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ABSTRACT

The Living Standards Measure (LSM), a South African marketing segmentation method, is a multivariate wealth measure based on standard of living. This article reports on whether a rationale can be found for the inclusion of psychological variables, particularly personal values, in this type of multivariate segmentation. Schwartz's (1992; 2006) values model was used to operationalise personal values.

Data were collected by means of a survey from a nationally representative sample (N = 2566) of purchase decision-makers. The Portrait Values Questionnaire (PVQ) (Schwartz, Melech, Lehmann, Burgess, Harris & Owens 2001) was used to measure personal values. Centred value scores were used to statistically control for variation among respondents in rating themselves on the PVQ. The 10 LSM groups were collapsed into four LSM super groups to provide a more rigorous analysis of measured personal value differences between LSM groups. The statistical analyses included descriptive and inferential statistics.

The findings in general supported Schwartz's theory of basic human values. Respective values could be allocated among different wealth-based consumer segments, which explained variances between these groups. It would be advisable to further investigate how these differences can be applied in marketing. Although the LSM segmentation approach has been adapted somewhat, the principal finding of this research remains applicable.

Key words: personal values, market segmentation, multivariate segmentation, Portrait Values Questionnaire, Living Standards Measure, purchase decision-makers

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Introduction

In the 53 years since the pioneering article by Wendell Smith (1956), market segmentation can be considered one of the most dominant concepts in marketing literature and practice. Market segmentation research involves obtaining behavioural information that is useful in guiding managerial choices for strategic action. The underlying logic is that customers differ in terms of their product preferences and buying behaviour, and groups of customers with similar characteristics will tend to respond similarly to marketing programmes (Dibb & Simkin 2008).

According to Nwanko, Aiyeku and Ogbuehi (2006), constantly changing modern marketing environments, fierce competition in many consumer goods markets and the need to target consumers more effectively force marketers to continually review methods of segmenting markets in which they are interested. Although socio-economic segmentation, for example, provides a broad picture of a particular market, Mead (in Nwanko et al. 2006) points out that socio-economic categories are increasingly being replaced by other more sophisticated segmenting techniques, which probe the psychological aspects of consumer decision-making.

Conceptualisation

In this section, market segmentation, the role of values in market segmentation, Schwartz's values theory, and the South African Advertising Research Foundation's Universal Living Standards Measure (LSM) are discussed.

Market segmentation

Higgs (2008) points out that South Africa is ideally suited to market research because of its cultural diversity and its high Gini co-efficient (a measure of the degree of inequality in people's incomes). A marketplace as diverse as in South Africa, composed of many different people, with different backgrounds, interests, needs and wants, especially lends itself to market segmentation – the practice of dividing a market into smaller specific segments sharing similar characteristics (Tranter, Stuart-Hill & Parker 2009: 42).

Market segmentation is usually the first step in a three-phase marketing strategy. After segmenting the market into homogeneous clusters, one or more segments are selected for targeting. To accomplish this, the marketer must decide on a specific product, price, channel and/or promotional appeal for each distinct segment. Finally, the product is positioned in such a way that it is perceived by each target market as satisfying that market's needs better than competitors' products. Segmentation

studies can also guide the redesign or repositioning of a product, where the product targeting is extended to a new consumer segment. Furthermore, segmentation research may assist marketers in identifying the most appropriate media in which to place advertisements (Schiffman & Kanuk 2007).

Selecting the most appropriate base (or bases) on which to segment the market forms the first step in developing a segmentation strategy. Michman, Mazze and Greco (2003) point out that segmentation should not be limited to a single variable; instead multiple dimensions should ideally be considered. A segmentation scheme based on multiple dimensions is often more valuable and flexible in planning marketing strategy than a single base. A combination of several segmentation bases is consequently used in hybrid (or multivariate) segmentation to create comprehensive profiles of particular consumer segments.

The role of values in consumer behaviour

Kluckhohn (in Berry, Poortinga, Segall & Dasen 2002: 59) defines a value as a conception, explicit or implicit, distinctive of an individual or characteristic of a group, of what is desirable, which influences the selection from available modes, means and ends of action. Rose and Shoham (2000) regard values as a learned set of desired outcomes and beliefs that guide attitudes and behaviour, while Rokeach (in Rose & Shoham 2000) considers values as enduring beliefs 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. According to Schwartz (2006), values are concepts or beliefs about desirable end-states or behaviours that transcend specific situations, guide selection or evaluation of behaviour and events and are ordered by relative importance.

Five important features of values, identified by Grunert and Scherhorn (in Christiansen & Hansen 2001), are evident from the foregoing. Values:

- are beliefs or concepts,
- about desirable behaviour or end-states,
- go beyond particular situations,
- guide the choice or evaluation of events and behaviour, and
- are arranged in a hierarchy.

