

Joseph W. Alba and J. Wesley Hutchinson, Editors

# The Effects of Music on Emotional Response, Brand Attitude, and Purchase Intent In an Emotional Advertising Condition<sup>1</sup>

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# ABSTRACT

Music is viewed as an important background feature in advertising because of its wide use and ability to enhance viewer arousal and affect. Previous research exploring the effects of music on emotional response and behavior has had mixed results.

In this study, an experimental design was used to examine for difference in emotional response, brand attitude, and purchase intent between advertisements, with and without music. SAM, The Self-Assessment Manikin and AdSAM® were used to measure emotional response.

There were no differences in brand attitude and purchase intent, however on emotional response six out of the 12 advertisements showed significant differences between the music and no-music groups. AdSAM<sub>®</sub> descriptively revealed the specific, emotional effects on viewers.

Music is used often in advertising to enrich the key message and may be the single most stimulation component in a commercial (Hecker, 1984). It is perceived as a potential peripheral cue used to positively arouse the consumer's emotional state (Stout & Lockney, 1988; Gorn, 1982; Park & Young. 1986). The notion of central and peripheral processing suggests that peripheral cues such as music can lead to a positive attitude about the advertisement and then transfer that positive attitude to the brand (Stout & Lockney. 1988). Since commercials are generally viewed as having an audience of potentially uninvolved, non-decision making consumers the affective, stimulating aspects of music can be a persuasive tool and may help persuade viewers. A peripheral cue such as music exerts its greatest influence on brand attitude in a low-involvement advertising setting (Park & Young. 1986; MacInnis & Park, 1991; Petty & Cacioppo, 1986; Petty, Cacioppo, & Schumann, 1983; Park & Young, 1986).

Some of this influence may come through music's indirect influence on respondents' feelings and other emotional responses (Clynes & Nettheim, 1982; Alpert & Alpert, 1990). Zimny and Weidenfeller (1961) found a relationship between music and emotional response. Exciting music was shown to increase emotional arousal in subjects via their skin response and heart rate, which are assumed to be the two physiological manifestations of emotional response.

The "messages" of music are more affective than cognitive, for example calm or sedate music decreased subjects' anxiety, and the structural elements of music such as major (happy) and minor (sad) modes influenced the listener's feelings. (Farnsworth, 1969; Hevner, 1935; Rohner and Miller 1980; Galizio and Hendrick, 1972). Music has been shown to directly affect behavior at the point of purchase. Variations on in-store background music significantly influenced the pace of shopping behavior, the amount spent, and the amount of money spent beyond the consumers' original expectations (Donovan & Rossiter, 1982; Milliman, 1982; Smith & Curnow, 1966). However, there is little agreement about the effect of music in advertising. Some research has shown minimal influence of music on emotional response in advertisements, (Stout and Rust, 1986), while other studies, Alpert and Alpert (1990) found that sad music was more effective in their study in influencing purchase intent than either happy or no music.

In some cases, music appears to increase emotional response, (Zimny & Weidenfeller, 1961; Farnsworth, 1969; Galizio & Hendrick, 1972 Alpert & Alpert, 1990) brand attitude, (Park & Young, 1986) and purchase intent (Alpert & Alpert 1990). And in studies where music had an inhibiting affect (Stout & Rust, 1986) or little or no effect on emotional response (MacInnis &Park, 1991) it was probably due to a poor fit between the advertisement and the background music. Alpert and Alpert (1990) and MacInnis and Park (1991) stressed that a good fit between the music and the advertisement had a strong impact on positive emotional response and attitude to the advertisement. Thus, the strength between the fit and

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emotional response should be investigated.

In one study, music interfered with brand attitude formation and purchase intent at the cognitive level, but facilitated brand attitude and purchase intent in the low-involvement state (Park and Young 1986). In another study, music significantly enhanced message processing for low-involvement consumers, but distracted message processing for high-involvement consumers. And, music created more negative emotions for low-involvement than for high involvement consumers (MacInnis & Park, 1991).

But an emotional stimulus such as music is inserted into an advertisement to stimulate a purchase motivation. This emotional component most likely affects purchase intent through brand attitude. It is thought that music stimulates emotions, which may affect the brand attitude and lead to brand purchase and usage (Rossiter & Percy 1991).

Researchers are now learning that emotions guide and influence consumer behavior far more than seen in traditional, cognitive research. (Rossiter & Percy, 1991; (Batra & Ray's 1983; Holbrook & Batra, 1988). Traditional research methods such as measures of recall, recognition and brand attitude measure consumers' thoughts, but not their feelings or their total range of emotion. Humans think and feel, and both processes influence their behavior (Zajonc, 1980; Zajonc & Markus, 1982).

Hypothesis: Subjects who view advertisements containing music will have significantly increased emotional response, brand attitude, and purchase intent scores as compared to subjects who view the advertisement without music.

