	D
B	61	40088	657.18	-44.82	: 657.18	B
C	257	189117	735.86	33.86	: 666.20	G
D	105	61095	581.86	-120.14	: 670.01	J
E	50	34658	693.16	-8.84	: 686.42	A
F	210	164616	783.89	81.89	: 693.16	E
G	173	115252	666.20	-35.80	: 693.57	H
H	118	81841.5	693.57	-8.43	: 735.86	C
I	79	62438	790.35	88.35	: 783.89	F
J	271	181573	670.01	-31.99	: 790.35	I

Kruskal-Wallis Test Statistic = 27.47
Level of Significance = 0.0012

Petrol
Kruskal Wallis One Way Analysis of Variance
Test Results - .002 Level of Significance
Average Rank = 527.5
UNISA Statistics Dept BMDP Statistical Software
Chi Square Test Statistic using 6 degrees of freedom

NATIONAL SECURITY

Brand	Freq	Rank Sum	Mean Rank	Dev. From Avg.Rank	:Ascending Mean Ranks	Ascending Brand
A	117	53098.00	453.83	-73.67	: 361.20	C
B	215	122077.50	567.80	40.30	: 453.83	A
C	40	14448.00	361.20	-166.30	: 518.24	E
D	141	78915.00	559.68	32.18	: 538.39	F
E	269	139406.00	518.24	-9.26	: 559.68	D
F	250	134597.00	538.39	10.89	: 567.80	B
G	22	13443.50	611.07	83.57	: 611.07	G

Kruskal-Wallis Test Statistic = 26.49
Level of Significance = 0.0002

EQUALITY

Brand	Freq	Rank Sum	Mean Rank	Dev. From Avg.Rank	:Ascending Mean Ranks	Ascending Brand
A	117	68847.50	588.44	60.94	: 465.18	F
B	215	112817.50	524.73	-2.77	: 491.56	C
C	40	19662.50	491.56	-35.94	: 510.28	D
D	141	71949.50	510.28	-17.22	: 524.73	B
E	269	152021.00	565.13	37.63	: 565.13	E
F	250	116294.50	465.18	-62.32	: 588.44	A
G	22	14425.50	655.70	128.20	: 655.70	G

Kruskal-Wallis Test Statistic = 14.26
Level of Significance = 0.0005

SALVATION Brand	Freq	Rank Sum	Mean Rank	Dev. From Avg.Rank	:Ascending :Mean	Ascending Ranks	Ascending Brand
A	117	55092.50	470.88	-56.62	:	470.11	C
B	215	120241.00	559.26	31.76	:	470.88	A
C	40	18804.50	470.11	-57.39	:	481.28	E
D	141	77393.50	548.89	21.39	:	505.45	G
E	269	129465.00	481.28	-46.22	:	548.89	D
F	250	143868.50	575.47	47.97	:	559.26	B
G	22	11120.00	505.45	-22.05	:	575.47	F

Kruskal-Wallis Test Statistic = 21.30
Level of Significance = 0.0016

Soft Drinks

EQUALITY
N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable T6
Classified by Variable SDMO

SDMO	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
A	14	9911.000	9828.0	1505.68185	707.928571
B	71	51257.000	49842.0	3320.46848	721.929577
C	34	23662.000	23868.0	2329.48146	695.941176
D	55	36608.000	38610.0	2939.97993	665.600000
E	69	44408.000	48438.0	3275.82381	643.594203
F	52	46766.000	36504.0	2861.85365	899.346154
G	697	497634.000	489294.0	7574.20080	713.965567
H	92	66773.500	64584.0	3749.84516	725.798913
I	185	119103.000	128466.0	5101.80124	650.836066
J	52	27601.500	36504.0	2861.85365	530.798077
K	84	61182.000	58968.0	3594.01691	728.357143

Average Scores were used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ= 27.981 DF= 10 Prob > CHISQ= 0.0018

FAMILY SECURITY
N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable T7
Classified by Variable SDMO

SDMO	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
A	14	11521.000	9828.0	1503.62636	822.928571
B	71	48960.000	49842.0	3315.93552	689.577465
C	34	24802.000	23868.0	2326.30135	729.470588
D	55	45131.500	38610.0	2935.96640	820.572727
E	69	45688.000	48438.0	3231.35180	662.144928
F	52	29421.500	36504.0	2857.94678	565.798077
G	697	475164.000	489294.0	7563.86084	681.727403
H	92	60437.000	64584.0	3744.72603	656.923913
I	183	132788.500	128466.0	5094.83649	725.620219
J	52	46644.000	36504.0	2857.94678	897.000000
K	84	64348.500	58968.0	3589.11051	766.053571

