EMOTIONAL RESPONSE TO ADVERTISEMENTS (OR COMMERCIALS) ACROSS CULTURES[1]

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Abstract

In the expanding global trade, marketers are increasingly facing the difficulty of communicating across cultures. In order to assess die effects of their efforts then, advertisers need a measurement tool that is applicable to all possible markets including consumers of all ages, races and cultures. A possible solution to this problem is AdSAM™: the combination of the Self-Assessment Manikin (SAM) and a data set of emotion adjectives, which produces a tool for pairing emotions with advertisements. The current study examines the effectiveness of AdSAM™ in gauging and interpreting emotional response to various television advertisements across cultural boundaries. Respondents from both General and Hispanic markets were exposed to a series of 13 television spots for various products in their native language. After viewing the ads, subjects used the Self-Assessment Manikin to indicate their emotional response to each on the three dimensional PAD scale. Results showed that commercial scores for the two markets were in line with one another. Such findings would suggest that AdSAM™ produces comparable data across cultures. Implications are discussed.

Introduction

As the international marketplace continues to expand, it brings with it new opportunities and consequently, new problems for marketers. Now, in addition to die familiar challenges facing them, marketers and advertisers are making ardent efforts to undertake the problem of cultural boundaries. They are finding that what constitutes appropriate advertising in one territory may not prove feasible in another. For example, marketers may encounter budget, cultural and legal requirements that differ markedly (Beven, 1992; Bonnall. 1990; Dibb, Simken & Yuen, 1994). The current ideology reflects the view that, “global branding is a misnomer; because in each territory a brand may convey different images and positioning” (Dibb, Simken & Yuen, 1994; Heller, 1988/89).

In response to the increasing skepticism about the effectiveness of advertising products globally, international marketers are beginning to vary their tactics. For example, businesses targeting European markets are currently utilizing two broad approaches to advertising. The first is the traditional standardized global advertising approach, in which Strategies and tactics remain uniform regardless of the intended geographic target. These ads are usually dubbed versions of the American commercial (Morris & Wei. 1993). The second approach is a more localized method that acknowledges the differences in target audiences from country to country and allows marketers to diversify all aspects of the advertising effort. With this approach, socio-economic, cultural, legislative, and demographic factors are accommodated by creating an advertisement specifically for that audience (Dibb, Simkin & Yuen, 1994). One major problem with this

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approach is the difficulty it creates in generating concordant and intelligible advertising strategies.

> "In reality, the choice between a standardized and localized approach is moderated by the cultural, social, demo graphic, and political make-up of a particular market. If, on a market-by-market basis, there are large differences in the factors which impact customers' product needs, it may not be possible to adopt a standardized approach to advertising" (Dibb, Simkin & Yuen, 1994).

Today's marketers are quickly learning that neither option is ideal. Some practitioners are combining the useful features of standardized and localized advertising, creating a third approach that adopts a central theme that is designed to accommodate local variations in strategies and tactics. In this way, a solidified brand image can be "communicated with minimal production and creative cost" (Dibb. Simkin & Yuen, 1994).

There is no proven best solution, and each situation is product and target market/audience specific. All these factors combined, marketers and advertisers continue to be split on which approach to use.

> "Marketers are, according to Eurocom, practicing one of three strategies: (i) the strongest imposes a single strategy across countries from head office - Gillette's approach; (ii) many companies, however, have a single strategy but permit adaptation at the local or national level -Ford or JCB's tactics: (iii) at the far extreme companies simply consolidate brands around Europe, leaving strategy and tactics to different national marketing teams (Crumley, 1992).
>
> ...There is increasing hype about converging consumer tastes within Europe, cutting across national and cultural boundaries. To a degree this may be true: Persil, Kodak, Sony, BMW, Aldi, and IKEA may well be highly visible throughout much of Europe, but there is little evidence to support the assumption that the consumers buying these brands have common goals and expectations across Europe. Until their lifestyles genuinely converge and brand perceptions unite, marketers and advertisers will need to vary tactics at least between countries" (Dibb. Simkin & Yuen, 1994).

