Asesorías y Tutorías para la Investigación Científica en la Educación Puig-Salabarría S.C.
José María Pino Suárez 400-2 esq a Lerdo de Tejada. Toluca, Estado de México. 7223898475
RFC: ATI120618V12

Revista Dilemas Contemporáneos: Educación, Política y Valores.
http://www.dilemascontemporaneoseducacionpoliticayvalores.com/
Año: VI Número: Edición Especial Artículo no.:129 Período: Junio, 2019.

TÍTULO: Diseño del ambiente de súpertienda con estimulantes no visuales: efectos en la compra y el comportamiento emocional de los compradores.

AUTORES:

1. Muhammad Asim Yasin.
2. Faiza Sultan.
3. Muhammad Nazam.
4. Rana Shahid Imdad Akash.
5. Muhammad Hashim.
6. Jamil Ahmad.

RESUMEN: El propósito de la investigación es investigar los efectos de los estimulantes no visuales en el comportamiento del comprador. La recopilación de datos fue de 330 encuestados. El experimento de campo se realizó en una supertienda con una técnica de muestreo por conveniencia para la selección de encuestados. La prueba post hoc y herramientas de regresión múltiple se utilizaron para el análisis de datos. La manipulación de estimulantes no visuales en la tienda mostró una respuesta positiva en la actitud del consumidor con respecto al nivel emocional y la intención de compra, mostrando éste más placer, felicidad y actitud estimulada con música de fondo. Se resaltan estimulantes no visuales como los olfativos y auditivos. Es el primer estudio en Pakistán que hace hincapié en estimulantes no visuales.

PALABRAS CLAVES: ambiente del supermercado, intención de compra, estado emocional, estimulantes no visuales.

TITLE: Designing the Super Store atmosphere with non-visual stimulants: effects on shoppers' purchase and emotional behaviour.

AUTHORS:

1. Muhammad Asim Yasin.
2. Faiza Sultan.
3. Muhammad Nazam.
4. Rana Shahid Imdad Akash.
5. Muhammad Hashim.
6. Jamil Ahmad.

ABSTRACT: The research purpose is to investigate the effects of non-visual stimulants on the shopper's behavior. The data collection was from 330 respondents. The field experiment was conducted in superstore and a convenient sampling technique was used for respondent selection. The post hoc test and multiple regression tools were used for data analysis. The manipulation in the departmental store with non-visual stimulants showed positive response in the consumer attitude concerning emotional level and intention of purchase. The consumer showed more pleasure, happiness and stimulated attitude in the situation of the background music playing. This research highlighted the importance of the non-visual stimulants such as olfactory and auditory stimulants, and it is the first study in Pakistan emphasizing on non-visual stimulants.

KEY WORDS: superstore atmosphere, purchase intention, emotional state, non-visual stimulants.

INTRODUCTION.

The word atmospheric stimulants used for those stimulants that enhance the vision of the shop atmosphere like the adoptability of scent and enjoying the background music. It creates the store atmosphere more refined and develop attraction for the sensory marketing. Any manipulation within the atmospherics factor had a major impact on the buyer behaviors either in emotional or purchase dimension (Mehrabian & Russell, 1974; Turley & Milliman, 2000; Hulten, 2011).

The sensory marketing is a rising concept in the marketing literature. It explains that 5 senses of human beings influenced by the brand expertise, helped building an image of brand in the mind of customer or visitors.

Retail atmospherics influence shopper cognitions and emotions in facilitating buying behavior (Michon et al., 2005; Turley and Milliman, 2000). Moreover, how much congruent these stimulants are with the shop style, product classes, and store image (Cheng et al., 2009; Garaus et al., 2015; North et al., 2016).

For retailers, the utilization of sensory stimulants may be helpful in influencing shoppers' emotions and buying behavior through retail store atmosphere (Hultén, 2011). However, analysis has not investigated multisensory stimulants, the economic in nature, might impact on shopper emotions and purchase intention at the point-of purchase (POP) in retail settings.

In this experimental research, multi-sensory stimulants defined as those that complement vision of the store atmosphere, like the addition of scent at moderate level in an odorless store setting, or sound at moderate level in a quiet retail setting. Since visual stimulants are the foremost common ones and sometimes dominate super-store atmosphere, retailers may supplement the atmosphere with others like auditory, olfactory, aesthetic/gustatory, tactile sensory stimulants, to create a multisensory atmosphere (Ballantine et al., 2015; Foster and Mclelland, 2015; Spence et al., 2014; Verma & Sharma, 2017). This type of atmosphere has been determined to exert a superior impact

on psychological factor, feeling and behavior. It can equally be argued that retailers ought to consider the utilization of multisensory stimulants in designing the store atmosphere (Spence et al., 2014). Accordingly, retailers will use multi-sensory stimulants to differentiate themselves from competitors and their product classes, that are often connected to a selected retail context (Ballantine et al., 2015; Vargas-Hernández, 2016). This means that an equivalent apparel store – Khaadi or equivalent - may use, for example, music and/or scents as non-visual stimulants for such product classes as beds, linen or carpets that are also complementing with store atmosphere. For retailers, the selection of the any non-visual stimulants is a confusing question and need a considerate time for the selection of these stimulants that are less costly and more congruent ones.

There is no clarification in the existing literature for accurate congruency level of the multi-sensory stimulants in a given store format. In general observation, there is no standardized selection criteria among the super store managers about the selection of the multi-sensory stimulants. In the marketing research, few empirical studies were conducted on this topic. Furthermore, in marketing research, few insights are offered to introduce multi-sensory stimulants to design a store atmosphere that absolutely influence shoppers' emotions and purchase behavior (Spence et al., 2014).

In this experimental research, the non-visual such as auditory and olfactory stimulants are included as independent variables and to check their effects on the shopper's emotions and purchase intention (Mattila & Wirtz, 2001; Rodgers, 2003; Helmefalk & Hulten, 2017).

