# The influence of emotions and personal values on packaging preference decisions

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# ABSTRACT

The importance of emotions and personal values for consumer decision-making is well documented. This article aims to provide additional insight into the relative influence of emotions and personal values in packaging preference decisions. The literature overview attempts to provide justification for using a particular methodology involving an animated non-verbal emotion measurement instrument, a repertory grid analysis followed by a laddering exercise as well as an overall preference measure between the pack designs. A non-probability sampling approach was used to draw a convenience sample consisting of 158 respondents. Findings confirmed certain theoretical perspectives, namely that packaging designs evoking intensely felt positive emotions and complex cognitive personal value structures, result in stronger preferences expressed for these packs. The research findings also indicate that packaging design can be viewed as providing the 'glue' that connects logic and reason with feelings and emotions.

#### Keywords: Emotions, Personal values, Packaging, Preference

Judgement and decision-making research has, according to Västfjäll and Slovic (2013), shown a dramatic increase in interest in the interplay between cognition and affect. Conceptual models attempting to describe and explain consumer behaviour have, however, always included feeling-related constructs such as emotions, with the underlying theoretical foundation dictating the relative influence of feelings on behaviour. The wellknown AIDA advertising model, for example, refers to acquiring Attention, holding Interest, arousing Desire, and then generating Action. According to this model, emotional reactions (in this case, desire) occur only after consumers have been made aware (attention) and experience interest in a product, service or

idea. Models based on this sequence of processing, generally termed hierarchy of effects models, have been a tenet of marketing for over 100 years (Nicholls, Schimmel, Manna, Schnurr & Clinton 2013). However, the understanding of the role of emotion started to change during the 1980s. Even before the neurosurgical evidence by Damásio (1994 2000), Zajonc (1980) argued that emotion has primacy over and can function independently of cognition. Damásio (2000) emphasises this finding by asserting that no decision can be made without considering the feelings or emotions associated with the potential outcome of the decision. It has also often been argued that, as competitive products from the same product category

become increasingly similar in tangible attributes such as quality and price, packaging and design with potential to evoke certain emotions could be utilised to gain differential advantage in competitive markets (Chapleo 2013).

In spite of the importance of packaging, Underwood and Klein (2002) found that most studies fail to distinguish the emotions elicited by the packaging design itself from emotions elicited by the total consumption experience. It is also more recently recognised by Moscarello and LeDoux (2013) that the behavioural influence of emotions occurs via the strong association between emotions and the underlying reasons or motivation for acting in a particular way. In this regard, Kahle, Rose and Shoham (2000) refer to several studies supporting the motivational influence of personal values on decision-making and behaviour. Hence, emotions and personal values can be viewed as two of the most influential factors that influence the preferences consumers express for a particular package design.

The proposition could consequently be posed that more intensely felt emotions elicit a more complex cognitive personal value structure, implying more cognitive activity than would be required for less intensely felt emotions. Intensely felt emotions and a complex value structure should, in turn, reflect a preference for the object of interest. This article introduces a methodology to investigate whether more intensely felt emotions elicit a more complex cognitive personal value structure. The methodology involves a meansend approach to identify the personal value structures associated with particular packaging designs, and a non-verbal animated emotion measurement tool, the Product Emotion Measurement Instrument (PrEmo©), to profile the emotive reaction elicited by the packaging designs. By applying this methodology, this study aims to inform the body of knowledge of

the influence of emotions and personal values on packaging preference decisions.

A convenience sample consisting of 158 respondents was drawn from 18-45 year-old consumers who had bought chocolate slabs in the preceding month after which a mixed method research approach, using both quantitative and qualitative data collection methods was employed. The findings will contribute to a fuller understanding of the role that emotions and personal values play in providing strategic direction for packaging developments and designs.

## LITERATURE OVERVIEW

The literature overview starts out by providing general definitions of emotions and personal values. This is followed by a review of research on emotions and the underlying personal values elicited by packaging within the marketing context specifically. The persuasive influence of packaging on consumer decision-making is also examined. This section aims to provide theoretical justification for the approach, and the research methodology and data collection methods applied in the current research.

