Influence of Ambient Perfumes on Consumer Spending Behaviour : A Study Among Apparel Shoppers in an Indian Setting

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Abstract

The objective of this study was to externally validate the two competing models, that is, emotion-cognition model and the cognition-emotion model in the Indian context. This helps to substantiate the research study conducted by Chebat and Michon (2003), which concluded that the cognition - emotion model better explains the influence of ambient perfume. The proposed competing models were tested in a mall setting with approximately 200 shoppers in a popular retail store selling branded apparel located in South India.

Results : In the emotion-cognition model, in the occurrence of perfumes, pleasure influenced shopper spending (dependent outcome) through mall atmosphere and product quality (both mediates), and the model cannot be fully substantiated because the average scores of the both groups across these variables were not statistically significant. To summarize the results of the cognition - emotion model, occurrence of perfume created an overall influence of mall atmosphere on product quality, and the overall correlation of pleasure on consumer spending (purchase) was stronger in the occurrence of perfume. Moreover, the consumer spending in the occurrence of perfumes was 13 % more. As per the results of this experimental study, both the 'emotion based' and the 'perception based' models reasonably explained the effect of perfumes on consumer spending.

Originality/Research Contribution : This work was done in an external setting using real shopping environment and helped to compare the Western culture based results to Indian settings.

Keywords : **ambient perfume, shopping environment, emotional and cognitive behavioural model, cultural comparisons**

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The use of fragrant herbs and plants for well-being, hygiene, and treatment has been prevalent for centuries across different cultures and traditions in India, which has increased manifold in the globalized world. The fragrance market growth rate was at an annual 40% estimated at US$ 225 million (Ghogale, 2012).

In modern retailing, sensory marketing plays a prominent role in consumer marketing, enhancing consumer experiences and triggering more sales. Subconscious factors like colour and fragrance help develop more interest in consumers (Sifferlin, 2013) and about 70% of purchase decisions are done in-store (Sahi, n.d.). It has been observed that aroma plays a prominent role in one's perceiving of the surroundings, which in turn is related to memories and emotions. Creating the right aroma is like creating the right visual floor space to enhance sales.

To create the real consumer experience and positive emotions, each section of the department store can have different perfumes. For example, baby powder aroma for the child's section or a coconut fragrance in swimwear (example of Bloomingdale) and lilac in the lingerie department. Specialized fragrances along with music and layout make the customers feel at home and emotionally connected with their brand. There can be specialized

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perfumes to trigger emotions from both genders as well. In certain other experiments, consumers perceived employees in the perfumed area of the store more knowledgeable than the non-perfumed area.

Olfactory fatigue can be avoided by using the right perfume for the right context, and the aroma released in specific intervals and not continuously (Braun, 2014). Hence, virtuous memories (memories with good and right thinking) make you purchase items because of the happy emotions around it. It is also found from various studies that a better physical ambience encourages the customers to linger more time within the stores, increasing the probability of higher sales.

The objective of this study is to externally validate the two competing models, that is, emotion-cognition model and the cognition - emotion model in the Indian context. This study is experimental in design and was conducted among shoppers of a popular ready-made clothing brand. The study investigates the question as to whether the ambient perfume induced emotion (affect) is an antecedent to perception (cognition) that leads to spending or ambient perfume enhances the perception (cognition) of retail surrounding and product quality and is an antecedent to emotion (effect) that leads to spending. This helps to substantiate the research study conducted by Chebat and Michon (2003), which concluded that the cognition-emotion model better explains the effect of ambient perfume. This study is also motivated by the study of Azeema, Kiumarsi, and Jayaraman (2016), which indicates the possibility of including ambient perfumes as a major factor in triggering consumer spending.

Literature Review

(1) Ambient Perfume and Shopping Environment : Store atmospherics is an element of general physical environment in business (Baker, 1986 ; Booms & Bitner, 1982). The retail surrounding has a remarkable influence on how a consumer behaves, which in turn affects their shopping behaviour with remarkable bearing on sales (Milliman, 1982, 1986; Smith & Curnow, 1966 ; Stanley & Sewall, 1976). Retail atmospherics can affect the way consumers do product evaluation (Bitner, 1986; Rappaport, 1982; Wheatly & Chiu, 1977) and also the level of customer satisfaction (Bitner 1990; Harrell, Hutt, & Anderson, 1980). One's attitude to the overall shopping atmosphere is more important in store choice than the attitude toward the merchandise (Darden, Erdem, & Darden, 1983).

