Happy feelings: examining music in the service environment

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Abstract

Purpose – The purpose of this paper is to examine the psychological influence that the presence of music has on consumers’ evaluations of the service environment. Specifically, it investigates how emotion regulation processes and the impact of emotions/mood are linked to consumers’ evaluation of service and product quality.

Design/methodology/approach – An exploratory study was conducted using industry professionals in order to garner insight about the value of music and its benefits in the service environment. A field experiment was then conducted to test hypotheses.

Findings – Industry professionals offer implicit theories about the value of music. Specifically, they propose that music can be used to help customers regulate emotions and improve mood, enhance the customer experience and help in attracting new consumer segments. Results from the field experiment found that those exposed to music were likely to improve mood, express more favorable evaluations of the service and product quality of the establishment, as well as exhibit stronger intentions to continue to patronize the establishment.

Practical implications – Using live music in the service environment can be beneficial to organizations by improving customers’ emotional/psychological status as well as their evaluation of the consumption experience.

Originality/value – This research contributes to the existing literature by demonstrating how emotion regulation processes and the impact of emotions/mood are linked to consumers’ evaluation of service and product quality. Also, support for mood congruency judgment is found. Participants in the field study who had been exposed to music indicated that they made efforts to improve their mood and subsequently had more favorable judgments of service and product quality.

Keywords Music, Emotion regulation, Mood congruency, Service environment

Paper type Research paper

Music can be powerfully evocative. For service-based businesses, where customer evaluations of the service encounter can be key in establishing and maintaining competitive advantage (Hartline et al., 2000), music can positively influence customers’ experiences. Music has been used for its benefits across the service sector. For example, music can be
Music in the service environment

Academic research has demonstrated that ambient music can be an important tool for managing customer behavior. Studies have confirmed that music provides pleasure and arouses consumers (Bruner, 1990; Garlin and Owen, 2006; Meng and Choi, 2017; Ryu and Jang, 2007; Turley and Milliman, 2000). Research has also shown that music tempo influences the behaviors of consumers, whereas increasing the tempo of atmospheric music causes diners to eat more quickly (Milliman, 1986) and shoppers to walk through a store at a faster pace (Milliman, 1982).

Knoeferle et al. (2017) found that fast music strongly increased spending under high-density/customer crowding conditions. Customers purchased more items despite the...
negative effects of high customer density. Moreover, Bailey and Areni (2006) demonstrated that waiting time was perceived as shorter when familiar as opposed to unfamiliar music was played. Hui et al. (1997) found that music led to approach behavior toward a service organization and music with positive valence triggered more positive emotional responses toward waiting. Similarly, Vida et al. (2007) found that music which is perceived to fit store image has a positive effect on length of shopping time, which indirectly influences consumers’ expenditure.

In sum, the effects of using background music to influence consumer behavior in different settings and situations have been widely recognized in service and retail contexts (Baker et al., 1992; Grewal et al., 2003). Music impacts arousal and pleasure (Bitner, 1992; Tansik and Routheaux, 1999), financial returns (North et al., 2000), attitudes and perception (Chebat et al., 1993; Grewal et al., 2003), temporal effects (Holbrook and Gardner, 1993) and behavioral variables (Garlin and Owen, 2006; Andersson et al., 2012).

**Music and emotions**

*Emotion regulation*

The ability of music to improve well-being and to help individuals cope with life stressors has been demonstrated (Bradt et al., 2011; MacDonald et al., 2012; Rickard and McFerran, 2012). Music has also been used for emotion regulation purposes (Chamorro-Premuzic and Furnham, 2007; North et al., 2000). Emotion regulation refers to the processes by which individuals influence which emotions they have, when they have them and how they experience and express emotions (Gross, 1998). Emotion regulatory processes may be automatic or controlled, conscious or unconscious, and may have their effects at one or more points in the emotion generative process. Research has established that the use of music for emotion regulation purposes is associated with the tendency to use positive and adaptive emotion regulation strategies (Chin and Rickard, 2012; Saarikallio, 2008). Based on support and evidence from the behavioral literatures, it is predicted that exposure to music in a service context will have similar impact. When music is present in the service environment, it will have a positive influence on individuals and activate emotion regulation processes. Thus, the following is predicted:

**H1.** People exposed to music will make efforts to try to improve their mood more so than those not exposed to music.

*Mood congruency*

Since music can be effective at regulating emotions and mood, the mood that individuals adopt can affect their evaluation of stimuli in their environment. The associative network theory (Bower, 1981) posits that emotions form nodes that are organized into memory networks containing information that shares the same valence. When an emotion node is activated by emotional information in the environment, congruent thoughts in memory are activated and become more accessible. Consequently, mood congruency judgments may manifest. Mood congruency judgment refers to a match in affective content between a person’s mood and his/her thoughts (Mayer et al., 1992). According to the mood congruency judgment, events are more likely to be evaluated under conditions of mood congruence. For example, a happy person will expect sunnier weather for a picnic than a sad person because sunny weather is congruent with the happy mood (Bower, 1981). Mood-congruent judgment may also influence additional types of judgments, thereby increasing the salience of mood-congruent ideas.

