INVESTIGATING THE IMPACT OF SENSORY MARKETING ON BUYING BEHAVIOR IN THE RETAIL CONTEXT: EGYPT CASE

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Abstract -
Given the continuous similarities of products and services, it is crucial for companies to distinguish themselves from their competitors. Particularly in the service industry, marketing researchers and practitioners have a great interest in successfully managing services in order to maximize the consumers' satisfaction and loyalty. One of the most recent technique is the sensory marketing technique that aims to fascinate the consumers by using their senses to influence their behavior. Despite the importance of this technique, there is a knowledge gap regarding the impact of sensory marketing using the five senses "sight, smell, sound, taste and touch" on consumer buying behavior. Therefore, the aim of this research is to investigate the impact of sensory marketing on consumer buying behavior via multisensory brand experience in the franchised coffee houses in Egypt. In order to achieve this aim, the researcher used quantitative approach, which consists of distributing, collecting and analyzing 444 electronic questionnaires. The findings of this research revealed that sensory marketing has a positive impact on consumer buying behavior via multi-sensory brand experience. The greatest impact was as follows the sense of sight, followed by the sense of smell, sense of touch, sense of taste and finally the sense of hearing.

Keywords - Sensory Marketing, Multi-Sensory Brand Experience, Customer Buying Behavior.

I. INTRODUCTION

In today's competitive market, there is a severe competition among the franchised coffee houses in the retail sector (Haase *et al.,* 2018). Particularly in Egypt where the current food franchise market size is estimated at more than $800 million according to the Egyptian export government 2019. Therefore, organizations search for different marketing methods in order to win the competition. Recently, sensory marketing technique has been used to attract the consumers by using their senses to influence their behavior (Biswas *et al.,* 2019). Despite its crucial role in attracting consumers, few studies have examined the impact of sensory marketing technique on consumers' buying behavior. Additionally, the majority of these studies have focused on sensory marketing technique based on one, two or three senses. Moreover, they were conducted in European context such as Hultén (2011), Schmitt et al. (2015) and Biswas et al. (2019). In this research, sensory marketing was examined based on the five senses to test its impact on the consumer's buying behavior via creating multisensory brand experiences.

A multi-sensory brand-experience happens when more than one of the five senses participates in the perception of sensory experiences (Hulte´netal, 2009; Hepola, *et al.,* 2017). Multi-sensory brand experience upholds individual value creation and raises to how persons respond when a firm cooperates and enhances their purchase and consumption procedures through the participation of the five human senses in creating customer experiences. These sensory experiences assist in differentiating the brand in the consumer's mind. (Hultén, 2011). Thus, there is a need to examine the impact of the sensory marketing to know how it creates a multi-sensory brand experience which may lead to a positive consumers' buying behavior (Haase *et al.,* 2018).

This research presents the research work, which structured in five sections. First, the literature review of the conceptual framework. Second, the research methodology. Third, results and analysis. Finally, conclusion followed by research limitations and directions for future research.

II. LITERATURE REVIEW

2.1 Sensory marketing and multisensory brand experience

Sensory marketing is defined as "marketing that engages the consumers' senses and affects their behaviors" (Krishna, 2010). In other words, sensory stimuli are cues associated to the five senses of sight, smell, sound, touch and taste (Biswas *et al.,* 2019).

Particularly in the retail context, sensory marketing is useful to create unconscious triggers to describe the consumer perception of intellectual thoughts of the product (Spence *et al.,* 2014; Jang *et al.,* 2018). It could be used to affect the apparent quality of a product like its color, taste, smell, sound or touch (Hultén, 2011). Sensory marketing supports in creating personalized and memorable experiences (Srinivasan and Srivastava, 2010). To generate a strong holistic experience, companies must apply an intelligible concept of sensory marketing, which means that the sensory stimuli emphasize each other and subsequently lead to a positive consumers' buying behavior (Guzman and Iglesias, 2012).

Consistent with the theory of super preservative effects (Lwin et al., 2010) which indicates that the quality of the experience is positively related to the number of senses harmoniously addressed in creating customer experiences. The different senses contribute

in conveying various types of information (Schifferstein, 2010). Based on the earlier studies such as (Ernst and Bülthoff, 2004) the more stimulated the number of senses, the stronger and richer the experiences. Throughout different ages of product use, nevertheless, the importance of different senses can differ (Biswas *et al.,* 2019).

For more illustration, the sense of sight is the most influential one for determining changes and differences in the atmosphere and is the most common sense in observing goods or services. (Garlin and Owen 2006). The sense of sound is connected to emotions and feelings and has an influence on brand experiences and explanations (Goldkuhl and Styfve ´n 2007) .The sense of smell is linked to pleasure and well-being and is carefully connected to emotions and memories. (Biedekarken and Henneberg 2006). The sense of taste is the most distinct expressive sense and usually interrelates with other senses. (Peck and Wiggins 2006). The sense of touch is the tangible one, associated to information and feelings about a product using physical interactions. (Peck and Wiggins 2006).