Odors play a role in retail and service atmospherics (Bitner, 1992 ; Baker, Levy, & Grewal, 1992 ; Baker, Grewal, & Parasuraman, 1994 ; Kotler, 1973). Of the different cues in a store premises, marketing scholars have studied the effect of ambient perfumes (Spangenberg, Crowley, & Henderson, 1996). Scholars have also studied the effect of premise cleanliness on consumers (Bitner, 1990 ; Garder & Siomkos, 1986), the influence of music (Dube´, Chebat, & Morin, 1995 ; Yalch & Spangenberg, 1990), the influence of colour (Bellizzi, Crowley, & Hasty, 1983 ; Crowley, 1993), and the influence of lighting (Golden & Zimmerman, 1986).

(2) The Pleasure/Arousal Research Tradition - The Mediating Influence of Emotion on Cognition and Shopping Behaviour : Emotion acts as a mediating factor between environmental cues and behaviour, is one of the most widely used models by researchers studying retail atmospherics (Mehrabian & Russell, 1974), and is popularly known as the pleasure/arousal research tradition. Retail atmospherics like ambient lighting and music ; social cues like number, friendliness of the employees, and their influence on the respondents' pleasure, arousal, and their intention to purchase were studied in detail by Mehrabian and Russell (1974). Two basic types of behaviour as seen in the reaction of respondents to various types of environmental cues are : approach and avoidance (Mehrabian & Russell, 1974). Approach is a positive intention to associate with the store, and avoidance is the opposite. Most of the research study outcomes find that a positive emotion generates a mediating effect on consumer's cognition and their final shopping behaviour (Obermiller & Bitner, 1984).

Increased pleasure leads to heightened perceptions of personal control, even in a packed environment (Hui & Bateson, 1991). Eroglu, Machleit, and Kellaris (1990) found that the negative effects of crowding in retail

surrounding increases the consumer's intent to leave. On the contrary, positive effects in the retail space make shoppers remain in the shop, experience the products, and interact with the employees (Darden & Babin, 1994 ; Dawson, Bloch, & Ridgway, 1990 ; Donovan & Rossiter, 1982; Hui & Bateson, 1991). If a positive effect existed in the shopping situation, it created an overall favourable perception in building the store image (Babin et al., 1994), also encouraging merchandise and service quality perception (Baker, Grewal, & Parasuraman, 1994), which thereby made consumer decision making style easy (Babin et al., 1994). Music also created a positive effect that created a desire to affiliate with the store (Dube et al., 1995). Even though different research vouches for different cues that are important in creating a positive influence of the retail surrounding, the process through which cues are channeled remains unclear.

Of the two competing models (emotional route and cognitive route) that predict the influence of ambient perfumes on shoppers' spending, the emotional route is partially ambiguous. In answering the question whether ambient perfume induced emotion influences store and product evaluations, researchers like Spangenberg et al. (1996) found that there are no main or interactive effects. In another study by Morrin and Ratneshwar (2000), among both familiar and unfamiliar brands, the influence of ambient perfume on evaluation and memory did not have any effect on subjects' emotional or arousal levels.

These conclusions are pointing the weakened influence of emotional route and thereby suggesting the significance of cognitive route or path. As per the arguments of Berry and Clark (1986) and Shostack (1977), consumers look for firms' capabilities and quality as cues (atmospherics), which can be found in the immediate physical firms' environment (Rappoport, 1982), otherwise called as the cognitive - affect model.

(3) Effects of Perfumes on Emotion and Cognition : Perfumes are perceived as pleasant and unpleasant (Buck & Axel, 1991 ; Ehrlichman & Halpern, 1988). Researchers have found that consumers are more likely to identify a lemon perfumed product if they are presented in a yellow container (Ellen & Bone, 1998), thereby making perfumes depend on additional cues for getting identified by the consumers (Davis, 1981).

Perfumes enter the limbic system (part of the brain) at the centre of emotions (Spangenberg et al., 1996) as perfume perceptions (Engen, 1982; Moskowitz, 1979; Schiffman, 1979). Perfumes also effect electroencephalographs (EEG), indicating that they can induce arousal (Lorig & Schwartz, 1988). The influence of arousal due to perfumes and pleasantness is not linear as it is found in many studies that as perfumes get more intense, reactions are more negative (Richardson & Zucco, 1989), following an inverted U-shaped function (Spangenberg et al.,1996). The perfumes do have cognitive effects (Gulas & Bloch, 1995), as it was found that perfumed hosiery influences women's perceptions of quality (Laird, 1932). The occurrence of congruent perfumes improved product evaluations (Bone & Jantrania, 1992) and also information processing as seen in an experimental study in a computer-aided product choice model by Mitchell, Kahn, and Knasko (1995). Perfumes are seen to be associated with persons, objects, and events. People's reaction to perfumes are usually tied to evoked associations (Kirk- Smith, 1994) by retrieving deeply ingrained memories, thereby leading to pleasant or miserable (unhappy) feelings.