# **RESEARCH DESIGN**

An experimental design was used to determine if there was a significant difference in emotional response, brand attitude, and purchase intent between emotionally involving advertisements, with and without music. Two different groups of subjects were each exposed to the same 12 print advertisements. One group of subjects saw the I2 advertisements with music in the background. The other group saw the same advertisements without background music. No subjects saw advertisements in both conditions.

The print advertisements used in this study were taken out of current, popular, American magazines and judged by the author to be sufficiently emotionally involving. To double-check this, a pretest was done on all 12 advertisements. Table 1 lists the advertisements.

1.	Anti-Fur PSA	7.	SAX-100	
2.	Rogaine	8.	Guess Jeans	
3.	Millennium	9.	Norplant	
4.	Sony	10.	Cancer PSA	
5.	Army	11	NW Mutual	
6.	Child Abuse PSA	12.	Save Whales PSA	

TABLE 1
Advertisement Presentation

Although advertisers began more rigorously examining the emotional response to advertising in the past ten years or so, (Stout & Rust, 1986; Stout & Lockney, 1988; Park& Young, 1986; Morris, Bradley, Sutherland, and Ping Wei, 1992; Morris & Waine, 1994) there is still no universally accepted theory of emotion in advertising.

A well-known and favored theory of emotion is the PAD theory that adequately describes the full spectrum of human emotions in three independent, bipolar dimensions. All other emotions are combinations in varying degrees of these three basic emotions (Russell & Mehrabian, 1977). Evidence, shows that three independent, bipolar dimensions are reliably measured and alone are sufficient to define all emotional states (Mehrabian and Russell, 1974). These three dimensions are: **P** pleasure/displeasure, **A** arousal/non-arousal, and **D** dominance/submissiveness. Pleasure/displeasure ranges from extreme

happiness to extreme unhappiness. The arousal/non-arousal dimension constitutes a physiological continuum connoting a level of physical activity, mental alertness or frenzied excitement on one extreme; inactivity, mental unalertness, or sleep at the other end. Dominance/submissiveness refers to a feeling of total power, control or influence versus the inability to influence a situation or a feeling of lack of control. Subjects use the PAD scales to report how they feel (Mehrabian & Wetter, 1987).

Because the three dimensional PAD approach has the capability to characterize diverse emotional responses in consumption situations (Holbrook & Batra, 1988), Mehrabian and Russell's (1974) pleasure, arousal, and dominance (PAD) emotion model was used in this study. Verbal emotional response measures however, are difficult to employ in advertising research. First, when adjective checklists or semantic differential scales are used to assess emotional response, the precise meaning of the emotional words may vary from person to person. For example, joy or anger may mean one emotion to one person, but something slightly different to someone else. This may vary the outcome of the subject's real emotional response. The second problem arises when researchers (Stout & Rust, 1986; Stout & Lockney, 1986) use open-ended questions and request respondents to describe their emotional response to the advertisements. This not only requires cognitive involvement, but respondents may not have an adequate vocabulary to express their feelings precisely.

In this study the Self-Assessment Manikin (SAM) (Lang, 1980) was used to measure emotional response. SAM is a graphic character that eliminates much of the bias associated with verbal measures (Edell & Burke's 1987), and it is quick and simple to use. (Morris & Waine, 1994; Lang, 1980). Correlations of .937 for pleasure, .938 for arousal, and .660 for dominance were found between ratings generated by SAM and by the semantic differential scales used by Mehrabian and Russell (Morris, Bradley, Sutherland, and Wei, 1992; Morris, Bradley. Lang and Waine 1992; Morris and Waine, 1994). SAM uses a nine-point scale for each of the dimensions. Respondents are asked to mark on the picture or between the pictures on each of the three scales (See Figure 1).

AdSAM®, a research tool that consists of a database of 232 emotional adjectives, was used to gain insight into the differences between the ads with and without music. The mean pleasure, arousal and dominance scores from the advertisements were compared to the PAD scores for the 232 AdSAM adjectives. The results of the comparisons are included in the discussion (Morris, 1995).

## Attitude Toward the Brand

Attitude toward the brand was assessed utilizing a four-item, seven-point semantic differential scale. This attitude to the brand measure was used in prior research by MacInnis and Park (1991). The author's report that 87.5 percent of the variance was accounted for by the scale in factor analysis (eigenvalue3.5). All factor loadings were reportedly above .90. Excellent reliability of the scale was also obtained (Cronback alpha =95). The brand attitude scale was computed by the average of summated items.

#### **Purchase Intent**

Purchase intent was measured using Haley and Case's (1979) Verbal Purchase Intent Scale (number eight). The Verbal Purchase Intent Scale is a single-item Likert-type scale. Validity for this scale was established by Gormley (1974) as well as Gruber (1970). Also, Haley and Case report the verbal purchase intent scale had a high factor loading on the product evaluation factor with a coefficient alpha of 0.88. Significant reliability (test-retest) for this kind of measure was also reported by Kassarjian and Nakanishi (1967) and Hughes (1967) (cited in Haley & Case, 1979).