According to Schwartz (1992), scholars in the areas of psychology, anthropology and sociology all agree on two core principles. First, values serve as guiding principles in peoples' daily lives because they are enduring beliefs about desirable end-states. Second, although values are utilised at the personal level, values are socially constructed and inherently cultural. People are thus not born with values; they learn values through socialisation.

According to Solomon, Bamossy, Askegaard and Hogg (2006), a person's set of values plays a very important role in his or her consumption activities, because people tend to purchase many products and services, believing that they will help them attain a value-related goal. A value system is a learned organisation of principles and rules to help one choose between alternatives, resolve conflicts and make decisions (Rokeach, in De Mooij 2004: 77). The extent to which people share a value system is a function of individual, social and cultural forces, as was evident in the preceding discussion.

Values serve as guiding principles in consumers' everyday life (Kahle, Rose & Shoham 2000). Because of differences in culture and socio-economic conditions, certain types of values may be regarded as more important to consumers in one country than another and may affect their attitudes and purchase decisions more significantly. It is therefore important to understand consumer behaviour in a particular cultural setting, especially consumers' social values. This would be indicative of the macro-approach to understanding the role of values in consumer behaviour, as will be evident in the next section.

Consumers' values serve as a focal point in many cognitive tasks, such as attitude formation or decision-making about a brand purchase. They further serve to organise the meaning representations for products and brands stored in consumers' knowledge structures (Peter & Olson 2008). According to Cleaver and Muller (2002), marketers are increasingly acknowledging the role that human values play in consumers' decisions. Durgee, O'Connor and Veryzer (in Lages & Fernandes 2005) also point out that one of the most powerful ways to understand and reach consumers is to understand their values and value systems. Reflecting firmly established values in advertising and product offerings is an essential ingredient in achieving brand awareness, consumers' trial of products and their subsequent loyalty to a product.

The application of the values perspective to the marketing of consumer products is based on two theoretically grounded perspectives, namely a macro-perspective representing sociology and a micro-perspective representing psychology (Reynolds, in Joubert & Mabunda 2007). In the macro-approach underlying this research, standard survey research methodology is combined with a classification scheme to categorise respondents into predetermined clusters or groups. In this way, a classification system or taxonomy is developed, which can be used to segment consumers into groups based on their value orientations.

The psychological perspective offered by the micro-approach, based on Means-End Theory, specifically focuses on the links between the attributes that exist in

products (the means), the consequences for the consumer provided by the attributes, and the personal values (the ends) that the consequences reinforce (Veludo-de-Oliveira, Ikeda & Campomar 2006).

Since human values serve as guiding principles in the life of a person or social entity, information regarding the human values that are important to the target market would be valuable in the development of marketing strategies. Related research should therefore focus on values, on what they mean, how they evolve and how they are manifested in products as perceived by target consumers (Allen 2001).

Schwartz's values theory

Several theoretical perspectives have been used to understand how values develop and how they impact on behaviour. This research was based mainly on Schwartz's (1992; 2006) values theory.

Schwartz (2006) presents a theory of the basic values that people in all cultures recognise. It identifies ten motivationally distinct value orientations and specifies the dynamics of conflict and congruence among these values. Schwartz and Bilsky (in Schwartz 2006) furthermore propose a universal structure that is particularly useful in the macro-approach to segmentation underlying this research. They identify different groups of values according to the following three criteria:

- according to the objective (instrumental or terminal),
- according to interest (individualist, collectivist or both), and
- according to ten motivational domains (power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, conformity, tradition and security).

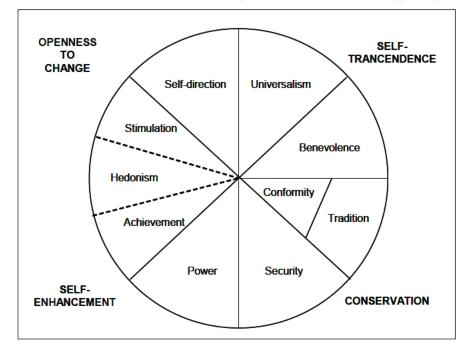
Values can thus be considered as people's adherence to objectives (terminal or instrumental), which are conducive to satisfying certain interests (individual, collective or both). These values belong to ten motivational areas, which are of varying importance in a person's daily life. These lead to motivationally distinct value types that are likely to be recognised within and across cultures and are used to form value priorities.

In addition, Schwartz (2006) conceptualises the complete pattern of relations of conflict and congruity among values in a circular structure, as evident in Figure 1. The closer any two values are in either direction around the circle, the more their underlying motivations correspond. The more distant values are, the more opposite their underlying motivations are. Some pairs of values therefore compete, while

L.M. Ungerer & J.P.R. Joubert

others are complementary. Benevolence and power, for instance, are contradictory, while others, such as conformity and security, are compatible.