#### Emotions

Researchers and scholars in the behavioural sciences have, since the seminal research by Damásio (1994) emphasised the need to consider emotions as a crucial factor in the decision-making process (Du Plessis 2011; Hall 2002). While the importance of emotions is increasingly being acknowledged, these researchers maintain that more work is needed to calibrate and refine emotion measurement methodologies.

Since *feelings* and *emotions* are often used interchangeably, and with the focus in this research on emotions and personal values, emotions need to be differentiated from feelings. Gainotti (2011) provides a useful distinction by describing emotions as primitive, reactive and unconscious mechanisms controlling individual responses to a wide variety of situations ranging from serious threats (for instance, from an approaching car) to more trivial decisionmaking tasks (for instance, choosing a slab of chocolate in a convenience store). Feelings, in contrast, are those conscious and cognitive perceptions used to describe emotive reactions. Feelings are therefore more detailed in nature than emotions, and can be described verbally in specific terms. It has furthermore been found by Kemp and Bui (2011) that positive emotional responses elicited by products, services and ideas enhance the likelihood of acquiring and using such products, services and ideas. In addition, graphics presented on product packaging can potentially determine consumers' attitudes and behaviour to the product (Westermann, Sutherland, Gardner, Baig, Critchley, Hickey, Mehigan, Solway & Zervos 2013).

Before attempting to address the measurement issue, some issues about the concept of emotion need to be clarified further. A diversity of reactions can be regarded as emotions. Poels and Dewitte (2006), for example, illustrate emotional reactions by referring to either the positive arousal that attracts men's attention to visual marketing stimuli, such as advertisements showing seductive women or the hope one may experience after seeing an advertisement about revolutionary dieting pills. These reactions do, however, involve different cognitive processes with the arousal in the first example occurring automatically, whereas cognitive processing is more apparent in the second example. A distinction therefore needs to be made between two types of emotions that operate on a continuum, depending on how much cognitive processing they require before the emotion is experienced. At the one end of the continuum are emotions that occur automatically, referred to by LeDoux (1996) and Zajonc (1980) as lower-order or type 1 emotions. These emotions mainly involve pleasure and arousal

reactions, whereas emotions that depend on more cognitive processing of the situation referred to as higher-order or type 2 emotions, are placed at the other end of the continuum. These emotions can consequently be conceptualised as more complex than lowerorder emotions in that they tend to be consciously labelled as a specific emotion

These two extremes, however, do not yet solve entire emotion conundrum. Certain the emotions, such as fear, anger and happiness, are situated somewhere in between type 1 and type 2 emotions. For example, on the one hand, being confronted by an unexpected situation such as a lift suddenly grinding to a halt will automatically fill one with fear, while on the other hand, fear can also be felt after conscious appraisal of a situation. After a series of mistakes at work, one may, for instance, experience the fear of losing your job. This type of fear is not constituted automatically but will be felt only after cognitive considerations of the situation. Since these emotions can be experienced either automatically or after cognitive consideration, they can occupy various positions on the emotional continuum (Poels & Dewitte 2006).

Zeelenberg, Nelissen, Breugelmans and Pieters (2008) furthermore emphasise that emotions can be understood as routes for intuitive decision-making, imposing upon the decisionmaker inclinations for behaving in a way that most adequately serves current strivings. Investigating these dynamics should further enhance our understanding of both decisionmaking processes and the dynamics of emotional experiences.

# Emotions and the marketing environment

The role and importance of emotion in stimulating buying interest, intentions and choices have been illustrated in various research studies since the late 1980s (Isen 1987). It has since then become apparent that lists of features and benefits alone are no longer enough to differentiate brands. especially when only a few seconds are available to make an impression. To this end, Desmet (2002) conducted his doctoral thesis on 'designing emotions', addressing questions that asks how products can elicit emotions and how designers can influence these emotions. This thesis explains the link between a product's design and the emotions it elicits. From this study, the PrEmo© measurement instrument was developed. O'Shaughnessy and O'Shaughnessy (2003) also acknowledge the importance of emotions, emphasising that, when marketing activities and consumption experiences jointly result in positive emotional responses, committed brand relationships ensue.

