

# Generational emotive discrepancies in reaction to television advertising<sup>1</sup>

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## ABSTRACT

Generational differences in emotive reaction to television advertisements and the applicability of verbal and non-verbal measures in establishing emotive profiles are explored. Multi-dimensional scaling established generational emotive profiles in accordance with AdSAM®, PrEmo© and Link™ LoE models across South African generations. The accrument of positive information seems to be accentuated with age and generational emotive differences appear more apparent with negative emotions using a verbal measure in response to a television advertisement aimed at the adult consumer market. Contrary to customary belief, liking ratings alone do not necessarily translate into a higher propensity for television viewers to act, but feelings of engagement are also required. This research firstly argues the importance of having to understand different generation consumers and presents findings that different age cohorts react differently to the same advertising. Secondly, given the ardent television watching behaviour of older generations, this older consumer market's insights should be given thoughtful consideration during consumer research endeavours. Thirdly, it is argued that the type of measurement instrument used to establish emotive reaction could influence the manner in which consumers indicate their true reaction to advertisements, emotive or cognitive, and determine the way in which consumer decisions are made about the product being advertised.

**Keywords:** Emotive reaction; Generation; Advertisement Self-Assessment Manikin (AdSAM®); Product Emotion Measurement (PrEmo©); Link™ List of Emotions (LoE)

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Despite the extensive use of emotional appeals in television advertising, studies investigating the behavioural impact on viewers rely almost entirely on cognitive measurement scales, requiring advanced verbal skills and analytical processing by participants. These methods rely on the assumption that participants are capable of translating their emotions into numerical scaled responses. Although verbal and numeric measures can represent many distinct aspects of emotion, they, however, require considerable cognitive processing. In this regard, neurologist Donald Calne is of the opinion that “the essential difference between emotion and reason is that emotion leads to action while reason leads to conclusions” (Weisnewski, 2006, p. 1). Against this background, researchers have emphasised the need to consider emotions as a crucial factor in the advertising process (Ambler & Burne, 1999; Du Plessis, 2005; Hall, 2002).

Allen, Machleit and Kleine (1992) argue that failing to understand the role of emotions by focusing on the cognitive process only, impedes the ability to achieve an enhanced understanding of consumer behaviour. Therefore, one clear solution entails the development and use of non-verbal measures of emotion, which offer the potential for representing measures whereby cognitive processing is limited. Part of the difficulty in developing measures of emotional response stems from the complexity of emotion itself. Various instruments are available for measuring emotional reactions to advertisements. The development of visually orientated scales like the Self-Assessment Manikin (AdSAM®) (Morris, 1995) and Product Emotion Measurement (PrEmo©) (Desmet, 2002, 2005) using animated graphic characters, hold much promise. To date, research findings are not clear on what measurement instrument provides the most valid measurement. Additional research is consequently needed to determine the role of emotion and to find methods for mitigating measurement bias associated with emotive

measures that rely on cognitive techniques (Erevelles, 1998).

Since emotions are learnt through interpersonal interactions (Denham, 1998), such as referent age groups, the question arises whether different emotions are experienced by different generations when exposed to the same television advertisement. The Generational Theory (Codrington, 2008, 2010) attempts to explain some of the differences between young and older people regarding how they act, react and interact in different environments, which seems plausible when investigating emotion across South African generations.

In the fourth century BC, Plato compared the human soul to a chariot pulled by the two horses of reason and emotion. In his mind, human behaviour clearly had an emotional element. However, it is the horse of reason that has prevailed through the centuries and has been predominantly used to explain human behaviour and that of consumers. This rational focus shifted radically during the early 1900s when Edmund Husserl came to be regarded as the founder of the philosophy of phenomenology (Moran, 2005). The need to better understand whether cognition dominates or mediates the relationship between affect and intent remains of interest to researcher and practitioners alike.

The Compact Oxford Dictionary (2002, p. 357) defines emotion as “a strong feeling”. The etymology of “emotion” is the Latin word to move something. In the field of consumer behaviour, emotions are acknowledged as the catalyst that moves people into action, hence, what drives consumers’ behaviour. An emotion entails a diversity of reactions involving different mental processes visualised on a continuum. On the one end emotional reactions are spontaneous and uncontrollable, which Rossiter and Bellman (2005) call type 1 emotions, sometimes also referred to as primary emotions (Damásio, 1994) or

automatic lower-order emotions (LeDoux, 1996; Zajonc, 1980). These do not require to be cognitively labelled as a specific emotion. Emotions that depend on deeper cognitive processing, referred to as higher-order, type 2 emotions or secondary emotions (Damasio, 1994), are placed at the other end. However, some emotions, such as fear, anger and happiness, are situated on the continuum between the two extremes.

Emotions have always been present in some way or another in models on “how advertising works”. The earliest conceptual advertising model is arguably the AIDA Model (Strong, 1925): get Attention, hold Interest (cognitive processing), arouse Desire (affect), and then obtain Action (generate behaviour). An emotional reaction, in this case Desire, occurred only after consumers experienced interest in the advertisement or the product. Such hierarchy-of-effects models dominated advertising literature for years (Vakratsas & Ambler, 1999). From the 1980s on, the role of emotion changed. Neurosurgical evidence by Zajonc (1980) and Damasio (1994) argued that emotion has primacy over and can function independently of cognition. This led to emotions being accepted as an important mediator of cognitive and behavioural consumer responses to advertising (Batra & Ray, 1986; Edell & Burke, 1987). The Advertising Research Foundation (ARF) copy-testing project (Haley & Baldinger, 1991) found that liking of an advertisement is a good predictor of effectiveness. However, Allen, Machleit and Kleine (1992) observed that insightful attitudinal information toward the advertisement can be learned by expanding the measurement beyond this simple correlation index. Reviews of the role of affect in marketing suggest that affect is not dependent on cognitive variables only (Machleit & Wilson, 1988) and later studies showed that highly emotional advertising leads to better recall (Hazlett & Hazlett, 1999).

