The impact of music pleasantness and fit on advertising attitudes for low and high involvement consumers

Abstract
Research in advertising suggests that music produces a substantial impact on a consumer’s attitude (e.g. Alpert and Alpert, 1989; Kellaris and Cox, 1989; North, MacKenzie, Law & Hargreaves, 2004; and Zander, 2006). However, there has been relatively little work on the mechanisms affecting low vs high involvement consumers. This study applies two dominant models on the impact of music in persuasion, classical conditioning and musical fit, to investigate the influence on low and high involvement consumers. Classical conditioning theory suggests that when a positive stimulus (i.e., the music) is associated with a neutral stimulus (the advertised product), the positive reaction to the music becomes associated with the product, leading to a favourable attitude (Gorn, 1982). Musical fit theory suggests that music activates information and evoked associations based on previous knowledge/familiarity, and when these fit the advertised product, the message becomes more persuasive (MacInnis and Park, 1991). Using an experimental design, 188 respondents saw advertisements paired with music that was pre-tested to be either pleasant/unpleasant (classical conditioning context) or congruent/incongruent with the product category (musical fit). Respondent’s involvement with the product category was also measured. The study found that ‘pleasant’ music significantly increased attitudes/purchase intention for low-involvement respondents (regardless of fit), while congruent music positively affected attitudes under high involvement conditions. Managerial implications and future research are discussed.

Keywords: music, consumer behaviour, classical conditioning, congruence

JEL classification: M37 (Marketing and advertising)

1.0 Introduction
Many studies in the marketing literature have investigated music effects in advertising (e.g. Gorn, Goldberg, Chattopadhuay & Litvack, 1991; Bozman, Melling & Petit-O’Malley, 1994). Research has shown that, depending on different circumstances, music could either increase or decrease communication effectiveness (see Lantos & Craton (2012) for a review). Key factors that influence how music impacts on the advertisement and the product are: a) the consumer through different levels of involvement and cognitive or affective processing (e.g. Petty, Cacioppo and Schumann, 1983); b) the consumer’s subjective perception of the appropriateness of the music as it relates to the central idea of the ad (‘fit’ as defined by MacInnis and Park, 1991); and c) the organization of the musical elements (e.g. Alpert, Alpert & Maltz, 2005). Two dominant models, classical conditioning and musical fit, are widely used to explain the impact of music in persuasion, emphasizing the role of consumer involvement and the associated influences on cognitive processing. From a marketing perspective, consumer involvement is commonly conceptualized as the degree to which a purchasing decision has perceived personal importance, relevance and consequences for the buyer (Greenwald & Leavitt, 1984). A consumer highly involved with purchasing and/or using an advertised product is motivated to extensively search for and deeply process marketplace information (Laczniak, Muehling & Grossbart, 1989).

In this paper, we use the elaboration likelihood model (ELM) of ad processing and persuasion as the theoretical lens to consider the degree of effort consumers exert learning about a brand’s attributes and forming an attitude (Petty, Cacioppo & Schumann, 1983). This model proposed two distinctly different routes to persuasion, depending on the consumer’s level of involvement (which serves as a proxy for motivation, opportunity, and ability to process information). Under ‘central route’ processing, involvement is high, with active effort put into processing. This can result in either highly cognitive ad processing (i.e. focused on the product information), or high affective ad involvement (e.g. evoked by emotion-inducing imagery or music). Under ‘peripheral route’ processing, involvement is low and consumers devote little energy to ad processing and to making choices, passively encountering unsought
information (Batra and Ray, 1993). Here consumers utilize peripheral cues – less relevant, easily processed positive and negative advertising stimuli (North and Hargreaves, 1997). MacInnis and Park (1991) argued that music can positively influence high involvement consumers if there is a high musical fit, since it primes relevant product beliefs. When music ‘fits’ the ad, by matching recipients individual perception of its relevance or appropriateness towards the central ad message, the music reinforces the basic advertising message and product. A number of studies have found advertisements were perceived more favourably and considered more informative when they contained music easily associated with the advertised brand (e.g. North, MacKenzie, Law & Hargreaves, 2004; Kellaris, Cox & Cox, 1993). In contrast, under low involvement conditions, consumers might be influenced by a passive process of learning stimulus-response associations, called classical conditioning. Under classical conditioning, an attitude is formed by frequently associating a positive or negative stimulus (A), such as music, with an initially neutral stimulus (B), such as a brand. Through repeated pairings, consumers transfer to B whatever thoughts and feelings they had about A (Mitchell and Olson, 1981).