Henson, Barnes, Livesey, Childs and Ewart (2006) reports on moisturising packaging and the importance of 'affective engineering', described as a relatively new field of design concerned with the translation of consumers' feelings for a product into design elements. Research to this effect is also being conducted in the field of neuroscience and applied to product packaging. One of these studies (Stoll, Baecke & Kenning 2008) established that the visual appeal of consumer good packages trigger different cortical brain activity when compared to unattractive packages. A more recent study, applied to chocolate packaging, reports on the need of the Scandinavian confectionary market to frequently revisit and improve product packaging as a means to remain competitive by ensuring consumers visual appeal that translates to unconscious purchasing decisions (Schütte 2013).

#### Measuring emotions

Various instruments have been developed for measuring emotional reactions to products, services and ideas. These instruments can, according to Poels and Dewitte (2006), be classified as either self-report or autonomic measures. Self-report measures focus on introspective reflections about the emotions felt with respect to marketing stimuli, whereas autonomic measures focus on emotional reactions that are less distorted by higher cognitive processes.

The research findings reported in Poels and Dewitte (2006) are not clear on which measurement instrument provides the most valid measurement but, based on the reactive, less cognitive nature of emotions, it seems plausible to err on the side of autonomic measures. In the research on which the current article is based, it was accepted that, instead of relying on verbal measures of emotions such as the List of Emotions, emotive responses can be obtained from visual, non-verbal cues, such as those developed by Desmet (2002).

PrEmo© was initially developed and applied to measure emotional responses to product design (Desmet 2002; Desmet, Hekkert & Jacobs 2000) and later applied to emotions evoked by advertisements. These studies concluded that PrEmo©is a user-friendly, valid and relatively inexpensive instrument to measure emotional reactions to marketing stimuli.

#### Personal values

It is acknowledged that the behavioural influences of emotions occur via the strong between association emotion and the underlying reasons for acting in a particular way (Isen 1987). In this regard, Kahle et al. (2000) refer to several studies supporting the linkage of personal values, decision-making behaviour. Personal values and can consequently be viewed as one of the most influential factors that influence the preferences consumers express and has therefore received substantial attention from both academics and practitioners.

# Personal values and the marketing environment

According to Reynolds (Reynolds & Gutman 1988: 787) the application of the personal values perspective to the marketing of products, services and ideas can be classified into two theoretically grounded perspectives, namely macro, representing sociology, and micro, representing psychology. The Value and Lifestyle (VALS) methodology of the Stanford Research Institute is a generally applied methodology indicative of the macro approach to classifying personal values. Reynolds, (Reynolds & Gutman 1988). furthermore cautions that the macro classification methodologies provides scant acknowledgement of the way in which product characteristics are internalised. Conversely, the micro approach applies the individualised psychological perspective on values by eliciting the functional and psychological consequences of product attributes or characteristics, also referred to as the 'means'. These consequences are furthermore, according to this approach, motivated by the relevant personal values, or the 'ends'. This approach, therefore, contributes to linking the product attribute and the perceived benefit or relevance.

The means-end perspective aligns to Expectancy-value theory that can be traced to the nineteen fifties (Rosenberg 1956). This seminal work theorises that individuals learn to associate particular 'values' of usage with particular 'instrumentality'.

This distinction between attributes. consequences and values imply that consumers might perceive packaging designs as having consequences that are even more abstract than functional psychosocial benefits. These more abstract benefits or consequences, according to means-end theory, represent personal values that are the cognitive representations of consumers' most basic and fundamental needs and goals. They furthermore constitute a major part of consumers' self-concepts and, as such, have a powerful and pervasive influence on cognitive processes and overt behaviours.

#### Measuring personal values

Gutman (1982) suggested a laddering type interview, based on personal construct and