Combining all the five senses together will help to create the multi-sensory brand experience, which occurs when more than one of the five senses contributes to the perception of sensory experiences (Hulten *et al.,* 2009). The experience turns into an image, creating the intellectual conceptions and perceptions of interactions and contributions in the service procedure that establishes the final result of the multi-sensory experience within a brand perspective (Biswas *et al.,* 2019). This perspective means that an individual's beliefs, feelings, thoughts, and opinions about a brand, are constructed on the total experience (Brakus *et al.,* 2009).

Multi-sensory brand experience boosts consumer's value by involving the five human senses in creating consumer experiences (Schmitt *et al.,* 2015). Based on the above arguments the following hypothesis was developed.

H1: Sensory marketing has a significant positive direct impact on multi-sensory brand experience.
H1a: the sense of sight has a significant positive direct impact on multi-sensory brand experience.
H1b: the sense of hearing has a significant positive direct impact on multi-sensory brand experience.
H1c: the sense of smell has a significant positive direct impact on multi-sensory brand experience.
H1d: the sense of touch has a significant positive direct impact on multi-sensory brand experience.
H1e: the sense of taste has a significant positive direct impact on multi-sensory brand experience.

2.2 Multi-sensory brand experience and buying behavior

The sensory cues can be observed as a central measurement of brand experience (Spence *et al.,* 2014; Hepola *et al.,* 2017). Multisensory cues have been considered in several retail context (Mattila and Wirtz, 2001; Spangenberg *et al.,* 2005). For retailers, the use of sensory cues is useful to influence consumers' emotions and their buying behavior (Hultén, 2012; Krishna, 2012). Retail atmosphere inspire shopper thoughts and emotions in easing buying behavior (Michon *et al.,* 2005).

Retailers boost consumer engagement by using the sensory cues (Ballantine *et al.,* 2010; Jang *et al.,* 2018). For example, lighting (Jang *et al.,* 2018), music (Michel *et al.,* 2017) or pervading the atmosphere with scents (Kivioja, 2017) can impact consumer buying behaviors (Helmefalk and Hultén, 2017). Thus, multi-sensory brand experience supports consumer's value creation and reflects how consumers reacts towards the organization, and supports their buying behavior (Schmitt *et al*., 2015). Based on the above arguments the following hypothesis was developed.

H2:Multi-sensory brand experience has a significant positive direct impact on consumer buying behavior.

Conceptual frame work:



III. METHODOLOGY

The researcher used quantitative research method, which consists of distributing, collecting and analyzing electronic questionnaires in order to examine the impact of the sensory marketing (the independent variable) on consumers' buying behavior (the dependent variable) via the multisensory brand experience (the mediator variable). The items of the questionnaire were adapted from Chung et al. (2016) and Haase et al. (2018).

The online questionnaire was distributed in the most popular franchised coffee houses in Egypt according to Egyptian export government 2019. The sample used in this study was convenient sample technique, which consists of (444) consumers. The collected data were tested by using Statistical Package for Social Sciences (SPSS 22).

IV. RESULTS AND ANALYSIS

4.1 Questionnaire reliability findings

To examine reliability, each factor is measured using a group of statements, indicates how stably and consistently the instrument taps the variable which can be examined by Cronbach's Alpha, the most common used test of reliability. The range of Alpha coefficient comes between 0 and 1, the higher the score the higher the reliability. If Alpha coefficients

are greater than or equal to 0.7, it implies adequate reliability. As mentioned in Table (1) Alpha coefficient for the study variables greater than 0.9 which indicates a high reliability.

The results of the linear regression model were significant, F (1,442) = 490.564, $p < .005$, $R^2 = .526$, indicating that approximately 52.6% of the variance in Multi-sensory brand experience is explainable by the sense of sight, $B = 0.96$, t (442) = 8.792, $p < .005$. This indicates that on average, every unit increase the sense of sight will result in a 0.96 unit change in Multi-sensory brand experience. H_{1a}: The sense of sight has a significant positive direct impact on multi-sensory brand experience "is accepted.

The results of the linear regression model were significant, $F(1,442) = 147.657$, $p < .005$, $R^2 = .250$, indicating that approximately 25% of the variance in Multi-sensory brand experience is explainable by the sense of hearing, $B = 0.484$, t (442) = 12.151, $p < .005$. This indicates that on average, every unit increase the sense of hearing will result in a 0.484 unit change in Multi-sensory brand experience."H_{1b}: The sense of hearing has a significant positive direct impact on multi-sensory brand experience "is accepted.