According to Codrington (2008): “Facing similar issues, impacted by the same events and sharing similar experiences, people of the same age are likely to have similar underlying value systems, regardless of their country or community of birth. These “value systems” are the drivers of behaviours and attitudes, and are good predictors of behaviour and expectations.” A generation can be defined as a cohort or group of people which share common interests regarding significant events from their country of origin. It generally commences from the cohort’s time of birth until they start having their own children, and lasts for approximately 20 years. Most generations do not have specific start and end dates, and overlaps sometimes occur. Generational labels generally used are GI (born 1900-1920s), Silent or Veteran (born 1929-1945), Boomers or Baby Boomers (born 1946-1960s), Generation X (born 1968-1989) and the Millennials or Generation Y (born mid 1980s-present). Codrington (2010, p. 2) explains there is “general global acceptance” of the Generational Theory’s principles.

Ageing seems significant when determining the emotional importance of advertisements as opposed to the factual content thereof. Older and young consumers with a shortened life expectancy appear to like and remember advertisements in which negative emotions are avoided, whereas those consumers with an unrestrained life expectancy appear to like and prefer advertisements in which positive emotions are elicited (Williams & Drolet, 2005). Research by MillwardBrown (2009) confirms that age is an important variable when testing television advertisements. Children alone undergo four basic stages of emotional needs. Although children generally tend to recall advertising detail better than adults do, they do not have such a strong brand relationship as adults. MillwardBrown (2009, p. 57) is of the opinion that “targeting the over-50s market represents an opportunity for most marketers”. This is because they are perceived to be “heavy media consumers”,

specifically of traditional media, and they can be reached more easily than other market segments. The study indicates that, in terms of tone and content, communications need to be carefully targeted for this audience. MillwardBrown (2009, p. 59) concludes that “when targeting the Boomer generation, ads that demonstrate a genuine understanding of the targets’ needs, not just their date of birth, are most effective. Nonetheless, it needs to be recognised that in many parts of the world, this generation has spent most of its life being exposed to advertising, and established associations can be hard to shift”.

Television advertisements, such as the advertisement used in the current research, are commonly aimed at certain generational cohorts. The research therefore aimed to investigate whether three South African generations display different emotive profiles to the same television advertisement. In addition, the research aimed to investigate whether it is advantageous to measure emotion in television advertisements by means of non-verbal measurement instruments as opposed to a verbal instrument. The exploratory nature of this research does not lend itself to the formulation of hypotheses. However, the following specific objectives could be formulated based on the aforementioned description of the research problem:

- To investigate differences in emotive reactions between the generations focused on in this study, namely the Baby Boomer (also referred to as Boomers), Generation X (also referred to as Xers) and Millennial generations.
- To explore the applicability of the AdSAM®, PrEmo© and Link™ List of Emotions (LoE) measures of emotion.

## RESEARCH METHODOLOGY

The research design and participants are presented in the section to follow.

### *Design*

To investigate whether three South African generational cohorts display different emotive profiles to the same television advertisement and whether it is advantageous to measure emotion in television advertisements by means of non-verbal measurement instruments, a quasi-experimental design was employed, in which participants were invited to participate in a cross-sectional survey. Data collection took place at a single point in time and in accordance with purposive disproportionate quota sampling specifications (Babbie, 2010).

### *Participants*

The study included a sample of adult television viewers residing in the Gauteng province. According to the All Media and Products Survey (AMPS), the majority of South African television viewers reside in the Gauteng province (SAARF, 2013). The only recruitment criteria were age and television viewing. Nonprobability sampling was performed, whereby a nonproportionate quota sample of television viewers ( $n=102$ ) was drawn from different population groups, gender, occupational and educational status aged 18 years and older. Due to a low response representation for the Silent generation, aged 65-81 ( $n=9$ ) and the Baby Boomer generation, aged 46-64 ( $n=13$ ), analysis for these two generations were combined and referred to as the Baby Boomer generation for purposes of

this study. The sample also included Xers, aged 25-45 ( $n=42$ ) and Millennials, aged 18-24 ( $n=38$ ).

### **Measuring instruments**

The AdSAM® (Morris, Bradley, Waive & Lang, 1993), PrEmo© (Desmet, 2002) and Link™ LoE instruments were used to identify differences in emotive reactions between the generations focused on in this study and to explore the applicability of these instruments in the measurement of emotion.

#### *AdSAM™*

The AdSAM® scale consists of a pictorial self-assessment rating of primary emotions experienced on the emotive dimensions of Pleasure, Arousal and Dominance (PAD). Due to the non-verbal design, which requires no literacy, the instrument is usable regardless of the age, educational or cultural background of participants. This instrument provides a measure of a participant's immediate reaction, largely undiluted by cognitive rationalisation. Immediate emotions are indicated on a 9-point nonnumerical rating scale, depicted by static human figure manikins. AdSAM® is a proprietary measure of emotional response used worldwide in market research that has been validated over the past 25 years and has been used in both qualitative and quantitative research in over 30 countries (Morris *et al.*, 1993).