means-end theory, to identify the values that influence consumer decision making. Kelly's personal construct theory (Kelly 1955), one of the earliest cognitive theories in psychology, provides the conceptual foundation for meansend theory and the implied laddering interview. Means-end theory, conceptualised by Gutman (1982), provides a more focused perspective for understanding how consumers think and feel about particular products or theory services. This focuses on the interrelations among product meanings at three levels of abstraction, namely attributes. consequences and personal values and is applied in the laddering interviewing approach used to elicit personal values or 'ends' from consumers. Attributes, according to Gutman (1982), refer to the relatively concrete characteristics of a product or service. Product packaging attributes could, for example, typically include colour, size, material, product description and illustration of usage. Consequences, according to Gutman (1982), refer to the outcomes associated with reasons for particular attributes regarded as important. Positive outcomes typically refer to benefits, whereas negative outcomes commonly represent associated costs or perceived risks. For example, a positive outcome of packaging attributes could convince the consumer that the product can result in feelings of selfgratification. Conversely, a negative outcome could disinterest the consumer, leading to possible feelings of disgust when viewing the product's packaging. Personal values. according to Gutman (1982), refer to highly abstract consequences that describe desired end-states of being, or personal values such as pleasure, health or indulgence. Rohan (2000) contends that personal values are related to needs, motives and goals in as far as all these psychological states influence and direct behaviour. Roberts and Robins (2001)furthermore maintain that personal values do, however, differ from specific goals as they are trans-situational across context and time, implying a more general influence on behaviour.

Means-end theory, moreover, contends that personal values vary in their importance as guiding principles, ranging from unimportant to important. Consumers may explain behaviour by referring to their personal values when they wish to justify their feelings, choices or actions. Personal values could, according to means-end theory, also serve as standards for judging one's own behaviour and that of others.

It is important to emphasise that personal values elicited from a means-end perspective are of a personal nature. Rohan (2000) provides a succinct perspective on this distinction by mentioning that in discussions of consumers' personal value priorities, it should be specified that personal value priorities are at issue, and in discussions of perceptions of others' value priorities, it should be specified that social values are at issue.

#### Packaging and consumer decisionmaking

According to Pilditch (1973), product packaging was seen as the 'silent salesman' as far back as in the 1950s. Lewis (1991), in reaction to Pilditch, considered product packaging to be more than just a salesperson, describing it as a flag of recognition and symbol of the brand. Vazquez, Bruce and Studd (2003) furthermore credit Pilditch with the argument that a pack must come alive at the point of purchase in order for the salesperson to function successfully. Based on these views, packaging remains one of the most important vehicles with which to communicate the brand message directly to consumers.

Packaging design can therefore be described as the 'glue' that connects logic and reason with imagination and feelings. The emotional reaction and personal value that consumers attach to packaging and the way this may assist in stimulating consumer interest is therefore of utmost interest to marketers in designing marketing strategies and campaigns. The research being reported here aimed to assist by providing a fuller understanding of this dynamic.

#### PURPOSE AND AIMS

The current research aimed to establish the influence that emotions and personal values elicited by three chocolate slab packages had on making preference choices. More specifically, the research aimed to determine:

- I the emotions that the three packaging designs elicited;
- I the most preferred packaging design; and
- the underlying personal values influencing the preference for a particular packaging design.

These aims, based on the underlying theories discussed in the literature overview, can be encapsulated in the following question: *Does a pack design that evokes intensely felt positive emotions and complex cognitive personal value structures result in a preference for that pack?* 

#### **RESEARCH METHODOLOGY**

A mixed method research approach was used, as both quantitative and qualitative data collection methods were employed. Data collected by means of the PrEmo© instrument may be described as quantitative, providing intensity measures for the 12 specific emotions measured. The repertory grid packaging attribute elicitation and laddering interviews are in essence respondent-driven with minimal interviewer bias, providing qualitative data.

An electronic version of the PrEmo© instrument was constructed and installed on 12 personal computers in the purposefully equipped central venue of the Bureau of Market Research (BMR) at the University of South Africa (Unisa). The PrEmo© was

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accessed from a central web-based platform ensuring immediate capturing as respondents completed responses. submitted After of completion the electronic PrEmo© instrument, individual face-to-face laddering interviews were conducted with respondents. This data collection method facilitated effective supervision and control over the data collection phase.

A purposefully selected convenience sample was drawn. Unisa students and staff, who had bought chocolate slabs in the preceding month, were recruited and invited to participate in the study. The following research principles were applied to ensure ethically responsible research:

- Participation depended on informed consent.
- The invitation to prospective respondents explained the nature and study foci of the research and guaranteed confidentiality of information provided during the survey and the right to withdraw at any stage of the process.
- An affirmative response to the invitation confirmed that they agreed to participate in the research and that they understood that all inputs provided would be treated confidentially and be used for research purposes by the research user.
- Once respondent consent was obtained, the respondents completed the research instruments.

