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# Effect of Escalator Use on Mall Love among Adult Pakistani Visitors

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**Abstract**

*The study examines the role of escalator-use in the generation of mall love among adult Pakistani visitors. It assesses the influence of hedonic and utilitarian value on mall love through visitors' attitude and emotional experience. The theoretical foundation of this research is founded on Technology Acceptance Model by Davis (1986). Around 1000 mall visitors were approached through the mall-intercept method in thirteen shopping malls in major cities of Pakistan. Among them, 500 responses were utilized for data analysis. Non-probability convenience sampling was considered as the best choice. Proposed relationships between the constructs were tested through Confirmatory Factor Analysis. The findings revealed that 'hedonic value' has a direct positive influence on visitors' mall love. While testing mediation, the results indicated that emotional experience, attitude and escalator use strengthen the relationship between hedonic and utilitarian value and mall love. It is interesting to observe that the use of escalators in shopping mall results in developing mall love among visitors in Pakistan. This study will benefit the entire gamut of stakeholders including shopping mall managers, academic researchers, and practitioners. This study will benefit mall management by offering them practical suggestions regarding attracting visitors through better management of the mall environment.*

**Keywords:** *innovation, knowledge management, social capital, social media use, organizational performance, electronics industry.*

**JEL Classification:** *L10, L11, O3, M31*

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## 1) INTRODUCTION

Shopping Malls have become retail engines and a dominant part of contemporary lifestyle. As a result of its connectivity with the present-day lifestyle, the shopping mall business is expanding manifolds. During the current regime, shopping malls are visited not only for making purchasing rather, most of the time purchasing becomes a secondary consideration, while entertainment, eating out, social interaction, and having an engrossing experience of the Malls' fascinating environment becomes the primary objective. The mall culture was initiated in the US in the 1950s, spread in developed countries, and has also effectively put its foot down in the developing countries. Today shopping malls face more challenges and are encountering high competition as compared to the earlier stage wherein the malls were competing only with street merchants (Ferreira & Paiva, 2017). Therefore, shopping mall managers had to work out alternative ways and means to attract the visitors' footfall.

In Pakistan, shopping malls are still in their growing phase, where shift from convenience stores domestically known as 'Kiryana Stores' is underway. The sensation of using the shopping malls instead of conventional retailers has reached urban areas of Pakistan, and the visitors, especially in the megacities of the country now prefer shopping in the malls due to shift in their preferences in terms of convenience, aesthetics, and socialization (Ramadevi, Saatha & Vanaja, 2016). As a result, jumbo shopping malls have sprouted in the megacities across the country as shown in Table 1.

Table 1
Grand Shopping Malls in Megacities of Pakistan

| City | Shopping Malls |
|---|---|
| Karachi | Lucky-One Mall , Dolmen Mall-Clifton, Dolmen Centre-Tariq Road, Ocean Mall, Park Towers, Millennium Mall, Atrium Mall, Emerald Tower and The Forum. |
| Lahore | Mall of Lahore, Mall of Defense, Vogue Towers, Pace Shopping Mall, Packages Mall, Emporium Mall, Amanah mall. |
| Islamabad | Centaurus Mall, Giga Mall, Safa Gold Mall. |
| Peshawar | Deans Shopping Mall, Hyper Mall, and Jans Arcade. |
| Quetta | Millennium Mall and Gold City Shopping Mall. |

Pakistan is the sixth-largest country in terms of population with residents of about 220 million and approximately 2.4% growth rate. Regarding economic activity, the service sector of Pakistan has shown improvement and resulted in more employment opportunities. According to the Pakistan Economic Survey 2018-19, it is considered one of the most rapidly urbanizing countries in South Asia, that promises growth of the shopping malls, especially in its bigger cities. The country is witnessing rapid transformation in the retail formats i.e. decline in mom and pop / traditional general stores and an increase in giant retailers and wholesalers. The State Bank of Pakistan Annual Report 2018-19 highlights a significant feature. Although the retail growth declined by half, there was an overall increase in the wholesale and retail sector,

mainly attributed to the e-commerce and the growing popularity of mega shopping malls. The overall share of Wholesale and Retail in GDP in the fiscal year 2019 remained 18.9% that is a significant share in the country's GDP.