## **Pre-testing for Fit**

Twenty-four songs and 22 print advertisements were selected. The advertisements were chosen out of current, popular magazines, and judged by the authors to be emotionally involving. The songs selected were not current, so there was no immediate bias for or against them. The print advertisements were then transferred to transparencies, and the songs were transferred to cassettes in the three different orders. Based upon artistic interpretation, common sense, logic, and common themes, the author matched the songs with the advertisements. A "fit" test was then administered to check for adequate pairing of the

songs with each advertisement. The fit test is a modified version of the fit test used by MacInnis and Park (1991). Seventy-eight subjects were asked to assess the fit of the 12 advertisements paired with different songs. The extent to which the music fit the advertisement was assessed by the mean of five items (alpha=.82), each on a seven-point scale (1=not at all 7=very much). Subjects were asked to indicate how unexpected the music was with respect to all elements in the advertisement; how well the music fit with the photograph in the advertisement; how well the music fit with the advertisement; how well die music fit with something specific mentioned about the brand (or cause) in the copy; and how well the music fit with the overall benefit of the brand or cause.

A mean of four or more was considered a sufficient fit, and any advertisement/song pair that obtained an average of four or more by all seventy-eight subjects was kept. On the basis of the pretest results 12 advertisements paired with 12 songs were selected as having sufficient emotionality and adequate fit. See Table 2 for the final 12 advertisement-music pairings.

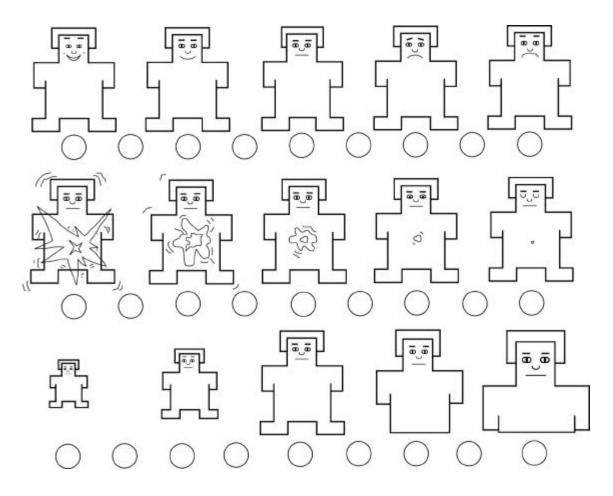


FIGURE 1 SAM The Self-Assessment Manikin

# PROCEDURE

Ninety college students participated in this study in six sessions. Three sessions saw the advertisements with background music, and three sessions saw the same advertisements without music. As in previous research, the advertisements were presented with an overhead projector, and the music with a cassette recorder (Mitchell, 1988; Alpert and Alpert, 1990; and Gorn, 1982). Each advertisement (and accompanying background music) was presented for 30 seconds. Each subject was given a 13-page questionnaire. The subjects were told the experimenter was working with an advertising agency and doing a survey on print advertisements, because the advertising company was thinking of making some of the print ads into television commercials. The subjects were told that the advertising agency values students' opinions and based upon what they say, the results of the experiment could help to continue or stop the conversion of the print advertisements into TV commercials. Subjects were given thirty seconds after viewing each advertisement to mark their emotional response, brand attitude, and purchase intent ratings. The procedure lasted about 25 minutes.

# RESULTS

The results of a MANOVA indicated there were no significant differences between the music and no music advertisements across all five dependent variables for all 12 ads.

A MANOVA was also used to examine for differences between each of the 12 advertisements across the five dependent variables. This was significant, F (55,33) 17.35, p<.05. The results are listed in Table 3.

The six advertisements with significant differences between the music and no music groups were further analyzed to determine the source of the difference, (i.e., Child Abuse, Sony, Anti-Fur, Cancer, Guess Jeans, and Millennium). See Table 4 for a break down of the significant means of the five dependent variables for the six significant advertisements.

Univariate analysis on the five dependent variables for the Child Abuse advertisement revealed no significant differences on any specific dependent variable, although as a whole advertisement, it was significant. Several dependent variables changed significantly for two advertisements when music was added. Sony had significant differences on the pleasure and brand attitude variables, and Millennium had significant differences on the pleasure, arousal, and purchase intent variables.