Three chocolate slab pack photographs were included as stimuli, namely packs P and R (new packaging designs) together with an existing pack design (Q).

The sequence of measurements mirrored the theoretical discussion in the literature overview above. Emotive reactions to the pack designs were measured at the outset, followed by preference questions and finally the laddering interview aiming to identify the underlying reasons for the preference choice made. Fieldwork started on 31 August 2009 and concluded on 17 September 2009 with 158 respondents participating in the research.

## Sample

A convenience sample design was adopted whereby students and university staff were selected on the basis of being readily available to participate. During the recruitment phase of the research, respondents were screened and selected on chocolate slab-buying habits. Sample members had to have bought a slab of chocolate during the month preceding the interview. The statistical considerations that influenced the final sample size included the following:

- degree of variability of the survey population – the more heterogeneous the population, the larger the sample size had to be;
- degree of precision the greater the precision required, the larger the sample size that was needed;
- degree of confidence 95% confidence
  level; and
- the extent of disaggregated analysis.

The derived sample for the research is outlined in more detail in Table 1.

Table 1 on the next page reflects that 84% of the respondents were unmarried, 73% were younger than 25 years old and 78% had a monthly income of less than R8 000.

#### Research instruments

Emotive reaction and personal values were measured with Desmet's Product Emotion Measurement Tool (PrEmo©), a repertory grid exercise and laddering format in-depth interviews.

#### PrEmo©

This computerised instrument consists of cartoon-like figures representing different emotions or emotional states. However,

Sample breakdown					
Demographic		Respondents (n)	% of total		
Age	18–24	115	72.8		
	25–33	23	14.6		
	34–45	15	9.5		
	46+	5	3.2		
	Total	158	100.0		
Gender	Male	69	43.3		
	Female	89	56.7		
	Total	158	100.0		
Marital status	Single	138	87.3		
	Married	17	10.8		
	Divorced	3	1.9		
	Total	158	100.0		
Monthly household income (gross)	< R3 000	71	44.9		
	R3 000–R5 000	22	13.9		
	R5 000–R8 000	18	11.4		
	R8 000–R12 000	12	7.6		
	R12 000-R18 000	6	3.8		
	R18 000-R24 000	2	1.3		
	R24 000-R30 000	3	1.9		
	R30 000+	8	5.1		
	Other*	16	10.1		
	Total*	158	100.0		

TABLE 1 Sample breakdown

\*16 respondents did not provide an indication of personal income

instead of static figures, PrEmo© includes 12animated cartoons with movement and sound. representing specific emotions comprising six positive emotions (desire, satisfaction, pride, hope, joy and fascination) and six negative emotions (disgust, dissatisfaction, shame, fear, sadness and boredom). The PrEmo© instrument requires respondents to indicate how strongly marketing stimuli, for example advertisements or packaging designs, are experienced by responding to each of the 12 emotions represented by the cartoons. Respondents are asked to click on each of the 12 depicted emotions and observe the sound and movement of each, followed by the instruction to indicate on a 5-point intensity scale to which degree the respondent's own emotion to the product is reflected by the each emotive

cartoon figure. Due to the non-verbal nature of the instrument, participants are only presented with the animations without being preinformed of the emotions depicted by each character in an attempt to elicit the most emotively authentic response.

#### Repertory Grid technique

This technique was developed by Kelly during the 1950s and involves the appraisal of personally identified bipolar constructs and determining the relationship between them. In the true sense of the constructivist theory, each appraisal is made from each respective respondent's own reality and experiences. The theory states that respondents do not just respond to a stimulus, but rather respond to what they perceive the stimulus to be, for example attractive versus unattractive. The elements that are used in repertory grids can be almost anything, depending on the context to be explored (Fransella, Bell & Bannister (2004). For the current research respondents were presented with three different chocolate packaging designs and, in accordance with the procedure suggested by Fransella and Bannister (1977) instructed to indicate in which way two are alike and different from the third. This attribute that distinguishes one design from the other two would then become the first 'rung' in the ladder of personal constructs until all possible attributes have been selected.