In the context of the emotional model competing with the cognitive model, the relevant question is whether emotion turns as a necessary mediator of cognition ? Researchers found that perfume based outcomes may occur in the absence of the emotional shift (Bone & Scholder, 1998; Cann & Ross, 1989; Ehrlichman & Halpern, 1988; Knasko, 1992 ; Spangenberg et al., 1996). As per the conclusion, the simple transfer of pleasantness/unpleasantness to the object happened without the emotional shift.

(4) The Interaction Between Emotion and Cognition : The mechanism through which consumers process information remains unclear. Does it take the emotion - cognition route or cognition - emotion route ? Emotion shift was not observed in subjects when ambient perfumes were used combining the emotion and cognition (Morrin & Ratneshwar, 2000 ; Spangenberg et al., 1996). Understanding the interplay and the hierarchy of

cognition and emotion in the study of atmospherics and its influence on shopping behaviour throws light upon numerous managerial questions. Should merchants modify shoppers' emotions ? Or should they try to modify the shoppers' perceptions of the store setting or product quality ? Are emotional shifts caused by entertainment efforts or by informational cues ?

The servicescapes model of Bitner (1992) and Zajonc and Markus (1984) argued for the emotion- cognitive model and contended that emotion can take place without an antecedent cognitive process. Arousal and motor activities which are key elements to emotion are caused by biological, sensory, or cognitive events. When there is a cognitive input, the soft affect is represented in the form of an emotional experience. The emotion leads to a consequence in the form of arousal. Thus, in an emotional process, there need not be a cognitive experience.

As per Zajonc and Markus (1984), the experience of emotion is cognition. Izard, Kagan, and Zajonc (1984) did not contest that cognition is a sufficient condition to emotion. But the real question is whether cognition is a necessary condition for emotion?

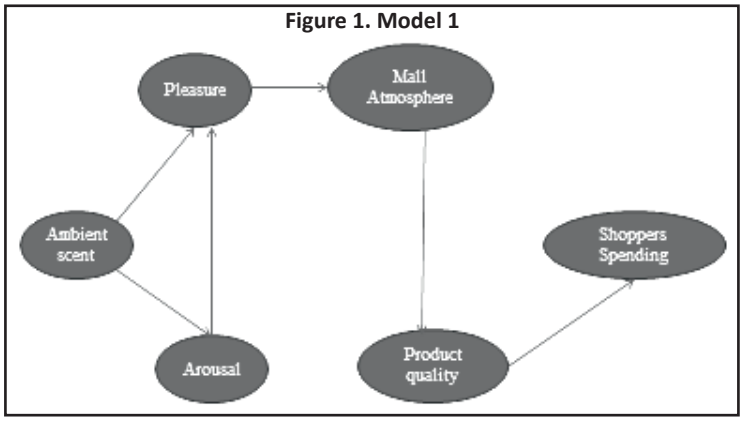
The cognition - emotion model (Lazarus, 1991) posits the casual role of cognition as a necessary but not sufficient condition to elicit emotions. Appraisal of both internal and external signs in a person-environment relationship is both necessary and sufficient.

Both the competing models are tested in the study. In model one, ambient perfume stimulates positive emotions influencing shoppers' perceptions of their situations (environment) and product quality. In the second model, ambient perfume mediates the perceptions of the shopping situation (environment) and product quality, thus enhancing the shoppers' emotions.

Hypotheses and Models

(1) Model 1 : Ambient perfume induced emotion (affect) is an antecedent to perception (cognition) that leads to spending.

Figure 1. Model 1



In the first model (Figure 1), ambient perfume influences consumers' emotions (affect) through arousal and pleasure. Pleasure and arousal were found to be independent dimensions (Russell & Pratt, 1980). Arousal induces pleasure (Berlyne, 1971, 1974). This path is verified as part of many subsequent studies (Babin & Attaway, 2000 ; Eroglu et al., 1998 ; Wakefield & Baker, 1998). It was also found that pleasure was not correlated with arousal (Dube et al., 1995 ; Richardson & Zucco, 1989 ; Spangenberg et al., 1996). Perfume and emotion (arousal) has an affective relationship. However, considering the U shape effect of perfume intensity, arousal and pleasure can have a positive or negative effect. Supposing a light pleasant perfume, its effect on arousal can be positive.