Nowadays, the store atmosphere design is very critical part in retailing. Although there is very little research conducted on this topic, but this research bridged the gap in the Pakistan (Gillani, 2012; Hussain & Ali, 2015).

The aims of this research paper are as follow: 1) To investigate the effects of the atmospheric stimulants on the emotional behavior and purchase intention of consumer, 2) To investigate the

effects of the emotional behavior on the purchase intention, and 3) To suggest managerial implications to retail managers for better store atmosphere.

The paper is structured as follows; firstly, the theoretical framework, research model and hypotheses are presented. Secondly, the research design for the study, the field experiments and the findings are presented. Thirdly, a discussion of the relationship between non-visual stimulants, emotions and purchase behavior is presented. Finally, the theoretical and managerial implications of the study, the limitations as well as future research options are concluded.

DEVELOPMENT.

Theoretical framework.

Designing the Super-Store atmosphere.

The designing of the super store atmosphere is an integral part of the store strategy and it includes the designing and complementary strategies of the store.

Prior studies elaborate the significant importance of store atmosphere and specially focus on the non-visual stimulants. The visual stimulant has an impact on the shoppers' behavior but non-visual stimulants grab more attention and influence more significantly than the visual stimulant. It stimulates the research and investigations to draw a pattern about the non-visual stimulants and their influence on the shoppers, and their attitude about the purchase and emotional behavior (Mattila & Wirtz, 2001; Gilboa & Rafaeli, 2003; Bakker et *al.*, 2014; Helmefalk & Hulten, 2017; Al-Khalifah, 2018).

Auditory Sensory Stimulus.

Hearing and listening are mostly related to the music in the retail setting (Demoulin, 2011). It is evidential that auditory sensory stimulus affects the consumer cognition, mental processes and their emotional states, such as pleasure, arousal and mood or purchase behavior and store perception

(Mattila & Wirtz, 2001; Gueguen & Jacob, 2010; Michal et *al*., 2017; Ahmadi et al, 2018). In retail context, the background music affects consumer emotive experiences and shopping enjoyment and it helps them to navigate by observing and identifying products more quickly.

Additionally, the research on the influence of background music on consumer's emotions elaborates close relation among tempo, genre and pitch volume (Yalch & Spangenberg, 2000; Garlin & Owen, 2006; Vida et *al*., 2007; Andersson et *al*., 2012; Michal et *al*., 2017). In this experimental research, it is proposed that auditory sensory stimuli, such as background music in form of remix songs affect the shopper emotions, purchase intention and store perception.

Olfactory Sensory Stimulus.

No doubt, the retail managers have considered the importance of the scents and their significant impact on consumer attitude and behavior. It is difficult to select the appropriate scent according to retail store environment and establishing its association with socio-economic profile of the shoppers (Mattila & Wirtz, 2001; Gueguen & Petr, 2006; Chebat et *al*., 2009). This highlights the importance of the appropriate scent and its implication according to store design, product categories and targeted shoppers (Leenders et *al.*, 2016). Thus, the implementation process should be carefully studied and investigated by retail managers.

Scents affect the purchase behavior as well as emotions and the pleasant scent also affects memory, risk-taking, inquisitiveness, attention and variety seeking attitude of shoppers (Chebat & Michon, 2003). In this experimental research, it is proposed that citric scent impact the emotion state, purchase intention and store perception of shoppers.

Table 1. Summary of the Literature Review.

Article	**Methodology**	**Application**	**Auditory**	**Olfactory**	**Pleasure**	**Arousal**	**Purchase Intention**
Robert & John (1982)	Stated preference of the shoppers	Retail store	-----	-----	√	√	-----
Turley & Milliman (2000)	Meta-analysis	Retail setting	√	√	-----	-----	------
Yalch & Spangenberg (2000)	Factorial experiment	Retail setting	√	√	√	√	-----
Mattila & Wirtz (2001)	Factorial experiment	Retail setting	√	√	√	√	------
Baker et *al.*, (2002)	Experimental	Retail setting	√	-----	-----	-----	-----
Chebat & Michon (2003)	Two factor Experiment	Shopping Malls	-----	√	√	√	-----
Gilboa & Rafaeli (2003)	Descriptive	Retail setting	-----	-----	√	√	-----
Rodgers (2003)	Experimental	Online retailing	-----	-----	-----	-----	√
Garlin& Owen (2006)	Meta-analysis	Retail setting	√	-----	√	√	-----
Guéguen & Petr (2006)	Experimental	Restaurant	-----	√	------	------	-----
Vida et *al.*, (2007)	Experimental	Supermarkets	√	-----	-----	------	------
Chebat et *al.*, (2009)	Experimental	Shopping Mall	-----	√	-----	------	------
Gueguen & Jacob (2010)	Experimental	Flower shop	√	-----	-----	-----	-----
Demoulin (2011)	Experimental	Service setting	√	-----	√	√	-----

Andersson et *al.*, (2012)	Experimental	Retail setting	√	-----	√	√	-----
Gillani (2012)	Stated preference of the youngsters	Retail store	-----	-----	-----	-----	√
Bakker et *al.*, (2014)	Exploratory	----------	-----	-----	√	√	------
Hussain & Ali (2015)	Stated preference of the consumers	Retail store	√	√	-----	-----	√
Mirabi & Samiey (2015)	Stated preference of the consumers	Retail store	√	-----	-----	-----	-----
Leenders et *al.*, (2016)	Experimental	Supermarkets	-----	√	-----	------	------
Michel et *al.*, (2017)	Meta-analysis	Service setting	√	-----	√	√	√
Helmefalk & Hulten (2017)	Experimental	Retail store	√	√	√	√	------
Alex & Menon (2018)	Experimental	Apparel industry	-----	√	√	-----	-----
Francioni et *al.*, (2018)	Longitudinal	Retail store	√	√	-----	-----	-----
Lindberg et *al.*, (2018)	Observational & Focus group	Food industry	√	√	-----	-----	-----
Tantanatewin & Inkarojrit (2018)	Behavioral	Restaurants	-----	------	√	-----	-----

Research Design and Field Experiments.