Tradition and conformity are located in the same wedge because they share the same broad motivational goal. Conformity lies more towards the centre and tradition more towards the periphery. This signifies that tradition values conflict more strongly with the values opposing them. The expectations linked to tradition values are more abstract and absolute than the interaction-based expectations of conformity values. Tradition values therefore demand a stronger, explicit rejection of opposing values.



Source: Schwartz (1994: 24)

Figure 1: Theoretical model of relations among motivational types of values, higher order value types and bipolar value dimensions

Two basic dimensions organise value systems into an integrated motivational structure with consistent value conflicts and compatibilities (Schwartz 2006). As Figure 1 shows, one dimension refers to 'openness to change' versus 'conservation' values. This dimension captures the conflict of an emphasis on one's own independent thought and action and favouring change (self-direction and stimulation values), versus submissive self-restriction, preservation of traditional practices and protection of stability (security, conformity and tradition). The second dimension deals with

'self-enhancement' versus 'self-transcendence' values. This dimension captures the conflict of an emphasis on acceptance of others as equal and concern for their welfare (universalism and benevolence) versus pursuing one's own relative success and dominance over others (power and achievement). Hedonism contains elements of both openness to change and self-enhancement.

The Schwartz (2006) theory of the basic values consequently distinguishes ten values that form a continuum of related motivations. This continuum explains the circular structure where adjacent values share motivational emphases. Power and achievement, for instance, share the emphases of social superiority and esteem. Regarding values as being organised in a circular motivational structure has an important implication for their relations to other variables – it implies that each value in the whole set of ten relates to any other variable in an integrated manner.

According to Schwartz (2006), associations of value priorities with other variables, such as attitudes, behaviour and demographics, tend to reflect this structure. If any variable associates most positively with one value type (for instance, age with conformity), its associations with the other tends to be progressively less positive as one moves around the circle, in either direction, towards the diametrically opposing type. Support for the distinctiveness of the ten values and the prototypical circular structure of relations among them, as presented in Figure 1, was found in 95% of the samples in research from 63 nations in which the SVS was used. Schwartz et al. (2001) point out that it is evident that, although people differ substantially in the importance they attribute to values, most literate adults' values across cultures are organised according to the common structure of motivational oppositions and congruities, as proposed by Schwartz's theory.

South African Advertising Research Foundation's Universal Living Standards Measure (LSM)

According to Haupt (2006), a requirement for an effective market segmentation tool is that it should create an index that will differentiate between people with different behaviour patterns and group together those people with similar behaviour. One such index, the Living Standards Measure (LSM), developed by the South African Advertising Research Foundation (SAARF), is one of the most widely used marketing segmentation tools in South Africa.

The target population for the purpose of the SAARF surveys is defined as the adult population (16 years and older) of South Africa, who reside in any type of private household, including live-in domestic workers, hostel dwellers and residents of informal settlements.

The SAARF Universal LSM measure is calculated by summing individual scores on 29 variables. These variables reflect access to services and durables, and geographic indicators as determinants of standard of living. The weighted scores are used to divide the South African population into ten LSM groups.

The LSM groupings are currently based on quantifiable, descriptive variables – particularly consumers' demographic characteristics and the assets they own. Haupt (2006) points out that the LSM can consequently not be used as a psychographic or attitudinal measure. Although Haupt (2006) does not refer to psychological variables as such, it appears that LSM-based segmentation can be enhanced by incorporating these types of variables.

Psychological characteristics refer to the inner or intrinsic qualities of the individual consumer (Schiffman & Kanuk 2007). According to Yeshin (2006), identifying consumers' underlying psychological characteristics provides a much richer texture from which to discriminate sufficiently among them. If certain psychological variables are found to distinguish among consumer segments, this information can be applied to further augment this type of segmentation. It may also be useful to position products more effectively in advertising to multivariate segments, which, in turn, would lead to more effective allocation of funds.

In summary, the LSM is a wealth measure, based on standard of living. This research investigates the inclusion of values as psychological variables in this type of multivariate segmentation.

Research aim

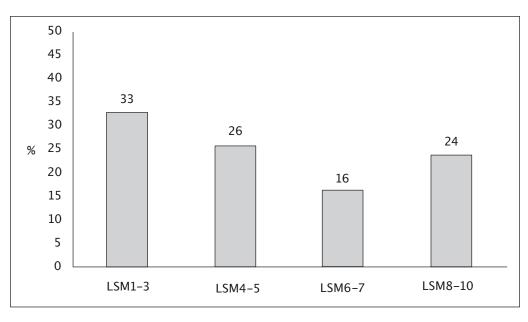
The research problem investigated in this research was whether consumer values as measured by Schwartz's (1992) values model can be used as additional psychological segmentation variables in the widely accepted multivariate LSM segmentation approach used in South Africa, and whether certain value priorities are more prevalent within broad groupings identified in this type of segmentation.

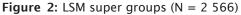
The primary aim of this research was therefore to investigate the extent to which values, as measured by Schwartz's (1992) model, differ across major groupings as defined by the LSM segmentation approach. Therefore, the general aim was to investigate whether values can be used to further discriminate among multivariate consumer segments.