Average Scores were used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ= 30.568 DF= 10 Prob > CHISQ= 0.0007

FREEDOM
NPAR1WAY PROCEDURE

Wilcoxon Scores (Rank Sums) for Variable T5
Classified by Variable SDMO

SDMO	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
A	14	10246.000	9828.0	1505.83683	731.857143
B	71	38900.000	49842.0	3320.81025	547.887324
C	34	25986.000	23868.0	2329.72123	764.294118
D	55	39236.500	38610.0	2940.28254	713.390909
E	69	40975.000	48438.0	3276.16099	593.840580
F	52	42214.000	36504.0	2862.14822	811.807692
G	697	497540.500	489294.0	7574.98041	713.831420
H	92	73688.500	64584.0	3750.23112	800.961957
I	183	126650.000	128466.0	5102.32637	692.076503
J	52	33510.500	36504.0	2862.14822	644.432692
K	84	55959.000	58968.0	3594.38684	666.178571

Average Scores were used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ= 27.926 DF= 10 Prob > CHISQ= 0.0019

INNER HARMONY
NPAR1WAY PROCEDURE

Wilcoxon Scores (Rank Sums) for Variable T10
Classified by Variable SDMO

SDMO	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
A	14	10598.500	9828.0	1505.79981	757.035714
B	71	58212.500	49842.0	3320.72862	819.894366
C	34	26331.500	23868.0	2329.66396	774.455882
D	55	34932.500	38610.0	2940.21026	635.136364
E	69	53708.500	48438.0	3276.08045	778.384058
F	52	29500.000	36504.0	2862.07786	567.307692
G	697	490288.000	489294.0	7574.79419	703.426112
H	92	59891.500	64584.0	3750.13893	650.994565
I	183	135576.500	128466.0	5102.20094	740.855191
J	52	37435.000	36504.0	2862.07786	719.903846
K	84	48431.500	58968.0	3594.29848	576.561476

Average Scores were used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ= 28.455 DF= 10 Prob > CHISQ= 0.0015

PLEASURE
N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable T13
Classified by Variable SDMO

SDMO	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
A	14	9288.000	9828.0	1504.99038	663.428571
B	71	46431.000	49842.0	3318.94359	653.957746
C	34	21833.000	23868.0	2328.41167	642.147059
D	55	34575.000	38610.0	2938.62978	628.636364
E	69	46539.000	48438.0	3274.31942	674.478261
F	52	43521.000	36504.0	2860.53938	836.942308
G	697	486909.500	489294.0	7570.72243	698.578910
H	92	70070.000	64584.0	3748.12308	761.630435
I	183	128428.500	128466.0	5099.45830	701.795082
J	52	27991.000	36504.0	2860.53938	538.288462
K	84	69320.000	58968.0	3592.36639	825.238095

Average Scores were used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ= 28.188 DF= 10 Prob > CHISQ= 0.0017

WISDOM
N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable T18
Classified by Variable SDMO

SDMO	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
A	14	6050.500	9828.0	1505.19086	432.178571
B	71	53117.500	49842.0	3319.38570	748.133803
C	34	27632.500	23868.0	2328.72183	812.720588
D	55	44871.000	38610.0	2939.02123	815.836364
E	69	52682.500	48438.0	3274.75559	763.514493
F	52	40061.000	36504.0	2860.92043	770.403846
G	697	474153.000	489294.0	7571.73092	680.276901
H	92	60325.500	64584.0	3748.62236	655.711957
I	183	130897.000	128466.0	5100.13759	715.284153
J	52	44037.500	36504.0	2860.92043	846.875000
K	84	51078.000	58968.0	3592.84493	608.071429

Average Scores were used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ= 31.782 DF= 10 Prob > CHISQ= 0.0004