The experimental approach used as research method to save the time and cost of the experiment. The main objectives of the study were to determine the effects of the atmospherics stimulants on the consumer's emotional states, their purchase intention and the overall evaluation of the store Atmosphere.

Theoretical Framework and Hypothesis Development.

The existing body of the literature provided the foundation to develop the theoretical framework and further to develop the hypothesis to test that theory.

Effect of Non-Visual Stimulants on the Emotional State.

The non-visual or multi-sensory stimulants has affected the emotional state of the consumers more significantly. The prior studies confirm and support this notion that any manipulation change in the store environment brought the significant change in the consumer's emotional level.

The consumer's emotional state or level consisted on the two variables commonly known as the pleasure and arousal. The emotional state of the consumer affected by the manipulation in the environment and many researches confirm that notion and concluded the significant results about it and suggestions for the implementation of the multi-sensory stimulants in the store atmosphere designing (Robert & John, 1982; Mattila & Wirtz, 2001; Gilboa & Rafaeli, 2003; Bakker et *al.*, 2014; Ajallooeian et al, 2015; Helmefalk & Hulten, 2017; Rincon-Flores et al., 2018).

On the basis of above discussion, the following hypotheses are developed:

H1 = Multi-sensory stimuli significantly affect the consumer Pleasure level at point of the purchase in super store.

H2 = Multi-sensory stimuli significantly affect the consumer Arousal level at point of the purchase in super store.

Effect of Non-Visual Stimulants on the Purchase Intention.

As the Mehrabian-Russell model suggests that the atmospheric stimulants affect the behavior of consumer during shopping. The multi-sensory stimulants affects the shopping attitude of the consumer and also the purchase behavior of the consumers in term of the time spent in the store. The prior studies presents the significant results about the purchase behavior of the consumers in the manipulation store environment (Rodgers, 2003, Gillani, 2012; Hussain & Ali, 2015; Leenders et *al.*, 2016; Helmefalk & Hulten, 2017; Kozhabergenova et al, 2018; Shirvani et al, 2015).

The purchase behavior in this research study is measured through the intention of the shoppers to purchase again from the same store or not and also to measure the purchase attitude of the shoppers to come again in the store or to make any repeated purchase from the store.

H3 = Multi-sensory stimuli significantly affect the consumer Purchaser Intention at point of the purchase in super store.

Effect of the Emotional State on Purchase intention.

The emotional state of the consumer affects the shopping attitude of the consumer and the purchase behavior of the consumers in term of the time spent in the store or the money spent in the shopping tour. The prior studies confirmed the significance level of results relating to emotional state of the consumers, but the question here rises that any emotional behavior of the consumer can affect the purchase intention of the consumer or not.

This research study conducted to find the answer of question that purchases intention of the consumer affected by the emotional level of the consumers. The change in the purchase behavior in this research study was measured through the intention of the shoppers to purchase again from the same store or not and also to measure the purchase attitude of the shoppers to come again in the store or to make any repeated purchase from the store. The consumer's emotional state or level consist on the two variables commonly known as the pleasure and arousal (Robert & John, 1982; Mattila & Wirtz, 2001; Gilboa & Rafaeli, 2003; Rodgers, 2003; Gillani, 2012; Bakker et *al.*, 2014; Hussain & Ali, 2015; Leenders et *al.*, 2016; Helmefalk & Hulten, 2017; Gomez et al, 2018).

H4 = Consumer emotional level significantly affect the purchase intention of consumers at point of the purchase in super store.

Field experiment

A Super store in city of Punjab was selected for the field experiment. The ocean waves sound was played at the moderate level in the store. The orange citric scent air Freshener was diffused in the store at half hour interval. The store employees were also helped in the diffusion of the scent in the store and maintained that level of the scent diffusion at the moderate level. In this field experiment the data was collected in the working days of the week and also when there were no discount offers were placed by the store team. This was done to enhance the internal validity of the experiment.

Data Collection.

The data was collected from the 308 respondents as 330 questionnaires distributed but 308 respondents completed the questionnaires. This response was collected in working days of the week. The data collection instrument was given to respondent at that point when they were about to leave the store. The questionnaire filling time started when the customer was about the leave the store started. Mostly customers showed willingness to response and took interest in the study and excited about the question regarding their mood and store atmosphere.

The customer involvement in the questionnaire was high as per the response rate. They eagerly responded and took interest in the topic about store Atmosphere and asked many questions and finally the majority showed the satisfied response toward store Atmosphere.

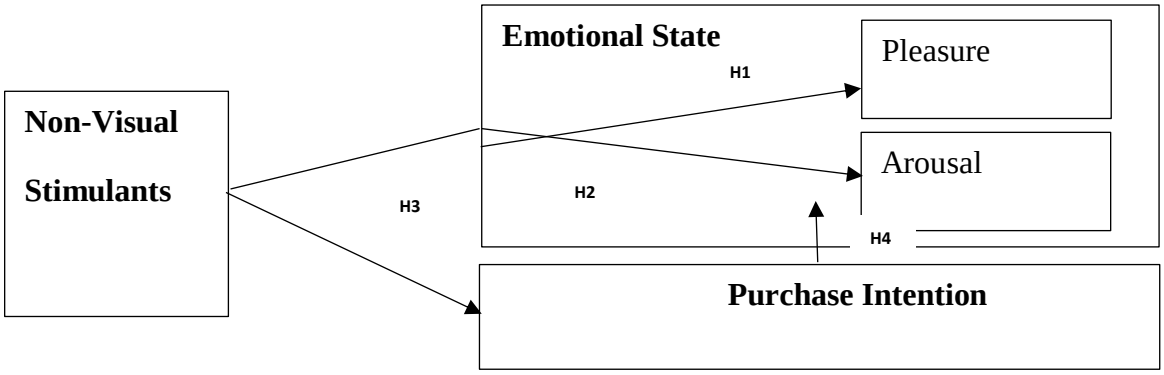

Figure 1. Theoretical Framework

Method selection for the Hypotheses Testing.