In this paper, we explore the role of classical conditioning and musical fit on attitudes toward advertisements and brands. We present the initial findings for two studies: i) an investigation into the effect of ‘pleasant’ vs ‘unpleasant’ music on attitude formation in a low involvement context (i.e. classical conditioning) and ii) the impact of musical fit (congruent vs incongruent music) in a high involvement situation. We start with a short review of the literature and develop the research framework.

2.0 Theoretical base and literature review
2.1 Classical Conditioning

Classical conditioning is generally accepted in the consumer behaviour literature as a relevant mechanism for understanding (and producing) advertising effects (Allen & Madden, 1985). Attitudes are thought to develop through repeated pairings of potential attitude objects (the ‘conditioned’ stimuli – CS) with positively and negatively valenced stimuli (the ‘unconditioned’ stimuli – US) which will cause the CS to elicit a conditioned response (CR) in an unconscious, automatic fashion. Classical conditioning has received attention from social psychologists (e.g. Cacioppo, Marshall-Goodell, Tassinary & Petty, 1992), marketing and advertising researchers (e.g. Shimp, Stuart and Enge, 1991), human learning theorists (e.g. Hammerl & Grabitz, 1996) and cognitive psychologists (e.g. Lewicki 1986). A core concept of classical conditioning is that subjects are not in a state of cognitive thinking processes. In an experimental study, Gorn (1982) found that subjects would be more likely to choose a specific pen colour if that pen had been matched with liked music rather than disliked music. The result suggested that liked music with an upbeat sound might stimulate the perception of that specific color of a pen as being ‘fun color’, and could be appropriate for an active lifestyle. This finding supports the view that a peripheral cue such as background music in advertising might be associated with the product in the advertisement and influence product choice, through mood induction (Alpert and Alpert, 1989) and cue association (e.g. upbeat and zingy vs somber and melancholy songs). Findings suggest that product-relevant information must be minimal in an advertisement for classical conditioning to occur.

Although classical conditioning as a general phenomenon has been supported by many studies (e.g. Bierley, McSweeney & Vannieuwker, 1985; Gibson, 2008; Tom, 1995), results in the context of music have been decidedly mixed. While some researchers report that consumers can be classically conditioned to prefer a product by pairing it with well-liked music (e.g. Gorn, 1982), others have failed to obtain this effect (Allen and Madden, 1985; Albert and Alpert, 1989, Gresham and Shimp, 1985; Macklin, 1986; Kellaris and Cox,
In one experiment, Kellaris and Cox (1989) attempted to replicate Gorn’s study, but did not find an affect. The equivocal findings might be due (at least in part) to the use of experimental objects (pens, greeting cards) as the unconditioned product rather than a complete advertisement (Juslin and Sloboda, 2010). In summary, it appears that classical conditioning occurs unreliably with music in advertising, and only for low involvement/passive consumers. To investigate this further, we hypothesize:

**H1a:** An advertisement will be perceived more positively by consumers under low involvement conditions where there is pleasant background music than where there is unpleasant background music.

**H1b:** The brand in an advertisement will be perceived more positively by consumers in a low involvement condition when there is pleasant background music than where there is unpleasant background music.

Considering the mechanisms by which classical conditioning occurs, it is reasonable to expect a greater impact on emotionally-oriented (i.e. hedonic) attributes of the brand rather cognitively-oriented (i.e. utilitarian) attributes. Therefore we hypothesize:

**H1C:** Under conditions of low involvement, the hedonic attributes of a brand will be perceived more positively by consumers where there is pleasant background music rather than unpleasant background music.

### 2.2 Musical Fit

While ELM proposed a peripheral cue such as music could influence the consumers’ attitude only when they are in a state of low-involvement, affective and non-message-based processing (Petty *et al.*, 1983), a more recent concept, musical fit, offers an alternative approach for the opposite state of high-involvement, message-based processing. MacInnis and Park (1991) first identified the characteristic of ‘fit’ as a complementary role of music with other advertising stimuli that could affect advertisement processing, stating specifically ‘music might positively influence these high-involvement consumers if it fits the advertisement or corresponds with “consumers” subjective perceptions of the music’s relevance or appropriateness to the central ad message’. In this context, music recalls prior beliefs about the brand (for example, upbeat lively music that performs in the background of energy drink advertising (North *et al.*, 2004)). Music’s ability to manipulate and activate information related to the product requires cognitive processes not activated under classical conditioning, and studies suggest fit is important in high involvement settings (Lavack, Thakor & Bottausi, 2008). Therefore, under high involvement conditions, the degree of fit (congruent vs. incongruent) music is expected to determine the production of negative and positive emotions that could influence positive and negative attitudes towards advertisement, and influence attitudes towards the brand. It is reasonable to expect fit to impact positively on both hedonic and utilitarian attributes. We hypothesize:

**H2a:** An advertisement with background music that is perceived to be congruent with the brand will be perceived more positively by consumers [in a high involvement context] than advertising with an incongruent fit of brand and background music.

