

MANAGING THE BRAND ART GALLERY: ART VISUALIZATION AND OVERALL EVALUATION

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ABSTRACT

This research was conducted in simulated art scenarios to explore the effects of three treatment variations of music on the visualization of art (not only its presence/absence was tested, but also its fast/slow perceived rhythm) and it employed a sample of 234 potential art consumers. Findings suggest that music is not able of enhancing the art experience. Actually, the study found empirical evidences of its negative influence on consumers' emotional, cognitive and behavioral responses.

Keywords: background music, art consumption, emotions, memories

INTRODUCTION

Music is a powerful stimulus, able to shape the affective, cognitive and behavioral responses of consumers (Jain & Bagdare, 2011). The congruence between an ambient music stimulus and a specific product category, brand or experience affects consumers' decisions (e.g., Kellaris, Cox & Cox, 1993; MacInnis & Park, 1991; Chebat, Chebat, & Vaillant, 2001; Mattila & Wirtz, 2001; Jain & Bagdare, 2011). Music increases cognition mainly when other cognitive cues are either absent or significantly reduced (e.g., Chebat et al., 2001). Nevertheless, the consumer experience in the artistic industry has unique characteristics and so it is not fully comparable with retailing industry (Joy & Sherry, 2003; Uusitalo et al., 2012). In art exhibitions, consumer experience is strongly marked by the aesthetic stimulus perceived beyond the mere rational appraisal (Bourgeon-Renault, 2000; Cirrincione et al., 2014). Music presence affects the individuals' emotional states and this, in turn, influences their perceptions of art. Yet, the way the presence or the absence of music affects emotions, memory and behavioral intentions in aesthetic environments such as art galleries is not properly understood.

THEORETICAL BACKGROUND

Aesthetic Experience and Art Exhibitions

Holbrook and Hirschman (1982) extended the traditional information processing model of consumer behavior to incorporate a hedonic component of consumption. They consider that a consumption experience is an individual occurrence which results of an interaction with the products/services consumed. Pine and Gilmore (1998) claim that an experience is more than producing a good or providing a service, or simply wrapping experiences around the existent goods or services, it deliberately

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designs events or situations to engage individual customers in a way that creates a memorable event. When offering experiences marketers and providers are “concerned with staging the experience – making it memorable and personal” (Arnould, Price, & Zinkhan, 2002, p. 423). Hence, experiences produce emotions and also transformations in individuals by immersing them into the situation.

Brakus, Schmitt, and Zarantonello (2009, p. 52) conceptualize brand experience as “subjective, internal consumer responses (sensations, feelings, and cognitions) and behavioral responses evoked by brand-related stimuli”, presenting four dimensions: sensory, affective, intellectual, and behavioral. The sense experience includes aesthetics and sensory qualities. Affective experiences induce feelings and sentiments. Intellectual experiences result from knowledge (educational), perceiving (through the senses), feeling, and doing, and stimulate curiosity. Behavioral experiences are related to action, meaning to engage in physical actions and behaviors, which result in bodily experiences.

Artwork, films, music or fine arts are regarded as aesthetic and emotional consumption and experiences (Holbrook & Hirschman, 1982; Carù & Cova, 2005; Bourgeon-Renault, Urbain, Petr, Le Gall-Elly, & Gombault, 2006). Aesthetic experience it is about the appreciation of the aesthetic properties of the object (Goldman 2006). Artists want viewers to engage in their artwork and attempt to evoke emotions, senses and reactions. Thus, art visualization is a psychological process involving the attention to the object and the suppression of everyday concerns (Cupchik & Winston, 1996), which involves emotions, senses and intellectual, but not necessarily engage in physical actions and behaviors.

Background Music and Art Evaluation and Appraisal

Emotions are embedded within the art of consumption experience (Joy & Sherry, 2003; Silvia, 2005), understood as a result of the interaction between cognitive appraisal and body senses and feelings (Cirrincione et al., 2014). Cupchik et al. (2009) allude that aesthetic experiences result from the complex interaction between *both* top-down (higher-order cognition that draws from one’s beliefs, concepts, and past experiences) emotional orientations and bottom-up perceptual processes (perceptual features of the stimuli).

Emotions in art can be explained by Berlyne’s theory (1971), whereby hedonic effects of structural features of the artworks (stimulus factors complexity, uncertainty and novelty) trigger high arousal states in individuals, which will influence their perceptions and appraisals. Stimulus features (or collative variables) high in complexity, novelty, uncertainty, and conflict can increase arousal, although they will not necessarily do so.