The following methodology was selected for each hypothesis. The following table used for indicating the roadmap for each hypothesis testing method.

Table 2. Roadmap for each hypothesis testing method

	Hypothesis	**Method**
1	H1 = Multi-sensory stimuli significantly affect the consumer Pleasure level at point of the purchase in super store.	One-way ANOVA with Games Howell test.
2	H2 = Multi-sensory stimuli significantly affect the consumer Arousal level at point of the purchase in super store.	One-way ANOVA with Games Howell test.
3	H3 = Multi-sensory stimuli significantly affect the consumer Purchaser Intention at point of the purchase in super store.	One-way ANOVA with Games Howell test.
4	H4 = Consumer emotional level significantly affect the purchase intention of consumers at point of the purchase in super store.	Multiple Regression.

Findings.

This section provided this research study the uniqueness and the novelty based on its research conclusion after critical data analysis.

Manipulation check.

The 86.50% auditory group data set respondents answered “Yes”. It also seemed natural and supportive as at that time of manipulation in the environment was conducted by the researcher. However, the 13.50% answered “No” and this can be justified in that sense as the some of the

respondent were new entrants too and some respondents may be perceived change in the perspective of some product placement changes (Ullakonoja, 2011).

The 82.50% olfactory treatment group data set respondents answered "Yes". It also seemed natural and supportive as at that time of manipulation in the environment was already conducted by the researcher. However, the 17.50% answered "No" and this can be justified in that sense as the some of the respondent were new entrants too and some respondents may be perceived change in the perspective of some product placement changes.

Non-visual Stimulants on the Pleasure, Arousal, Purchase Intention and Store Atmosphere Perception.

This portion of the results and conclusion directly related with objectives of the study. This part as considered the most integral and intriguing one because the whole theory and research work depended on this part. This part going to finalize the destiny of this research work either toward acceptance or rejection of the hypotheses.

Table 3. Descriptive Statistics and ANOVA results.

Dependent Variables	**Experimental Groups**		**Control Group**	**F**	**p-value**
	Auditory	***Olfactory***			
Pleasure	52.5577 (14.74299)	52.6796 (12.64462)	40.7525 (9.48304)	30.565	0.000
Arousal	41.4423 (14.84014)	44.0388 (11.32230)	29.9208 (8.90694)	40.117	0.000
Purchase Intention	12.7308 (2.17323)	13.0485 (2.70938)	11.1980 (2.78934)	15.096	0.000

This table summarized the results of the ANOVA method and highlighted the descriptive statistics in which the mean value and the standard deviation were included. The p-value (*p=0.000)* indicated that all non-visual stimulants significantly affected the independent variables of the research work.

Table 4. Multiple Comparisons of Pleasure by using Games-Howell Post Hoc test

Independent Variable	Independent Variable	Mean Difference (I-J)	Std. Error	Sig.
Control	**Auditory**	-11.80522	1.72637	0.000
	Olfactory	-11.92714	1.56291	0.000

In Table No.4, there was a statistically significant difference between groups as determined by One-way ANOVA (F (2,305) = 30.565, p = 0.000). The Games-Howell post hoc test revealed that pleasure level of the consumers in the store significantly enhanced after staying in the conditions of manipulated non-visual element known as auditory stimulants (52.55 ± 14.74, p = 0.000) and other non-visual element known as olfactory stimulants (52.68 ± 12.64, p = 0.000) compared to the un-manipulated condition known as control group (40.75 ± 9.48). There was no statistically significant difference between the non-visual elements auditory and olfactory groups (p = 0.998).

Table 5. Multiple Comparisons of Arousal by using Games-Howell Post Hoc test.

Independent Variable	Independent Variable	Mean Difference (I-J)	Std. Error	Sig.
Control	**Auditory**	-11.52152	1.70384	0.000
	Olfactory	-14.11804	1.42481	0.000

In Table No.5, there was a statistically significant difference between groups as determined by One-way ANOVA (F(2,305) = 40.117, p = 0.000).The Games-Howell post hoc test revealed that arousal level of the consumers in the store significantly enhanced after staying in the conditions of manipulated non-visual element known as auditory stimulants (41.44 ± 14.84, p = 0.000) and other non-visual element known as olfactory stimulants (44.04 ± 11.32, p = 0.000) compared to the un-manipulated condition known as control group (29.92 ± 8.91). There was no statistically significant difference between the non-visual elements auditory and olfactory groups (p = 0.335).

Table 6. Multiple Comparisons of Purchase Intention by using Games-Howell Post Hoc test.

Independent Variable	Independent Variable	Mean Difference (I-J)	Std. Error	Sig.
Control	**Auditory**	-1.53275	0.34992	0.000
	Olfactory	-1.85052	0.38510	0.000

In Table No.6, there was a statistically significant difference between groups as determined by One-way ANOVA (F (2,305) = 15.096, p = 0.000). The Games-Howell post hoc test revealed that purchase intention of the consumers in the store significantly enhanced after staying in the conditions of manipulated non-visual element known as auditory stimulants (12.73 ± 2.17, p = 0.000) and other non-visual element known as olfactory stimulants (13.05 ± 2.71, p = 0.000) compared to the un-manipulated condition known as control group (11.20 ± 2.79).

There was no statistically significant difference between the non-visual elements auditory and olfactory groups (p = 0.622). In addition, figure 2 depicts the mean differences of pleasure between the control, auditory and olfactory groups. Figure No. 3 show the mean difference of Arousal between the control, auditory and olfactory groups. Figure 4. The mean difference of Purchase Intention between the control, auditory and olfactory groups.