Thus, as marketers and advertisers proceed to execute various strategies; there is the need for a diagnostic and evaluative tool for examining affective response to the advertising. The measurement tool must be able to transcend cultural boundaries and must serve as a means of interpreting cultural differences,

Perhaps one of' the most useful approaches to understanding cultural differences begins at the individual level, through a study of attitudes and their components. Attitudes are generally comprised of three components, the cognitive (or thinking) aspect, the affective (or emotional) aspect, and the cognitive (or behavioral) aspect (Ratchford, 1987). Although there may be some cognitive differences between cultures, many of' the moderating affects are emotional. Insight into consumer emotional involvement or reward should be the focus of future cross-cultural advertising testing (Plummer, 1986).

A parsimonious and simply administered global method for measuring affective response to advertising has emerged with the combination of a dimensional paradigm for describing emotions and a process for visually measuring consumer s affective responses. Recent research

has examined culture similarities and differences in emotional response to Global Standardized Advertising through a pilot study of eastern versus western cultures (Morris and Wei, 1993). The study utilized the three dimensional approach described as Pleasure, Arousal, and Dominance together with the Self Assessment Manikin (SAM), the visual measurement of these three dimensions.

This approach adequately describes the full spectrum of human emotions in three independent bipolar dimensions. They are: P-pleasure/displeasure, A-arousal/non-arousal, and D-dominance/submissiveness. Pleasure/displeasure ranges from extreme happiness to extreme unhappiness. Arousal/non-arousal represents a continuum ranging from a level of physical activity, mental alertness or frenzied excitement, to inactivity, mental in alertness, or sleep. Dominance/submissiveness refers to a feeling of total power and control or influence versus the inability to influence a situation or a feeling of lack of control. Evidence shows that these three dimensions are reliably measured and alone are sufficient to define all emotional states (Russell & Mehrabian, 1977). The Self-Assessment Manikin (SAM) contains three graphic scales, each of which represents one dimension of the Mehrabian and Russell's PAD paradigm (Lang, 1980).

Following the initial, successful application of SAM in a cross-cultural environment the need arose for a more definitive approach to evaluating ads. AdSAM™, the measurement tool used in this experiment, was developed for this purpose: and is based upon this three dimensional model of emotion and a data set of emotion adjectives, that produce a tool for pairing emotions terms with responses to a given stimuli, in this case television commercials. AdSAM™ provides a universal, visual measure of emotional response that eliminates the need for translation at the respondent level. Consumer responses to stimuli are matched to emotion adjectives.

The Study

This study is part of the ongoing analyses of emotional responses to marketing communication using the AdSAM™ process. AdSAM™ was developed using the visual affective measure SAM the Self-Assessment Manikin (Lang, 1980). Several previous studies have shown SAM to be a reliable, efficient and valid instrument for measuring consumers' emotional response to advertising messages. AdSAM™ data is reported in the PAD format and consists of a database of ratings of emotion adjectives. SAM scores, measuring responses to any stimuli, are matched to adjective scores to create a pleasure x arousal space that shows the relationship of the stimuli (an advertisement) and the adjectives.

This study was designed with the following purposes in mind:

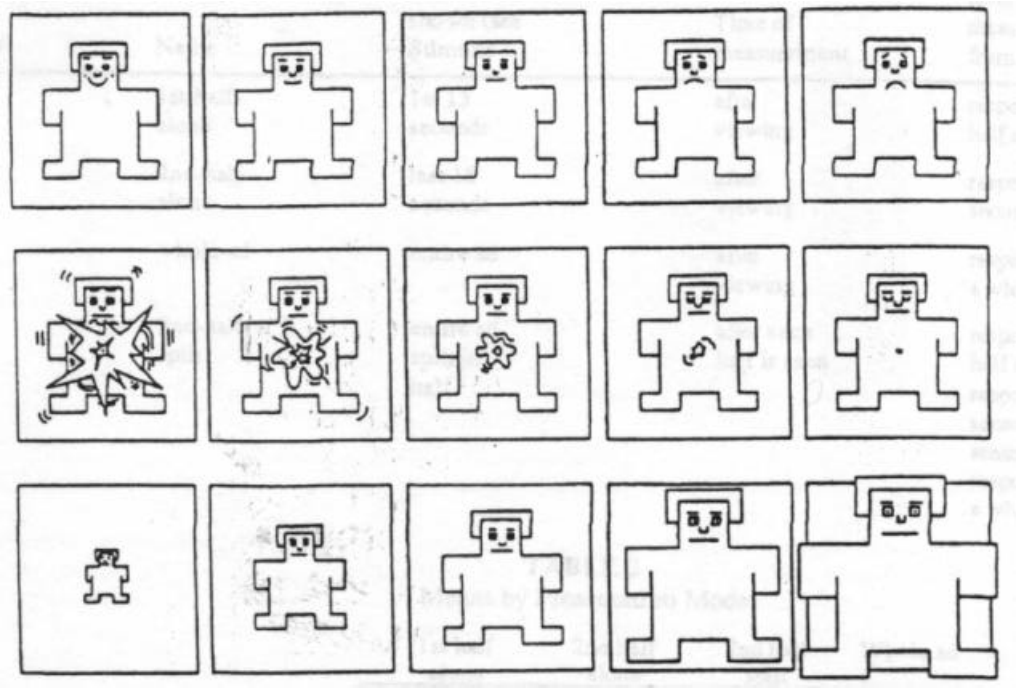
- to examine the applicability of SAM (and AdSAM™) in non-English speaking cultures and thereby determines the measure's ability to report affective responses for global products;
- to examine differences in PAD mean scores between groups receiving the regular instructions and modified limited instruction and;
- to look at the effect of moderating demographic variables on the PAD scores.

The Hispanic market located in south Florida was chosen for this study because the area reflected the most efficient and reliable method for securing non-English speaking subjects. The study was designed to measure responses to 13 English speaking commercials with approximately 50 General Market respondents and to compare the results to responses to 13

mostly similar Spanish speaking commercials with approximately 150 Hispanic Market subjects. The Hispanic subjects spoke little or no English.

Methodology for the Development of AdSAM™

In the development phase of AdSAM™, 236 words, 150 from the Mehrabian & Russell (1977) study and 86 from various advertising material, were evaluated by a sample of college students using SAM. Results of the SAM analysis were then compared to the Mehrabian and Russell findings and investigated for correlation of PAD.



Measurement Tool

The Self-Assessment Manikin (SAM)

The figure above, SAM the Self-Assessment Manikin (Lang, 1980), represents the three different dimensions of feelings: pleasure, arousal, and dominance. Each of these three dimensions is arrayed along a nine-point scale, ranging from extremes, with gradations in between, neutrality in the middle. In the first pleasure-displeasure scale, five pictures present SAM's expression from a broadly smiling face to an unhappy face. The second scale represents the arousal-nonarousal dimension by varying the SAM figure from eves open with lifted eyebrows to eyes closed. The third scale varies the SAM figure in various sizes from giant to tiny to represent the dominance-submissiveness dimension.

Subjects. In this phase of the research, 202 students in two introductory advertising classes, with a diverse student subject pool, participated in the analysis of the 236 emotion terms in (Morris, Bradley, Lang, and Waine, 1993). Mehrabian and Russell used 300 students from an advertising class in their semantic differential analysis of the words. In the AdSAM™ experiment, 236 emotion terms and the 202 subjects were divided into six equal groups.

Through random selection, the words were presented in different orders to each subject in the experiment. The emotion terms from the Mehrabian and Russell study (1977) were sorted according to the level of pleasure and arousal ratings so as to create four groups: high pleasure, high arousal; low pleasure, high arousal; high pleasure and low arousal; and, low pleasure, low arousal. A pretest was used to sort the remaining 86 words into like categories. Words from each level were selected and placed into six different groups. SAM was presented on paper and subjects were given 15 seconds to indicate their PAD rating for each word. Three different orders of SAM were used to minimize repetitive habitual marking. Students were instructed to put an x over or between a SAM picture on each of the three lines. For comparison, some words were included in all six groups.