Research method

In light of the fact that creating a distinct value profile for each of the LSM groups is a fairly complex task involving large data tables, and that some of the LSM groups share common features, it was considered appropriate to reduce the number of LSM groups in this research before creating a distinct value profile for them. The collapsing of ordinal and higher level taxonomies into larger groups is standard practice in analytical empirical research in order to enhance the statistical interpretability of the research data. In deciding which groups to combine for further analysis, general market practice was taken into consideration, and the following super groups were created: LSM super group 1 (purchase decision-makers from LSM 1–3), LSM super group 2 (purchase decision-makers from LSM 4–5), LSM super group 3 (purchase decision-makers from LSM 8–10). Four LSM super groups were therefore created to investigate differences in values among them.

Figure 2 presents the LSM super groups and their corresponding percentages as represented in the sample.





This research can be classified as non-experimental exploratory research because no attempt was made at manipulating any variables – certain phenomena (consumers' values) were only measured at a particular time. This research can be further classified as quantitative research, because a structured questionnaire was used to collect numeric data, which were analysed by means of statistical procedures. The specific quantitative research method that was used entailed the use of structured questionnaires that were completed during personal interviews in a national survey, as will become evident.

Participants

The data were collected by a reputable marketing research company based in Johannesburg. The national (both metro and non-metro) surveys were conducted in October 2005. It is argued that the contribution or central tenet espoused in this research is not bound by a specific year or time period. The value of this research is grounded primarily in the enhancement of multivariate segmentation approaches by including psycho-social variables such as values as descriptors of particular wealth groups.

The population for this survey consisted of all South African adults. A stratified probability sample of 3 500 adults was selected for the survey. The primary stratification variable was geographical region, using the nine provinces as a basis, and the second stratification variable was community size, with cities, large towns, small towns, villages and rural areas as categories. The metro sample was a stratified probability sample consisting of 2 000 adults (16 years and older) living in metropolitan areas. The non-metro sample also consisted of a stratified probability sample of 1 500 adults (16 years and older), but living in non-metropolitan areas.

This sampling process resulted in 3 500 face-to-face, in-house interviews being undertaken with respondents 16 years and older in both metro and non-metro areas. In order to determine the appropriate respondents for this research, the questionnaire included a screening question requiring respondents to indicate whether they were the main purchasers for a particular household. This exclusion criterion resulted in a final sample of 2 566 respondents for the research. The final sample consequently consisted of adult South African purchase decision-makers.

The questionnaire was translated into isiZulu, isiXhosa, Setswana, Sesotho, Sepedi and Afrikaans. Interviews were conducted in respondents' preferred language. All interviewers had a Senior Certificate qualification and were trained and thoroughly briefed before they conducted any interviews. The interviewers were representative of South African society. All black interviewers were required to be proficient in four languages, while white, coloured and Indian interviewers were required to have command of at least two languages. Although all interviews were conducted under the constant supervision of trained and experienced supervisors, a

minimum of 20% back-checking on each interviewer's work was conducted to ensure accuracy and consistency, for instance, to prevent falsification of information and to verify sampling accuracy.

Measuring instrument

Christiansen and Hansen (2001) point out that many scales have been developed to measure people's value systems. During 1995, the Schwartz Value Survey (SVS) was introduced to consumer behaviour research by both Grunert and Juhl (in Christiansen & Hansen 2001) and Puohiniemi (in Christiansen & Hansen 2001). The use of Schwartz's values model has recently gained popularity in segmentation research, as is evident in the work of researchers such as Kihlberg and Risvik (2007) and Worsley and Lea (2008). In these studies, the SVS was used, but as was evident earlier and will be explained in more detail in the next section, the 29-item Portrait Values Questionnaire (PVQ) was used in this study. Schwartz (2005b) believes that both the SVS and PVO are related to and predictive of consumer behaviour across a large variety of contexts.

Schwartz et al. (2001) adapted the Portrait Values Questionnaire (PVQ) – a questionnaire developed by Schwartz to determine people's value priorities in populations for which the SVS is not as suitable, such as less literate populations – for South African conditions. According to Schwartz et al. (2001), two objectives guided the development of the PVQ. It had to be more concrete and less cognitively demanding than the SVS, so that it could be used with populations for which the SVS appeared not to be suitable. Furthermore, it had to differ substantially from the SVS in its format and judgement task in order to serve as an independent test of the theory of value content and structure.

