# Impact of Store Atmosphere on Impulse Buying Behaviour: Moderating Effect of Demographic Variables

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#### Abstract

Impulse buying as an unplanned purchasing decision is influenced by several factors. This study explores the relationship between store atmosphere and impulse buying behavior (IBB). It also examines how demographic variables such as age, gender, and education affect the relationship between store atmosphere and IBB. Mall intercept technique was used to collect data from over seven hundred shoppers from eighteen mega stores in Pakistan using self administered questioners. In order to analyze the data and test the Hypothesis, Structure Equation Modeling (SEM) technique was used. The results suggest that store atmosphere has positive relationship and significant influence on IBB. Additionally, it reveals that only one demographic variable i.e. age has substantial influence on IBB while other variables such as gender and education bear insignificant relationship with IBB. Age moderates the relationship between store atmosphere and IBB. This study is a valuable addition in the existing literature and the findings of the study would be helpful in making different selling and retailing decisions. From a managerial perspective, it is recommended that marketers and the retail managers can considerably enrich the IBB through improving the store environments. In contrast to the common studies that research the impact of store atmospheres on IBB, this research mainly takes into account the demographic variables as moderators.

**Keywords:** Impulse Buying Behavior, Store Atmosphere, Demographic Variables, Age, Gender, Education and Retail Stores

## 1. Introduction

In today's competitive environments, the relationship of store atmosphere and Impulse Buying Behavior (IBB) is well acknowledged by marketers and researchers all around the world. The store atmosphere and impulse buying both relate to consumer buying behavior and persuade the consumer buying patterns. It is recognized that while making buying decisions, the consumers respond more to the core products and services being offered. So the buying environment, more specifically the store atmosphere is more important in buying decisions than the product itself. For the same rationality, today more emphasis is given to the store design, texture, layout, architecture, and interior design.

This theme has been extensively studied by researchers during the last 60 years. [1] Was the first to characterize store atmosphere as the retail store personality [2] defined

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store atmosphere is a complex combination of psychological attributes and a store's tangible and intangible or functional qualities. [3] dealt with the perception of store atmospherics, the interface of the tangible and intangible elements created by customers' feelings, and thoughts within the choice of their previous knowledge, experience and expectations. The large majority of researchers [4-11] concluded that store atmosphere attributes exert important influences on store choice and store loyalty. Customer perceptions of store atmosphere strongly influence shopping and impulse buying. The significance of store atmosphere may be well understood by the popular saying of leading researcher [12] which note that People will forget what you said, people will forget what you did, but people will never forget how you made them feel. The store atmospherics include physical appearance, arrangement, music, light, fragrance, color, texture, store layout, architectural design, and interior design [13].

Impulse buying has always been considered as an important topic in consumer buying decisions. Impulse purchase happens when a customer sees the product in a shop and the inner feelings strongly urge the customer to purchase and bring it into possession. When buyers purchase a product or service without a plan such instances of purchase are known as impulse buying. In its simple definition, the act of unplanned and unstructured purchase has been regarded as impulse buying [14-17]explained impulse buying as more touching, unintentional, less premeditated, and more tempting buying decision is contrast to planned buying decisions. According [18-19] the actual impulse buying manifests an at-the-moment on-spot decisions which are predominantly influenced by the store's environment, and the customer's feel at the hour of shopping. On a similar note [20-22] conducted studies on the impact of store atmosphere on consumer impulse buying behavior and the moderating role of demographics factors.

Although a lot of studies have addressed the association of store atmosphere with IBB, the impact of demographic variables such as age, gender, and education as moderators has little been dealt. Whereas the demographic variables can play vital affect on consumers' behavior, in developing countries like Pakistan, this very dimension in the context of store atmosphere has notably been neglected. This research aims (a) to analyze the association between the demographic variables and impulse buying behavior, (b) to examine the effect of store atmosphere on impulse buying behavior, and c) to investigate if the demographic variable affects the relationship between store atmosphere and IBB.

### 2. Store Atmosphere, Impulse Buying and Demographic Variables

#### 2.1. Store Atmosphere

The concept of store atmosphere as introduced by [23-24] defines that it is an effort to design store environment to create the specific emotional effects in the buyer that enhances the purchase opportunity. Another definition says that it is the physical characteristics and surrounding influence of a retail store used to attract customers [25]. According to [26] the tangible part of a store atmosphere includes the equipment, store cleanliness, theme colors, store layout, merchandise display and eye-catching décor etc. On the other hand the intangible factors comprise of the temperature, scent, music, and lighting etc. Store atmosphere contributes to the customer shopping convenience and therefore influences the shopping experience [27].