For each of the emotion words, three scores, based on mean SAM pleasure, arousal and dominance ratings, were computed by averaging individual responses over the subjects. First, the ratings were compared to the Mehrabian and Russell (1977) ratings. Pleasure scores showed the strongest correlation's .92, followed by arousal .87, and dominance .84. The comparisons show that the SAM ratings and the Mehrabian and Russell ratings of the emotion adjectives are very similar. Reliability of the mean scores in the current study for SAM measures of pleasure, arousal, and dominance were computed using 37 subjects and 45 words, and were found to be .98, .89, and .96 respectively. In the original Mehrabian and Russell (1977) analysis, reliability for 29 subjects who all rated the same 20 were .97 for pleasure, .89 for arousal and .87 for dominance.

Methodology for the Current Study

Subjects. The subjects for this study were selected at random by Market Segment Research of Miami, FL, a company with a vast knowledge of the Hispanic Market and experienced in advertising testing. Subjects were offered monetary compensation for an hour of their time. After a brief telephone interview, including such questions as age, gender, and "primary language spoken in household", subjects were selected to participate in the experiment and split into two segments: Hispanic (those speaking some form of Spanish dialect as their primary language) and General Market (those speaking English as their primary language). The total sample pool consisted of 160 male and female adults (age 18 and older), 50 belonging to the General market segment, 110 to the Hispanic segment.

Stimulus. An assortment of commercials in both English and Spanish was secured from various sources, i.e. Univision, Noble & Asociados, D'Arcy, Masius, Benton, & Bowles, and Sos, Bromley, Aguilar, & Associates. From this collection, a number of commercials were selected for viewing during the experiment. In every case, commercials were as closely matched with their nearest "counterpart" in the other language (English to Spanish) as was possible. Efforts were made to find English commercials whose Spanish counterpart had similar strategy and either contained the exact casting and sequence of scenes with the exception of Spanish dialogue, or contained the same sequence of events with a cast of Hispanic actors/actresses. In some cases, however, there was no match and a different creative strategy and execution were used for the same brand.

Same creative strategy, same sequence of events, same casting, different language:	Nissan Pampers Vicks44 Dawn McDonald's
Same creative strategy, same sequence of events, different casting, different language:	Charmin

Analysis of the Hispanic market showed the following results:

1. The three dimensions of PAD were significantly different from each other [F (2.204)=50.88 p<0.000l].
2. There were significant differences between commercials [F (12,1224)=19.25 p<O.OO01].
3. There was a significant PAD x commercial interaction effect [F (24,2448)=6.49 p<O.OOO1], indicating that the dimensions of PAD varied by commercial.
4. There was a significant version x commercial interaction effect [F (12,1224)=3.99 p<O.OOO1] affecting some commercial mean scores. The two commercials that showed version differences were Nissan [F (l, 105)=25.23 p<0.000l] and Vicks [F (l, 105)=6.34 p, 0.0133].
5. More interestingly, there was a significant PAD x commercial x version interaction effect [F (24,2448)=2.14 p<(0.000l], indicating that the differences among the commercials differed by version across PAD. This was not reflected in the General market. In particular, the following commercials showed significant differences in PAD across version (scale dimension in brackets): Cover Girl (Pleasure F=5.22. p<O.O243); Nissan (Pleasure F=14.36, p<O.OOO3 Arousal F=16.39, p<O.OOO1); Burger King (Arousal F=4.69, p<0.0326); Charmin (Arousal F=8.30, p<O.OO48); Vicks (Arousal F=6.06, p<O.O154). (See Table 2 for mean scores).
6. There was no significant difference between the groups with typical instruction and with limited instruction. However, there was a significant PAD x commercial x instruction [F (24,2448)=2.39 p<0.0002], meaning that some commercials varied by PAD and instruction. Table 3 - shows the commercials which showed significant differences.
7. There was a PAD x commercial x instruction x version [F (24,2448)=2.07 p<0.001], meaning that the dimensions of PAD varied by commercial by version given typical instruction against limited instruction. Significant differences in the pleasure scale occurred in the Dawn commercial, [F=4.07 P<0.0461]. Significant differences in the arousal scale occurred in the Pampers, [F=5.25 P<0.0239], McDonald's. [F=4.68 P<0.0328] and Charmin, [F=5.61 P<0.0196] commercials. Significant differences in the dominance scale occurred in the McDonald's, [F=6.07 P<0.0154] and Sprint, [F=4.93 P<0.0285] commercials.