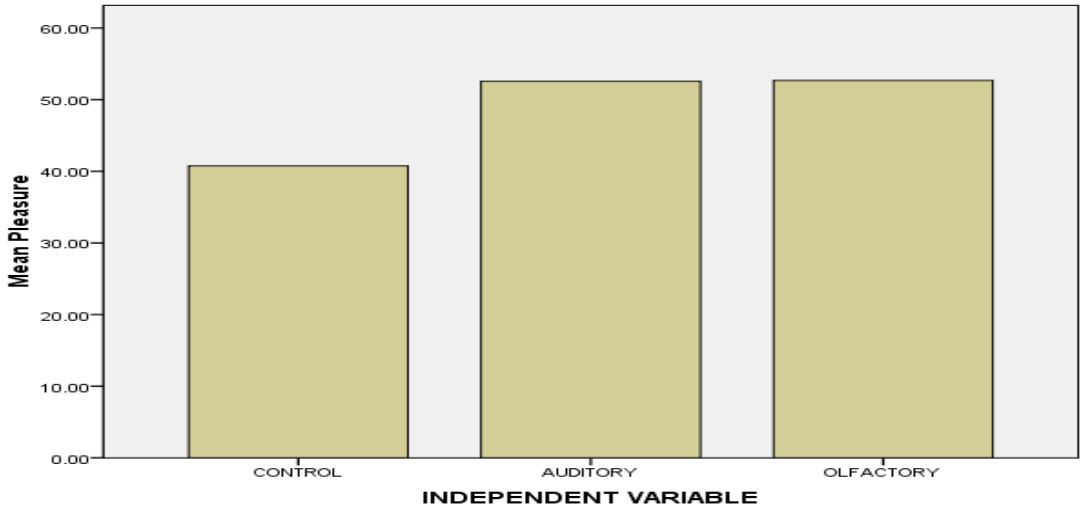

Figure 2. The mean difference of Pleasure between the control, auditory and olfactory groups.

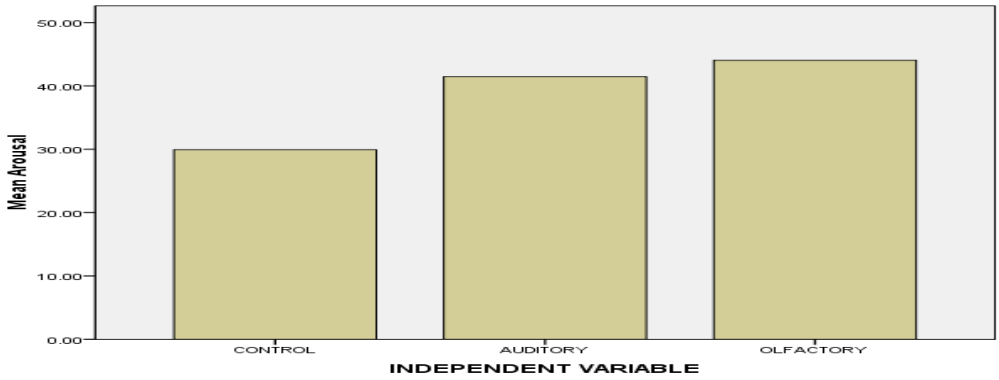

Figure 3. The mean difference of Arousal between the control, auditory and olfactory groups.

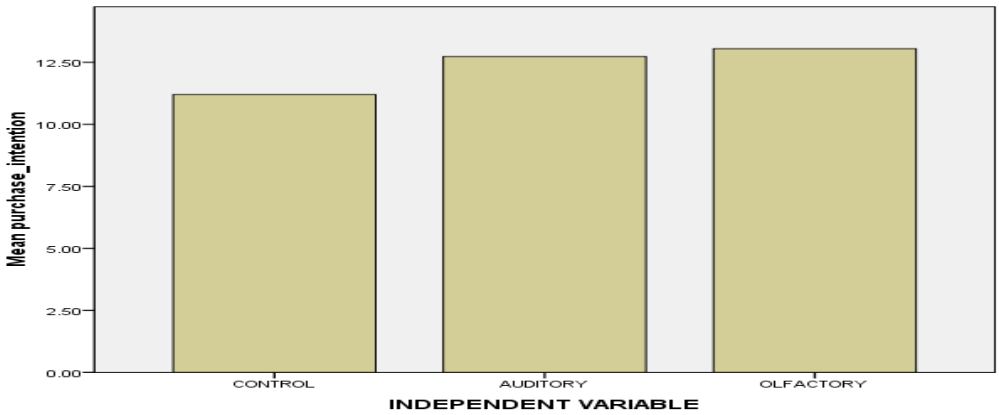

Figure 4. The mean difference of Purchase Intention between the control, auditory and olfactory groups.

Pleasure and Arousal effects on Purchase Intention.

The multiple regression used for the analysis and to check that how the purchase intention of the consumers affected by the pleasure and arousal level of the consumers at the point of purchase. The multiple regression analysis used as this hypothesis built up to test that the intent of the consumer to purchase can be predicted by pleasure and arousal level of the consumers or not.

The population regression equation can be written as:

$$\mathbf{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + e}$$

Y = purchase intention of the consumer.

X_1 = pleasure level of the consumer.

X_2 = Arousal level of the consumer.

e = error term.

Then the sample regression equation can be written as:

$$\hat{y} = b_0 + b_1x_1 + b_2x_2$$

The table highlighted the goodness of the fit of the regression model. The r-square indicated that only 25.3% change occurred in the pleasure level of the consumer due to the purchase intention of the consumer. The r-square indicated that only 23.90% change occurred in the arousal level of the consumer due to the purchase intention of the consumer. Although model is not good fit because there could be more extraneous variables that may be affected the arousal level of the consumer more as compared to the purchase intention of the consumer. And the due to multicollinearity that existed among the independent variables the arousal level of the consumer was excluded from the multiple regression coefficients table.