The 29-item PVQ includes short verbal portraits of 29 different people. Each one describes a person's goals, aspirations or wishes that imply the importance of a particular value. "Thinking up new ideas and being creative is important to him. He likes to do things in his own original way", for example, describes a person for whom self-direction values are important. "It is important to him to be rich. He wants to have a lot of money and expensive things" describes a person for whom power values are important. For each portrait, respondents are asked, "How much like you is this person?" They tick one of six boxes labelled very much like me, like me, somewhat like me, a little like me, not like me, and not like me at all. Before statistical analyses were undertaken on the research data, respondents' value scores were reversed, so that high ratings indicated that values were highly important to them. Respondents' values are inferred from how similar to themselves they regard the people who implicitly portray particular values. Each person in the verbal portraits is described in terms of what is important to him or her. This is intended to capture a person's values without explicitly referring to them as such. Schwartz et al. (2001) limited the total number of portraits so that the questionnaire could be completed in ten minutes at most. The number of portraits used to measure each value depended on the breadth of its conceptual definition (Schwartz, in Schwartz et al. 2001): stimulation, hedonism and power were each measured by two portraits; self-direction, achievement, security, conformity, and benevolence were each measured by three portraits; and tradition and universalism were each measured by four portraits.

The portraits were ordered randomly, but those intended to represent the same value had to be separated by at least three other portraits. The PVQ was developed in Hebrew and English in male and female versions. Its language level was simplified until 11-year-olds in Uganda, Canada and Israel understood all items.

In summary, the PVQ does not require as many fine distinctions as the SVS, and respondents do not have to convert their judgements into numbers. The PVQ presents portraits of people, and respondents then have to judge how similar the people are to themselves in terms of how they are portrayed. It consequently measures values indirectly. Respondents typically indicate that they find completing the SVS a mentally challenging task, which requires careful thought and evaluation of the relative importance of values. Respondents to the PVQ, by comparison, tend not to find it difficult to form their judgements and rarely have any questions. They respond to it as a simple task, and even preadolescents complete the PVQ in seven to ten minutes (Schwartz et al. 2001).

Scoring the PVQ

S.H. Schwartz (personal communication, 8 May 2008) points out that it is necessary to make a correction for individual differences when using the response scale, before performing analyses to investigate the relationship between people's value priorities and other variables.

People differ in the way they use the response scale for values. Some distribute their importance ratings across the whole rating scale. Others tend to rate most value items as quite important, while yet others tend to give lower ratings to most items. When using the PVQ, the aim is to investigate people's value priorities, or the relative importance of different values to them.

When relating value priorities to other variables, such differences in scale use should be controlled. This can be done statistically. For the PVQ, each person's mean

score across all 29 items is computed. Analysis of covariance is used to compare group means, with each person's mean rating as the covariate. To correlate value priorities with other variables, partial correlation is used on the mean rating. This does not serve as a form of standardising, but these procedures preserve real differences in the extent to which people discriminate among their values.

The score for each value consequently is the mean of the raw ratings given to the items comprising a particular value. S.H. Schwartz (personal communication, 7 November 2007) strongly warns that unless the necessary corrections for scale use are made, incorrect conclusions will be drawn. The procedure used to make this correction entails that scores for each of the ten values are computed by taking the means of the items that index it. Each individual's mean score is computed across all 29 value items. A centred score is then computed for each of the ten values by subtracting the mean score across all items (computed in step 2) from the mean score of a particular value (computed in step 1). S.H. Schwartz (personal communication, 7 November 2007) furthermore suggests that these centred value scores be used in correlation analyses, t-tests, MANOVAs and ANOVAs. This approach was followed in the research.

Findings

The findings of the research are presented in the next sections. Firstly, the reliability of the PVQ used in the current research is repoted on as well as a comparison of the centred value scores across major groupings as defined by the LSM segmentation. The extent to which values as measured by the PVQ differ across major groupings, as defined by the LSM segmentation, was investigated by a MANOVA.

The reliability of the PVQ

Table 1 presents the Cronbach alpha coefficients computed for the PVQ in total, as well as the various values it measures. The range of Cronbach alpha coefficients found in various studies (based on the SVS), as summarised by Schwartz (1992), are also presented in this table. As pointed out earlier, the SVS is regarded as a more complex and complete measurement of values. It has been used most frequently in international research, and results based on this measurement may serve as an indicator of acceptable internal consistency for the PVQ.

L.M. Ungerer & J.P.R. Joubert

	Current study		Summary from Schwartz et al. (2001)		Summary from Schwartz (2005b)	
	Cronbach alpha	Number of items	Cronbach alpha	Number of items	Cronbach alpha	Number of SVS items
All items	0.87	29		29		
Conformity	0.47	3	0.48	3	0.55-0.79	4
Self-direction	0.55	3	0.53	3	0.49-0.76	5
Achievement	0.61	3	0.52	3	0.61-0.78	4
Tradition	0.43	4	0.37	4	0.47-0.67	5
Universalism	0.57	4	0.57	4	0.68-0.84	8
Stimulation	0.53	2	0.76	2	0.66-0.78	3
Security	0.64	3	0.64	3	0.45-0.80	5
Benevolence	0.63	3	0.61	3	0.59-0.81	5
Power	0.50	2	0.50	2	0.54-0.76	4
Hedonism	0.64	2	0.79	2	0.68-0.84	2-3

Table 1: Cronbach alpha coefficients of the PVQ

Source: Schwartz et al. (2001: 531); Schwartz (2005b: 70)

With an overall Cronbach alpha of 0.87, the reliability of the scale overall appears to be very high. Although lower reliabilities were found for the individual values, they are within or close to the range of coefficients reported with the same instrument by Schwartz et al. (2001) and those summarised by Schwartz (1992), based on previous research with the SVS.