Table 2 - Pleasure, Arousal, and Dominance (PAD)

Means by Commercial by Version for Hispanic Market						
	VERSION 1			VERSION 2		
Commercial	**P**	**A**	**D**	**P**	**A**	**D**
Nissan	6.72*	5.55*	5.28	5.08*	3.78*	5.88
Cover Girl	7.08*	4.47	5.88	6.25*	4.58	5.89
Polaroid	6.79	4.45	5.47	6.72	4.81	6.14
Burger King	6.67	4.10*	5.58	5.91	5.02*	5.07
Dawn	5.30	3.30	5.68	5.52	4.05	5.91
Pampers	7.86	5.79	5.49	8.09	5.27	5.92
McDonald's	7.84	5.61	5.20	7.74	5.72	5.52
Western Union	6.22	3.97	5.06	6.02	4.60	5.70
Sprite	6.18	5.18	5.35	6.30	5.16	5.80
Sprint	6.02	3.99	5.24	5.79	3.78	5.94
Bud Light	7.73	5.77	6~22	7.54	6.35	5.61
Charmin	6.98	4.30*	5.89	7.49	5.68*	5.28
Vicks44	5.32	3.61*	5.45	5.79	4.72*	587

Table 3 - Significantly Different Pleasure, Arousal, and Dominance (PAD) Means for Commercials for Instructions and Limited Instructions for Hispanic Market Segment

Commercial	**Instructions**			**Limited instructions**		
	P	**A**	**D**	**P**	**A**	**D**
Pampers (F=5.25, P<O.0239)		5.91			5.15	
McDonald's (F=9.17, P<0.003l)			4.57			6.15
Bud Light (F=5.91, P<O.0167)			5.25			6.58

A combined analysis of the General and Hispanic market showed the following results:

1. There was a significant commercial x version interaction effect [F (12.1824)=2.21 p<O.OO94] As in the individual market analyses the commercial mean scores varied by version.
2. There was a significant PAD x commercial interaction effect [F (24,3648)=6.03 p<0.00l].
3. There was a significant commercial x language interaction effect [F (12.1824)=3.58 p<0.00l], showing that the commercials varied by language.
4. There was a significant commercial x version x language [F (12,l 824)=6.03 p<0.001].
5. There was a significant PAD x commercial x language interaction effect [F (24,3648)=2.34 p<0.0002]. This shows that the scale, or the dimensionsof PAD varied significantly by commercial by language. Table 4 - shows the significant scale means for the Hispanic and General market by commercial.

Table 4 - Significantly Different Pleasure, Arousal, and Dominance (PAD) Means for Commercials by Language

Commercial	General Market			Hispanic		
	P	A	D	P	A	D
Polaroid (F=4.19 P<0.0424)	5.50			4.64		
Pampers (F=8.29 p<0.0045)		6.90			5.64	
Western Union	7.19	6.45		6.11	4.36	
(Pleasure - F=7.86 P<0.0057)						
(Arousal - F=22.93 P<0.000l)						
McDonald's (F=6.18 P<0.0140)	6.86			7.74		
Charmin (F=7.04 P<0.0088)	6.30			7.22		
Bud Light (F=18.35 P<0.000l)	6.21			7.61		

Table 5 - Pleasure, Arousal, and Dominance (PAD) Means by Commercial by Version for General Market

	VERSION 1			VERSION 2		
Commercial	P	A	D	P	A	D
Nissan	6.67	5.47	5.00	6.17	5.17	4.60
Cover Girl	6.00	5.13	5.00	5.80	4.69	5.40
Polaroid *	7.73*	6.20*	6.07	6.06*	4.80*	5.26
Burger King	5.33	4.73	4.67	5.89	5.06	5.37
Dawn	6.07	4.80	5.53	4.97	4.03	5.11
Pampers	8.00	7.40	5.53	7.34	6.40	5.34
McDonald's	7.20	5.33	6.00	6.51	5.60	5.31
Western Union	7.47	6.67	5.13	6.91	6.23	5.00
Sprite	6.07	5.00	5.80	6.34	5.23	5.14
Sprint	5.87	4.20	5.47	5.46	3.94	5.31
Bud Light	6.13	5.33	5.73	6.29	5.74	5.60
Charmin	5.93	4.93	4.93	6.66	5.46	5.57
Vicks44	5.73	4.80	4.67	4.74	3.97	5.20