In presenting the model to participants, the scales' numeric assignment is not presented in order to elicit the most authentic emotive response. The Pleasure dimension is represented by the top row, the Arousal dimension is represented by the middle row and the Dominance dimension is represented by the bottom row of manikins.

Empirical studies report a positive relationship between Pleasure and Arousal dimensions, which is ideally to be expected in advertising (Morris *et al.*, 1993). Morris *et al.* (1993)

suggest that, by restricting the analysis to the Pleasure and Arousal dimensions alone, an interpretable "two-dimensional affective space" results without losing much variance. The AdSAM® has been used in numerous psychophysiological studies since its development in the 1980s. In validating the instrument's ability to effectively index similar emotive stimuli, the developers Morris, Bradley, Waive and Lang (1993) conducted various validity tests against other emotional scales (Mehrabian & Russell, 1974; Bradley, Greenwald & Hamm (in Morris *et al.*, 1993); Greenwald, Cook & Lang, 1989; Holbrook & Batra, 1988 in Morris *et al.*, 1993), using television advertisements. Correlations between scores obtained using the AdSAM® and others were significant for both Pleasure (.94) and Arousal (.94) and smaller but still substantial for Dominance (.66). To date, the AdSAM® has been used extensively to measure emotional reactions to a wide variety of affective stimuli, including colour pictures, descriptive sentences, digitised sound clips, films and more.

#### *PrEmo©*

The PrEmo© is an electronic non-verbal self-report instrument that measures twelve emotions reflected on animations of a cartoon character. This is an audio-visual measure. In each animation, the character expresses a different emotion in approximately one second, both with movement and sound, by clicking on each character. The character expresses six positive emotions, namely Desire, Satisfaction, Pride, Hope, Joy and Fascination as well as six negative emotions such as Disgust, Dissatisfaction, Shame, Fear, Sadness and Boredom. PrEmo© can be used to assess to what extent each of the emotions is elicited by the appearance of a visual stimuli. The respondent's emotions are rated in relation to the emotion depicted by the animated human figure character using a 5-point scale. Even though the instrument is computerised, literacy is not a pre-requisite for participation.

The PrEmo© uniquely combines two qualities. It measures distinct secondary emotions and it can be used cross-culturally because it does not ask participants to verbalise their emotions. In addition, it can measure mixed emotions, that is, more than one emotion experienced simultaneously.

Animations can be displayed in a randomised order. Due to the non-verbal nature of the instrument, participants are only presented with the animations without being pre-informed of the emotions depicted by each character in an attempt to elicit the most emotively authentic response. The PrEmo© instrument has also been extensively applied in mostly developed countries. In conceptually grounded pioneering work conducted by Desmet (2002), validation and reliability indices are discussed.

### *LoE*

The Link™ List of Emotions (LoE) uses a survey-based approach, inclusive of a comprehensive set of diagnostic questions to evoke both rational and emotional reactions to advertisements. Participants are shown an advertisement twice, and answer a series of introspective questions about their reaction to the copy. This generates an understanding of the memorability of the copy, rational and emotional message take-out, and motivational power. It also includes diagnostic measures, which indicate which parts of the copy are the focus of attention for consumers, and which influenced their responses to the advertisement most strongly. The instrument has been applied in more than 90 countries and comprehensive normative criteria have been compiled by MillwardBrown. The intention with the current research is primarily to investigate the self-reported list of emotions measured on a verbal scale after being required to indicate rational responses to the same stimuli. For the purpose of this research, the full Link™ test was not used, but limited to the emotive measurement with the use of

the LoE only. For this reason, the remainder of the article will refer to LoE. This list is adapted from Plutchik's (2001) wheel of emotions originally designed in 1962. Importantly, this research design facilitates an investigation into similarities or differences between non-verbal and verbal measures of emotion.

### **Procedure**

Participants were invited to a central venue at a research institution based at a large public South African university. Each participant was assigned to an Internet-linked computer. The nature of the non-verbal measurement instruments requires direct access to different servers, whereas the verbal instrument was installed on the respective computers. Data was collected under supervision.

Participants were required to view two television advertisements, introducing the respective instruments with a “dummy” advertisement. Subsequently participants' spontaneous emotions were elicited whilst viewing the advertisements. Whilst no time limit was imposed, the importance of undeliberated emotive reactions was reiterated. The AdSAM® procedure of including a “general mood” question was followed. Following this measure, the PrEmo© and LoE instruments were administered. The LoE instrument requires exposure to a reel consisting of four randomised advertisements, of which one represents the test advertisement.

The BulaBoot advertisement (also known as the Castle Lager advertisement viewed during the Fifa World Cup in 2010) was used as test advertisement for all three measurement instruments. Due to South Africa being the host of the Fifa World Cup in 2010 and Castle Lager being one of the main sponsors of this event, the use of this advertisement in this study seemed fitting. Television viewers from all generations were exposed to this event as well as the supporting television advertisements.

**Ethical aspects**

The ethical aspects of the research were discussed with participants. Participation was voluntary and required a signed consent form. Informed consent was furthermore obtained from the management from a retirement home to invite and transport residents to the nearby research venue, however, participant consent and transportation indemnity clearance was obtained from each resident Baby Boomer participant. The research posed no harm,

however, participants could withdraw from the research at any time. Participants were not incentivised, but were invited to a light lunch after completion of all three measurements. The tests were administered in English during a single point in time in the research institution's computer room, however, participants could respond to the open-ended questions in their mother tongue if preferred.