Shopping malls in megacities of Pakistan like Karachi, Lahore, and Islamabad need heavy visitor footfall to be profitable. As the expanding population in these cities has triggered a need for bigger markets, the traditional shopping stores steadily evolved into mega shopping malls. As a result, competition among them in attracting and maintaining visitors has risen, making it increasingly challenging to continuously ascertain visitors' preferences other than the quality and price of products. This challenge to the shopping malls necessitated evoking emotional attachment among the visitors for them - a concept that has its roots in brand loyalty - named Mall Love. Such emotional attachment could be materialized through continuously affecting positive experiences among the visitors in the form of efficiency in operations and their encounter in a fascinating shopping environment. This emerging situation has been well mirrored in the KPMG Report (2018), stating that the year 2020 onwards will feature visitor experience as the most imperative mall brand differentiator. The shopping mall attracts huge number of visitors to enjoy amenities i.e. outlets, entertainment, food area, and other facilities such as ATMs, elevators, and escalators. Visitors witnessed escalators for the first time in shopping malls in Pakistan. People used to visit these malls to be associated with them and to enjoy the facilities and environment rather than to purchase the products they needed.

This study has employed Technology Acceptance Model (TAM) developed by Davis (1989), see figure 1. It was employed to assess the hedonic and utilitarian perspective and use of escalators in shopping malls. The research attempted to answer if the use of escalators in shopping malls affects mall love among adult mall visitors through the development of emotional experience. Traditionally, the retailers have been controlling the visitors' footfall through keeping their prices competitive but this approach is not relevant to the contemporary shopping malls, as the tangible product and price of brands remain similar across all shopping malls. Besides, the visitor's expectations from these malls are increasing, making it challenging for mall management to delight their visitors. This means that consumers will visit shopping places where they have greater opportunities to enhance their experiences. Ayad, Ainous, and Maliki (2016) correctly identify that to overcome the challenge of product and price differentiation and attract the visitors, retailers should build stimulating atmospheres by stoking emotional experiences among the visitors. However, the lack of research necessitates the need for research about antecedents of mall love specifically the shopping environment.

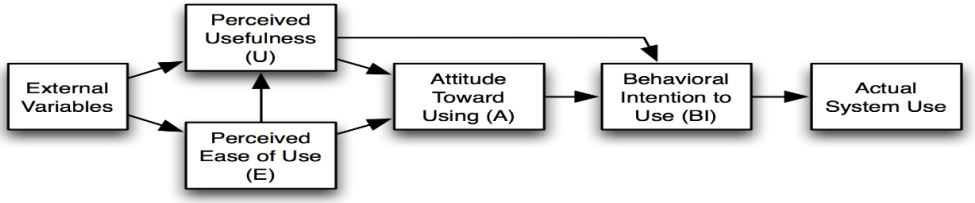


Figure 1 - Technology Acceptance Model by Davis (1989)

This study offers advance knowledge applicable to a wide array of disciplines such as consumer behavior, use of escalator as a proxy of technology in shopping malls, emotional experience, and retailing in the shopping mall perspective. The study examines if hedonic value, the utilitarian value created through escalator-use as a part of the shopping environment affects visitors' mall love among Pakistani adults. The study also attempts to examine the mediating role of attitude and emotional experience to effect mall love. It will benefit the retail investors and mall operators by providing insights on how to manage and improve mall environments to enhance visitors' emotional experience and to facilitate visitors in shopping malls. This body of knowledge will be of special importance given the scarcity of knowledge in this field relating to developing countries like Pakistan. It will be first of its kind for Pakistan that has taken into consideration the role of technology in shopping malls on visitors; mall love. It will provide rich local context and new in-sights to the mall visitor behavior. The through literature review revealed very limited studies on shopping mall behavior particularly for a developing nation like Pakistan.