Music as a major, recurring, and common variable induces mood, takes place at a subliminal level and creates a positive impact on impulse buying. [28-29] argue that customers react psychologically and behaviorally towards music. According to another study, the up-beat music particularly triggers impulse buying [30]. Similarly elegant lighting boosts a retailer's interior, generates an atmosphere of thrill, and encourages optimistic influence [31].

The store image additionally has positive impact on impulse buying behavior. Some shops display distinct appearances whereas others are more of a kind that blends into the crowd. The shop image is the sum of different features together with location, merchandise suitability, and the knowledge and congeniality of the sales personnel [32].

## 2.2. Impulse Buying Behavior

Rook [33] defines impulse purchase as a buying that occurs when a consumer experiences a sudden, often powerful and persistent urge to buy something immediately. Similarly [34] define it as a sudden purchase with no pre-shopping intentions either to buy the specific product category or to fulfill a specific buying task. According to [35] impulse buying is the purchase of an item with least deliberation under the influence of a sudden and powerful urge. Impulsive behavior is irresistibly arousing but less deliberative as compared to planned purchasing conducts [36].

[37] found that coupons together with low cost vouchers, shop show, commercials and promotions, behaviors of store staff and promoting value were substantial determinants of impulsive buying. External factors specific to a person, for example their socioeconomic status, gender, lifestyle, and family background additionally have effect on their impulse buying behavior. Consumers who're single, of a low socio-financial status, materialistic and/or female tend to exhibit impulse buying [38]. In the eyes of Chang *et.al*, [39] the consumers with more positive emotional reactions towards the store atmosphere are more inclined towards impulsive purchases.

Highly stimulating and pleasant store environments can lead to enhanced impulse buying [40]. Product appearance and background music were important external influences on the customer that lead to the impulse buying [41-42] found that a pleasant environment contributed to unplanned shopping and prepare the consumer to make a sudden decision to buy a product.

Research demonstrates that in pleasant store environments, consumers are likely to spend added time in the retail location, have a greater desire to affiliate and interact with the service providers and are likely to buy impulsively [43-45] showed that there is positive relationship between store atmosphere and impulse buying. Similarly [46] concluded that publicity to in store advertising stimuli generates an unplanned shopping. Eroglu S.A. and Machleit K.A. [47] demonstrated that the sales atmosphere variables are important stimulants which lead to buy impulsively. On a similar note [48-50] also found that store environment stimulates the customers' emotional states and drive impulse purchasing through convincing affect and urge. In the light of above studies, we conclude that impulse buying is convincingly influenced by the store atmosphere.

Hypothesis1: There is a positive relationship between store atmosphere and impulsive buying behavior.

#### 2.3. Demographic Variables

The study of human population is called Demographic. Personal information that consist of such information as race, family size, income level, educational level, location, ethnicity, gender and age. For example, the marketing department of a business might use demographic variables as an important input when formulating target customer profiles. The possible range of such factors includes race, family size, income level, educational level, location, ethnicity, gender and age since this study takes into account age, gender, and education as moderator variables, a brief introduction to each of them is given below. Different studies point out association of demographic variables with IBB.

**2.3.1** Age: Age is one of the imperative factors that determines impulse buying behavior in buyers [51-56]. Some studies established that, in certain markets the younger buyers exhibit more impulsive conducts in their purchases when compared to the elder ones [57-

64]. However, in developing countries like Pakistan, majority of the youth are dependent on their families, hence exhibit weaker impulse buying tendency [65].

Bellenger, Robertson & Hirshman [66] argued that within the age of 18-19 the youth are heavily inclined to impulse shopping. [67] found enhanced impulse shopping in age bracket 18 to 39, and a gradual decline thereafter. He concluded an inverse relationship between age and impulse buying. [68] Performed a similar study and endorsed the findings of Wooden.

Hypothesis 2: There is a relationship between age and impulsive buying behavior.