In a service environment where music is being played, individuals may exhibit more positive mood, given its ability to help in emotion regulation processes. As a result, people may ascribe positive attributes to the stimuli with which they come into contact.
Specifically, they may evaluate service quality more positively. Research has found that people who listened to music, especially music of a positive valence, and then were exposed to various facial images, perceived the images that they viewed to be happier (Logeswaran and Bhattacharya, 2009). Similarly, customers often favorably judge the service of service providers whom they perceive to be happy (Goldenberg, 2013; Hwang and Ok, 2013; Magnini and Thelem, 2008). Hence, people who are exposed to music in the service environment and are in a good mood as a result, may think they are being attended to by service providers who are reliable and empathetic. In addition, according to mood congruency tendencies, these positive evaluations may also extend to the product offerings – where individuals assess the quality of products more favorably. If both service quality and product quality are perceived positively, individuals might also express intentions to continue to patronize an establishment. Consequently, the following is proposed:

H2. People exposed to music will perceive that elements of service quality are better than those not exposed to music.

H3. People exposed to music will perceive that product quality is better than those not exposed to music.

H4. People exposed to music will express greater interest in patronizing an establishment than those not exposed to music.

Exploratory study
In order to test hypotheses, two investigations were conducted. First, an exploratory assessment (Brakus et al., 2009; Kemp et al., 2013) was performed to determine what implicit theories managers in the hospitality, attractions and restaurant industries have about the use of music in the service environment. Participants were asked whether they use music at their respective establishments as an atmospheric element. Second, respondents were asked whether they thought there was value in using music in the service environment.

A convenience sampling approach was enlisted as questionnaires were distributed to 36 industry professionals at a training seminar for the hospitality industry in the southern part of the USA. In total, 34 usable questionnaires were returned. Participants represented hotels, restaurants, and attraction and tourism companies. They had tenures at their companies, which ranged from 2 months to 30 years (see Table I; an alias was assigned to each participant). In total, 66 percent were female, and participants ranged in age from 22 to 59 (M = 34; SD 9.3). Open-ended questions were asked on the survey. The participants' responses were examined and coded by the authors of this research. Commonly accepted coding protocol was employed (i.e. Auerbach and Silverstein, 2003; Spiggle, 1994). In total, 15 of the 34 professionals indicated that they used background music in their establishments. The majority of the participants felt that music had value in the service environment. A common theme which emerged was that music helped engender positive emotional experiences. The positive effect music had on emotions and mood was recognized for both customers and the staff:

Guests that come in are cheery and in better spirits when music is playing. Music helps in improving mood […]. (Brenda, Hotel)

People usually look happier when live music is playing. (Sue, Hotel)

Music in the workplace also helps to improve the mood of employees. (Carol, Travel)

When you are having a rough day, and then you hear the music, it makes the day better. (Amy, Hotel)
Just as academic research has corroborated the positive effects of using background music in service and retail contexts (Baker et al., 1992; Grewal et al., 2003), there was also consensus among participants that music is an important atmospheric element. Many of the participants purported that music enhances the service setting as well as the consumption experience:

It adds to the overall customer experience. We are here to make sure the guests have a good time. It gets the guests excited. (Sarah, Operations)

Music creates a positive environment and stimulates the mind. (Jane, Transportation/Dispatch)

Others commented about how music can be useful in attracting new customers and potentially different market segments. This could have special implications as firms within the hospitality industry look for new ways to appeal to younger consumer segments (McIntyre, 2015):

Providing both recorded and live music helps with keeping guests in our venue. (Jack, Hotel)

Music helps us attract another crowd and potential new customers to our venue. (Tony, Travel)