In Berlyne’s view, the hedonic artistic qualities of stimuli are mainly associated with changes in the activation state (arousal state). Nevertheless, appraisal theory (Roseman & Evdokas, 2004) regards emotions as the result of a cognitive process of appraisal. Therefore, a painting or a sculpture give the stimulus to be cognitively appraised and emotions are the consequences. People deal with emotions in terms of physiological and cognitive reactions. Emotions come from subjective appraisals of events (Roseman & Evdokas, 2004) and so different events or situations can create the same emotions if the person appraises each one of them similarly. In art context,

Silvia (2005) shows that the appraisal theory explains people's behavior better than Berlyne's theory.

The third perspective comes from environmental psychology (Mehrabian & Russel, 1974) and was introduced to retailing settings by Donovan and Rossiter (1982). The S-O-R framework, i.e., stimuli, organism and response, is transferred as atmosphere, emotions and approach/avoidance behaviors. Atmospheric cues are mainly social (people in the store), design (visual cues of layout, clutter, cleanliness, and color) and ambient (non-visual cues, including smells and sounds) factors (Eroglu et al., 2001, 2003), which act as stimuli influencing people's emotional states (e.g., pleasure or arousal). Emotions in turn result in approach or avoidance behaviors (psychological reactions such as attitudes and/or behavioral reactions). Sherman et al. (1997) suggest several behavioral responses that represent approach or avoidance: consumers' duration of visit (prolonged or transitory), the number of products purchased or the amount of money spent.

Eskine, Kacinik and Prinz (2012) developed an experiment designed to disentangle the effects of emotion and physiological arousal in order to determine their role in aesthetic experiences. The findings reveal that the same paintings were evaluated more positively after the visualization of a scarce video (a negative stimulus) than after a happy video (positive stimulus). This may be explained in terms of the adaptive significance of negative stimuli, that is, after visualize something negative people tend to evaluate (judge) the second stimulus (e.g., a painting) more positively. Therefore, the auditory (background music) and visual stimulus (artwork) can compete in the consumers' mind and induce unfavorable artwork (paintings) evaluations.

H1: Artworks will be evaluated more positively when viewed without background music than with background music.

Background Music and Art Memory

Music stimulates cognitive processes through arousal, cue congruence, memories, familiarity and meaning (Kellaris et al., 1993; MacInnis & Park, 1991; Chebat, et al., 2001). Actually, several researchers have analyzed the effects of music on advertisement effectiveness (eg. Kellaris et al., 1993; Zhu & Meyers-Levy, 2005; Meyers-Levy & Zhu, 2010). Kellaris et al. (1993) reveal that when music is congruent with the advertisement message, concentration to music improves cognitive stimulation (for example, brand recall or recognition). In contrast, when congruency is low, attention to music reduces the cognitive stimulation. Consumers can build two types of meanings from music (Zhu & Meyers-Levy, 2005; Meyers-Levy & Zhu, 2010). Embodied meaning (or the hedonic value or favorableness) should require relatively few cognitive resources in evaluating if music is pleasant or not. Referential meaning should require more cognitive resources because it involves the associations between the music and the extra-musical ambient.

Stimuli in multiple modalities (e.g., visual, olfactory, auditory) may interrupt attentional process (Cauberghe & De Pelsmacker, 2010; Ryu et al., 2007). According to Choi, Lee and Li (2014) music may distract from advertising processing (in video game context) because sound often intrudes on perceptions and impairs cognitive performance. Irrelevant sound may causes greater attentional selectivity, arousal might increase and disrupt brand name processing. However, unfamiliar brands attract

more attention, which may nulls the sensory distraction (Banbury et al., 2001; Choi et al., 2014).

In the case of background music within an art exhibition, visitors may drive their attention to the music rather than the artworks and so calm background music (less arousing music), may be less cognitively prominent and therefore it may not interrupt attentional process from artwork, potentially helping to improve the memorization of artwork.

H2: Artworks will be remembered better after having been viewed with a less arousing or neutral background music than with a high arousing background music.

METHODOLOGY

Participants were invited to a virtual art gallery in a laboratory. Two artists well known in Portugal and abroad were selected and their paintings were exhibited simulating a real context of an art gallery. The artistic styles of the two painters, Vieira da Silva (VS) and Paula Rego (PR), differ strongly (see figure 1). Vieira da Silva (1908-1992) was born in Lisbon and died in Paris. She lived in Portugal, Brazil and France, but most of the time in France. Her style melds Cubism, Futurism, and Constructivism, with jagged shapes fracturing the picture plane. Paula Rego was born in Lisbon (1935) and lives in the United Kingdom (London). Her paintings combine seemingly disparate themes and traditions, bringing together the comic and the grotesque and the gap between the abstract and the figurative.