↳ **H1 :** A light and pleasant ambient perfume positively arouses consumer emotion.

The positive effects provoke a favourable perception on shopping environment under approach/avoidance model (Donovan & Rossiter, 1982 ; Mehrabian & Russell, 1974). Therefore, pleasure enhances the product quality perception (cognition) through transfer (Obermiller & Bitner, 1984).

↳ **H2 :** Consumer emotion improves perception of the shopping environment and it positively influences perception of product quality.

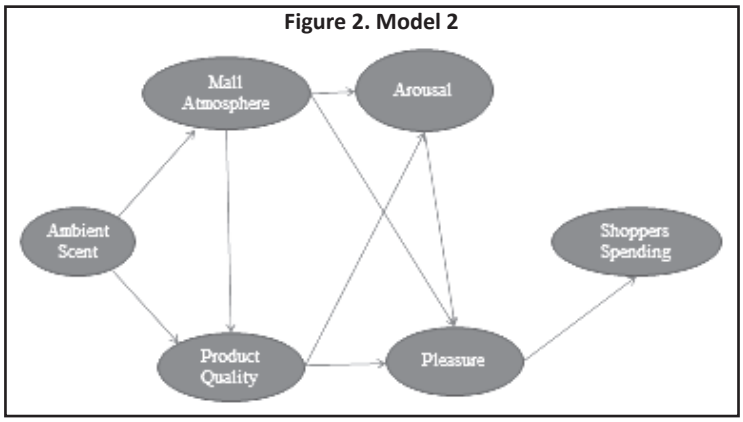
Consumers who are with positive emotion stay longer in stores and affiliate with others and make more purchases (Donovan & Rossiter, 1982).

↳ **H3 :** Shopping environment and product quality influences consumer spending.

In short, in the first model (Model 1), emotion (affect) is an antecedent to perception (cognition).

(2) Model 2 : Ambient perfume enhances the perception (cognition) of retail surroundings and product quality, which is an antecedent to emotion (effect) that leads to spending (Figure 2).

Figure 2. Model 2



In the second model (Model 2), ambient perfume is perceived by consumers not to influence their emotional shift (Bone & Scholder, 1998 ; Ehrlichman & Halpen, 1988 ; Knasko, 1992 ; Morrin & Ratneshwar, 2000 ; Spangenberg et al., 1996) but ambient perfume is seen as an environmental cue (Berry & Clark, 1986 ; Rappoport, 1982; Shostack, 1977; Spangenberg et al, 1996) that influences product evaluation (Bitner, 1986, 1990; Rappoport, 1982).

↳ **H4 :** Ambient perfume influences consumers' perception of shopping environment and product quality.

Perceptions of the retail surrounding and product quality are antecedents to consumers' effect (behaviour/shopping) (Bagozzi & Moore, 1994 ; Bagozzi, Gopinath, & Nyer, 1999 ; Baker et al., 1994).
↳ **H5 :** Consumer's perception on the retail surrounding (shopping environment) and product quality positively affects shopping emotion and leads to increased shopping behaviour.

In short, in the second model (Model 2), perception (cognition) of retail surrounding and product quality is an antecedent to emotion which leads to increased shopping.

Research Methodology

The proposed competing models were tested in a mall setting with approximately 200 shoppers in a popular retail store selling branded apparels, located in South India. This study replicates the study in a new external setting using real shopping environment like the study of Chebat and Michon (2003), which was done in Montreal, Canada. Previous studies in the area were conducted in a laboratory condition (study of Morrin & Ratneshwar, 2000) and that of Spangenberg et al. (1996) was done in a stimulated store. The real shopping environment is maintained and at the same time, regulated in this experimental study, making the conclusions realistic.

Data was collected on two identical weekends (Saturday and Sunday) from 11A.M till 8 P.M on both days in the second and third weekends of August 2016. There were two sets of respondents, that is, the control and the experimental group. In the control group, the olfactory atmosphere was not modified. There were no other aggressive odors in the air-conditioned store. For the second set of respondents (experimental group), ambient perfume was diffused in the air-conditioned showroom of the ready-made wear textile retailer. The whole showroom, both the first and second floors, were separately perfumed for 10 seconds every 15 minutes continuously from start to end time of the experiment. The room was perfumed within the threshold limits without causing inconvenience to shoppers. On each floor, two diffusers were used for uniformity of perfume strength.