Table 7. Coefficients values of the Multiple Regression.

	Unstandardized Coefficients		**Standardized Coefficients Beta**	**T**	**Sig.**
	B	**Std. Error**			
(Constant)	7.490	.491		15.268	.000
Pleasure	0.099	0.010	0.506	10.253	0.000
(Constant)	7.506	.485		15.476	0.000
Pleasure	0.061	0.016	0.312	3.734	0.000
Arousal	0.048	0.017	0.238	2.848	0.005

The standardized Beta value for the purchase intention of the consumer showed the significant (p=0.000) p-value. The positive sign of the standardized Beta indicated the positive relation between these variables. The purchase intention of the consumer will increase by 0.312 units if the pleasure level of the consumer at the point of the purchase in the retail setting increased by one unit. The purchase intention of the consumer will increase by 0.238 units if the arousal level of the consumer at the point of the purchase in the retail setting increased by one unit.

Table 8. Excluded Variable and Multi-Collinearity value.

	Beta In	T	Sig.	Partial Correlation	Collinearity Statistics
					Tolerance
Arousal	.238[a]	2.848	.005	.161	.340

The table highlighted the results of the collinearity and this table showed the tolerance value greater than 0.20 and it is good sign and it showed that this level of the collinearity can be tolerated easily, and it is not such dangerous and over all accepted tolerance value of the collinearity.

Table 9. Results.

	Hypothesis	Method	Status
1	H1 = Multi-sensory stimuli significantly affect the consumer Pleasure level at point of the purchase in super store.	One-way ANOVA with Games Howell test	Accepted
2	H2 = Multi-sensory stimuli significantly affect the consumer Arousal level at point of the purchase in super store.	One-way ANOVA with Games Howell test	Accepted
3	H3 = Multi-sensory stimuli significantly affect the consumer Purchaser Intention at point of the purchase in super store.	One-way ANOVA with Games Howell test	Accepted
4	H4 = Consumer emotional level significantly affect the purchase intention of consumers at point of the purchase in super store.	Multiple Regression	Partially Accepted

The table No.9 shows the summarized form of the hypotheses and all the four hypotheses were accepted except the last one. The H1, H2 and H3 were accepted and these presents that non-visual stimulants affect the emotive behavior and purchase intention of the consumers. But the H4 is partially accepted due to the multi-collinearity among the independent variables. However, the p-value was less than 0.005.

CONCLUSIONS.

Implications for the retail managers and limitations.

The conclusion or findings represented that emotional state of the consumers affected by the situations when music was played and when citric scent was diffused in the store atmosphere. The manipulation in the departmental store with the non-visual stimulants showed the positive response in the consumer attitude in context of the emotional level and intention of the purchase. The consumer showed more pleasure, happiness and stimulated attitude in the situation of the background music playing. This change showed and approved with support of the statistical analysis techniques and tools. The consumer's intent to purchase was more in the music playing situation as compared to no music playing situation.

Similarly, the consumer showed more pleasure, happiness and stimulated attitude in the situation of the citric scent diffusion. The consumer's intent to purchase was more in the citric scent diffusion situation as compared to no citric scent situation.

This research work supported that proposition that consumer will come again in the store to purchase if they feel pleasure and stimulated in the freshly scented atmosphere. These non-visual stimulants significantly influenced the attitude and reaction of the consumer regarding their purchasing style. The work of the Helamfalk & Hulten (2017) also highlighted that type of the conclusion but their research objective directly focused on the pre-purchase behavior of the shopper. Their research totally ignored the post-purchase intention of the consumer regarding purchasing decision. In this research work the results explored that shopper come again if they felt pleasure and stimulated level within their own self, their future purchase intention also develops in the sophisticated atmosphere.

This research contributed in the existing literature of the marketing in many ways. Firstly, the purchase intention as a variable seldomly used as dependent variables in experimental research (Rodgers, 2003). The results demonstrated that purchase intention was significantly affected by the

olfaction and auditory stimulants. Secondly, the use of air freshener with citric scent were affected the consumers' purchase intention. Finally, the use of the remix songs as background music were also affected the consumers' behavior.

Implications for the retail managers.

The last objective of this research work was to suggest the managerial implications to the retail managers for the store designing and mainly focused on the use of the non-visual stimulants and elements in the atmosphere.

Firstly, the store designing is an integral part of any store strategy and it cannot be overlooked at any cost. The atmospherics factors lasted an effect on the consumer emotional level and their intent of the purchase as this research study confirmed. The store atmosphere designing should be done to develop the consumer behavior and attitude. The use of the non-visual stimulants such as olfactory and auditory affected the consumer behavior as this research results confirmed. The visual stimulants directly captured the attention of the consumer but non-visual also captured the attention of the consumer directly and significantly affected the consumer behavior. The consumer's experience can be created through the non-visual elements to develop the loyalty level in the consumers.

Secondly, the sense of smell has always affected the human mind more than other senses and prior studies confirmed that proposition. The use of the olfaction and specifically the citric olfaction considered the significant one among Pakistani shoppers. The use of the olfaction creates an atmosphere that attracted the shopper's mind to stay in the store and their purchase intention and their intent to come back in store for repurchase. The sense of hear has always affected the human mind more significantly than other senses and prior studies confirmed that proposition. The use of background music in the departmental store supported the proposed results of the research work and in the departmental store atmosphere designing music playing also stimulated the shopper's mood and their also their future intention of coming back in the store and to repurchase again.

Thirdly, the Pakistani retail stores should use the non-visual elements in their store designing strategies. They mainly focus on the visual stimulants and ignored the non-visual stimulants. This research work highlighted the importance of the non-visual stimulants such as olfactory and auditory stimulants. It is advisable for the retail managers that background sound and some kind of the suitable scent or air freshener should be diffused in the store atmosphere to enhanced the beauty of the store and to create the attraction for customer and to capture the attention of the shoppers in very indirect way.