Table 6 – Pleasure, Arousal, and Dominance (PAD) Means by Commercial for General Market

Commercial	P	A	D
Planet Reebok	5.82	7.22	7.06
Oil of Olay	5.58	4.00	5.52
Nissan	6.32	5.26	4.72
Cover Girl	5.86	4.82	5.28
Polaroid	6.56	5.22	5.50
Burger King	5.72	4.96	5.16
Dawn	5.30	4.26	5.24
Pampers	7.54	6.70	5.40
McDonald's	6.72	5.52	5.52
Western Union	7.08	6.36	5.04
Sprite	6.26	5.16	5.34
Sprint	5.58	4.02	5.36
Bud Light	6.24	5.62	5.64
Charmin	6.44	5.30	5.38
Vicks44	5.04	4.22	5.04

Table 7 - Pleasure, Arousal, and Dominance (PAD) Means by Commercial for Hispanic Market

Commercial	P	A	D
Canon	6.46	5.04	6.69
Jif	5.67	3.87	5.88
Nissan	5.90	4.67	5.20
Cover Girl	6.58	4.49	5.86
Polaroid	6.68	4.64	5.72
Burger King	6.32	4.61	5.34
Dawn	5.36	3.61	5.89
Pampers	7.96	5.65	5.59
McDonald's	7.75	5.79	5.13
Western Union	6.11	4.36	5.40
Sprite	6.32	5.23	5.59
Sprint	5.94	3.92	5.61
Bud Light	7.61	6.13	5.73
Charmin	7.22	5.05	5.51
Vicks44	5.45	4.08	5.77

Analysis of the demographic variables was carried out separately for the Hispanic and General market. Results for the Hispanic market indicated that there were no significant main effects and interaction effects for the demographic variables.

For the General market the following moderating affects were found:

1. There were significant main effects of age [F (23,3)=24.41 p<0.0113], marital status [F (2,3)=212.72 p<0.0164], occupation [F (5,3)=18.58 p<0.0183], highest level of education [F (3.3)=l1.16 p<0.0390], and annual household income [F (5.3)= 17.07 p<0-0206].
2. There were significant commercial x highest level of education interaction effect [F (36,36)=2.47 p<0.0040]. Some commercial scores varied significantly by highest level of education completed.
3. There was a significant PAD x commercial x number of children interaction effect [F (72.72)=l.57 p<0.0292], meaning that the PAD scores varied significantly by commercial when interacting with the number of children in the household.

Discussion

It appears that SAM did provide comparable measurements of emotional responses to television commercials across diverse groups. The data shows that Hispanic and General market respondents followed similar patterns in their responses to our 13 test commercials. Analyses of both groups showed that the Scale (PAD) was different across ads: meaning that scoring for the dimensions of pleasure, arousal, and dominance varied by ad. In addition, the significant finding of **COMM** revealed that the ads differed from each other across all dimensions. Both markets did show differences in scores for some commercials by version or order of presentation. This is consistent with our earlier findings (Morris & Wei, 1993; Morris, Bradley, Waine & Lang, 1993; Morris & McMullen. 1993) and we continue to believe that order of presentation (sequencing) affects some commercial scores. Ad scores by order (Version) have been provided for inspection (See Tables 2 and 5). Commercials in the Hispanic Market were more affected by order than those in the General Market.

Overall, there were no significant differences in scores, between groups that received the standard “full instructions” and groups that received “limited instructions.” When the comparisons were made by version, however, there were significant differences between groups receiving limited instructions and full instructions to some commercials. Two out of the three commercials that were affected by order, however, showed differences in dominance only, indicating that these occurrences don’t appear meaningful.

It appears that limited instructions will work, once the process becomes standardized. Perhaps a compromise between the full length (typical) set of instructions and the limited set, to create a slightly abridged version would be most effective. Reducing the instructions reduces need for extensive translation and the confusion across cultures and improves the testing environment. From this experiment, and the post session debriefing we believe we have a good understanding of the necessary instructions.