For the store experiment, a feminine perfume "vanilla" was used in the female section on the ground floor and masculine perfume "rose maroc" was used in the men's section. The children's section was part of the men's section and hence, the influence of masculine perfume on feminine shoppers for children's clothes could not be separated. The category perfumes were used as per the findings of Spangenberg et al. (1996) and Chebat and Michon (2003). The perfume used should have been congruent with garments sold in the retail store.

Graduate marketing students spent four days in total at the store full time, and the consumers were asked to fill the questionnaire (schedule) at the end of their shopping. The volunteers were perfume neutral in their dressing. The number of respondents in the control group was 99 and in the experimental group was limited at 83, respectively. The proportion of men and women in the sample were almost equal for both the groups.

Perceptions of product quality were measured using the three- item scale developed by Bellizi et al. (1983). The following statements/phrases were used : (a) outdated/ upto date, (b) inadequate/adequate, (c) low/high quality.

Shopping mall perceptions were measured using the scale of Fischer (1974). The following statements/phrases were used : (a) boring/stimulating, (b) unlively/lively, (c) uninteresting/interesting.

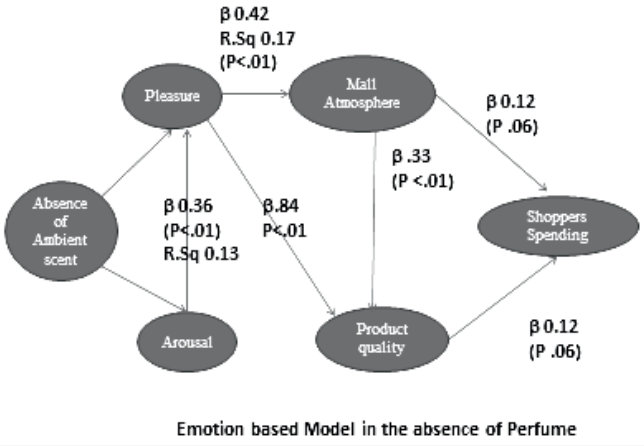
Pleasure and arousal items were measured using the scale of Mehrabian and Russel (1974). The following statements/phrases were used for pleasure : (a) unhappy/happy, (b) annoyed/pleased, (c) unsatisfied/satisfied, (d) melancholic/contented. The following statements/phrases were used to measure arousal : (a) relaxed/stimulated, (b) calm/excited. The dependent variable for the study is their actual purchase intent measured as a binary outcome, purchased/ not purchased.

Analysis and Results

The results are discussed in the following contextual argument that ambient perfume induced emotion (affect) is an antecedent to perception (cognition) that leads to spending.

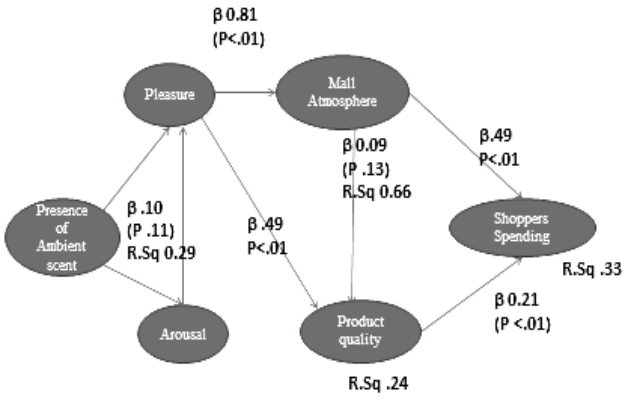
As per H1, a light and pleasant ambient perfume positively arouses consumer emotion, which is substantiated as the average score for arousal (.84, in the occurrence of perfumes) is greater than average score in the absence of perfumes (.60) (see Tables 1 and 2). They are statistically significant as well (Table 3). In the path model, arousal leading to enhanced pleasure is significant (p <.01) in the absence of perfume situations in the emotion based model (Figure 3) (Figure 4 - Occurrence of perfume model, p >.01). The beta - value is stronger in the absence of perfumes, for the effect of arousal on pleasure (.36), but the average differential score of pleasure between the sample groups is insignificant (p >.01, Table 3), indicating that pleasure is same for across the groups. The difference in mean scores for pleasure being insignificant makes the path relationship weak, making the H1