## TABLE 2

## Final 12 Advertisement/Music Pairings

	Advertisement	Music
1.	Anti-Fur PSA	Johanna by Sondheim
2.	Rogaine	Headed for the Future by Neil Diamond
3.	Millennium	Heart of Rock 'N Roll Huey Lewis and the News
4.	Sony	In Wee Small Hours of the Morning sung by Carly Simon
5.	Army	Devils Gun by C.J. & Co.
6.	Child Abuse (PSA)	Albinoni's Adagio in 0 Minor
7.	SAX-100	Blue Danube by Strauss
8.	Guess Jeans	While my guitar Gently Weeps by George Harrison
9.	Norplant	Careless Whisper by Wham
10.	Cancer	Ravel's Adagio Assai from the piano concerto in 0 Major
11.	NW Mutual	Sons Of by Jacques Brel
12.	Save Whales PSA	Farewell to Farewell by Judy Collins

## TABLE 3

Results of MANOVA Between No Music/Music Conditions

	Advertisement	Results
1.	Norplant	Not Significant
2.	Save the Whales	Not Significant
3.	Child Abuse	F (5,84)=2.64, pc05 (sig)
4.	Sony	F (5,84)=2.83. pc.05 (sig)
5.	Anti-Fur	F (5,84)=4.50, pcO5 (sig)
6.	Sax-100	Not Significant
7.	Army	Not Significant
8.	Rogaine	Not Significant
9.	Cancer	F (5,84)=2.51, p<.05 (sig)
10.	Guess Jeans	F (5,84)=4.20, p<.O5 (sig)
11.	Northwest Mutual	Not Significant
12.	Millennium	F (5,84)=3.31, p <.05 (sig)

## TABLE 4

Means of Five Variables for Six Significant Advertisements Mean For No Music/Music Groups

	Ad	Pleasure	Arousal	Dominance	Brand Attitude	Purchase Intent
1.	Child Abuse	N.S.	N.S.	NS.	N.S.	N.S.
2.	Sony	5.74/6.85*	N.S.	N.S.	5.05/5.71*	N.S.
3.	Anti-Fur	3.83/2.77*	5.81/4.77*	MS.	N.S.	N.S.
4.	Cancer	5.83/4.49*	5.60/4.64	4.83/3.92*	N.S.	N.S.
5.	Guess Jeans	6.24/5.04*	5.14/3.51*	N.S.	5.16/424*	2.83/2.34*
6.	Millennium	5.95/7.04*	4.67/5.81 *	N.S.	N.S.	2.29/2.79*

N=90, N.S.= not significant

\* P<.05 indicates a significant difference between no music and music groups. Means obtained from MANOVA conducted between no music and music groups for each ad.

Several dependent variables declined significantly for three advertisements when music was added. Anti-Fur had significant decline on the pleasure and arousal variables; Cancer had significant decline on the pleasure, arousal, and dominance variables; and Guess Jeans had significant decline on the pleasure, arousal, brand attitude, and purchase intent variables.

# **DISCUSSION AND CONCLUSIONS**

A simple acceptance or rejection of the hypothesis based on an overall measure is not feasible. Research seeking to understand the relationship between music and emotional response, purchase intent and brand attitude, must recognize the idiosyncratic nature of advertising stimuli. Treating all advertisement and public service announcements as homogeneous entities, hides the goals, content and strategies of marketing communications. This was evident when we examined the results for specific differences. Six out of the 12 advertisements showed significant differences between the music and nomusic groups. Emotionally, two of the advertisements were significant in a positive direction, and four advertisements were significant in a negative direction when music was added. It appears that pleasure decreased when music was added to the Anti-Fur advertisement. The advertiser's goal would be to decrease pleasure for this advertisement. Adding music made the advertisement less pleasurable. It showed that music was helping to emphasize the message about killing animals for fur.

What was interesting to note from this study, were the descriptive changes in viewers feelings toward the advertisements when music was added. These changes in feelings occurred in nine of the 12 advertisements, whether the ads were positively or negatively significant, or not significant at all. These sometimes subtle, but important changes were revealed by the AdSAM® technique. Advertisers need to know that by casually adding background music to what they consider to be an otherwise well tested, effective advertisement, may completely change viewers' feelings. More research is needed on advertisements with and without music, to examine changes in viewers' feelings across different types of advertisements.

## Six Significant Advertisements

It appears that music can have a significant effect particularly on emotional response, but also on attitude and purchase intent, depending on the advertisement. And this effect can be positive or negative, even with high fit scores between the advertisement and music. This demonstrates how sensitive and careful advertisers must be when pairing music and advertisements. The six advertisements that had significant results will be discussed.

## **Child Abuse Advertisement**

The MANOVA across five dependent variables was significant. However, subsequent univariate F's on each of the five dependent variables were not significant. Thus, nothing can be inferred from this advertisement in terms of music increasing or decreasing any one dependent variable.

#### Sony Advertisement

The differences between the Music/No Music groups for the Sony advertisement were significant and positive across all five dependent variables. The univariate F's indicated significant improvement in the pleasure and brand attitude variables when music was added. This may have occurred as the Sony movie camera is a trendy product, and the music was a remake of a popular 1940's tune by a very trendy, popular artist, Carly Simon. The song had recently been used in the current, hit movie "Sleepless in Seattle". Also, the advertisement displayed the Sony camera with a video in it, clearly showing the two lead characters from the movie "Sleepless in Seattle" holding hands, which further tied the music to the advertisement.