Initially, thirty painting from each artist were selected and organized to be presented to the audience. The paintings were exhibited in an unique, randomly intermixed order. Three groups of participants visualized the paintings: the first group with no background music, the second group with a "stirred" or more arousing music, and the third with a "calm" or less arousing music.

Pretest: Congruence Between Music Pieces and Painting Style

Based on previous research relating to appropriateness of music to a specific environment (Areni & Kim, 1993), instrumental music was chosen as the most appropriate for this study mainly because individuals' responses to music are likely to be affected by the choice of words in the lyrics or the associations that are made to it (Oakes, 2000).

The procedure adopted consisted of playing a sequence of six musical compositions excerpts (about one minute each), chosen from an initial list of 12 songs especially for their possible adaptation to the environment of an art exhibition and to the art of Paula Rego and Vieira da Silva (selected based on six experts (merchant of art owners of art galleries in Lisbon and Cascais) who considered those songs (or better musical excerpts) susceptible of being used in the environment of an art exhibition. Musical excerpts were played in the laboratory room, using an average audio system, in order to be evenly distributed throughout the room. Participants were a group of 35 individuals (from the same population as the experiment). After listening to each composition excerpt participants were invited to fulfill a questionnaire adapted from Cameron et al. (2003) to measure its pleasantness, arousal, familiarity, attractiveness, emotional tone and likeability, using a 5-point scale.

Then, participants associated each composition excerpt to the qualitative attributes that best translated their perceptions about the music (North & Hargreaves, 1998), from the following possible: slow, calm, relaxing, peaceful, sad, joyful, stirred, strong, exciting, lively, and neutral. Finally, participants were asked to observe two series of images (paintings of the two artists in the study) and to evaluate the congruency of each piece of music with the artistic style (using a 5-point scale).

Sunny (by Jazeboo) and Starlight Memories (by Dennis Kuo) were the two music pieces selected from the pretest. Sunny was considered simultaneously congruent with the work of VS and incongruent with the work of PR (for 70% and 88% of the sample, respectively), and Starlight Memories was considered congruent with the work of PR and incongruent with the work of VS (for 88% and 74% of the sample, respectively). Sunny was described by most participants as "stirred" or more arousing and Starlight Memories as "calm" or less arousing.

Participants and Procedure

The questionnaire was elaborated in two languages, Portuguese and English, and the back translation technique was used to ensure that both questionnaires communicated the same information (Sekaran, 1983). A pilot sample test with ten individuals from the same population as the experiment was conducted to ensure that the wording of the questionnaire was clear and only a few adjustments were made.

Two hundred and thirty-four individuals ($M = 47$, $SD = 24.1$; 18-85 years) recruited from undergraduate and graduate (master) programs of two public universities and two senior universities in Lisbon were asked to participate in the study and randomly assigned to one of three groups: no background music (66, 30 young and 33 senior students), Sunny – stirred or more arousing music (85, 36 young and 49 senior students) and Starlight Memories – calm or less arousing music (83, 39 young and 44 senior students). Initially we had 70 participants to the more neutral background but four did not want to finish the experiment. All participants were volunteers and none of them received any payment or gift in exchange for their participation. Young participants were mostly students at two major public universities in Lisbon, but some have already other professional activity (master students). Senior participants come from four senior universities in Lisbon (teaching institutes where retired people meet together to learn more about a large range of knowledge areas, such as history, language, music or geography) and had previously embraced several different professions, such as teachers, bank clerks, officials.

Participants viewed and evaluated 16 paintings – eight VS paintings randomly intermixed with eight PR paintings (time for visualization 60 seconds). Participants were instructed as follows: "Imagine yourself in an art gallery. Think of the environment around you and how you might feel if you saw these paintings in a real art gallery." For each painting they rated the level of arousal (from "calming" to "exciting") and valence (from "negative" to "positive") of the painting, their liking of the painting (from "not at all" to "very much") and their interest in being owners of the artworks (from "not at all" to "very much"), in that order, using 5-point scales. They then advance to the next painting.