#### Laddering interviews

Using the data obtained during the repertory grid technique, laddering interviews were conducted. Laddering essentially represents a form of recursive questioning with the aim of elucidating higher-order implications of using a particular marketing stimuli. Once all the attributes have been selected during the repertory grid technique, the interviewer would ask the respondent to indicate which attributes are more important, and then ask 'Why?' or 'What is the advantage of that?' This theoretically ladders up to the next higher-order construct, to which the interviewer elicits a further associated reason by repeating the cycle of questioning at each new rung. Questioning usually proceeds in this way until the respondent is unable to articulate an answer to the ultimate 'Why' prompt, or

until his or her response represents a simple rewording of the previous construct. The result of the laddering interview typically represents a multi-layered hierarchy of personal meanings.

The research instruments were piloted to test for user-friendliness, understanding of instructions and whether they provided for accurate data capturing. The major focus areas reflected in the instruments included the following:

- emotional reaction by means of the PrEmo© animated scale;
- packaging attribute elicitation and preference measure by means of the repertory grid technique; and
- personal values influencing preferences by means of a laddering interview.

#### Analysis and findings

Emotional responses elicited are difficult to measure because their nature is subtle (low intensity) and often mixed (more than one emotional response at the same time). Instead of relying on the use of words, respondents could report their emotions by using expressive cartoon animations. In the instrument, each of the 12 measured emotions is portrayed by an animation of dynamic facial, bodily and vocal expressions. Exhibit 1 reflects the cartoon animations used in the research.



#### EXHIBIT 1 Premo cartoon animations



FIGURE 1 Emotive profiles

The cartoons represent (from top left to bottom right) desire, satisfaction, pride, hope, joy, fascination, disgust, dissatisfaction, shame, fear, sadness and boredom.

The collective emotive profiles elicited after exposure to the three pack designs are reflected in Figure 1.

Figure 1 reflects largely similar emotive profiles for both packs P and R. Both packs elicited strong desire, joy and satisfaction. Less intense reactions are noticeable for fascination and hope. The packs elicited very little indication of boredom, sadness, fear, shame, dissatisfaction or disgust. Pack Q however elicited a different emotional profile with much lower scores on all positive emotions. However, pack R elicited higher (although insignificant) desire, satisfaction and pride measures.

The responses derived from the repertory grid technique were captured in a data matrix format which was subjected to both descriptive and inferential statistical analyses through the application of the statistical programme Laddermap. The output provided a graphical display of the relationship between emotive reactions to packaging designs, and expressed preference levels between packaging designs.

Respondents were also requested to indicate their overall preference between three packs. Each respondent was exposed to two packs (P and Q, Q and R, R and P) in a round-robin design and required to indicate his or her preference. The overall preferences are reflected in Table 2.

TABLE 2						
Overall	packaging	preference				

Packaging	Percentage			
Р	34.2			
Q	23.4			
R	42.4			

Table 2 clearly indicates that pack P and pack R were preferred to pack Q. An insignificant difference was, however, evident between packs P and R (z=1.12 and p=0.26). The difference between pack P and Q was significant (z=5.9 and p=0.00), as was the difference between R and Q (z=3.86 and p=0.01). An analysis of the preference between packs by demographic variable is reflected in Table 3.

Table 3 indicates that age differentiated between overall preference levels with a greater number of older respondents preferring P and R.

Each respondent was asked to consider the packaging designs and indicate any differences or similarities. This attribute elicitation approach provided for respondent-identified

packaging attributes. These identified differences or similarities may also be interpreted as objective rational reasons for preferring a particular packaging design. Some of these reasons may be positive or 'enabling' while others may be negative or 'constraining'.

After the attributes had been elicited. respondents were probed to indicate the relative importance of these attributes. The most important attributes were then laddered. Laddering interviews involve a tailored format using primarily a series of directed probes, typified by the 'why is that important to you?' question, with the goal of determining sets of linkages or rungs between the range of attributes, consequences and values. The process was continued until the respondent had difficulty in articulating answers to the ultimate 'why' prompt, or until his or her response represented a simple rewording of previous reasons. The series of responses formed a means-end chain or ladder of meanings that typically linked a destination attribute with one or more benefits and ultimately with one or more personal values important to the individual.