**2.3.2 Gender:** Gender is the social distinction between women and men, their roles, and the way they construct the society [69]. It is found as a key determinant in impulse buying behaviors [70-74]. However, different studies have described the effect of gender on impulse buying differently. Some studies declare that women are more impulsive in buying as compared to men [75-80], while the others maintain that men show more impulse purchasing than women [81-82].

Men generally do not assume pleasure in procuring as a lot as women typically do; this reduces the chances of making impulsive choices among men folks [83]. Men normally have least interaction in ordinary shopping but are fairly expert at procuring durable goods, like automobiles, instruments, stereos or computer systems etc., while ladies traditionally take care of more momentary things, like cooking a dinner, adorning a cake, correct haircut or makeup etc. For girls, shopping is a kind of reworking expertise and has psychological and emotional association that rarely exists in males [84-85] analyzed that female consumers' buying behavior was easily influenced by advertising, displays of goods, atmosphere, promotions and sales, and the attitudes of sales person. Women usually buy self-expressive and symbolic stuff which represent their emotional aspects and appearance [86]. Thus, girls have a larger tendency to buy impulsively [87-91]. For males, on the other hand, the impulsive shopping tendency is more of instrumental character. They tend to discover what they need, and end it quickly with a minimal level of engagement. Impulsive buying for them is therefore a faster decision, and in addition, the quickest attainable usage of the goods bought. Moreover, for males impulsive shopping tendency is more related with facets of money attitudes [92].

Hypothesis 3: There is a relationship between gender and impulsive buying behavior.

**2.3.3 Education:** Education level has emerged as an important influence on human behavior, and has thus been used as criterion in a variety of categorizations such as a determinant of socio economic level.[93] found that consumer education negatively influences on impulse buying behavior which means that less educated customers are more impulsive in taking their buying decisions then more educated ones. Well educated buyers are relatively better in decision making and are also well versed with the marketing tactics, so they are comparatively lesser tempted towards impulse shopping, in general. [94] while discussing the consumer behavior, established a negative relation of education on immediate gratification and impulse buying. [95] also described that people with lower education levels tend to exhibit more impulsivity in buying in order to emulate the 'good life'.

Hypothesis 4: There is a relationship between education and impulsive buying behavior.

# 4. Age, Gender, and Education as Moderators

It is well established that enhanced atmosphere of a store bears a direct positive relationship with IBB. Moreover the demographic factors such as age, gender, and education are known to have direct associations with IBB. However, the role of demographic variables as moderators on the relationship of store atmosphere and impulse buying are little explored. For example, [96] studied the direct impact of store image as a

constituent for a customer in choosing a store and using the store environment. Similarly [97] assessed the straight effects of age on perception of store atmosphere. Likewise, whereas men and women are advocated to be treated as different entities in the consumer behavior studies [98-99] the role of gender as moderator in shaping the linkage of store atmosphere and IBB is rarely addressed. On a similar note, education has not been examined as a moderating variable in evaluation of store atmosphere and to buy impulsively because it is a grim variable to define. The effect of the behavioral changes caused by various levels of education on perception of store atmospherics and impulse buying is not known. In order to evaluate the effect of these demographic variables as moderators on relationship between store atmosphere and IBB, Following three hypotheses may be developed.

H5a: Age moderates the relationship between store atmospheres and IBB in such a way that relationship is stronger where the age is low and the relationship is weakened where the age is high.

H5b: Gender moderates the relationship between store atmospheres and IBB such that the relationship is strengthened where the gender is female and relationship is weakened when the gender is male.

H5c: Education moderates the relationship between store atmospheres and IBB such that the relationship is strengthened when education is high and weakened when the education is low.

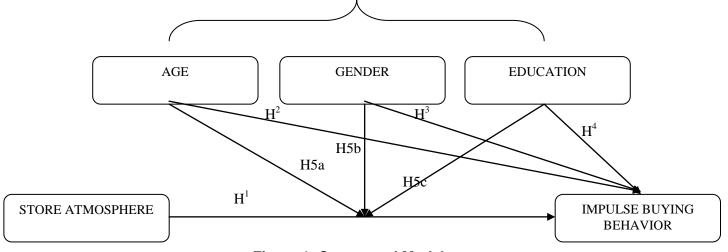


Figure 1. Conceptual Model

## 5. Research Methodology

## 5.1. Sampling and Data Collection

The data was collected from the eighteen mega stores in three big cities (Faisalabad, Lahore and Islamabad) of Pakistan and mall intercept technique was used to collect data on study variables. This design is consistent which previous research [100-101]. The reason behind the collection of data from these malls are because they are standing at most populated areas where people can easily purchase and make impulse buying due to their atmosphere and environment of the stores. The data was collected through self-administered questionnaire from seven hundred individuals.