Findings from the exploratory research conducted uncover managers’ insights and thoughts about the use of music in the service environment. Managers believe that music

| Name     | Gender | Age | Industry               | Tenure with current company |
|----------|--------|-----|------------------------|----------------------------|
| Brenda   | Female | 35  | Hotel                  | 5 years                    |
| Sue      | Female | 27  | Hotel                  | 1 year                     |
| Carol    | Female | 35  | Travel                 | 2.5 years                  |
| Amy      | Female | 32  | Hotel                  | 5.5 years                  |
| Sarah    | Female | 29  | Operations             | 5 years                    |
| Jane     | Female | 23  | Transportation/dispatch | 4.5 years                  |
| Jack     | Male   | 41  | Hotel                  | 11 months                  |
| Tony     | –      | –   | Travel                 | 2 months                   |
| Michael  | Male   | 57  | Travel                 | 5.7 years                  |
| James    | Male   | 59  | Hotel                  | 30 years                   |
| Karen    | Female | 47  | Travel                 | 12 years                   |
| Teressa  | Female | 36  | Travel                 | 7.4 years                  |
| Rebecca  | Female | 40  | Hotel                  | 3 years                    |
| Amanda   | Female | 42  | Hotel                  | 4 years                    |
| Emily    | Female | 45  | Hotel                  | 7 years                    |
| Olivia   | Female | 30  | Hotel                  | 10 years                   |
| Zakary   | Male   | 28  | Hotel                  | 1.2 years                  |
| Sophia   | Female | 29  | Culinary               | 1.5 years                  |
| Emma     | Female | –   | Hotel                  | 4 years                    |
| Madison  | Female | 25  | Hotel                  | 2.5 years                  |
| Charlotte| Female | 27  | Hotel                  | 7 months                   |
| John     | Male   | 37  | Hotel                  | 17 years                   |
| Caroline | Female | 23  | Hotel                  | 1 years                    |
| Erica    | Female | 26  | Hotel                  | 1.8 years                  |
| Nathan   | Male   | 32  | Hotel                  | 1.5 years                  |
| Daniel   | Male   | 31  | Hotel                  | 1.5 years                  |
| Charles  | Male   | 25  | Hotel                  | 3 months                   |
| Mary     | Female | 22  | Museum                 | 3 months                   |
| Richard  | Male   | 31  | Travel                 | 5 years                    |
| Jennifer | Female | 24  | Tour operation         | 2.5 years                  |
| Jessica  | Female | 38  | Culinary               | 16 years                   |
| Joseph   | Male   | 41  | Hotel                  | 2 months                   |
| Martin   | –      | –   | Hotel                  | 3 months                   |
| David    | Male   | 35  | Hotel                  | 2 years                    |

Table I: Demographic Information
can be a powerful agent in helping to regulate emotions and improving the mood of customers and employees. Moreover, music also enhances the customer experience. Next, a field experiment was performed to test the hypotheses put forth in this research.

Main study
Overview and procedure
To test the proposed hypotheses, a single-factor (live music/no music) between-subjects design was conducted in an actual restaurant setting. Participants dined in a cafeteria at a public university (n = 82) in the southern part of the USA. Participants were chosen using a convenience sampling methodology; 51 percent were male and ranged in age from 18 to 40 (M = 21; SD = 3.54) years. In total, 39 percent of participants were Caucasian/White, 35 percent were African American, 6 percent were Asian American, 6 percent were Hispanic/Latino, 1 percent was Native American, 6 percent were International and 7 percent indicated “other.” Participants were both nonstudents and students at the university.

Dependent measures
One group was exposed to live music, a solo guitarist, during their dining experience and the other group (the control group) was not exposed to any music during their dining experience. The solo guitarist played music from various genres, including pop, jazz and light classical. Each group dined on the same day of the week and was offered the same food menu. The servers for each dining experience were the same. After dining, participants completed a (paper) survey. In the survey instrument, they were asked the degree to which they had made efforts to regulate their emotions, “Indicate the degree to which you tried to improve your mood.” This was measured using a seven-point Likert scale. In addition, participants rated the quality of the service rendered on reliability and empathy dimensions (adapted from Kim et al., 2009), “Servicers provided prompt and quick service, and “Servers seemed pleasant while delivering service.” These two dimensions were selected because reliability has been deemed one of the most important elements of service quality (Knutson et al., 1990; Madangolu, 2004; Guesalaga and Pitta, 2014) and empathy assesses staff-related behaviors and attitudes. The quality of food was also rated. Diners were asked to, “Describe the quality of the food received, which was anchored by ‘low quality/high quality’ on a 7-point scale” (Keller and Aaker, 1992). Repeat purchase behavior was also assessed (Chaudhuri and Holbrook, 2001), “I plan to dine at [this establishment] on a regular basis.” This item was measured using a seven-point Likert scale.