Food Stores

SALVATION 14

NPAR1WAY PROCEDURE

Wilcoxon Scores (Rank Sums) for Variable T14
Classified by Variable FOOD

FOOD	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
A	28	15746.000	19670.000	2113.88156	562.357143
B	37	30432.500	25992.500	2422.01895	822.500000
C	29	27319.000	20372.500	2150.51643	942.034483
D	55	44531.000	38637.500	2933.45707	809.654545
E	308	219514.000	216370.000	6257.09938	712.707792
F	80	57620.500	56200.000	3504.94658	720.256250
G	21	10371.500	14752.500	1835.32574	493.880952
H	7	3928.500	4917.500	1064.97556	561.214286
I	295	207339.000	207237.500	6159.83669	702.844068
J	269	178941.500	188972.500	5950.67851	665.210037
K	214	147421.000	150335.000	5434.66507	688.883178
L	61	43145.500	42852.500	3082.44504	707.303279

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ= 30.118 DF= 11 Prob > CHISQ= 0.0015

NPAR1WAY PROCEDURE

Wilcoxon Scores (Rank Sums) for Variable T18
Classified by Variable FOOD

FOOD	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
A	28	14268.000	19670.000	2119.43010	509.571429
B	37	25568.000	25992.500	2428.37629	691.567568
C	29	15188.500	20372.500	2156.16113	523.741379
D	55	37476.000	38637.500	2941.15684	681.381818
E	308	230898.000	216370.000	6273.52308	749.668831
F	80	54332.500	56200.000	3514.14640	679.156250
G	21	12054.000	14752.500	1840.14312	574.000000
H	7	4941.500	4917.500	1067.77092	705.928571
I	295	225288.500	207237.500	6176.00510	763.689831
J	269	183663.500	188972.500	5966.29792	682.763941
K	214	140295.000	150335.000	5448.93004	655.584112
L	61	42316.500	42852.500	3090.53587	693.713115

Average Scores were used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ= 29.070 DF= 11 Prob > CHISQ= 0.0022

Hypothesis 6 test for significance between EPS and LPS/RPS

NPAR1WAY PROCEDURE

Wilcoxon Scores (Rank Sums) for Variable SIGVALUE
Classified by Variable PSTYPE

PSTYPE	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
EPS	3	23.5000000	16.5000000	4.33397431	7.83333333
LPS/RPS	7	31.5000000	38.5000000	4.33397431	4.50000000

Average Scores were used for Ties

Wilcoxon 2-Sample Test (Normal Approximation)
(with Continuity Correction of .5)

S= 23.5000 Z= 1.49978 Prob > |Z| = 0.1337

T-Test approx. Significance = 0.679

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ= 2.6087 DF= 1 Prob > CHISQ= 0.1063

Appendix 5
Kruskal-Wallis One Way Analysis of Variance
Classification and Regression Trees
All Product Classes

CART Analysis - Banks

The CART programme was unable to generate a tree for the bank product class. However, using the "exploratory mode", CART projected the following six market segments:

Segment 1 (33,9% of the sample) - Coloureds and Blacks to whom **SALVATION** is relatively important.

Segment 2 (9,0% of the sample) - Coloureds and Blacks to whom **SALVATION** is relatively unimportant.

Segment 3 (14,3% of the sample) - Indians

Segment 4 (28,2% of the sample) - Whites to whom **SOCIAL RECOGNITION** is relatively important.

Segment 5 (8,8% of the sample) - Whites to whom **SOCIAL RECOGNITION** is relatively unimportant and to whom **FORGIVING** is relatively important.

Segment 6 (5,8% of the sample) - Whites to whom **SOCIAL RECOGNITION** and **FORGIVING** are relatively unimportant.

Shares by CART segment

	CART Market Segment Number					
Brand	1	2	3	4	5	6
	38	27	50	22	33	16
	9	8	5	12	9	29
	4	6	2	28	12	17
	27	43	25	15	25	17
	16	12	16	6	11	11
	5	5	3	17	11	10