**H2b:** A brand in an advertisement with background music that is perceived to be congruent with the brand will be viewed more positively by consumers [in a high involvement context] than advertising with an incongruent fit between the brand and background music.
H2c: For a brand with congruent background music, hedonic and utilitarian attributes will be more positively perceived than for a brand with incongruent background music.

In summary, in situations of low involvement, classical conditioning predicts that pleasant music will have a positive influence on attitudes to the advert and the brand. In high involvement conditions, the degree of musical fit (defined as ‘congruent’ vs. ‘incongruent’) between the music and the brands is expected to influence attitudes.

3.0 Methodology
Based on the ELM framework, our research model (Figure 1) presents two main scenarios; a) a low involvement advertisement setting that draws on classical conditioning processes (pleasant vs. unpleasant music), and b) a high involvement advertisement context that tests the musical fit concept (congruent vs. incongruent music). This is to identify the influence of different characteristics of music on the attitude towards advertisements and brands based on two state of involvement. The research design consists of two categories (classical conditioning vs. musical fit) each evaluating two different background music settings for the advertisements: Low involvement with pleasant music (1), Low involvement - unpleasant music (2), High involvement with congruent music (3) and High involvement with incongruent music (4). We began by pretesting a sample of 10 real-life advertisements and 24 musical excerpts with a group of 30 undergraduate business students. Pretest subjects were asked to categorize the advertisements according to ‘natural’ involvement levels (high/medium/low), and from this a ‘low involvement’ advert and ‘high involvement’ advert were selected. The pretest group was then divided in half to evaluate 12 musical excerpts each. For the classical conditioning context, pretest subjects were asked to rate each song (pleasant vs not pleasant on a five item scale from very unpleasant (1) to very pleasant (5)). For the musical fit context, pretest subjects were asked to evaluate each song’s fit to the “high involvement” adverts, using a five-item index adapted from MacInnis and Park (1991), with songs selected that were the most congruent (best fit) and least congruent (worst fit). In each case (classical conditioning vs musical fit), songs selected as extremes for their given treatment also had roughly equivalent scores for their opposing scenario (i.e. the pleasant and unpleasant selected for the low involvement context were similar in fit to the brand; the congruent/incongruent music selected for the high involvement context was rated as equally pleasant). All songs were familiar to the subjects. The selected advertisements and songs were then used in the main experiments.
3.1 Main experiments

The pretests identified the materials (advertising and music) used in the two studies. In the classical conditioning context (low involvement) a beer commercial was presented with either pleasant music or unpleasant music. For the musical fit experiment (high involvement), a car advertisement was presented with congruent or incongruent background music. Although the ads had been pre-tested for ‘natural’ high/low involvement levels, involvement was intentionally manipulated by personal-relevance instructions in the treatment. For the automotive advertisement, subjects were told that the relevant brand would soon launch a new model. Before the introduction, the brand was interested in consumer reactions to the brand. Subjects were asked to pay close attention to brand information contained in the commercial (a normal exposure environment) and to consider their interest in buying the brand. Low involvement subjects were told they would see a short clip from the programme “Mary: Queen of the Shops” concerning regenerating the UK high street, and that they would be asked several questions about their views on the tactics advocated by Mary after watching the segment. Subjects were told the clip contained commercials but that the products were not locally available. For the high involvement setting, the commercials were either accompanied by the congruent music selection or the incongruent one. For the low involvement setting, the accompanying music to the advert was either pleasant or unpleasant.

Following exposure to the commercial (or commercial + programme), subjects completed questions that asked about attitude to the advertisement and the brand. Manipulations checks for involvement were done by asking whether consumers paid not much (1) or very much (7) attention to the ad. In addition to a single-item five point measure of liking for the advert and for the brand, brand attributes were measured using a ten-item five-point semantic differential scale for hedonic and utilitarian (HED/UT) dimensions of attitude (Spangenberg, Voss & Crowley, 1997). The five utilitarian items were ‘usefulness’, ‘practicality’, ‘functionality’, ‘helpfulness’ and ‘necessity’. The five hedonic items ‘excitement’, ‘delightfulness’, ‘thrill’, ‘enjoyable’ and ‘fun’. Measurement analysis confirmed a two dimensional scale with high reliability for each factor (αHED = 0.86; αUT =0.90). Using a snowball sampling technique among undergraduate and postgraduate students at a UK university, 188 respondents participated in the test.