Adequate reliability (Cronbach alpha) coefficients of above 0.6 were found for the values of achievement, security, benevolence and hedonism. Coefficients of above 0.5 were found only for self-direction, universalism, stimulation and power. Field (2005), however, indicates that the number of items in a scale can impact on the Cronbach alpha – the fewer the items, the lower the alpha. The low reliabilities obtained for these values need to be considered in this light, as a relatively small number of items are used to measure them.

Low reliability coefficients (below 0.5), however, were found for two values from Schwartz's model, namely conformity and tradition, which may point to the need to further investigate these values, or to develop items that are more suitable for the South African context in future research. Schwartz (1992) also reports a range of low reliability coefficients for tradition. He points out that the low reliability coefficient obtained for this value suggests that it includes diverse components. An inspection

of his data indeed suggests two components to this value: faith (devout, respect tradition) and self-restriction (moderate, humble, accepting portion in life).

Centred value scores by LSM super group

The centred value scores of each of the four LSM super groups are graphically depicted in Figure 3. Negative scores therefore indicate that the value is lower, while positive scores indicate a higher than average score relative to the overall average score.

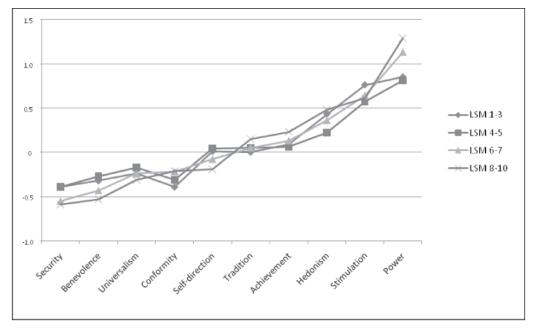


Figure 3: Centred value scores for LSM super groups

Although there were differences in the centred value scores of the LSM super groups, their overall profiles of scores on values were very similar. According to Schwartz (2005a), people's life circumstances provide them with opportunities to follow or express some values more easily than others. Wealthy persons can, for example, pursue power values more easily. Because purchase decision-makers in LSM 8–10 are classified at the highest level of a wealth measure, their pursuit of power is consistent with this expectation.

Some differences among purchase decision-makers from the different LSM super groups are also evident in Figure 3. A multivariate analysis of variance or MANOVA

was performed to investigate whether the value differences among purchase decisionmakers from various LSM super groups were significant.

MANOVA: testing for value differences among LSM super groups

A MANOVA was initially performed in order to investigate the differences among the LSM groups (the independent variable) in terms of the various values (the dependent variables).

Effect		F	Significance
LSM group	Pillai's Trace	12.4	0.000***
	Wilks' Lambda	12.8	0.000***
	Hotelling's Trace	13.3	0.000***
	Roy's Largest Root	35.1	0.000***

Table 2: Multivariate test statistics

*** Significant at $\alpha = 0.001$

The statistics in Table 2 indicate that overall there were highly significant differences among the LSM super groups in terms of their value priorities. The 'tests of between-subject effects' table following the overall multivariate tests provides significance levels for each dependent variable (Garson 2008). The between-subject effects, presented in Table 3, indicate that there were significant differences among LSM groups in terms of the specific values.

As is evident from Table 3, highly significant differences were found on all ten values. To establish the LSM super groups among which significant differences exist, a post hoc test for differences was performed.

Table 4 presents the homogeneous subsets as created by Duncan's multiple comparison procedure, as well as the means for groups in each homogeneous subset.

From a review of the subsets and the means for groups in each homogeneous subset, a number of characteristic values were evident for purchase decision-makers in the four LSM super groups. Table 5 summarises the interpretation of the homogeneous subsets and centred value means by summarising the values characterising each super group, or the values that were important to them.

It is evident from Table 5 that purchase decision-makers from LSM super groups 1 and 2 corresponded in terms of the values that they characteristically regard as

Dependent variable	Df	F	Sig.
Conformity	3	15.41	0.000***
Self-direction	3	21.06	0.000***
Achievement	3	8.17	0.000***
Tradition	3	7.78	0.000***
Universalism	3	9.02	0.000***
Stimulation	3	4.65	0.003**
Security	3	20.20	0.000***
Benevolence	3	25.85	0.000***
Power	3	26.20	0.000***
Hedonism	3	8.62	0.000***

Table 3: Between-subject differences on all values for LSM groups

*** significant at $\alpha = 0.001$

** significant at $\alpha = 0.01$

important. The same applies to purchase decision-makers from LSM super groups 3 and 4. Some differentiators among the super groups are, however, also evident. Purchase decision-makers from LSM super group 1 regarded stimulation as more important than all the other groups. Although purchase decision-makers from all LSM groups regarded stimulation as important, purchase decision-makers in this group attached significantly more importance to this value, compared with purchase decision-makers from LSM super group 2 attached particular importance to universalism, compared with the other groups. Purchase decision-makers from LSM super group 4 attached above average importance to hedonism, achievement and tradition.