Figure 3.Emotion Based Model in the Absence of Perfume



Emotion based Model in the absence of Perfume

Figure 4. Emotion Based Model in the Occurrence of Perfume



Emotion based Model in the occurrence of Perfume

Table 1. Descriptive Statistics

In the Occurrence of Perfume		
	Average Score of Respondents	**Max Score on Bi-Polar Scale**
Arousal	0.84	2
Pleasure	3.65	4
Shopping Environment (Surrounding)	2.77	3
Product Quality	2.78	3
Purchase (% of Purchased Consumers)	83	
In the Absence of Perfume		
	Average Score of Respondents	**Max Score on Bi-Polar Scale**
Arousal	0.6	2
Pleasure	3.67	4
Shopping Environment (Surrounding)	2.84	3
Product Quality	2.8	3
Purchase (% of Purchased Consumers)	70	

partially significant. However, the scores of arousal is moderately high and that for pleasure is high across the two groups.

As per H2, consumer emotion (pleasure) improves perception of the shopping environment and it positively influences perception of product quality, and is partially substantiated. The pleasure score is high, but insignificant across groups (mean score in the absence of perfume = 3.67 and mean score in the occurrence of perfume = 3.65) (Table 1 and Table 3). However, the influence of pleasure on mall atmosphere is significant for both the groups (p <.01) with beta value at .81 and .42, respectively in the occurrence and absence of perfumes (Figure 3 and Figure 4). However, at the same time, shopping environment (mall environment) is perceived as same across the two groups. The average scores of shopping environment in the occurrence of perfumes is 2.77 and in the absence of perfumes is 2.84 (p >.05) (Table 1 and Table 3). The mean score difference of product quality between the two groups is insignificant (p >. 05). The influence of pleasure on product quality is significant for both the groups, but stronger in the absence of perfume (Beta .84, p <.01).

As per H3, shopping environment (mall environment) and product quality influences consumer spending, which is partially substantiated. The product quality scores are high both in occurrence of perfumes (2.78) and in the absence of perfumes (2.8), but insignificant across groups (p >.05) (Tables 1, 2, and 3). However, in the occurrence of perfumes, 83 % of the shoppers spent, while in the absence of perfumes, only 70 % spent, indicating a definite role of perfumed environment in creating a positive mall atmosphere and higher consumer spending.

Table 2. Percentage Outcomes- In Presence and Absence of Perfumes

	In the Occurrence of Perfume	
	Percentage of Respondents with	
	Positive Outcome	Negative Outcome
Arousal	33	67
Pleasure	86	14
Shopping Environment (Surrounding)	85	15
Product Quality	82	18
Purchase	83	17
	In the Absence of Perfume	
	Percentage of Respondents with	
	Positive Outcome	**Negative Outcome**
Arousal	23	77
Pleasure	86	14
Shopping Environment (Surrounding)	95	5
Product Quality	89	11
Purchase	70	30

Table 3. Chi-Square Results for Descriptive Statistics

	Occurrence of Perfume	Absence of Perfume	Chi-Square
Arousal	0.84	0.6	p <.05
Pleasure	3.65	3.67	p >.05
Shopping Environment (Surrounding)	2.77	2.84	p >.05
Product Quality	2.78	2.84	p >.05

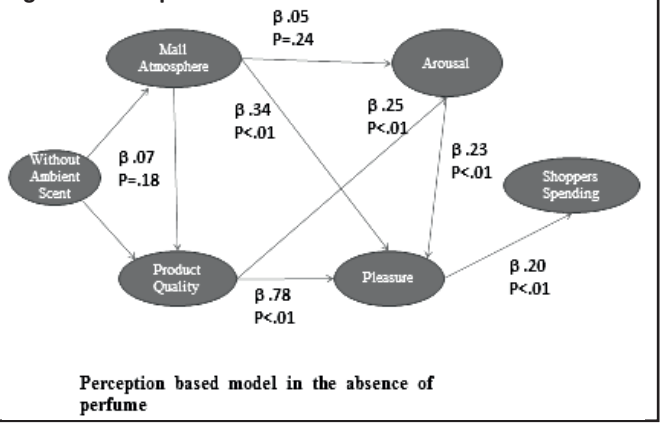
In the occurrence of perfume, mall atmosphere mediates the relationship between pleasure and shoppers' purchases (spend) (Figures 3 and 4). The effect of mall atmosphere on shopper spending in the occurrence of perfumes is 0.49 (p <.01), which is stronger than in the absence of perfumes (0.12, p >.01). Similarly, in the occurrence of perfumes, product quality mediates the relationship between pleasure and shopper spending. In the occurrence of perfumes, the beta-values are stronger (0.21, p <.01) than when compared to in the absence of perfumes (0.12, p >.01).