		Р		Q		R		Total	
		n	%	n	%	n	%	n	
Age	18–24	34	29.6	35	30.4	46	40.0	115	
	25–44	10	46.5	1	4.7	12	48.8	23	
Gender	Male	27	39.7	15	22.1	26	38.2	68	
	Female	27	30.3	22	24.7	40	44.9	89	
Marital status	Single	44	32.6	37	26.2	58	41.1	141	
	Married	8	47.1	0	0.0	9	52.9	17	
Monthly household	< R3 000	24	33.8	15	21.1	32	45.1	71	
income (gross)	R3 000 +	26	36.6	13	18.3	32	45.1	71	
	Total	54	34.2	37	23.4	67	42.4	158	

TABLE 3Overall preference by demographic variable

	Р	Р		Q		R		
	Mentions	%	Mentions	%	Mentions	%		
Pure milk	19	33.3	6	14.0	23	38.3		
Brand name	15	26.3	9	20.9	13	21.7		
Big choc pieces	9	15.8	8	18.6	2	3.3		
Milk	2	3.5	7	16.3	7	11.7		
Light blue	1	1.8	0	0.0	10	16.7		
Catch phrase	4	7.0	2	4.7	0	0.0		
Red	2	3.5	1	2.3	3	5.0		
Attractive	4	7.0	0	0.0	0	0.0		
Flavour/ingredient	0	0.0	3	7.0	0	0.0		
Milk choc	0	0.0	2	4.7	1	1.7		
More chocolaty	0	0.0	1	2.3	1	1.7		
Original	0	0.0	2	4.7	0	0.0		
Solid golden line	1	1.8	0	0.0	0	0.0		
Straight edge	0	0.0	1	2.3	0	0.0		
Tempting	0	0.0	1	2.3	0	0.0		

TABLE 4 Most important differentiating attributes

Table 4 reflects the attributes that were reported as the most important in differentiating between chocolate slab packaging.

Table 4 reflects that respondents mentioned 'pure milk' as the most important differentiating attribute between the three packs tested with the new packs (P and R) significantly more descriptive of this attribute. The brand name was also mentioned significantly more when comparing the new packs to the existing pack, especially evident on pack P.

Respondents were required to complete a laddering exercise whereby the underlying reasons for mentioning a particular attribute were elicited. This interview approach elicited functional and psychosocial consequences at a first level and ultimately those personal values that influence and direct preferences between

pack designs. The first step in analysing laddering data (attributes, consequences and values) is to edit the ladders to remove redundancies. This occurred when the next response given in a ladder simply repeated or elaborated upon a previous response in that ladder. For example, if the ladder started with the outcome 'better value', and the next response provided (based on the prompt 'why is better value important to you?') was 'value is always important'; then the second response was considered to be redundant and was subsequently ignored. Following this step, the edited ladders were entered in an electronic spread sheet. As each element of each ladder was entered, it was classified into content codes such as, amongst others, pure milk, treat and trust. The content categories were developed based on key words or phrases that emerged as the data was entered.









Figures 2 to 4 reflect the derived hierarchical value maps for the total sample for pack P, pack Q and pack R respectively.

Figure 2 reveals attributes, cons quences and values associated with pack P. The packaging attributes of the product descriptor (1) milk and pure milk chocolate, chocolate flavour (3) and brand name quality associations (2 and 4) were perceived as key in the decision to prefer this pack. The direct strong association between the product descriptors and pack P being perceived as attractive, is apparent. Taken together, the pattern of relationships among the higherlevel consequences and personal values suggests that the reasons for preferring this pack ultimately rested on the personal values of pleasurable experiences, self-gratification and the perceived attractive nature of pack P.

Figure 3 reveals attributes, cons quences and values associated with pack Q. The

packaging attribute product descriptor (1) milk and pur milk chocolate was perceived as key in preferring pack Q. The direct strong association between the product descriptors a d pack Q being perceived as chocolaty is apparent. This pack also elicited strong healthy living values through its milk connotation. Respondents identified few attributes and consequences from pack Q's design, indicative of a cognitive personal value structure with restricted complexity due to a limit d preference for this pa k.

Figure 4 reveals attributes, consequences and values associated with pack R. The packaging attributes of the product descriptor (1) milk and pure milk chocolate, chocolate flavour (4) and brand name quality associations (2 and 5) were perceived as key in the decision to prefer this pack. The direct strong association between the product descriptors and the personal values of, self-gratification, pleasurable and healthy living is noticeable.