The procedure used for the memory test phase was based on Taylor, Buratto, and Henson (2013). That is, participants viewed and evaluated ~~16~~ 32 paintings (16

previously seen and 16 new) by the same artists. The paintings were also presented in a randomly intermixed order and each painting was visualized for 60 seconds. Participants were instructed as follows: “We will now assess your ability to remember the paintings you just saw. We will show you a series of 16 paintings, one at a time. Some will be paintings that you saw in the first part of the study, but others will be completely new. Your task is to identify which ones you saw in the first part of the study and which ones you did not see. You will have two answer options: “remember” (if you remember the appearance of the painting, what it made you think or feel, etc.) and “new” (if you did not see the painting in the first part of the study).”

After evaluating the paintings, participants were asked to rate their overall impression of the experience (on a 6-point scale, from "very negative" to "very positive"). This question was applied to measure their cognitive response. They were also invited to identify the artists, in case they recognized them, and describe their styles ("completely opposite", "with traits in common" and "very similar").

In the two scenarios where there was music included, participants were asked whether or not they had noticed the presence of background music (based on three response options, "did not notice", "I've noticed it, but it made me felt uncomfortable" and "I've noticed it and I thought it was nice"). Finally, they gave their opinion about the music, on a 6-point scale (from "did not liked it" to "liked a lot").

Noise sensitivity was measured using the short form of the Individual Noise Sensitivity Scale (NSS-SF) (Benfield et al., 2014). Participants indicated their level of agreement with each of the 5 items of the NSS-SF, using a 6-point scale. The higher the score obtained, the greater the sensitivity shown by the participant (Weinstein, 1978).

RESULTS

Considering the control factors of the experiment, it was established that the average age was not significantly different between the three sample groups. Also, independent samples *t* test confirmed that the two groups treated with background music did not differ in terms of their noise sensitivity (Cronbach's $\alpha = 0.66$). Although the majority of the participants noticed the presence of background music in both scenarios, they tended to consider Sunny to have a neutral (53%) or a negative (24%) effect and Starlight Memories to have a neutral (47%) or a positive (43%) effect during the experiment. For all groups, the two artist were regarded as having different styles (see table 1). A χ^2 test confirmed that the three groups did not differ in their knowledge of the two artists either.

Regarding the art evaluation, evidences show significant differences across the three scenarios. The group in the no music condition presented ratings slightly superior than the groups with background music. Therefore, H1 is supported.

Following standard procedures employed by Taylor et al. (2013) for the memory test, memory scores were calculated by subtracting the incorrect “remember” responses to the non-presented lure items (paintings) from the correct “remember” responses to the presented items (paintings). These calculations enabled the removal of the participant's tendency to guess “remember” to items that were in fact new.

The results of the memory test show that paintings were significantly more likely to be remembered when viewed with background music than without music, particularly in the case of less arousing music (Starlight Memories). This result supports H2. Finally, the overall experience was considered satisfactory, with the average rating being close to the neutral value of 3 /see table 2).

CONCLUSIONS AND IMPLICATIONS

Prior research have highlighted the importance of the presence of pleasant music in a store's environment to enhance behaviors intentions and positively impact store image (Eroglu, Machleit, & Chebat, 2005; Morin, Dubé, & Chebat, 2007; Hul, Dubé, & Chebat, 1997). Yet, in the case of aesthetic experiences, particularly art exhibitions, the presence of environmental stimuli may negatively interfere in art appraisal and affect its evaluation unfavorably. Ambient stimuli may act as a distraction from the important element: the artworks. Eskine et al. (2012) found that after experiencing a negative stimulus, people tend to judge a second stimulus (e.g., a painting) more positively.

Cirrincone et al. (2014) revealed in their study that individuals tend to evaluate more positively artworks that are viewed with a neutral ambient scent than with a pleasant scent. In the current study, participants tend to report better evaluations in the scenario without background music. Even so, when considering the effect of background music in the art visualization, music seems to play an important role, as it may enhance the memorization process. This fact could be particularly interesting to managers and owners of art gallery promoting new or not well-known artists.

Although this study has been conducted carefully, with participants of a large age range being invited to experience a virtual aesthetic experience, it would be interesting to go further in investigating the role of background music in real art galleries. Additionally, only the effect of background music were tested, so more studies should be conducted to analyze other human senses and their interactions, in order to better understand the impact of ambient stimuli on the perception of artwork. Third, new further research should focus on different varieties of music tempo aside from the ones tested, in order to understand which tempo fits better with different artwork styles, helping its memorization without compromising the painting evaluation.