Pleasure may have improved because of the song's current popularity along with the popularity of the artist, and because of the music and advertisement's connection with the movie. Brand attitude may have improved because pleasure improved.

When subjects saw the advertisement without music, they felt *nostalgic*, *different, awed,* and *wonder*. These adjectives are appropriate as the Sony movie camera advertisement was playing on all the nostalgia involved in the romantic movie 'Sleepless in Seattle.' The headline directed the focus to the movie as it read 'You Can Watch Movies'.

Awe and wonder made sense as the photo of the two lovers from 'Sleepless in Seattle' may have caused viewers to be awed as they finally met, and to wonder what would happen next to the characters. There was no other copy in the advertisement, except for tiny print next to the camera saying you would get a free copy of "Sleepless in Seattle" when you purchase the camera.

When music was added, the viewers felt *informed, self conscious, virtuous* and *useful.* The music was "In the Wee Small Hours of the Morning," sung by Carly Simon. It was chosen because it was a haunting love song sung by a popular, contemporary artist. It was also chosen because it is a song used

in "Sleepless in Seattle." Useful and informed make sense as the movie camera is a useful piece of equipment and, therefore, the audience felt informed. However, why respondents felt virtuous and self-conscious when music was added is unclear.

## Anti-Fur advertisement

Differences between the Music/Non-Music groups for the anti-fur advertisement for the five dependent variables were significant and negative. As expected, the univariate F's indicated a significant decline for the pleasure and arousal variables when music was added. This may have occurred due to the nature of the PSA against the sale of fur. The music was tender and poignant, and possibly made viewers even less happy with the idea. The decline in the pleasure score when music was added is appropriate given the nature of this particular PSA. Thus, the advertisement should have been more effective when music was added.

When subjects saw the advertisement without music, they felt *defiant, tense, hostile* and *suspicious*. All adjectives that are very appropriate to this advertisement. The headline read, "You wouldn't wear these." The photo under this headline depicted two cute puppies licking each other. Under this photo was another photo of two cute puppy foxes. Under this photo the headline read 'Why would you wear these?' A sub headline under each photo reads "Canine." The tie-in of the dog pups to the fox pups is startling, as most people do not think of foxes and dogs in the same light. The copy further emphasizes the point by mentioning dogs and foxes are in the same canine family. We bring one type of canine into our homes and love them, while the other type of canine is caught in traps, electrocuted and worn as coats. The copy asks if this makes sense.

When subjects saw the advertisement with music, they felt *scornful, guilty, angry, determined, dishonest,* and *burdened.* The music was 'Johanna' from Sweeney Todd by Sonheim. It was a very beautiful, tender, but bittersweet melody. The music was chosen to emphasize the plight of the foxes. The adjectives reveal that the music did what it was supposed to do by softening the suspicious and hostile feelings to guilty, angry and burdened.

FIGURE 2 AdSAM<sub>®</sub> Perceptual Map

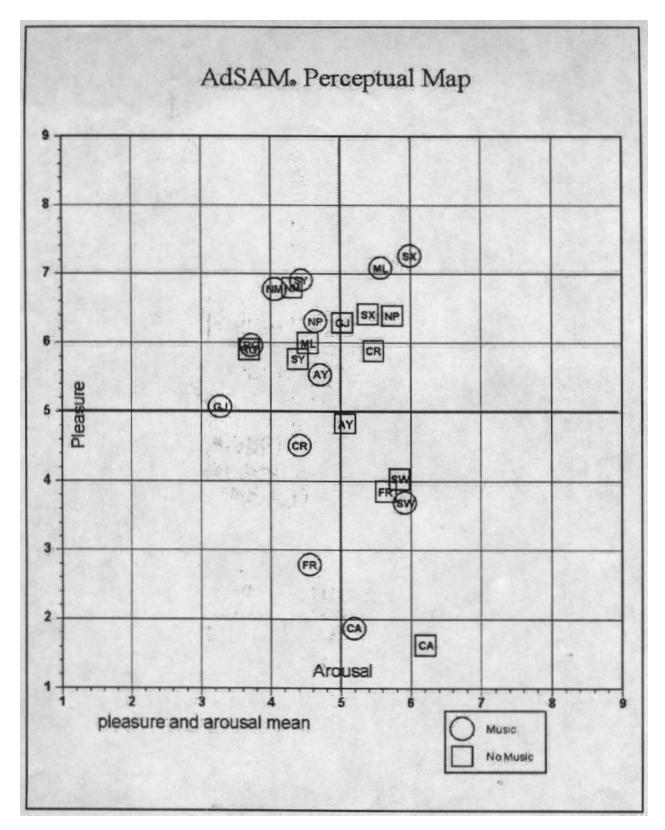
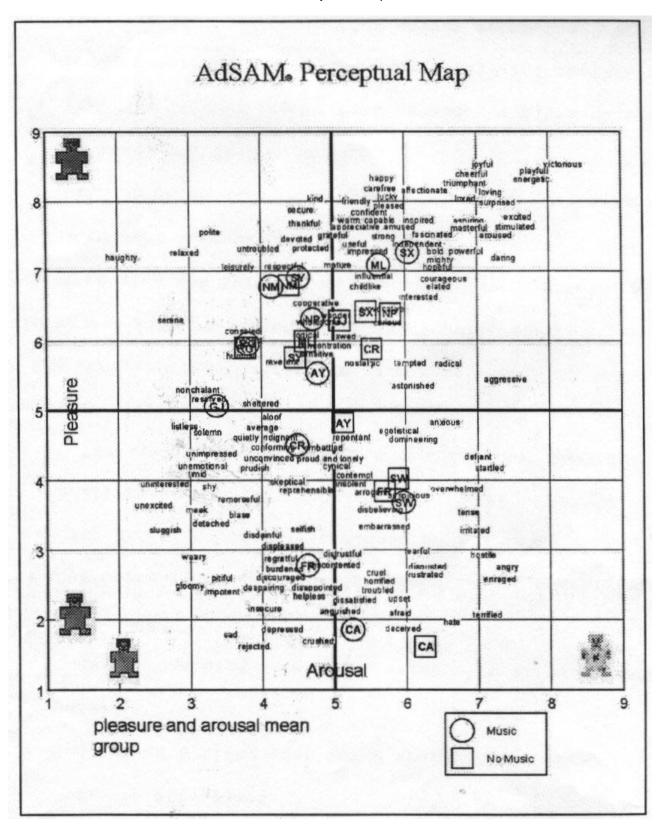