Lastly, these non-visual stimulants of the store atmospherics that indirectly affected the consumer's behavior in the context of the emotional level and purchase behavior should be included in the store atmosphere designing strategies of the store. The use of the scent mostly in the form of the air freshener should be on the regular basis. It removes the bad odor from the atmosphere and spreads beautiful scent in the atmosphere. It helps to enhance the mood of the shoppers during shopping time and stimulated them in very light manner. The use of the background music mostly in the form of the remix and famous song album or combination should be updated on the regular basis. It creates the good vibrations in the store and very sophisticating atmosphere in the store. It helps to enhance the mood of the shoppers during shopping time and stimulated them in very sophisticated manner.

Limitations and future research options.

Following were some limitations and future research options of this research study.

Firstly, in this research work only the multiple regression was used for testing the effects of the pleasure and arousal on the purchase intention of the consumer. However, many further types of the regression could be used for the analysis such as ordinal or any other type of the multinomial regression.

Secondly, sensory marketing mainly deals with the five senses of the human mind. In future studies, remaining senses can be used as independent variables for exploring more dimensions and horizons in the context of the sensory marketing.

Lastly, the Pleasure, Arousal and Dominance combined to describe the emotional state of the consumer. In the future, the next research study can be focused on this issue to explore more dimensions in this context of the emotional dimension.

BIBLIOGRAPHIC REFERENCES.

1. Ahmadi, F., Rahimi, M., & Rezaei, A. (2018). Study of Relation between Business Model and Sensemaking Decisions. Journal of Humanities Insights, 2(2), 216-225.
2. Ajallooeian, E., Gorji, Y., & Niknejadi, F. (2015). Evaluate the Effectiveness of Social Skills Training through Group Therapy Play on Reducing Rational Aggression Boy Elementary School Student in Esfahan City. UCT Journal of Social Sciences and Humanities Research, 3(1), 1-4.
3. Alex, N. J., & Menon, P. (2018). Influence of Ambient Perfumes on Consumer Spending Behaviour: A Study Among Apparel Shoppers in an Indian Setting. Indian Journal of Marketing, 48(1), 61-74.
4. Al-Khalifah, A. (2018). The Strategic Stabilization of Private Banks and Insurance Company in the Financial Service Sector. Journal of Humanities Insights, 2(04), 161-166.
5. Andersson, P. K., Kristensson, P., Wästlund, E., &Gustafsson, A. (2012). Let the music play or not: The influence of background music on consumer behavior. Journal of retailing and consumer services, 19(6), 553-560.
6. Baker, J., Parasuraman, A., Grewal, D., & Voss, G. B. (2002). The influence of multiple store Atmosphere Stimulants on perceived merchandise value and patronage intentions. Journal of marketing, 66(2), 120-141.

7. Bakker, I., van der Voordt, T., Vink, P., & de Boon, J. (2014). Pleasure, arousal, dominance: Mehrabian and Russell revisited. Current Psychology, 33(3), 405-421.
8. Ballantine, P. W., Parsons, A., & Comeskey, K. (2015). A conceptual model of the holistic effects of atmospheric cues in fashion retailing. International Journal of Retail & Distribution Management, 43(6), 503-517.
9. Bruner, G. C. (2009). Marketing Scales Handbook: A compilation of multi-item measures for consumer behavior & advertising research. v. 5 (Vol. 5). GCBII Productions.
10. Chebat, J. C., & Michon, R. (2003). Effects of ambient odors on mall shoppers' emotions, cognition, and spending: A test of competitive causal theories. Journal of business research, 56(7), 529-539.
11. Chebat, J. C., Morrin, M., & Chebat, D. R. (2009). Does age attenuate the effects of pleasant ambient scent on consumer response? Atmosphere and behavior, 41(2), 258-267.
12. Cheng, F. F., Wu, C. S., & Yen, D. C. (2009). The effect of online store atmosphere on consumer's emotional responses–an experimental study of music and colour. Behaviour & Information Technology, 28(4), 323-334.
13. Demoulin, N. T. (2011). Music congruency in a service setting: The mediating role of emotional and cognitive responses. Journal of Retailing and Consumer Services, 18(1), 10-18.
14. Foster, J., & McLelland, M. A. (2015). Retail atmospherics: The effects of a brand dictated theme. Journal of Retailing and consumer services, 22, 195-205.
15. Francioni, B., Savelli, E., & Cioppi, M. (2018). Store satisfaction and store loyalty: The moderating role of store atmosphere. Journal of Retailing and Consumer Services, 43, 333-341.
16. Garlin, F. V., & Owen, K. (2006). Setting the tone with the tune: A meta-analytic review of the effects of background music in retail settings. Journal of Business Research, 59(6), 755-764.

17. Gilboa, S., &Rafaeli, A. (2003). Store Atmosphere, emotions and approach behaviour: applying Atmospherics aesthetics to retailing. The International Review of Retail, Distribution and Consumer Research, 13(2), 195-211.
18. Gillani, F. (2012). Effects of peer pressure and store atmosphere on purchase intention: An empirical study on the youngsters in Pakistan. International journal of academic research in business and social sciences, 2(7), 323.
19. Guéguen, N., & Jacob, C. (2010). Music congruency and consumer behavior: an experimental field study. International Bulletin of Business Administration, ISSN, 56-63.
20. Guéguen, N., & Petr, C. (2006). Odors and consumer behavior in a restaurant. International Journal of Hospitality Management, 25(2), 335-339.
21. Garaus, M., Wagner, U., & Kummer, C. (2015). Cognitive fit, retail shopper confusion, and shopping value: Empirical investigation. Journal of Business Research, 68(5), 1003-1011..
22. Gomez, H. F., Lozada, E. F., Martínez, C. E., Baño, F. P., Álvarez, G. A., Culque, W. V., . . . Cevallos, R. E. S. (2018). Introduction to the Analysis of Tourism Services through Feelings Mining. Journal of Information Systems Engineering & Management, 3(4), 33.
23. Helmefalk, M., &Hultén, B. (2017). Non-visual congruent Stimulants in designing retail store atmosphere: Effects on shoppers' emotions and purchase behavior. Journal of retailing and consumer Services, 38, 1-11.
24. Hultén, B. (2011). Sensory marketing: the non-visual brand-experience concept. European business review, 23(3), 256-273.
25. Hussain, R., & Ali, M. (2015). Effect of store atmosphere on consumer purchase intention.
26. Kozhabergenova, G. E., Taubaeva, S., Bulatbayeva, A. A., Kabakova, M. P., & Asanov, N. A. (2018). The Stewardship of School Counselor Education in Higher Educational Establishments. Opción, 34(85-2), 386-414.