**TABLE 1**  
AdSAM<sup>®</sup> PAD Anova

Dimension	Age	N	M	df	F	Sig. (p)
General mood: Pleasure	18-24	38	8.08	2	1.849	0.163
	25-45	42	7.52	99		
	46+	22	7.50			
	Total	102	7.73	101		
General mood: Arousal	18-24	38	5.26	2	2.547	0.083
	25-45	42	6.40	99		
	46+	22	6.05			
	Total	102	5.90	101		
General mood: Dominance	18-24	38	6.97	2	3.286	0.042 *
	25-45	42	5.86	99		
	46+	22	6.05			
	Total	102	6.31	101		
Dummy advertisement: Pleasure	18-24	38	7.47	2	1.154	0.319
	25-45	42	7.05	99		
	46+	22	6.68			
	Total	102	7.13	101		
Dummy advertisement: Arousal	18-24	38	6.05	2	1.590	0.209
	25-45	42	5.31	99		
	46+	22	5.00			
	Total	102	5.52	101		
Dummy advertisement: Dominance	18-24	38	6.42	2	3.191	0.045 *
	25-45	42	5.14	99		
	46+	22	5.36			
	Total	102	5.67	101		
Test advertisement: Pleasure	18-24	38	8.05	2	1.052	0.353
	25-45	42	7.48	99		
	46+	22	7.82			
	Total	102	7.76	101		
Test advertisement: Arousal	18-24	38	6.18	2	1.289	0.280
	25-45	42	6.10	99		
	46+	22	7.18			
	Total	102	6.36	101		
Test advertisement: Dominance	18-24	38	7.34	2	2.255	0.110
	25-45	42	6.36	99		
	46+	22	6.05			
	Total	102	6.66	101		

\*  $p \leq .05$

**TABLE 2**  
AdSAM® generational emotive profiles

		Generation	Comfortable	Warmed	Enthusiastic	
			(Valid N%)	(Valid N%)	(Valid N%)	
PLEASURE	High	7-9	Millennials	18	8	55
			Generation X	10	12	50
			Baby Boomers*	0	18	64
	Moderate	4-6		Indifferent	Ambivalent	Apprehensive
				(Valid N%)	(Valid N%)	(Valid N%)
			Millennials	8	8	0
		Generation X	7	17	0	
		Baby Boomers*	9	0	9	
	Low	1-3		Sullen	Troubled	Alarmed
			(Valid N%)	(Valid N%)	(Valid N%)	
Millennials			0	0	3	
	Generation X	2	2	0		
	Baby Boomers*	0	0	0		
		<b>1-3</b>	<b>4-6</b>	<b>7-9</b>		
		<b>Low</b>	<b>Moderate</b>	<b>High</b>		
<b>AROUSAL</b>						

\* Due to a low respondent base for the proposed Silent Generation (ages 65-81), the nine participants' (8.8%) emotive profiles were incorporated with those of the Baby Boomers

## RESULTS

One-way ANOVAs and a Rasch analysis were conducted to investigate the generational differences in emotive reactions to the AdSAM® and PrEmo© instruments. LoE chi-square analysis was conducted to investigate the generational differences in emotive reactions. This was followed by a thematic analysis of verbatim comments. The results of these analyses will now be reported, followed by a discussion thereof.

Significant generational differences were limited to general mood and dummy advertisement measures on the Dominance dimension. It is, however, apparent that the test advertisement elicited stronger emotive

reactions on all the dimensions. The consolidated generational matrix in accordance to the AdSAM® model is reflected in table 2.

Table 2 reflects high Pleasure and high Arousal across all generational groups. More participants, however, expressed high Pleasure than high Arousal. In assessing whether Pleasure, Arousal and Dominance reactions differ with respect to the acknowledgement of the experienced emotion, the Rasch analysis, a construct validation tool, was applied.

The Rasch model is particularly appropriate due to the nature of scales in the AdSAM® instrument. A rating of six by a specific



**TABLE 3**  
AdSAM® Rasch analysis on the test advertisement

Person class**	Dif measure	Person class**	Dif measure	t	df	Prob. (p)	Emotive dimension
1	0.14	2	-0.45	-0.65	78	0.52	Pleasure
1	0.14	3	-0.45	-0.50	58	0.62	Pleasure
2	0.11	3	-0.34	0.04	62	0.97	Pleasure
1	0.10	2	0.42	1.56	78	0.12	Arousal
1	0.10	3	0.42	2.79	58	0.01	Arousal*
2	0.09	3	0.21	1.57	62	0.12	Arousal
1	0.11	2	-0.05	-1.14	78	0.26	Dominance
1	0.11	3	-0.05	-2.46	58	0.02	Dominance*
2	0.09	3	0.11	-1.57	62	0.12	Dominance

\*

 $p \leq .05$ 

\*\* Person class 1 = Millennials; 2 = Generation X; 3 = Baby Boomers

respondent could, for example, indicate a reasonably strong emotively aroused feeling. A similar rating by another respondent could, however, indicate a much stronger emotively aroused feeling.

Descriptive statistics, such as the two-sample tests of proportion, assume that this rating reflects similarly between participants. The perspective underpinning the Rasch model is therefore distinctly different from the perspective underlying descriptive statistics, with the objective to obtain data that fit the model and not to merely describe raw data. This model can be applied wherever discrete data are obtained with the intention of measuring constructs such as emotion. The Rasch output for the general mood question on the AdSAM® instrument is reflected in table 3.