In short, in the occurrence of perfumes, pleasure influences shopper spending (dependent outcome) through mall atmosphere and product quality (both mediates), and cannot be fully substantiated because the average scores of both the groups across these variables are not statistically significant (Tables 1, 2, and 3).

The results of H4 and H5 are discussed in the context that ambient perfume enhances the perception (cognition) of mall atmosphere (shopping environment) and product quality, and is an antecedent to emotion (effect) that leads to spending (Figure 5 and Figure 6).

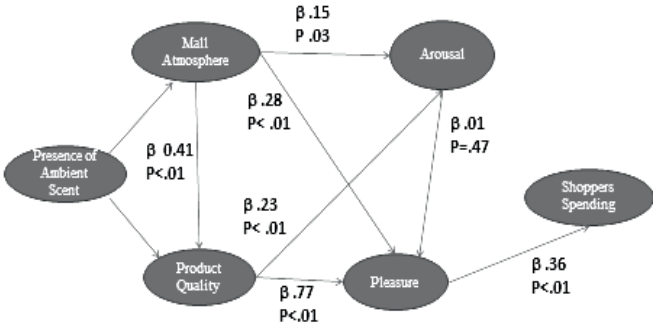
As per H4, ambient perfume influences consumers' perception of shopping environment and product quality, and the hypothesis is not substantiated because even though the average scores are high for both the variables, they are insignificant across both groups (p >.05) (Table 3). The influence of mall atmosphere on arousal (beta 0.15, p <.01) is significant only in the occurrence of perfumes. However, the influence of mall atmosphere on pleasure is significant and equal in both the groups (occurrence of perfume : 0.28, p <.01 and absence of perfume : 0.34, p <.01). The influence of mall atmosphere on product quality is significant in the occurrence of perfumes (beta .41, p <.01).

Figure 5. Perception Based Model in the Absence of Perfume



Perception based model in the absence of perfume

Figure 6. Perception Based Model in the Occurrence of Perfume



Perception based model in the occurrence of perfume

As per H5, shopping environment (mall atmosphere) on product quality and arousal is significant only in the cognitive model with occurrence of perfumes. The influence of mall atmosphere on pleasure and that of product quality on arousal is significant on both the models (occurrence and absence of perfumes). The influence of pleasure on purchase (consumer spending) is significant for both the models (occurrence and absence of perfumes), but the correlation value is stronger in the model with perfumes (β .36, p <.01) (Figure 5 and Figure 6).

To summarize the results, occurrence of perfume created an overall influence of mall atmosphere on product quality (β values are significant only for the model with perfume), and the overall correlation of pleasure on consumer spending (purchase) is stronger in the occurrence of perfume. Moreover, the consumer spending in the occurrence of perfumes is 13 % more. As per the results of this experimental study, both the emotion based and the perception based models reasonably explain the effect of perfumes on consumer spending.

As reported earlier, the children's section was part of the men's section and hence, the influence of masculine perfume on feminine shoppers (10 shoppers of 42 female shoppers of experimental group) for children's clothes could not be separated, which could have had an impact on the results.

Discussion

As per H1, a light and pleasant ambient perfume positively arouses consumer emotion, and the hypothesis is substantiated as the average score for arousal (.84, in the occurrence of perfumes) is greater than average score in the absence of perfumes (.60) (Tables 1, 2). As per H2, consumer emotion (pleasure) improves perception of the shopping environment and pleasure positively influences perception of product quality, and the hypothesis is partially substantiated, because the difference in the average score outcome and correlation outcomes are not significant in all the cases (Figures 3 and 4 ; Tables 1, 2, and 3). As per H3, shopping environment (mall environment) and product quality influence consumer spending, and the hypothesis is partially substantiated (Figures 3 and 4 ; Tables 1, 2, and 3).

Of the two competing models (emotion - cognition route and cognition - emotion route) that predict the influence of perfumes on shoppers' spending, the emotional route is partially ambiguous, and this is further confirmed in this study as well. In answering the question, whether the ambient perfume induced emotion influences store and product evaluations, researchers like Spangenberg et al. (1996) found that there are no main or interactive effects, and the same is getting substantiated in this study as well as argued above.