#### 5.2. Measures

**5.2.1. Impulse Buying Behavior:** Rook and Fisher [16] evolved the scale of IBB is used in this study for measuring IBB. It consists of nine items ranging from 1= strongly

disagree to 5= strongly agree measured by five-point Likert scale, A sample item from this scale is "I often buy things without thinking."

**5.2.2. Store Atmosphere:** Store Atmosphere scale measures the degree to which a customer holds positive perception of a retail store, particularly with regard to the friendliness of the shopping environment. Scale developed by [108] is used which consists of 4 items. All items were measured on Same Likert scale as IBB. A sample item from this scale is "The store is a pleasant place to shop."

Sr.No.	Variables	Codes	Instrument Author's	No. of Items	Previous Reliability	Measurement Scale	
1	Impulse Buying Behavior	IBB	Rook and Fisher 1995	9	0.88-0.82	1= Strongly Disagree, 5= Strongly Agree	
2	Store Atmosphere	SA	Baker et al., 1994 and Grewal <i>et al.</i> , 2003	4	0.81-0.90	1=SD, 5=SA	

Table 3-1. Summary of all Measures

#### 5.3. Data Analysis

SPSS was used to enter the data. Structured equation modeling (SEM) was used for the analysis of data and to test the Hypotheses. AMOS 20 was used for the analysis of data. Review of IBB literature regarding methodology reveals that very few studies have analyzed data using SEM. Thus, it is an opportunity to fill this gap and along with that, elaborating the constructs in detail. By the end of analysis an overall fit of both model is estimated for both the mentioned models i.e. measurement model and structural model, through fit statistics by using multiple indices e.g. Relative chi-square (CMIN/DF), Goodness-of-Fit Index (GFI), Adjusted Goodness-of-Fit Index (AGFI), Comparative Fit Index (CFI) and Root Mean Square Error of Approximation (RMSEA). Descriptive statistics, Mean, S.D, Correlation and Regression Analysis.

#### 6. Results and Discussions

The current study designed to develop and explore the structural equation modeling of IBB with Store Atmosphere. The data was collected through questionnaire and the next step in the analysis of data and then interpretations of results. Structures equation modeling was used for the analysis of data and also descriptive statistics were considered for the sample and variables.

#### **6.1. Descriptive Statistics**

Demographic variables are described the characteristics of respondents in term of gender, age, and education. It also helps to understand the general characteristics of populations sample and to understand the results of the research. Responses from consumers were obtained by floating questionnaires through Mall intercept technique as well as personal interaction mode. A total of 664 forms were received out of which only 473 were useful for analysis making it 68% of response out of 700 floated. Table 6-1

shows the demographic Gender information of respondents. Gender of respondents was divided in two categories of male and female. This sample of 473 individuals comprised of 220 females and 253 males (46%, 54% respectively).

Table 6-2 shows the demographic Age information of respondents. Respondents were divided in five slabs for ascertaining their age. 38.1% of the consumers were between 15-20 years of age, 18.8% were between 21-25 years, 13.1% were between 26-30 years, 18.2% were between 31-35 years, and 11.8 were of age above 36 years. The majority of the respondents were falling in 15-20 years.

Table 6-3 shows the demographic Education information of respondents. When respondents are divided according to their qualification, table shows that majority of the respondents were holding Bachelor's degree (31.1%), only 23% of the respondents belong to the group having Intermediate degree, only 22.4% of the respondents were holding degree masters, very few 12.7% of them were having above master's degree. There was very small percentage of respondents falling in category of Metric 9.9%.