FIGURE 3 AdSAM. Adjective Map



## **Cancer treatment advertisement**

The differences between the Music/No Music groups for the Cancer advertisement across five dependent variables were significant and negative. The univariate F's indicated a significant decline in the pleasure, arousal and dominance variables when music was added. Music appeared to significantly hurt this advertisement. This cancer treatment center advertisement is very upbeat and positive, implying that the center can help you beat cancer. However, the music decreased pleasure, arousal and dominance.

When subjects saw the advertisement without music, they felt *egotistic, astonished, proud* and *tempted.* The headline read, "You can beat Cancer. Ask My Granddaughter." There was a large photo of a happy, smiling woman on a swing with her granddaughter hugging her. The copy emphasized the point of how the Cancer Treatment Center helped the woman continue her life with care, concern, and kindness. They helped her to beat cancer and live on to see her grandchildren grow up. The adjectives were appropriate.

When music was added, viewers felt *repentant*, *skeptical*, *contempt*, *coarse*, and *cynical*. The music was a delicate, sweet wondering melody. Some subjects may have felt the music too sweet and gentle, which my have caused them to be skeptical about the center helping the woman recover from cancer. The music obviously did not help this advertisement project the correct feelings, especially because the adjectives for the advertisement without music were projecting the correct feelings. The adjectives not only reveal that the music was poorly chosen for this particular ad, but that music can change viewers feelings about the advertisement very drastically (i.e. from proud and astonished to skeptical, cynical and contemptuous).

## **Guess Jeans advertisement**

The differences between the Music/No Music groups for the Guess Jeans advertisement across five dependent variables were significant and negative as well. The univariate P's indicated significant decline in the pleasure, arousal, brand attitude, and purchase intent when music was added. The reason why music significantly decreased four of the five dependent variables may have been because the song was not liked. The advertisement itself was odd because it was a jeans advertisement and the model in the photo was holding a cat looking very forlorn, but you could not see her jeans or shirt. Nothing in the advertisement showed off the product. This advertisement may have been visually confusing to viewers.

When subjects saw the advertisement without music, they felt *curious, proud,* and *interested*. Curious and interested are appropriate as the beautiful, mysterious woman in the advertisement is sitting holding a cat, looking sad and vulnerable. Nothing else is going on in the advertisement. 'The only copy in the advertisement is the headline, which reads "Guess Jeans". The curiosity and interest from viewers could have resulted from the lack of copy, or from not knowing what is making the beautiful woman so sad. One cannot see what she is wearing.

When music was added, the adjectives were *sheltered*, con*centrating*, *serious*, *aloof*, and *obedient*. The music was "While my guitar gently weeps" sung by Kenny Rankins. It is a love song about a sleeping love. The directions in this case may have been correct even though the PAD scores decreased when the music was added. The adjectives aloof, and serious seem to support the visual. She does look aloof, and the advertiser may wish to convey a feeling of serious rather than sad.

Obedient and sheltered are possible interpretations of the photo as the model looks almost child-like, and may be what the advertiser wanted to project to viewers. Concentrating probably is indicative of the study that is necessary to arrive at a conclusion form the picture of the mysterious woman, with no headline, no copy, and no product.

It is interesting to note that different music might have been chosen if the No Music results had been known. The adjectives may also be revealing that the advertisement itself without music may not be working as well as it could.