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TABLES AND FIGURES

Figure 1. Examples of paintings by Vieira da Silva (left) and Paula Rego (right)

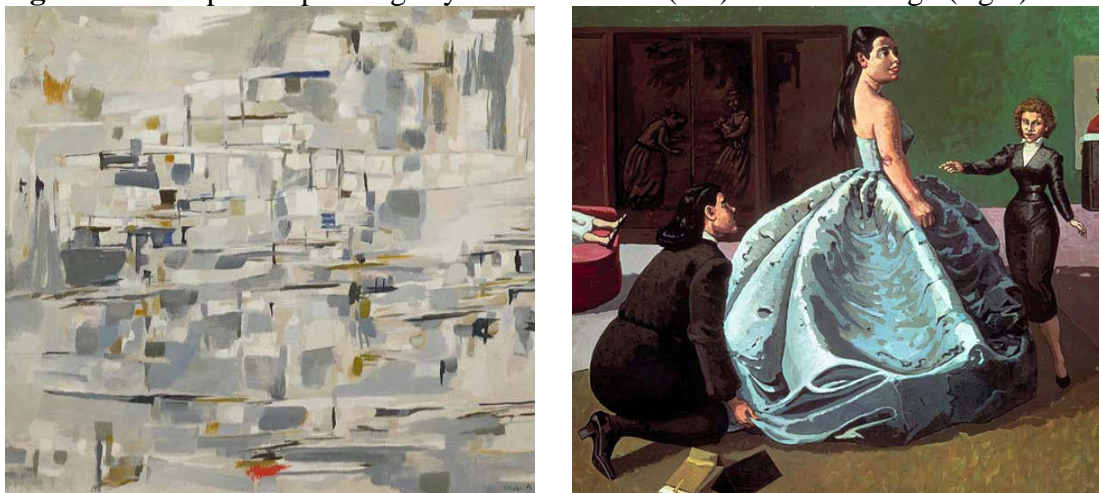


Table 1. Control factors, art evaluation, art memory and experience evaluation across different background musical scenarios

Control Factors	Without Music		Music Sunny (Mex)		Music Starlight Memories (Calm)		F (df)	p
	M	SD	M	SD	M	SD		
Age (years)	45,8	25,077	48,9	23,811	46,6	23,802	0,340 (2, 226)	0,712
			M	SD	M	SD	t (df)	p
Noise Sensitivity	–	–	20,2	4,864	19,8	5,236	0,552 (164)	0,582
			%	%	%		X ² (df)	p
Knowledge of artists		59,1		51,8		37,3	11,203 (6)	0,082
Perception artists styles		65,2		67,9		80,2	5,680 (4)	0,224
Perception music background		–		94,1		97,5	5,648 (2)	0,059
Art Evaluation Emotion	M	SD	M	SD	M	SD	F (df)	p
Arousal	2,9	0,727	2,8	0,719	2,6	0,628	3,242 (2, 231)	0,041
Valence	2,8	0,674	2,6	0,631	2,4	0,603	3,864 (2, 231)	0,022
Liking	2,8	0,679	2,7	0,649	2,5	0,626	4,709 (2, 231)	0,010
	M	SD	M	SD	M	SD	X ² (df)	p
Art Memory	68,8	25,441	74,7	21,692	78,5	20,825	6,7420 (2)	0,034
Overall Experience Evaluation	M	SD	M	SD	M	SD	F (df)	p
	3,6	0,994	3,4	1,135	3,3	1,073	1,322 (2, 227)	0,269

Note: Noise sensitivity was measured using the NSS-SF scale, where higher scores indicate greater sensitivity. Knowledge of artists is the percentage of participants who correctly identified one or both of the artists. Arousal, valence, and liking were rated on 5-point scale, Overall experience was rated on 6-point scale. Test F analyzed using ANOVA.

Table 2. Multiple comparisons Tukey's HSD test for art evaluation emotion

Art evaluation emotion			Mean difference	SE	<i>p</i>	Significant at
Arousal	Without music	Music Sunny	0.13	0.113	0.476	ns
		Music Starlight Memories	0.29	0.114	0.032	<i>p</i> < 0.05
	Music Sunny	Music Starlight Memories	0.16	0.116	0.310	ns
Valence	Without music	Music Sunny	0.12	0.104	0.463	ns
		Music Starlight Memories	0.29	0.104	0.018	<i>p</i> < 0.05
	Music Sunny	Music Starlight Memories	0.16	0.098	0.217	ns
Liking	Without music	Music Sunny	0.17	0.106	0.240	ns
		Music Starlight Memories	0.33*	0.107	0.007	<i>p</i> < 0.01
	Music Sunny	Music Starlight Memories	0.16	0.100	0.267	ns

SE – Standard Error.

The Tukey's HSD test also confirm that the average scores of arousal, valence and liking in the scenario with no music are different than in the scenario with Starlight Memories as background music.