The general emotive reaction to the Arousal and Dominance dimensions reflected in table 1 is also evident in table 3 with Millennials and Baby Boomers reflecting significant differences. Baby Boomers reacted with greater Arousal intensity whereas Millennials

expressed higher levels of Dominance than Baby Boomers. The advertisement elicits feelings of empowerment (Dominance) among Millennials whilst feelings of engagement are evoked from Baby Boomers. No significant differences were detected between generations on the Pleasure dimension. Analyses of the PrEmo® instrument are discussed below.

Table 4 indicates significant generational differences were limited to one negative emotion, namely Boredom with the Baby Boomers expressing less Boredom than the other generations. Positive emotions were felt strongly by all generations whilst negative emotions featured less prominently. Directional differences between generations seem to be more apparent on the negative emotions. Conversely, reactions to the positive emotions are largely similar. A significant generational difference is, once again, evident on the Boredom emotion. Lower  $p$ -levels ( $p < 0.20$ ) were also detected on Satisfaction, Pride, Fear and Sadness.

**TABLE 4**  
PrEmo<sup>®</sup> Anova on the 12 emotive dimensions

Emotive dimension	Generation	<i>n</i>	<i>M</i>	<i>df</i>	Mean square	<i>F</i>	Sig. ( <i>p</i> )
Desire	Millennial	38	2.53	2	0.635	0.277	0.758
	Gen X	42	2.29		2.291		
	Baby Boom	22	2.32				
	Total	102	2.38	101			
Satisfaction	Millennial	38	2.82	2	0.464	0.265	0.768
	Gen X	42	3.02		1.750		
	Baby Boom	22	2.86				
	Total	102	2.91	101			
Pride	Millennial	38	2.97	2	0.471	0.295	0.745
	Gen X	42	3.02		1.594		
	Baby Boom	22	3.23				
	Total	102	3.05	101			
Hope	Millennial	38	1.79	2	2.429	1.163	0.317
	Gen X	42	1.45	99	2.088		
	Baby Boom	22	2.00				
	Total	102	1.70	101			
Joy	Millennial	38	3.32	2	0.080	0.065	0.937
	Gen X	42	3.24		1.229		
	Baby Boom	22	3.23				
	Total	102	3.26	101			
Fascination	Millennial	38	2.71	2	0.796	0.487	0.616
	Gen X	42	2.43	99	1.632		
	Baby Boom	22	2.55				
	Total	102	2.56	101			
Disgust	Millennial	38	0.89	2	1.578	1.188	0.309
	Gen X	42	0.52		1.328		
	Baby Boom	22	0.55				
	Total	102	0.67	101			
Dissatisfaction	Millennial	38	0.92	2	1.275	0.969	0.383
	Gen X	42	0.57	99	1.316		
	Baby Boom	22	0.82				
	Total	102	0.75	101			
Shame	Millennial	38	0.47	2	0.464	0.693	0.503
	Gen X	42	0.26		0.670		
	Baby Boom	22	0.32				
	Total	102	0.35	101			
Fear	Millennial	38	0.97	2	3.536	2.658	0.075
	Gen X	42	0.40		1.330		
	Baby Boom	22	0.86				
	Total	102	0.72	101			
Sadness	Millennial	38	0.58	2	1.380	1.262	0.288
	Gen X	42	0.45		1.094		
	Baby Boom	22	0.14				
	Total	102	0.43	101			
Boredom	Millennial	38	0.84	2	3.976	3.529	0.033*
	Gen X	42	0.38		1.127		
	Baby Boom	22	0.14				
	Total	102	0.50	101			

\*  $p \leq .05$

**TABLE 5**  
PrEmo<sup>®</sup> Rasch analysis on the test advertisement

Person class**	Difference measure	Person class**	Difference measure	t	df	Prob. (p)	Name
1	-0.54	2	-0.58	0.26	78	0.80	Desire
1	-0.54	3	-0.55	0.06	58	0.96	Desire
2	-0.58	3	-0.55	-0.16	62	0.87	Desire
1	-0.75	2	-1.08	1.64	78	0.10	Satisfaction
1	-0.75	3	-0.97	0.90	58	0.37	Satisfaction
2	-1.08	3	-0.97	-0.45	62	0.65	Satisfaction
1	-0.88	2	-1.08	0.97	78	0.34	Pride
1	-0.88	3	-1.34	1.65	58	0.11	Pride
2	-1.08	3	-1.34	0.95	62	0.35	Pride
1	-0.07	3	-0.33	1.22	58	0.23	Hope
2	-0.10	1	-0.07	-0.20	78	0.84	Hope
2	-0.10	3	-0.33	1.08	62	0.28	Hope
1	-1.23	2	-1.28	0.19	78	0.85	Joy
1	-1.23	3	-1.34	0.36	58	0.72	Joy
2	-1.28	3	-1.34	0.22	62	0.83	Joy
1	-0.67	2	-0.67	-0.01	78	1.00	Fascination
1	-0.67	3	-0.71	0.19	58	0.85	Fascination
3	-0.71	2	-0.67	-0.21	62	0.83	Fascination
1	0.55	2	0.66	-0.48	78	0.63	Disgust
1	0.55	3	0.80	-0.88	58	0.38	Disgust
2	0.66	3	0.80	-0.46	62	0.64	Disgust
1	0.53	2	0.60	-0.33	78	0.74	Dissatisfaction
1	0.53	3	0.51	0.06	58	0.96	Dissatisfaction
2	0.60	3	0.51	0.33	62	0.74	Dissatisfaction
1	1.01	2	1.13	-0.38	78	0.71	Shame
1	1.01	3	1.15	-0.39	58	0.70	Shame
2	1.13	3	1.15	-0.06	62	0.95	Shame
1	0.48	2	0.83	-1.43	78	0.16	Fear
1	0.48	3	0.47	0.04	58	0.96	Fear
2	0.83	3	0.47	1.29	62	0.20	Fear
1	0.87	2	0.76	0.42	78	0.68	Sadness
1	0.87	3	1.72	-1.66	58	0.10	Sadness
2	0.76	3	1.72	-1.86	62	0.07	Sadness
1	0.59	2	0.88	-1.10	78	0.28	Boredom
1	0.59	3	1.72	-2.23	58	0.03	Boredom*
2	0.88	3	1.72	-1.62	62	0.11	Boredom