The results of the linear regression model was significant, F (1,442) =477.914, $p < .005$, $R^2 = .520$, indicating that approximately 52% of the variance in Multi-sensory brand experience is explainable by the sense of smell, $B = 0.68$, t (442) = 21.861, $p < .005$. This indicates that on average, every unit increase the sense of smelling will result in a 0.68 unit change in Multi-sensory brand experience."H1c: The sense of smell has a significant positive direct impact on multi-sensory brand experience "is accepted.

The results of the linear regression model were significant, F (1,442) =289.455, p < .005, R2 =.396, indicating that approximately 39.6% of the variance in Multi-sensory brand experience is explainable by the sense of tasting, B = 0.595, t (442) = 17.013, p < .005. This indicates that on average, every o unit increase the sense of tasting will result in a 0.595 unit change in Multi-sensory brand experience. "H1d: The sense of tasting has a significant positive direct impact on multi-sensory brand experience "is accepted.

The results of the linear regression model were significant, F(1,442) =446.333, p < .005, R2 =.502, indicating that approximately 50.2% of the variance in Multi-sensory brand experience is explainable by the sense of tasting, B = 0.635, t (442) = 21.127, p < .005. This indicates that on average, every unit increase the sense of touch will result in a 0.635 unit change in Multi-sensory brand experience. "H1e: The sense of touch has a significant positive direct impact on multi-sensory brand experience "is accepted. Therefore, the 1st main hypothesis "H1: Sensory marketing has a significant positive direct impact on multi-sensory brand experience "is accepted.

The results of the linear regression model were significant, . $F(1,442) = 324.419$, $p < .005$, $R^2 = .423$, indicating that approximately 42.3% of the variance in Customer buying behavior is explainable by the Multi-Sensory Brand Experience , $B = 0.673$, t (442) = 18.012, $p < .005$. This indicates that on average, every unit increase Multi-Sensory Brand Experience will result in a 0.635 unit change in Customer buying behavior.

Items	Mean	Std. Deviation	Corrected Item-Total Correlation	Cronbach's Alpha
Sight	3.9521	0.70378	0.805	0.903
Hearing	3.7162	0.69543	0.633	0.92
Smell	4.0405	0.71251	0.81	0.903
Taste	4.0569	0.71049	0.741	0.91
Touch	3.7382	0.75028	0.745	0.91
Multi sensory Brand Experience	3.8402	0.67195	0.799	0.904
Customer buying behaviors	3.9268	0.69462	0.742	0.91

The results of the linear regression model were significant.. $F(1,442) = 324.419$, $p < .005$, $R^2 = .423$, indicating that approximately 42.3% of the variance in Customer buying behavior is explainable by the Multi-Sensory Brand Experience , $B = 0.673$, t (442) = 18.012, $p < .005$. This indicates that on average, every unit increase Multi-Sensory Brand Experience will result in a 0.635 unit change in Customer buying behavior. Table 3 summarizes the results of the regression model."H_2: multi-sensory brand experience has a significant positive direct impact on customer buying behavior "is accepted.

Variable	*B*	*SE*	B	F	R2	*t*	*Sig*
sense of sight	0.69	0.031	0.725	490.56	0.526	22.149	0
sense of hearing	0.48	0.04	0.500	147.65	0.25	12.151	0
sense of smell	0.68	0.031	0.721	477.91	0.52	21.861	0
sense of taste	0.59	0.035	0.629	289.45	0.396	17.013	0
sense of touch	0.63	0.03	0.709	446.33	0.502	21.127	0

Note. $p < .005$

Table (2): Results for simple Regression with Sensory marketing factor predicting Multi-sensory brand experience.

Variable	*B*	*SE*	β	*t*	*Sig*
(Intercept)	1.344	0.146		9.233	0
Customer Buying Behavior	0.673	0.037	0.651	18.012	0

Note. $F(1,442) = 324.419$, $p < .005$, $R^2 = .423$

Table (3) Results for simple Regression with Multi-Sensory Brand Experience predicting Customer Buying Behavior

V. CONCLUSION

This research provides a practical and academic proof for the power of sensory marketing. It gives new insights on how sensory marketing by combining the five senses could build a unique multi-sensory brand experience, which will lead to positive consumers' buying behavior. The results support all research hypotheses drawn in the conceptual framework. Additionally, it shows the importance of each sense. For example, the greatest impact was as follows the sense of sight, followed by the sense of smell, sense of touch, sense of taste and finally the sense of hearing. The results of this research give directions to the service providers particularly the retailers to create effective multi-sensory brand experience by focusing on sensory marketing in order to succeed in a competitive environment.

VI. LIMITATIONS AND FUTURE DIRECTIONS

This research has some limitations that could be the start for future research. The sample used in this research was convenience sampling technique. Therefore, further studies could focus on probability sampling techniques. Moreover, the data focused on specific region which is Egypt. Hence, future research could be applicable on other countries. This study was tested in the retail sector, particularly the franchised coffee houses.

Future research could test this model in other sectors such as restaurants and hyper markets.

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