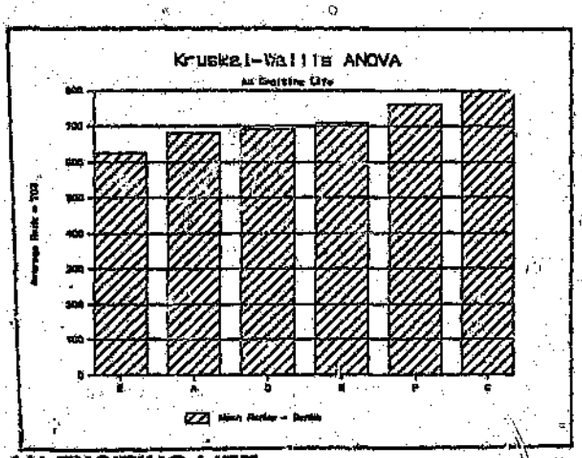
Variable	Relative Importance	Variable	Relative Importance
EQUALITY	100	IMAGINATIVE	81
Income	96	PLEASURE	81
HELPFUL	95	HAPPINESS	81
FREEDOM	91	BROADMINDED	81
WISDOM	90	NAT SEC	80
POLITE	89	FORGIVING	80
LOGICAL	89	CHEERFUL	80
COURAGEOUS	89	WORLD BEAUTY	79
MATURE LOVE	88	INTELLECTUAL	78
SOCIAL REC	84	CLEAN	77
INNER HARMONY	83	COMFORTABLE	77
FAMILY SEC	82	WORLD PEACE	77
SELF CONTROL	82	SENSE ACCOMP	77
EXCITEMENT	82	Age	76
RESPONSIBLE	82	HONEST	74
LOVING	81	AMBITIOUS	71
SELF RESP	81	Education	70
TRUE FRIEND	81	OBEDIENT	68
INDEPEND	81	SALVATION	66
CAPABLE	81	Race	51

Kruskal-Wallis Analysis of Variance - Banks

The Kruskal-Wallis test yielded six significant values at α=.0028: **AN EXCITING LIFE, EQUALITY, SALVATION, NATIONAL SECURITY, SELF-CONTROLLED** and **HAPPINESS.**

The value of **AN EXCITING LIFE** is significant at .0012. It is not often associated with bank brand image perceptions by all respondents of any race. CART did not find this value to be very important in either mode.

This value is generally more important to respondents who would be most likely to open an account at Bank E. It is relatively much less important to respondents who choose Bank C or Bank F.



AN EXCITING LIFE
"Most Likely x Brand Matrix"
Lowest Scores are Most Important

Analysis by Age

AN EXCITING LIFE is more important to respondents aged 25-49 in most races than others. Asians are an exception. They find this value to be relatively unimportant after the age of 25.

Analysis by Marital Status

The importance of **AN EXCITING LIFE** does not seem to be clearly linked to marital status, although indications are that it is more important during the family building years when people are tied down to the house and kids.

Analysis by Household Income

AN EXCITING LIFE is relatively more important to lower income groups.

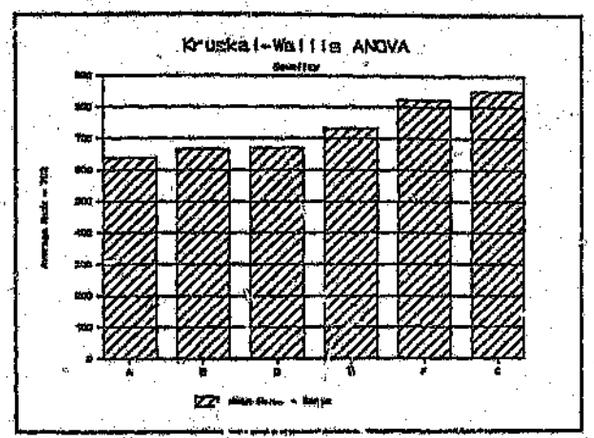
Analysis by Education and Father's Education

AN EXCITING LIFE is also more important to the less educated but this could simply mirror the high correlation of low education and low household income.

EQUALITY is significant at .001. This value is often associated to the product class by consumers (8-9%), with the exception of Whites.

EQUALITY is relatively more important to Brand A users and relatively unimportant to Brand F and C users.

This value most differentiates all other races from their White counterparts in South Africa. It is relatively of moderate importance to all races but Whites. It is very unimportant to Whites.



EQUALITY
"Most Likely x Brand "Matrix"
Lowest Scores are Most Important

Analysis by Age

This value is unimportant to Whites of all ages. It is somewhat more important to consumers of other races in the 30-44 year old age group.

Analysis by Marital Status

EQUALITY is generally more important to people who have divorced or remarried.

Analysis by Household Income

This value shows no clear developmental pattern related to household income.

Analysis by Education and Father's Education

There is no clear developmental pattern for this value related to education or father's education.