A comparison of the results of the General Market and the Hispanic Market tests indicate that overall, mite responses were similar. Correlations between the market groups (P=. 71, A=. 66 &

D=. 29) as well as a visual examination of the plot (See Figure 1) of the pleasure and arousal scores shows a similar trend while confirming several individual differences between the General and Hispanic Markets. This supports the finding that SAM works well across cultures (Morris & Wei. 1993). Overall, the group of ads created more pleasure among the Hispanic group and more arousal among the General market group. But generally, the trend shows that subjects in both market groups perceived their affective interactions with the ads, similarly. The degree to which culture and individuality affect the results is reflected in the difference between the correlation and the overall reliability P=. 96, A=. 94 & D=. 31.

An analysis of the results by demographic variable shows differences only in the General market group. Because of the size of this group, 50 respondents, these results are of little value. No differences by demographic variable were found in the Hispanic group, attesting to the homogeneity of responses from this group.

Emotion Adjectives and Affective Space Plot

Included in this report are the results from a recently developed process for producing adjectives that are related to the test stimuli. This process is the result of a careful examination of formulas for matching the ad scores with the adjective scores. The words are followed by two scores, one is (INT) the interval between the commercial and the words being considered and the other is (DIF) the differences between the advertisement and a word. The interval is set at .5, marking a 1 point area of 'emotional similarity' with the commercial in the center. The difference score is used to determine the number words to be used in the evaluation of the responses. Increases in the DIF score mean that the chances of selecting the incorrect word or emotional description are reduced, but the level of discrimination has also been reduced.

The margin of error in the INT score is wide enough to accommodate most variations in response scores. A .5 interval accounts for most of the variance created by the order of the presentation. We are continuing to refine the process including retesting the emotion adjectives among various target groups.

Implications

The results of this study indicate that the Self-Assessment Manikin is a unique tool for measuring affective responses to communications across cultures. Previous studies have shown that language is not a boundary for this measurement and this study confirms those findings, when the technique is applied to advertising (Bradley, Lang 1994; Morris and Wei, 1993). AdSAMTM will permit researchers to measure emotional responses to global advertisements in many countries with a limited amount of instruction. The results can then be compared in several ways including by emotion adjective. The matching of advertisements to adjectives adds yet another dimension to the process of evaluating scores. Ads and words that are matched are considered to be producing similar responses.

This is the second study (Morris & Wei. 1993) to show that consumers in different cultures respond similarly to advertising messages. This study refutes the theory that standardized global advertising is ineffective. Affective responses to many commercials are similar enough to show that consumers both cultures encounter like feelings after viewing the commercials. PAD scores for several commercials are different enough, however, to show that culture has some influence on consumer response to some aspect of the commercial.

Some researchers have suggested that a single dimension is sufficient for measuring affective response to commercials (Cohen & Areni. 1991). Our findings show that response differences between the cultures occurred in both the pleasure and arousal dimensions. Looking at the commercial plot (See Figure 1) and reviewing the overall mean scores, the Hispanic Market reported higher pleasure after viewing the commercials than the General Market, and the General Market reported higher arousal than the Hispanic Market (See Tables 6 and 7).

The purpose of a three dimensional comparison is to provide discriminate data that will help pinpoint the feelings of the respondents. Using the dimensions together enables the researcher to establish 'coordinates of feelings.' In addition, the three scores help to identify a wide range of adjectives including those that have a similar level of pleasure but differ greatly in the level arousal. For example, differences in feeling polite and feeling powerful are differences in arousal not pleasure.

Limitations and Future Research

Future research should focus on the differences between the affective response and other consumer variables, such as intent to buy and persuasion. In addition, many sociological questions should be examined. For example, does gender moderate a difference in response to commercials with explicit sexual depictions? Does puffery have an affect on emotional response? Do celebrities affect the responses?

The major limitation of this study is the size and scope of the respondent pool. More tests in different cultures are needed to determine which responses are similar across cultures and which are not. The potential for measuring other media and promotional tools needs to be examined. The findings of several studies indicate that SAM and AdSAMTM will be effective in measuring emotional responses to any communication. The role of SAM in advertising research has yet to be determined. If recent studies are an indication, SAM will continue to provoke inquiry for quite some time.

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