FIGURE 4 Pack R Hierarchical value map



#### CONCLUSIONS

In the current research, packaging, as one form of marketing communication, was used to investigate the influence of emotional reaction and personal values in consumer decisionmaking. The research on which this article reports, aimed to determine the influence of emotions and personal values on packaging preference decisions. The literature overview attempted to provide justification for using a particular methodology and revealed the following:

- emotions and personal values not only influence but also control consumer decision-making;
- I insights from the field of neuroscience reveal that decisions are influenced by emotive memory and guidance;
- I in a marketing context, positive emotions experienced as a result of being exposed to marketing stimuli predispose consumers to act favourably towards a product;
- emotions can be conceptualised on a continuum ranging from type 1 emotions (spontaneously experienced emotions) to type 2 emotions (requiring cognitive processing and typifying specific emotions);
- values can be conceptualised from a macro (sociological) or micro (psychological) perspective;
- personal values can be classified as belonging to the micro perspective;
- I non-verbal scales should be considered to elicit emotions due to these scales requiring less cognitive processing;
- repertory grid analysis is conducive to identifying evaluative constructs underlying consumer decision-making; and
- I laddering interviews provide a means of revealing personal values directing consumer decision-making.

Based on the literature overview, a novel methodology, involving a non-verbal animated emotion measurement tool (PrEmo©), and a repertory grid analysis followed by a laddering exercise was adopted. A non-probability sampling approach was used to draw a convenience sample consisting of 158 respondents. This sample size was deemed sufficient for the mixed method research design, considering statistical and qualitative analysis requirements.

Descriptive as well as interpretive analyses were conducted, resulting in emotive profiles and hierarchical value maps for each of three chocolate slab packaging designs used in the research. Tests of significance were conducted on emotive profiles and preference percentages, while interpretive analysis was based on personal construct and means-end theory.

The findings revealed that two pack designs elicited more intensely felt emotions than the third pack design. The two pack designs associated with intensely felt emotions were also significantly preferred to the pack design that elicited less intensely felt emotions. This finding confirmed the theoretical perspective, discussed in the literature overview, which states that intensely felt emotions influence consumer decision-making and specifically differences in preference levels.

The Laddermap analyses furthermore revealed that the hierarchical value maps representing the cognitive structures differed between the three pack designs. The pattern of relationships among the higher-level consequences and personal values suggested that the decision to buy a particular product rested on certain personal values linked to specific packaging design attributes. The values of healthy living (through the milk connotation), pleasure, self-gratification, treat (chocolate moments) and personal satisfaction were identified in the current research. The cognitive structures moreover seemed to

indicate a primary solitary or private component.

These insights can be of value in linking the packaging attributes (concrete constructs) to the consumer's personal values and providing direction as to what and how these should be communicated. Personal values furthermore be communicated in can emotive image-type marketing material/packaging designs with an understanding of the linkage to concrete attributes.

In conclusion, the preferred packaging designs elicited more personal attributes, consequences and values than the less preferred packaging design. This finding seems to suggest that cognitive structures with fewer simple attributes, consequences and values have a reduced influence on the intensity of emotions felt and ultimately on consumer decisionmaking. This conclusion should, however, be interpreted with caution, as the measuring instrument used in this research requires some cognitive processing, and could consequently be categorised as tending towards measurement of type 2 emotions. The influence of autonomic type 1 emotions should therefore be investigated further.

Based on the findings of the research reported here, it may finally be concluded that packaging designs evoking intensely felt positive emotions and complex cognitive personal value structures result in a preference for such packs. It does indeed seem as if packaging designs could provide the 'glue' that connects logic and reason with feelings and emotions.

#### **CONTRIBUTION AND LIMITATIONS**

This article suggests a novel methodology to elicit underlying values and emotions influencing packaging preference decisions. Not only does it address the scarcity in related reported research but it provides sufficient justification for acknowledging the role of cognitions, emotions and values in consumer decision making. Generalizability of findings is however limited due to the homogenous nature of the sample, comprising students and staff members at a distance education university. Despite this limitation, the sample denotes a range of demographic descriptors. The student body at the university are mostly income earners and represent approximately a third of all South African students.

It is finally recommended that the methodology be applied amongst a broader population inclusive of a wider range of product packaging stimuli.

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