Results
As a manipulation check, participants were asked to what extent they noticed music playing in the establishment (measured on a seven-point Likert scale). Participants in the live music condition indicated that they noticed music (M = 5.64) more than those in the no music or control condition (M = 4.17; F (1, 80) = 4.14, p < 0.05) (see Figure 1).

H1 addressed the influence music had on aiding in the emotion regulation process. It predicted that individuals in the music condition would be more likely to make efforts to improve mood. Findings indicated that individuals in the music condition (M = 4.85) were more likely to make attempts to improve mood than those in the control condition (M = 4.09; F (1, 78) = 4.04, p < 0.05)[1]. Therefore, H1 was supported.

H2 predicted that participants in the music condition would perceive service quality more favorably than those in the control condition. Participants in the music condition (M = 5.46) perceived service quality in the context of reliability to be better than those in the control condition (M = 4.67; F (1, 78) = 5.64, p < 0.05). Similarly, the display of empathy
from service providers was rated much higher in the music condition \( (M = 5.4) \) than by participants in the control condition \( (M = 4.67; F(1, 78) = 5.05, p < 0.05) \).

Next, \( H3 \) proposed that participants in the music condition would perceive the quality of food (product) quality more favorably than those in the control condition. \( H3 \) was supported. Those exposed to music \( (M = 4.80) \) perceived product quality to be better than those not exposed to music \( (M = 4.17; F(1, 78) = 3.92, p < 0.05) \).

Finally, \( H4 \) predicted that using music would help to foster future patronage of the establishment. Results reveal that those in the music condition expressed higher intentions to continue to patronize the establishment \( (M = 5.35) \) than those in the control condition \( (M = 4.30; F(1, 78) = 11.09, p < 0.01) \). Thus, \( H4 \) was supported.

**Discussion**

Findings from this research demonstrate that music is integral to adding value to the customer experience. In the pilot study, industry professionals expressed implicit theories about the value of music. Music can be used to help customers regulate emotions and improve mood, enhance the customer experience as well as help in attracting new consumer segments. Results from the field experiment found that those exposed to music were likely to improve mood, express more favorable evaluations of the service and product quality of the establishment as well as exhibit stronger intentions to continue to patronize the establishment.

Conclusions drawn from this research are consistent with conceptual postulates about the ability of music to help in the regulation of emotions. Emotion regulation refers to the processes by which individuals influence which emotions they have, when they have them, and how they experience and express these emotions (Gross, 1998). The effects of music in improving well-being and helping individuals cope with life stressors has been demonstrated (MacDonald et al., 2012; Rickard and McFerran, 2012). A recurring theme among industry professionals in this research was that using music in their facilities helped to improve the mood of customers. This was further corroborated in the field study. Participants exposed to music were more likely to make attempts to improve their mood than those who were not exposed to music.

Results from this research also support mood congruency judgment. According to mood congruency judgment, a match occurs between affective content and a person’s mood and his/her thoughts (Bower, 1981; Mayer et al., 1992). Consequently, a person may judge environmental stimuli in a manner which is consistent with the mood he/she may be experiencing. Participants in the field study who had been exposed to music indicated that
they made effort to improve their mood, and subsequently, had more favorable judgments of service and product quality as well as expressed intentions to engage in continued patronage. This study as well as those which have preceded it speaks to the benefits of music in the service environment. Establishments are turning to music, especially live music in order to bring life to their facilities and create a unique experience for their customers. However, establishments should be prepared to handle the performance, the audience and the musicians. For example, having adequate floor space for the band, proper lighting and equipment, a music license, insurance and an adequate budget are all important considerations.

This research provides additional insight regarding the value of music. However, future studies should further explore how music can be used in service contexts. In this study, a variety of music was played during the field experiment. This is consistent with some studies that have examined the effect of music on consumption behavior (Areni and Kim, 1993; Milliman, 1986). However, research also suggests that music genre, preference and familiarity may influence an individual’s attitude and behaviors (Baker et al., 1994; Yalch and Spangenberg, 1993). Future studies might explore the effects of music genre on customer behavior. Additionally, future research might juxtapose or compare live music against recorded music for its efficacy. Finally, further avenues of exploration might include examining the effect of music valence (positive vs negative/happy vs sad) on consumers to determine if there are differential effects on perceptions of service and product quality. Even though the main study in this research included both nonstudents and students, it was completed on a college campus at a single institution. Future studies might be conducted in multiple locations with diverse business offerings (i.e. hotels, restaurants and attraction sites).

Note
1. Whether participants possessed a meal plan/ticket at the cafeteria was used as a covariate in all the analysis.

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