27. Leenders, M. A., Smidts, A., & El Haji, A. (2016). Ambient scent as a mood inducer in supermarkets: The role of scent intensity and time-pressure of shoppers. Journal of retailing and consumer services.

28. Lindberg, U., Salomonson, N., Sundström, M., & Wendin, K. (2018). Consumer perception and behavior in the retail foodscape–A study of chilled groceries. Journal of Retailing and Consumer Services, 40, 1-7.

29. Mattila, A. S., & Wirtz, J. (2001). Congruency of scent and music as a driver of in-store evaluations and behavior. Journal of retailing, 77(2), 273-289.

30. Mehrabian, A., & Russell, J. A. (1974). An approach to Atmospherics psychology. the MIT Press.

31. Michel, A., Baumann, C., & Gayer, L. (2017). Thank you for the music–or not? The effects of in-store music in service settings. Journal of retailing and consumer services, 36, 21-32.

32. Michon, R., Chebat, J. C., & Turley, L. W. (2005). Mall atmospherics: the interaction effects of the mall environment on shopping behavior. Journal of Business Research, 58(5), 576-583.

33. Mirabi, V. R., &Samiey, E. (2015). Factors influencing store Atmosphere perception (evidence from Iranian chain stores). Journal of Scientific Research and Development, 2(6), 171-177.

34. North, A. C., Sheridan, L. P., & Areni, C. S. (2016). Music congruity effects on product memory, perception, and choice. Journal of Retailing, 92(1), 83-95.

35. Rincon-Flores, E. G., Gallardo, K., & Fuente, J. M. D. L. (2018). Strengthening an Educational Innovation Strategy: Processes to Improve Gamification in Calculus Course through Performance Assessment and Meta-evaluation. International Electronic Journal of Mathematics Education, 13(1), 1-11.

36. Robert, D., & John, R. (1982). Store atmosphere: an Atmospherics psychology approach. Journal of retailing, 58(1), 34-57.

37. Rodgers, S. (2003). The effects of sponsor relevance on consumer reactions to internet sponsorships. Journal of advertising, 32(4), 67-76.

38. Shirvani, M., Mohammadi, A., & Shirvani, F. (2015). Comparative study of cultural and social factors affecting urban and rural women's Burnout in Shahrekord Township. UCT Journal of Management and Accounting Studies, 3(1), 1-4.

39. Spence, C., Puccinelli, N. M., Grewal, D., & Roggeveen, A. L. (2014). Store atmospherics: A multisensory perspective. Psychology & Marketing, 31(7), 472-488.

40. Tantanatewin, W., & Inkarojrit, V. (2018). The influence of emotional response to interior color on restaurant entry decision. International Journal of Hospitality Management, 69, 124-131.

41. Turley, L. W., & Milliman, R. E. (2000). Atmospheric effects on shopping behavior: a review of the experimental evidence. Journal of business research, 49(2), 193-211.

42. Ullakonoja, J. (2011). The effects of retail design on customer perceived value (Doctoral dissertation, Master's Thesis Aalto University).

43. Vargas-Hernández, J. G. (2016). THE QUESTION OF CHANGING THE CONCEPT, ROLE AND FUNCTIONS OF STATE. Humanities & Social Sciences Reviews, 4(1), 08-19. https://doi.org/10.18510/hssr.2016.412

44. Verma, G., & Sharma, K. (2017). The Role of Quantitative Techniques in Business and Management. Journal of Humanities Insights, 01(01), 24-6.

45. Vida, I., Obadia, C., & Kunz, M. (2007). The effects of background music on consumer responses in a high-end supermarket. International Review of Retail, Distribution and Consumer Research, 17(5), 469-482.

46. Yalch, R. F., & Spangenberg, E. R. (2000). The effects of music in a retail setting on real and perceived shopping times. Journal of business Research, 49(2), 139-147.

DATA OF THE AUTHORS.

1. Muhammad Asim Yasin. Department of management Sciences, COMSATS University Islamabad, Vehari Campus, Pakistan; Email: dr.asim@ciitvehari.edu.pk

2. Faiza Sultan. Institute of Business Management Sciences, University of Agriculture, Faisalabad, Pakistan; Email: faizasultan1991@gmail.com

3. Muhammad Nazam. Institute of Business Management Sciences, University of Agriculture, Faisalabad, Pakistan; Email: nazim_ehsas@yahoo.com

4. Rana Shahid Imdad Akash: Faculty of Management Sciences, Department of Business Administration, University of Sargodha Women Campus, Faisalabad, Pakistan; Email: shahid.imdad@yahoo.com

5. Muhammad Hashim: Department of Management Sciences, National Textile University, Faisalabad, Pakistan; Email: hashimscu@gmail.com

6. Jamil Ahmad: Department of management Sciences, COMSATS University Islamabad, Vehari Campus, Pakistan; Email: jamil.ahmad@ciitvehari.edu.pk

RECIBIDO: 2 de mayo del 2019. **APROBADO:** 14 de mayo del 2019.