3.2 Analysis

For study 1 (low involvement, n=92), independent sample t-tests were conducted to examine the impact of music-brand congruence on attitudes and perceived attributes. An examination of the means in Table 1 shows attitudes toward the advertising and the brand were in the direction expected: adverts/brands with pleasant music were preferred to adverts with unpleasant music. Because a priori hypotheses were presented and these hypotheses make predictions that are directional in nature, one-tailed tests are used to test the relevant hypotheses. Analysis reveals significant differences in attitude to the advertisement ( t(90) = 3.344, p< .001 one tailed) and to the brand ( t(88) = 3.09, p= < 0.01 one-tailed), which supports H1a and H1b. As expected, hedonic attributes were stronger in the pleasant music context ( tHED(88) = 2.204, p= < 0.02 one-tailed; but no difference was seen for utilitarian brand attributes tUT(88) = 1.388, p= >0.10 two-tailed), supporting H1c.

<table>
<thead>
<tr>
<th></th>
<th>Pleasant music (n=44)</th>
<th>Unpleasant music (n=48)</th>
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Liking for Advert | 3.77(1.14) | 2.92 (1.30)  
Liking for Brand | 3.77(1.00) | 3.06 (1.15)  
Hedonic Brand Attributes (HED) | 3.76 (0.92) | 3.35 (0.85)  
Utilitarian Brand Attributes (UT) | 3.18 (0.88) | 2.89 (1.03)  

Table 1: Means for attitudes and attributes for LOW Involvement Ad

For the second study (n=88), independent sample t-tests were conducted to examine the impact of music-brand congruence on attitudes and perceived attributes, (mean values in Table 2). The results show significant differences between the treatments for attitude to the advert ( t(74) = 2.519, p< .01 one tailed) and attitude to the brand. ( t(86) = 1.724, p= < 0.04 one-tailed), which supports H2a and H2b. As expected, the hedonic and utilitarian brand attributes were higher for the congruent advertisement ( t_HED(86) = 1.791, p= < 0.05 one-tailed; t_UT(86) = 3.59, p= < 0.001 one-tailed), supporting H2c.

<table>
<thead>
<tr>
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<th>Congruent music (n=46)</th>
<th>Incongruent music (n=42)</th>
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<tr>
<td>Liking for Advert</td>
<td>3.67 (0.92)</td>
<td>3.07 (1.28)</td>
</tr>
<tr>
<td>Liking for Brand</td>
<td>3.59 (0.98)</td>
<td>3.21 (1.05)</td>
</tr>
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</table>
| Hedonic Brand Attributes (HED) | 3.71 (0.83) | 3.37 (0.96)  
| Utilitarian Brand Attributes (UT) | 3.35 (0.71) | 2.70 (0.94)  

Table 3: Means for attitudes and attributes for HIGH Involvement Ad

4.0 Discussion

The results suggest that for settings where an advertisement is unlikely to attract focused attention (for instance, if placed between successive commercials), or where initial audience testing is lacklustre, the choice of musical accompaniment should focus on general appeal rather than the fit with the brand. We suggest general appeal is probably best measured by general popularity in terms of radio play. Allan (2006) found that advertisements with popular music received more attention and were retained better than advertising without popular music. Our findings suggest that positive hedonic attitudes are formed from this greater attention.

However, where an ad/brand is likely to generate high involvement, the fit between brand attributes and the song are important. Our findings suggest that musical fit promotes liking for the advertisement, and influences both knowledge and emotional responses to the product, impacting the associated utilitarian and hedonic attributes associated with the product. Managers should consider the likely level of involvement for their target audience and tailor their music choice accordingly. The desired relative impact on hedonic and utilitarian attributes should be considered. If a brand wishes specifically to increase perceptions of utilitarian benefits (as opposed to hedonic benefits), the fit between music and the brand (as opposed to general ‘pleasantness’ or popularity) becomes increasingly important. Overall, advertisers should consider the listening situation, characteristics, product category, desired associations and nature of the musical stimulus when selecting music for advertising.
The current studies have a number of limitations that could be addressed by future research: classical conditioning processes and musical fit mechanisms could be considered for high and low involvement adverts respectively. The music used was easily accessible to the participants; the effects of fit when consumers are unfamiliar with the type of music could be considered. The current research did not account for familiarity with the brands or for repeated exposures to the adverts. Future research could also explore the impact of foreground vs background music.
**Bibliography:**


LAVACK, A.M., THAKOR, M.V. & BOTTAUSCI, I. 2008. Music-brand congruency in