People typically adapt their values to their life circumstances. They increase the importance they attribute to values that they can readily attain, and decrease the importance of values that they cannot easily pursue (Schwartz & Bardi, in Schwartz 2005b). Schwartz (2005b) furthermore points out that people's tendency to increase the importance of attainable values and decrease the importance of thwarted values applies to most, but not all, values. This may explain why purchase decision-makers from LSM super group 1 corresponded to those in LSM super group 4 in terms of hedonism. Purchase decision-makers from the lower LSM super groups may have attached particular importance to this value because they were not able to attain it.

Purchase decision-makers from LSM super group 4 attached significantly less importance than other groups to universalism, and purchase decision-makers from

L.M. Ungerer & J.P.R. Joubert

LSM super		Subset			
group	n	1	2	3	
		Achievement			
2	668	0.06			
1	850	0.09			
3	423	0.13			
4	623		0.23		
		Tradition			
1	850	-0.01			
2	668	0.05			
3	423	0.05			
4	623		0.15		
		Stimulation			
2	668	0.57			
4	623	0.61			
3	423	0.64			
1	850		0.76		
		Security			
4	623	-0.59			
3	423	-0.55			
1	850	0.00			
2	668				
2	000	Conformity			
1	850	-0.39			
2	668	0.55	-0.31		
3	423		0.51	-0.22	
4	623			-0.22	
7	025	Self-direction		-0.21	
4	623	-0.19			
3	423	-0.19	-0.08		
1	850		-0.08	0.01	
2	668			0.01	
2	008	Universalism		0.04	
4	623	-0.31			
1	850	-0.31	-0.24		
3	423		-0.24		
			-0.24	0.17	
2	668	Benevolence		-0.17	
1	622				
4 3	623 423	-0.53	0.42		
			-0.43	0.22	
1	850			-0.32	
2	668	Devicer		-0.27	
2	<u> </u>	Power			
2	668	0.81			
1	850	0.85	1 1 7		
3	423		1.13	1.20	
4	623			1.29	
2		Hedonism			
2	668	0.22			
3	423		0.36		
1	850		0.43	0.43	
4	623			0.48	

 Table 4: Homogeneous subsets for LSM super group comparisons on values

114

LSM super group 1	LSM super group 2	LSM super group 3	LSM super group 4
Stimulation	Self-direction	Power	Power
Hedonism	Universalism	Conformity	Hedonism
Benevolence	Security		Achievement
Self-direction	Benevolence		Tradition
Security			Conformity

 Table 5: Values that are important to LSM super groups presented on Schwartz's circular model characteristic or dominant values of LSM super groups

LSM super group 2 attached the highest level of importance to this value, compared with all the groups. According to Schwartz and Bardi (2001), universalism values and their related values (such as social justice, equality and broad-mindedness) contribute to positive social relations, but universalism values focus mostly on those outside people's in-group. Universalism values are functionally important primarily when group members must relate to those with whom they do not readily identify. Commitment to the welfare of non-primary group members is critical in schools, workplaces and other non-family settings. Universalism values are less crucial when most interaction is limited to the primary group. Purchase decision-makers from LSM super group 4 did not show a high level of concern for people who are different from them, and did not give much priority to those outside the in-group. Purchase decision-makers in this group tend to be mostly white, which may indicate an individualistic trend among them.

Purchase decision-makers from LSM super groups 1 and 2 differed significantly from those from LSM super groups 3 and 4 on security – they attached significantly more importance to this value. As pointed out earlier, people tend to increase the importance they attribute to values that they can readily attain, and to downgrade the importance of values that their circumstances restrain them from pursuing. The reverse occurs with values that concern material well-being and security. When such values are blocked, their importance increases, but when they are easily attained, their importance decreases. People who suffer economic hardship and social upheaval, for example, attribute more importance to power and security values than those who live in relative comfort and safety (Inglehart, in Schwartz 2005a). This may explain why purchase decision-makers from LSM super groups 1 and 2 ascribed significantly more importance to security.