 Frequency
 Percent
 Cumulative Percent

 Male
 253
 53.5
 53.5

 Female
 220
 46.5
 100.0

 Total
 473
 100.0

**Table 6-1. Respondents of Gender** 

	Frequency	Percent	Cumulative Percent
15-20	180	38.1	38.1
21-25	89	18.8	56.9
26-30	62	13.1	70.0
31-35	86	18.2	88.2
Above 36	56	11.8	100.0
Total	473	100.0	

**Table 6-3. Respondents of Education** 

	_	_	Cumulative
	Frequency	Percent	Percent
Below Metric	4	.8	.8
Metric	47	9.9	10.8
Intermediate	109	23.0	33.8
Bachelor	147	31.1	64.9
Master	106	22.4	87.3
Above Master	60	12.7	100.0
Total	473	100.0	

**6.2.1.** Correlation Matrix and Descriptive Statistics Between Independent and Dependent Variables: Table 6.2.1 showed the descriptive calculation of mean, standard deviation, reliabilities and correlations among the all variables. So minimum correlations

accepted values are .14 significant at p < .05, and higher are .17 significant at p < .01 (Raja *et al.*, 2004). The mean and standard deviation of Impulse Buying Behavior and Store Atmosphere is also given in this table. The mean score for Impulse buying behavior is 3.6771 which show that respondents are more agree that purchase impulsively. The Store Atmosphere show the mean 4.1290 which indicates that respondent are mostly purchase goods impulsively due to Atmosphere of Store. And standard deviations are IBB and SA .62806, .57191 respectively. Correlation shows the relationship between variables. There is significant association between Impulse buying behavior and store atmosphere with value .428 which indicates that there is a positive correlation between IBB and SA. There is a negative correlation between Impulse buying behavior and Gender with value -.073 similarly negative relationships between Store Atmosphere and Gender with value -.087. The result shows that there is a positive and significant relationship between demographic variable age and impulse buying behavior and similarly positive association between education and IBB. The Cronbach's alpha reliability IBB was amounted 0.83 and SA .76.

Table 6.2.1. Means, Standard Deviations, Correlations, and Reliabilities

Variables	Mean	Std. Deviat ion	Age	Gender	Education	IBB	SA
Age	2.4693	1.44519					
Gender	1.4651	.49931	268**				
Education	4.0233	1.19917	.569**	057			
IBB	3.6771	.62806	.168**	073	.264**	(.83)	
SA	4.1290	.57191	.232**	087	.241**	.428**	(.76)

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

N = 473

For correlations greater than or equal to .14, p< .05; for correlations greater than or equal to .17, p< .01

Gender Male = 1, Female = 2

#### 6.3. Structure Equation Modeling

The initial model 1 results were no satisfactory and the model was poor fit. The analysis of the fit-statistics indicated that the initial model had poor fit which needed improvement. Due to the poor fit of model 1 the some changes are required and the values of model 1 CMIN/DF = 6.618; GFI = 0.869; AGFI = 0.814; CFI = 0.770; RMSEA = 0.10. The structured model 2 fit was satisfactory and the model was estimated which showed good fitness with following values of these indices: CMIN/DF = 4.417; GFI = 0.948; AGFI = 0.905; CFI = 0.910; RMSEA = 0.08. In this model delete the three items of IBB due to poor fitness of model. Further results showed no critical problems of misfit and did not suggest any additional changes.

<sup>\*</sup>p<0.05 \*\*p<.01 \*\*\*p<.001

# Results and its Comparison Between Initial and Final Structural Model

	Fit- statistics	Results of initial (SEM) Model (i.e Model 1)	Results of final (SEM) Model (i.e Model 2)	Analysis of final Structural Model (Improvement)
1	CMIN/DF	6.618	4.417	Good fit (Improved)
2	GFI	.869	.948	Good fit (Improved)
3	AGFI	.814	.905	Good fit (Improved)
4	CFI	.770	.910	Good fit (Improved)
5	RMSEA	.10	.08	Average fit (Improved)

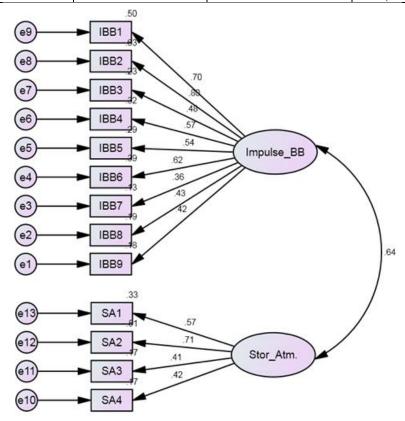


Figure 6-1. Results of Structural Model (In Term of Standardized Estimates Model-1)

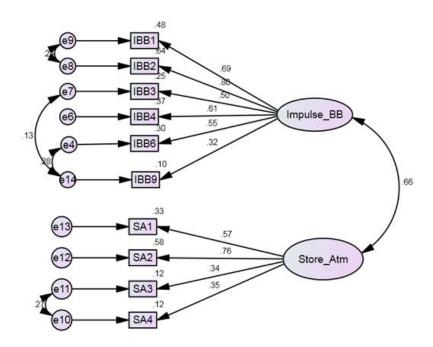


Figure 6-2. Results of Structural Model (In Term of Standardized Estimates Model-2)

# 7. Main Effects Hypotheses

Hypothesis 1: There is a significant relationship between store atmosphere and impulsive buying behavior.