\*  $p \leq .05$

\*\* Person class 1 = Millennials; 2 = Generation X; 3 = Baby Boomers

Table 6 displays the chi-square analysis of the LoE requiring participants to indicate whether they think that a particular emotion is felt after being exposed to the test advertisement. Greater generational differences are evident for emotions measured on the verbal LoE scale than on the non-verbal instruments. Significant differences are apparent on the Affectionate and Surprised emotions with Baby Boomers and Xers expressing lower reported incidence of these respective emotions. This study also investigated the measurement of emotions by means of non-verbal instruments as opposed to verbal instruments. It was necessary to determine whether participants who were classified in one of the emotive segments on the non-verbal AdSAM® instrument claimed to have experienced certain comparable emotion(s) on the verbal LoE instrument. Table 7 represents the emotive AdSAM®

segments and specific emotions as measured by the LoE instrument. The LoE multiple response scale contained in the instrument resulted in an average of approximately seven reported emotions per respondent. It is evident from table 7 that Indifferent and Ambivalent AdSAM® segment participants expressed a mixture of negative and positive emotions. With regard to the Comfortable, Warmed and Enthusiastic segments a similar emotive pattern emerged. Participants mentioned that Excited, Proud, Attracted, Contented, Inspired, Confident and Affectionate emotions were all felt with more or less the same intensity. The proportion of emotions as measured by the LoE within each of the AdSAM® segments is reflected in table 8.

**TABLE 6**  
Chi-square comparison of LOE emotions of generational proportions

List of emotions	Emotion felt	Millennial	Gen X	Baby Boomer	X <sup>2</sup>	p																																																																																												
Attracted	Yes	0.76	0.86	0.77	1.291	0.524																																																																																												
	No	0.24	0.14	0.23			Excited	Yes	0.84	0.88	0.68	4.083	0.130	No	0.16	0.12	0.32	Confident	Yes	0.79	0.79	0.59	3.513	0.173	No	0.21	0.21	0.41	Contented	Yes	0.76	0.79	0.77	0.059	0.971	No	0.24	0.21	0.23	Affectionate	Yes	0.68	0.74	0.32	11.725	0.003*	No	0.32	0.26	0.68	Surprised	Yes	0.50	0.29	0.64	8.050	0.018*	No	0.50	0.71	0.36	Proud	Yes	0.82	0.79	0.86	0.580	0.748	No	0.18	0.21	0.14	Inspired	Yes	0.79	0.74	0.73	0.400	0.819	No	0.21	0.26	0.27	Repelled	Yes	0.26	0.31	0.09	3.836	0.147	No	0.74	0.69	0.91	Inadequate	Yes	0.26	0.14
Excited	Yes	0.84	0.88	0.68	4.083	0.130																																																																																												
	No	0.16	0.12	0.32			Confident	Yes	0.79	0.79	0.59	3.513	0.173	No	0.21	0.21	0.41	Contented	Yes	0.76	0.79	0.77	0.059	0.971	No	0.24	0.21	0.23	Affectionate	Yes	0.68	0.74	0.32	11.725	0.003*	No	0.32	0.26	0.68	Surprised	Yes	0.50	0.29	0.64	8.050	0.018*	No	0.50	0.71	0.36	Proud	Yes	0.82	0.79	0.86	0.580	0.748	No	0.18	0.21	0.14	Inspired	Yes	0.79	0.74	0.73	0.400	0.819	No	0.21	0.26	0.27	Repelled	Yes	0.26	0.31	0.09	3.836	0.147	No	0.74	0.69	0.91	Inadequate	Yes	0.26	0.14	0.05	5.046	0.080								
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List of emotions	Emotion felt	Millennial	Gen X	Baby Boomer	X <sup>2</sup>	p
Sad	No	0.74	0.86	0.95	1.167	0.558
	Yes	0.13	0.12	0.05		
Annoyed	No	0.87	0.88	0.95	0.716	0.699
	Yes	0.13	0.17	0.09		
Hatred	No	0.87	0.83	0.91	2.424	0.298
	Yes	0.11	0.07	0.00		
Disappointed	No	0.89	0.93	1.00	2.595	0.273
	Yes	0.11	0.21	0.09		
Guilty	No	0.89	0.79	0.91	3.727	0.155
	Yes	0.08	0.14	0.00		
Unimpressed	No	0.82	0.81	0.86	0.316	0.854
	Yes	0.18	0.19	0.14		