## Millennium advertisement

The differences between the Music/No Music groups for the Millennium advertisement across five dependent variables were significant and positive. The univariate F's indicated significant improvement in the pleasure, arousal and purchase intent variables when music was added. Pleasure may have improved because the advertisement was showing a trendy product. The music was also a fairly current, popular rock and roll song. Arousal may have improved because the music was a very popular, amusing rock song. In this case the fit is highly correlated with arousal. Purchase intent also may have significantly improved due to the influence of the arousing music.

When subjects saw the advertisement without music, they felt *awed*, *different*, *wonder*, and *nostalgic*. The advertisement had a large photo showing a man's hand putting batteries into a battery recharger. The copy emphasized how the music will go on forever with these batteries as they can be recharged over and over. The batteries will last forever. It goes on to say that with these special batteries and recharge, rock and roll is definitely here to stay.

These adjectives make sense. Viewers could have felt awe and wonder from the 'power' image that the batteries/recharger project in ate photo and because the copy declared that rock will go on

forever, and you'll save hundreds of dollars. The nostalgia probably referred to the headline "Why rock and roll will never die".

When music was added, the feelings changed to *popular, strong, bold, hopeful* and *creative*. The music that was chosen was 'Heart of Rock 'N Roll' by Huey Louis and the News. It has a very strong beat, and is a fun, upbeat, happy rock song. The music made an appropriate and positive change in feelings. The adjectives are all positive, upbeat feelings. The popularity of the music made the viewers feel popular. The strong, definite beat made them feel strong and bold. The music also made them feel hopeful, and creative, which very much describes the music with its bold, happy tune. Hopeful probably came from the hope that 'rock will never die' due to the batteries/recharger, which is the main point of the advertisement. This up-tempo, happy music helped feelings go from awed to bold and hopeful and helped convey the double meaning.

# CONCLUSIONS

Music may not always significantly change pleasure, arousal, dominance, brand attitude, or purchase intent in an emotional advertising condition, but it can change how the viewer feels when watching the advertisement. This is consistent with the results from past research regarding music's influence in an emotional situation (Park & Young. 1986). Music alone was not a significant enough factor to drastically increase any of the five dependent variables. However, when deciding whether to use background music with an advertisement, just considering whether the music significantly increased or decreased purchase intent should not be the sole consideration.

Pretesting the fit of the advertisement with the music is highly recommended; just as test marketing the advertisements effective ness is advisable. Any weak element in the advertisement will hurt the impact, but pretesting the music's fit with the advertisement is a good basic start for an effective advertisement, and may be potentially important for strong, arousing emotional response.

PAD via SAM, the Self-Assessment Manikin seems to be an excellent way to assess changes in viewers' emotional feelings after adding music to the advertisement. The SAM scale, is a quick testing method and the mean scores can be correlated with the AdSAM adjectives, which give a description to viewers' feelings.

The AdSAM® adjectives make sense of the numbers. Knowing that pleasure went down significantly or arousal went up is interesting, but does not tell the researcher descriptively how the viewers' feelings changed when music was added. The adjectives flesh out the SAM results, put a face to viewers' feelings, and show how viewers' emotional responses change when music is added. That change can be very subtle, and only noticed when comparing the adjectives.

# REFERENCES

Alpert, J. I., & Alpert, M. I. (1990). Music influences on mood and purchase intentions. *Psychology & Marketing*, 7,109-133.

Batra, R., & Ray, M. L (1983). Emotion and persuasion in advertising: What we do and don't know about affect. In R. P. Bagozzi and A. Tybout (Eds.), *Advances in Consumer Research*, Vol. 10, (pp.543-548). Ann Arbor, MI: Association for Consumer Research.

Clynes, M., & Nettheim, N. (1982). The living quality of music: neurobiological basis of communicating feeling. In M. Clynes (Ed.), *Music, Mind, and Brain: The Neuropsychology of Music.* New York: Plenum Press

Edell, J. A., & Burke, M. C. (1987). The power of feelings in understanding advertising effects. *Journal of Consumer Research*, 14, 421-433.

Farnsworth, P. R. (1969). Language aspects of music. In P. R. Farnsworth (Eds.), *The Social Psychology of Music,* (pp.69-98). Ames, Iowa: The Iowa State University Press.

Galizio, M., & Hendrick, C. C. (1972). Effects of musical accompaniment on attitude: The guitar as a prop for persuasion. *Journal of Applied Social Psychology*, 2.350-359.

Gorn, G. J. (1982). The effects of music in advertising on choice behavior: A classical conditioning approach. *Journal of Marketing*, 46(1), 94-101.

Haley, R. I., & Case, P. B. (1979). Testing thirteen attitude scales for agreement and brand discrimination. *Journal of Marketing* 43(3), 20-32.

Hecker, S. (1984). Music for advertising effect. Psychology & Marketing, 1,3-8.