A significant relationship of Store Atmosphere with impulsive buying Behavior (IBB) was established under this hypothesis. It is clear from the results that the value of Unstandardized Regression Co-efficient 0.426 or (B= 0.426), with p<0.05, that is expressing the important and positive relationship between SA and IBB. Overall perception of store environment has a positive effect on impulse buying behavior .Finally the hypothesis is sustained for this relation.

Hypothesis 2: There is a relationship between age and impulsive buying behavior. Demographic variable Age has significant positive influence on Impulse buying behavior (IBB) with un-standardized regression co-efficient value as .054 (B= .054) with p<0.05. The hypothesis for the relationship between Age and IBB is accepted. Enough evidence is found to support the hypothesis. Results showed that a one unit increase in age of respondents and effect of other variables constant 5 % increase in impulsive buying among customers.

Hypothesis 3: There is a relationship between gender and impulsive buying behavior. A significant relationship of demographic variable gender with Impulse buying behavior (IBB) was established under this hypothesis. It is clear from the results that gender has not major influence on IBB with p>0.05. The results did not support the hypothesis. Not enough evidence is found to accept the hypothesis for influence between these two variables. Because the economic condition of country effects the buying power of consumers may be that's why people don't go for impulsive buying. The selected respondents belong to cities they were more conventional as compare to other cities of the country that's why people are more conscious about their buying.

Hypothesis 4: There is a relationship between Education and impulsive buying behavior.

The hypothesis H3 predicts that there may be negative relationship between education level of respondents and impulsive buying behavior. A significant relationship of

demographic variable education with impulsive buying behavior (IBB) was established under this hypothesis. It is evident from the results that consumer's Education has not significant influence on IBB with p>0.05. The results did not support the hypothesis. Not enough evidence is found to accept the hypothesis for influence between these two variables.

## 7.2. Moderation Effects Hypothesis

H5a: Age moderates the relationship between store atmospheres and Impulse buying behavior in such a way that relationship is stronger where the age is low and the relationship is weakened where the age is high.

H5b: Gender moderates the relationship between store atmospheres and Impulse buying behavior. Such as the relationship is strengthened where the gender is female and relationship is weakened when the gender is male.

H5c: Education moderates the relationship between store atmospheres and Impulse buying behavior. Such as the relationship is strengthened when education is high and weakens when the education is low.

To study the moderating effects of demographic variables age, gender and education on the relationship between Store atmosphere and impulse buying behavior, a hierarchical regression analysis was conducted in this study. The control variables/Demographic variables such as age, gender, education, were entered in the first step; the independent variables store atmosphere was added in the 2nd step; and age which used as a moderating variable was added in 3rd step. The interaction terms such as SA\*Age was added in the last step. Table no. shows the results of the Hierarchical regression analyses.

Table 7-1. Results of Moderator Regression Analysis: Age

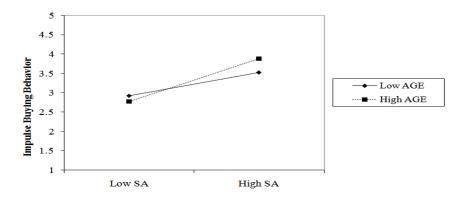
Predictor's	β	$R^2$	$\Delta R^2$
Moderator Analysis			
Store Atmosphere			
Step 1			
Control Variables		.063	
Step 2			
Age	.054		
Store Atmosphere	.426***	.213	.149***
Step 3			
Store Atmosphere × Age	.124	.240	.027

N=473; Control Variables are Age, Gender and Education. p<0.05 \*p<.01 \*\*p<.001\*\*\*

The results of moderation effects shows in table (7-1), the R2 of control variable (age, gender, education) was .063 or 6.3%. The value of un-standardized regression coefficient of age was .054 and significant at the conventional level .05 (p<.000). Un-standardized regression coefficient for store atmosphere was .426 (p<.000), which means that there is a positive significant relationship between store atmosphere and impulsive buying behavior. The R2 change associated with interactional term was .027. In other words the interaction of store atmosphere and age was explained additional 2% of the variance change in the

dependent variable impulsive buying behavior and the combine effect of both interactional term and store atmosphere was .24 means 24% change variance explained by independent and moderator. The hypothesis H5a accepted.