\*p ≤ .05

**TABLE 8**  
Proportional segment distribution

AdSAM <sup>®</sup> segments	AdSAM <sup>®</sup> proportion	LoE proportion
Sullen	1.0	1.0
Troubled	1.0	1.0
Alarmed	1.0	1.3
Indifferent	7.8	7.2
Ambivalent	9.8	8.8
Apprehensive	2.0	1.4
Comfortable	10.8	11.5
Warmed	11.8	11.0
Enthusiastic	54.9	56.8

## DISCUSSION

### *First objective: Investigate differences in generational emotive reactions*

Analyses based on all three measurement instruments indicated that Millennials and Xers were inclined to react to the test advertisement in a different manner compared to the older generation (Baby Boomers). Overall, the test advertisement elicited mostly strong Pleasure and Arousal-related emotions from all generations on the AdSAM<sup>®</sup> instrument. Strong positive and limited negative emotions were measured for all generations on the PrEmo<sup>©</sup> instrument, with

only Boredom reflecting significant differences. Directional differences were, however, more prevalent, which implies that a bigger sample could result in more significant differences being detected.

The AdSAM<sup>®</sup> analysis indicates that Baby Boomers found it easier to acknowledge higher levels of Arousal and Pleasure with the test advertisement, but more difficult to resonate with emotions relating to Dominance.

Baby Boomers' reasons for emotive reactions, as measured on AdSAM<sup>®</sup>, tend to confirm more emotively authentic and mature responses regarding their reactions in comparison with the other generations. This finding could be confirmative of the findings of Williams and Drolet (2005) who concluded that consumers with a shortened life expectancy (due to age or illness), appear to like and remember advertisements in which negative emotions are avoided. On the contrary, consumers with an unrestrained life expectancy appear to like and prefer advertisements in which positive emotions are deliberately elicited. Baby Boomers tend to indicate how they feel with greater confidence and conviction than the other generations. Although all generations expressed positive

emotive reactions on PrEmo© while viewing the test advertisement, directional differences indicate that Millennials felt more Comfortable, whereas the Xers and Baby

**TABLE 7**  
Two-way analysis of LOE and AdSAM® emotions

LoE Emotions	AdSAM® emotive segments								
	Sullen	Troubled	Alarmed	Indifferent	Ambivalent	Apprehensive	Comfortable	Warmed	Enthusiastic
	<i>n</i> (1)*	<i>n</i> (1)*	<i>n</i> (1)*	<i>n</i> (8)	<i>n</i> (10)	<i>n</i> (2)	<i>n</i> (11)	<i>n</i> (12)	<i>n</i> (56)
Excited	1	1	1	5	9	1	10	10	46
Proud	1	1	1	5	7	2	9	11	46
Attracted	1	1	1	5	8	1	10	10	45
Contented	1	1	1	6	7	1	9	10	43
Inspired	1	1	1	4	6	1	9	9	45
Confident	0	1	1	6	8	1	10	10	39
Affectionate	1	1	1	2	8	1	7	8	35
Surprised	1	0	1	2	2	2	4	5	28
<b>Positive emotions</b>	<b>7</b>	<b>7</b>	<b>8</b>	<b>35</b>	<b>55</b>	<b>10</b>	<b>68</b>	<b>73</b>	<b>327</b>
Repelled	0	0	1	3	2	0	4	1	14
Unim-pressed	0	0	0	3	1	0	2	1	11
Annoyed	0	0	0	2	1	0	1	0	10
Inadequate	0	0	0	3	1	0	3	1	9
Disap-pointed	0	0	0	2	2	0	1	1	9
Sad	0	0	0	1	0	0	1	1	8
Guilty	0	0	0	1	0	0	1	0	7
Hatred	0	0	0	1	0	0	0	0	6
<b>Negative emotions</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>16</b>	<b>7</b>	<b>0</b>	<b>13</b>	<b>5</b>	<b>74</b>
<b>Average</b>	<b>7.0</b>	<b>7.0</b>	<b>9.0</b>	<b>6.4</b>	<b>6.2</b>	<b>5.0</b>	<b>7.4</b>	<b>6.5</b>	<b>7.2</b>

\*Due to low respondent bases in the Sullen, Troubled, Alarmed and Apprehensive segments, analysis was limited to the Indifferent, Ambivalent, Comfortable, Warmed and Enthusiastic segments.

Boomers felt stronger Warmed emotions. Millennials expressed feeling higher levels of Boredom, and overall it appears, as with AdSAM<sup>®</sup> measures, that the Baby Boomer generation differed from the other generations by displaying less intense negative and more intense positive emotions.

These findings also seem to confirm studies that have been done previously, reflecting that older individuals tend to purposefully seek to experience positive emotions and avoid or limit negative emotions (Charles, Piazza, Luong & Almeida, 2009; Drolet, Lau-Gesk, Williams & Jeong, 2009; Drolet, Lau-Gesk & Scott, 2009; Phillips, Henry, Hosie & Milne, 2008; Williams & Drolet, 2005; Gavazzeni, 2008). Mather and Carstensen (2005, p. 2) state unequivocally that “chronological age is associated with paying more attention to emotional gratification and the emotional aspects of life”. The accrument of positive information seems to be accentuated with age. The conclusion by Mather and Carstensen was furthermore evident during the analysis of the verbatim responses to emotive reactions, which revealed that, as the emotive clusters evolved (from the bottom left Sullen dimension to the top right Enthusiastic dimension on the AdSAM<sup>®</sup> matrix), participants’ level of understanding and being in touch with personal emotions, seemed to increase and mature. The same argument applies to the Baby Boomers who tended to produce more emotively authentic responses regarding their reactions in relation to the other generations. Participants reacting with Sullen, Troubled or Alarmed emotions, excluding Baby Boomers, tended to rationalise their reasons for emotions experienced. As a result of this cognitive process they appeared inclined to purposefully avoid or distantiate from becoming emotionally involved with the stimuli presented.