In another study by Morrin and Ratneshwar (2000), among both familiar and unfamiliar brands, the influence of ambient perfume on evaluation and memory did not have any effect on subjects' emotion or arousal levels. These results are reflected in the outcome in both the competing models, as the outcomes are mixed, as the average scores

and correlation path values are only partially conforming. The main point of argument rests upon the fact that only arousal has a mean score difference across groups (p <.01). All other variables like pleasure and mall atmosphere have no mean score difference across the two groups (p >.01). These conclusions point toward the weakened influence of emotional route (Figures 3 and 4) and thereby, suggesting the importance of cognitive route or path (Figures 5 and 6).

As per the arguments of Berry and Clark (1986) and Shostack (1977), consumers look for firms' capabilities and quality as cues (atmospherics), which can be found in the immediate physical firms' environment (Rappoport, 1982). This forms the basis of the argument (Lazarus, 1991) of the cognitive theory of emotions.

As per H4, ambient perfume influences consumers' perception of shopping environment (mall atmosphere) and product quality, and this hypothesis is only partially substantiated because even though the average scores are high for both the variables, they are insignificant across both groups (p >.05), and the path values give only partial indications.

As per H5, shopping environment (mall atmosphere) on product quality is significant in the cognitive model with perfumes. The influence of mall atmosphere on arousal is significant in the occurrence of perfumes. The influence of shopping environment (mall atmosphere) on pleasure is significant on both the models (with and without perfumes).

The real challenge is the difficulty in deducing the information pertaining to both these models because the mechanism through which consumers process information remains unclear - does it take the emotion - cognition route or the cognition - emotion route ?

Managerial Implications

Understanding the interplay and the hierarchy of cognition and emotion in the study of atmospherics's influence on shopping behaviour throws light upon numerous managerial questions. Should retailers try to modify shoppers' emotions ? or should they try to modify the shoppers' perceptions of the store environment or product quality? Are emotional shifts caused by entertainment efforts or by informational cues? The answer still remains unclear from the tested models.

Arousal and motor activities which are key elements to emotion can be generated by biological, sensory, or cognitive events. However, tampering (modifying) with the physical atmospherics is relatively easy, which, in turn, triggers the cognition path. When there is a cognitive input, the soft effect is represented in the form of an emotional experience. The emotion leads to a consequence in the form of arousal.

Tracking the emotional state of the consumer is practically difficult. Even though cognition leads to emotions and purchases as said above, it need not happen every time. Thus, in an emotional process, it need not every time generate a cognitive experience. As per Zajonc and Markus (1984), the experience of emotion is cognition. Izard et al. (1984) did not challenge that cognition is a sufficient condition to emotion. But the real question is whether cognition is a necessary condition for emotion? The cognition-emotion model (Lazarus, 1991) posits the causal role of cognition as a necessary, but not a sufficient condition to elicit emotions. Appraisal of both internal and external cues in a person-environment relationship is both necessary and sufficient.

In short, customers can be occasionally emotional and sometimes rational as well. When emotions come into play, they may lack rationality. However, when consumers are rational, sometimes due to emotional swings, they can be emotional as well. Sometimes, a particular situation or object that is totally strange, that evolves in a shopping environment, triggers nostalgia and makes a person emotional.

However, the cognitive model seems better an appeal because for all practical purposes, the emotional state of the consumer cannot be addressed and ascertained by the marketer. The best option for the retailer is to create a retail atmospheric that appeals to the potential customer, making him/her feel aroused, positive about the product quality, and at the same time, pleasurable, which leads to an enhanced possibility of spending (cognitive model).

Hence, the servicescapes model of Bitner (1992) and Zajonc and Markus (1984) argued for the emotion - cognitive model and contended that emotion that can take place without antecedent - cognitive process is also valid.

Limitations of the Study and Scope for Future Research

The sample size in this experimental study was limited to 99 and 83 respondents for control group and experimental group, respectively, which is a major constraint. The study was limited to just shoppers of a well-to-do ready-made garment brand. The samples can also be drawn from grocery and book stores representing various sectors with varied ambient perfume backgrounds. The age group of the respondents of the study for the day was between 25-65 years, which could not be segregated into different categories for limited sample size.

Both the cognitive model (cognition - emotion) and the emotion model (emotion - cognition) are important, with more practical significance for the cognitive model. The study failed to bring in various dynamic factors like the tracking of customer emotional swings that makes them switch from cognition to emotion after being exposed to a particular object or environmental cue (both nostalgic) in the shopping space. Such dynamic factors could be taken up later by future researchers.

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