Hevner, K. (1935). The affective character of the major and minor modes in music. *American Journal of Psychology*, 47,246-268.

Holbrook. M. B., & Batra, R. (1988). Assessing the role of emotions as mediators of consumer responses to advertising. *Journal of Consumer of Research*, 14, 404-419.

Holbrook, M. B., & Batra, R. (1988). Toward a standardized emotional profile (SEP) useful in measuring responses to the nonverbal components of advertising. In S. Hecker, & D. W. Stewart (Eds.), *Nonverbal communication in advertising* (pp.95-109). Lexington, MA: D.C. Health.

Lang, P. J. (1980). Behavioral treatment and bio-behavioral assessment: Computer applications. In J. B. Sidowski, H. Johnson, and T. A. Williams (Eds.), *Technology in Mental Health Care Delivery Systems*, (pp. 119-137). Norwood, NJ: Ablex.

Lang, P. J., Greenwald, M. K., Bradley, M, M., & Hamm, A. 0. (in press). *Looking at pictures: affective, facial, visceral, and behavioral reactions.* 

MacInnis, D. J., & Park, C. W. (1991). The differential role of characteristics of music on high and lowinvolvement consumers' processing of ads. *Journal of Consumer Research*, 18, 161-173.

Mehrabian, A., & Russell, J. A. (1974). An Approach to Environmental Psychology. Cambridge, MA: MIT Press.

Mehrabian A., & Russell, J. A. (1977). Evidence of a three-factor theory of emotions. Journal of Research in Personality, 11, 273-294.

Mehrabian, A., & Wetter, R. D. (1987). Experimental test of an emotional based approach to fitting brand names to products. *Journal of Applied Psychology*, 72, 125-130.

Milliman, R. E. (1982). Using background music to affect the behavior of supermarket shoppers. *Journal of Marketing*, 46(3), 86-91.

Mitchell, A. A. (1988). Current perspectives and issues concerning the explanation of feeling advertising effects. In S. Becker and D. W. Stewart (Eds.), *Nonverbal Communication in Advertising*, (pp. 127-143). Lexington, MA: Lexington Books.

Morris, J. D. (1995). Observations: SAM: The Self-Assessment Manikin; *An* Efficient Cross-Cultural Measurement of Emotional Response. *Journal of Advertising Research*, 35(8), 63-68.

Morris, J. D., Bradley, M. M., Lang, J. B., & Waine, C. A. (1992). Assessing affective reactions to advertisements with the self-assessment manikin (SAM). Working Paper, University of Florida, Gainesville.

Morris, J. D., Bradley, M., Sutherland, J., & Ping Wei, L (1992). Assessing cross-cultural transferability of standardized global advertising: an emotional response approach. Working Paper, University of Florida, Gainesville.

Morris, J. D. & Waine, C. (1994). Managing the creative effort: pre-production and post-production measures of emotional response. Working Paper, University of Florida, Gainesville.

Park, C. W., & Young, S. M. (1986). Consumer response to television commercials: the impact of involvement and background music on brand attitude formation. *Journal of Marketing Research*, 23, 11-35.

Petty, R. E., & Cacioppo, J. T. (1986). Communication and Persuasion: Central and Peripheral Routes to Attitude Change. New York: Springer.

Petty, R. E., Cacioppo, J. T., & Schumann, D. (1983). Central and peripheral routes to advertising effectiveness: the moderating role of involvement. *Journal of Consumer Research*, 10, 135-146.

Rohner, S. J., & Miller, R. (1980). Degrees of familiar and affective music and their effects of state anxiety. *Journal of Music Therapy*, 17, 2-15.

Rossiter, J. R., & Percy, L. (1991). Emotions and motivations in advertising. *Advances in Consumer Research*, 18, 100-111.

Smith, P. C., & Curnow, R. (1966). Arousal hypothesis and the effects of music on purchasing behavior. *Journal of Applied Psychology*, 50, 255-256.

Stout, P. A., & Leckney, J. D. (1986). Measuring emotional response to advertising *Journal of Advertising*, 15(4), 35-41.

Stout, P. A., & Leckney, J. D. (1988). Let the musk play: music as a nonverbal element in television commercials. In S. Hecker and D. W. Stewart (Eds.), *Nonverbal Communication in Advertising.* (pp.207-233). Lexington, MA: Lexington Hooks.

Stout, P. A., & Rust, R. T. (1986). The effect of music on emotional response to advertising. In E. F. Larkin (Ed.), *Proceedings of the 1986 Conference of the American Academy of Advertising* (pp. *R82-R85)*. Norman, OK: School of Journalism, University of Oklahoma.

Zajonc, R. B. (1980). Feeling and thinking: Preferences need no inferences. *American Psychologist,* 35, 151-175.

Zajonc, R. B., & Markus H. (1982). Affective and cognitive factors in preferences. *Journal of Consumer Research,* 9, 123-131.