These findings confirm the challenge that is faced by creative teams and marketers, namely the importance and difficulty of having one

advertisement to reach a diverse consumer market where age discrepancies play a key role in having the desired marketing effect. Given the ardent television watching behaviour of older generations, this older consumer market’s insights should be given thoughtful consideration during consumer research endeavours, especially in relation to television viewership and advertising behaviour.

*Second objective: Applicability of the verbal versus non-verbal instruments*

The LoE multiple response scale contained in the instrument resulted in an average of seven reported emotions per respondent. Responding to this instrument requires participants to think about their feelings, resulting in ubiquitous cognitive processing. In contrast, the AdSAM<sup>®</sup> instrument requires participants to project an immediate feeling on a nonnumerical, non-verbal pictorial scale, thereby avoiding cognitive processing to a great extent. The PrEmo<sup>®</sup> instrument, whilst predominantly a non-verbal emotive measurement, appears to encompass a certain degree of analytical judgment and can be viewed as partly cognitive, partly reactive.

From the AdSAM<sup>®</sup> results reflecting reasons for a particular emotive reaction, participants show a greater resistance to admit to negative emotions, rationalising reasons in contrast to expressing feelings when providing reasons for positive emotive reactions. It should be reiterated that, when responding to the LoE, participants were required to contemplate whether a particular emotion was actually felt. It can therefore be assumed that cognitive processing is pervasive when indicating whether a particular emotion was felt or not, after reflecting on the meaning thereof.

It appears that the underlying structure of the AdSAM’s<sup>®</sup> PAD model accommodates the LoE model without specific comparable positive or negative emotions as measured by



the LoE model. Due to the nature of the LoE scale used, participants are inclined to endorse a multitude of emotions, which should be interpreted as either positive or negative, and not necessarily according to an authentic emotion felt. Therefore, taking the aforementioned information on the three measuring instruments into account, the AdSAM<sup>®</sup> instrument appears to render the most emotively authentic data regarding the manner in which participants from all ages react to a television advertisement in a way that is cost and time effective, easy to understand and does not require any literacy. Greater generational differences seem to be evident when emotions are measured with a verbal instrument than with non-verbal instruments, and due to the nature of the LoE, higher acquiescence with regard to the list of emotions is noted.

Traditional measures tend to rely heavily on Pleasure or happiness only to the detriment of the engagement or inner excitement as a result of being exposed to the advertisement. AdSAM<sup>®</sup> measures, however, suggest that high levels of Pleasure do not necessarily translate into a higher propensity to act, but that feelings of excitement are also required for an advertisement to influence television viewers to act.

With regard to the PrEmo<sup>®</sup> instrument, participants' reactions to the positive emotions were largely similar, except for the Hope emotion. This dimension should therefore be interpreted with caution as it could imply that the test advertisement either elicited lower levels of Hope, or the animated character could have been misconstrued for a different emotion.

Lastly, emotive response to a respondent's general mood seems to permeate throughout the responses to the test advertisement, which could be indicative of the pervasive nature of general mood in reacting to visual stimuli. Dr Calne's statement, that "the essential

difference between emotion and reason is that emotion leads to action while reason leads to conclusions" (Weisnewski, 2006, p. 1) appears fitting. Although verbal measures can represent many distinct aspects of emotion, they do not produce a true dichotomy between affect and cognition because they too require cognitive processing. However, this study concludes that the rating instrument used to determine participants' emotive reactions to a television advertisement, whether verbal or non-verbal, could influence the manner in which participants indicate their true reaction to the advertisement, whether emotive or cognitive, and as a result thereof determine the way in which they make consumer decisions about the product or service being advertised.

## LIMITATIONS AND RECOMMENDATIONS

The present research is not without limitations. Limited research findings on generational differences in South Africa as they relate to emotive profiles have been published. This implies that a holistic view of the respective generational cohorts is largely unavailable to the scientific community. This study recommends including a larger sample that is nationally representative of different generations and comparing results to international findings. Research on generational values could be considered as emotions are consciously and subconsciously driven by values.

The applicability of verbal and non-verbal measuring instruments to measuring emotive reaction to television advertisements could be explored further, given the complexity of emotions and rational judgment.

Whilst different advertisements were used, only analyses related to the test advertisement were presented in this article. Against this background, investigation whether generational emotive differences or similarities

would change during exposure to a larger variety of television advertisements is recommended. It could also be insightful to investigate how generations and culture groups will react emotively to different types of marketing stimuli in the consumer market.

The capability of being able to reliably and accurately measure the emotional impact in different types of media contexts would be of special interest to a variety of marketing industry professionals including, but not limited to, creative directors and advertisers. The implication thereof is that consumers would not only be more inclined to endorse advertising, but that it would result in desirable generational consumer purchasing behaviour. It therefore seems that the introduction of emotional response measurements would contribute to a more robust paradigm for analysing the behavioural impact of advertisements.

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