## **Moderation Graph**



#### 8. Conclusion and Discussions

The rationally consequent interpretations of the results as well as reasons of some interesting findings may be found in the following.

Hypothesis H1 reveals that there is a positive relationship between store atmospheres and IBB. Store with good and attractive environment influences more customers to employ in impulsive buying. Different things in store environment which boost up impulsive buying behavior include product display, store lighting, crew behavior, technology, store location, availability of goods, and number of other variables. These all factors, together, put a positive impact on impulse buying behavior. This results is similar from previous study conducted by [102-103].

Results of the hypothesis H2 indicate that there is a positive as well as significant relationship between age and IBB. It further explains that respondents with younger age were more involved in impulsive buying behavior whereas this behavior was less found in mature respondents. This is because consumers in younger age are less conscious in spending money and their decision making process is spontaneous. They just see the products, get inspired, and purchase. Moreover it is easy to inspire young consumers as compared to mature heads.

Outcome of the hypothesis H3suggests that there is no relationship between gender and IBB. It essentially means that impulsive buying phenomenon is indifferent towards gender whether males or females. The rationale behind such occurrence is that impulsive buying behavior ideally applies to convenience goods. In subject segment females who buy convenience goods most of the times, are well experienced and planned in their shopping, so therefore it is difficult for marketers to influence them for impulsive shopping. In addition, it is remarkable to mention that this study was conducted to evaluate impulse buying against convenience goods in general and not for a specific product category. Therefore some respondents could have forgotten even after buying some goods impulsively. The studies conducted by [104-106] also concluded similar findings.

Results of the hypothesis H4 indicate that there is no significant relationship between education and IBB. Results reveal that education puts no influence on impulsive buying behavior because attractive environment, product packing, store location, and display persuade educated and non-educated people equally. Previous study shows [107] that educated people have no tendency to purchase impulsively whereas illiterate people have

mostly low income scale, so they have tight purchasing power and because of their planned purchasing list, they have little chance to experience unplanned buying.

Fallouts of the hypothesis H5ashow that age is successfully moderating the relationship between store atmosphere and IBB. It explains that consumers in good store atmosphere exhibit more impulse buying behavior if they belong to younger age groups. H1 has already confirmed that there is a significant relationship between SA and IBB. Hypothesis H5a additionally tells that this relationship is further strengthened by the moderation of age factor. While consumers are already influenced towards IBB by the store atmosphere, the lower age consumers have low buying decision power which enhances the relationship between SA and IBB. On the other hand, maturity also influences the relationship between SA and IBB, however, this effect is lesser as compared to lower age groups. It is because decision making process is more planned in mature age groups. Also, mature consumers focus more on product quality and performance rather than store atmosphere and therefore are relatively less influenced by store atmosphere.

H5b and H5c respectively show the relationship between gender with IBB and education with IBB but both are not being considered as moderators because they don't have any significant influence on dependent variable *i.e.*, impulsive buying behavior

#### 8.1. Limitations and Future Directions

This study is limited to only three Cities Lahore, Islamabad, and Faisalabad. Also, the sample size is relatively small for generalization. The target population of the study consisted of retail stores (Mega Malls) which mostly target the upper and middle class consumers. The behavior of the consumers who are less affluent could not be portrayed. It is therefore recommended that a larger, more representative sample including other stores of the city be considered to substantiate the differences in consumer behaviors. The analysis of this study was cross sectional in nature. Additional research is suggested to be done longitudinally in order to assess the impact of the factors over time. The study was conducted on the demographic characteristics. "Do these results hold true for different types of products" also seems a researchable future endeavor. The said finding cannot be generalized to each product category. The studies carried out on the basis of each product category, location of shopping malls, and pricing policies may provide further insights. Since very few studies are available on online impulse buying behavior, demographic variables such as marital status, income, culture, geographic location, and family size, research in respective direction is also recommended.

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