Purchase decision-makers from LSM super group 4 appear to be power-driven. The preceding explanation may also apply to this finding. They may tend to be power-driven because of their wealth – their circumstances allow them to pursue power values more readily. Schwartz's (1992; 2006) conceptualisation of values

as organised in a circular motivational structure (as depicted in Figure 1) has important implications for their relations to other variables – it implies that the whole set of ten values relates to any other variable in an integrated manner. The interrelationship is confirmed by the fact that purchase decision-makers from LSM 4 attached most importance to power, which lies opposite universalism on the circular model, while purchase decision-makers from LSM group 2 attached most importance to universalism.

Figure 4 depicts the values that were most important to purchase decisionmakers in the four LSM super groups, based on the circular motivational structure of relations among the ten values.

There is some indication in Figure 4 that the higher their level of LSM classification, the more importance purchase decision-makers attach to values towards the left of the circular model (reflecting the self-enhancement dimension).

Conclusion

In 1990, Burgess pointed out that there was almost no literature on values and consumer behaviour available in South Africa. In the interim, research conducted by Burgess (1990), Burgess and Steenkamp (1998), Corder (2001) and Jonkheid (1998) has contributed to a greater understanding of values and consumer behaviour in South Africa. The present study contributes to this line of research because it specifically investigated the personal values of South African purchase decision-makers.

The findings in general support Schwartz's theory of basic human values. Purchase decision-makers from different LSM groups differed in the values they pursued most strongly. It was found that the LSM super group representing the lower LSMs (LSM 1–5) differed from the LSM super group representing higher LSMs (LSM 6–10) with regard to, among others, stimulation, benevolence, security, conformity and power. Lower LSM groups (1–3) tend to display a motivational structure reflecting openness to change, while LSM groups 4–5 tend to display a self-transcendence motivational structure. The higher LSM groups (6–10) are characterised by a self-enhancement motivational structure in terms of the importance attached to particular values.

These findings illustrate that particular values can be associated with particular LSM groups and that these groups are reflective of particular value sets. The findings furthermore suggest that the LSM segmentation approach could be supplemented and enhanced by including values as descriptors of particular LSM groups. The South African Advertising Research Foundation has on numerous

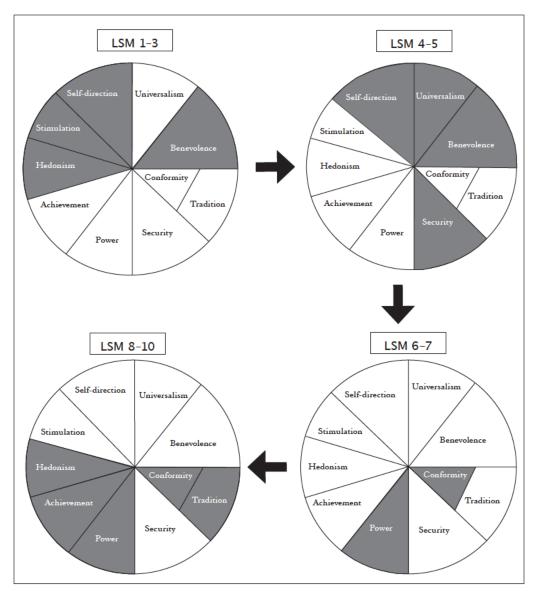


Figure 4: Values that are important to LSM super groups presented on Schwartz's circular model

occasions implored consumer researchers to investigate the use of psycho-social variables in segmentation tools such as the LSM. The findings reflected in this article are an attempt to address this need and are reflective of the only known South African research study to report on the potential use of values as LSM descriptors.

Limitations and future research

Although the dated nature of the data could be viewed as a limitation, the salient findings that values of purchase decision-makers differed between LSM and population groups could be fruitfully applied in consumer segmentation efforts and therefore remain appropriate. The dynamic nature of the cultural composition of LSM groups, however, requires that additional research be conducted to investigate whether similar values differentiate between LSM groups, as determined by more recent classifications.

A number of additional suggestions can be made in terms of segmentation and values research, as well as methodological issues in each area, as will become evident.

A macro-survey (as in this study) provides information on the overall value orientation of particular target segments. These general classifications provided in the macro-approach can provide essential positioning insights by investigating both the relevance of product attributes and values during consumer decision-making.

A micro-perspective could, however, add further value and insight to a fuller understanding of the differences reported. As pointed out earlier, the micro-approach aims to provide an understanding of the role of consumers' values in decision-making and behaviour. In this type of research, in-depth qualitative methods are mainly used to understand consumer motivations, instead of pre-established lists of values. Hierarchical value mapping could provide additional insight into the true relation between consumers' decisions and their values.

Future research needs to address the cultural context and meaning of specific values. The impact of social values on consumer behaviour therefore requires further investigation.

Finally, as indicated earlier, South Africa is particularly suited to market research of this nature because of its cultural diversity. When respondents' cultural group, however, is tightly constricted by a key research variable, such as their level of LSM classification, it becomes a crucial variable to consider in the analysis of research data, where the purpose is to explore differences among groups. In the current research, respondents' LSM grouping tends to be highly associated with their cultural group, implying a need for additional cross-cultural research.

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118

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