## 2) LITERATURE REVIEW

The underlying theory employed to support the research framework of this study is Technology Acceptance Model that has been integrated with flow theory to examine the mall visitors' acceptance behavior towards escalator use along with their psychological state towards mall love. Csikszentmihalyi (1990) used the term 'flow' to describe the psychological state of an individual. In this research framework, it has been used to examine visitors' attitude, emotional experiences, and mall love with a focus on the flow of activity. TAM has been widely used by researchers to assess the adoption of technology, in the belief-attitude-intention-behavior paradigm (Seo, 2019; Min, Somang, Kevin & Jeong, 2019). The model reflects that hedonic and utilitarian value created through the use of technology results in positive attitude formation among its users that leads to the use of specific technology. Utilitarian value is measured through perceived usefulness and ease of use of a specific technology, whereas perceived enjoyment and playfulness are key dimensions used to determine hedonic value. Utilitarian and hedonic values act as significant determinants of attitude while using technology, and determine consumers' usage intention. Understanding the utilitarian and hedonic perspective of technology use may provide better insights to retailers and mall management to design the retail environment more attractive by employing various technologies as

a part of the shopping environment in malls. Consumer attitude plays a mediating role between utilitarian and hedonic values and the use of technology. TAM has been employed in this study to examine the influence of technology use as an environmental stimulus in the shopping mall on visitors' mall love.

The recent technological advancements have pushed all industry leaders to integrate technological innovations into their systems and operations (Pantano, 2015), and the retail industry is also not lagging in this regard. Accordingly, the retail industry has infused numerous technologies to enhance customer experience that, in turn, is augmenting loyalty among the visitors for the shopping malls resulting in increased visitor footfall. To keep up with the fast pace of technological developments, retailers are increasingly testing the potential of Virtual Reality into the shopping journey to sustain market share (Bonetti, Warnaby and Quinn, 2018). Research reports that the retailers are also depending on Radio Frequency Identification (RFID) technologies to improve their efficiency and customers' shopping experience (Muller, Dautzenberg, Creusen & Stromereder, 2009; Saibannavar & Naik, 2018). The interactive display is another technology that is increasingly being used in public spaces such as shopping malls, however, it is still a challenge to model people's behavior when they come across with such displays (Ardito, Buono, Costabile, & Desolda, 2015). A real-time, location-based user-friendly shopping system if connected to a mobile phone application may help the mall visitors throughout the shopping mall. Such an application can guide mall visitors to navigate through the shopping mall in a convenient manner (Hubert, Blut, Brock, Backhaus & Eberhardt, 2017; Rezazadeh, Sandrasegaran, & Kong, 2018). Digital signage is also a technology that is getting popular in public places including shopping malls for presenting and advertising information on large screens to a larger audience. However, this appliance will take yet more time to become an integral part of the shopping malls businesses. (Sandkuhl, Smirnov, Shilov, & Wißotzki, 2018). Research has also shown that the presence of IoT based intelligent shopping carts/trollies has become common in big malls and hypermarkets that helps avoid big queues for payment of bills at the cash counters. The shopping carts use RFID technology and minicomputers to provide a better shopping experience to the mall visitors by saving their time at checkout counters (Raiyani, 2019).

However, despite such surge of use of technology in the shopping malls in developed countries, the pace of technological development in the retail industry in developing countries is comparatively slow and the use of such technologies is not common in these countries including Pakistan. Literature has identified that digitalization is still limited in the shopping mall businesses in the developing countries (Grewal, Roggeveen & Nordfält, 2016; Trappey, Trappey & Mulaomerovic, 2016). As a result, the sophisticated technologies being used in the shopping mall businesses of the developed countries as discussed above are not commonly employed in the shopping malls of developing countries. There are only few customer-oriented technologies that are utilized by shopping malls, and that too are not present across all the shopping malls. For instance, interactive digital screens are employed only in few new malls in Pakistan, hence all mall visitors are not well aware of them. Keeping this in view, it was decided to select a technology that is commonly found in the larger sized retailer facilities in Pakistan and the visitors of these retailer

facilities are well aware of it and have utilized it more than once. To meet this criterion, the escalator in shopping malls was exclusively identified as one of the most common technologies that could be employed as a proxy of technology used in shopping malls as an environmental stimulus leading to mall love that is the dependent variable of this study.

Mall love is derived from brand love, which is still in its infancy stage (Unal & Aydın, 2013) and there is a dearth of literature on it. As per previous literature, the concept of brand love has emerged from interpersonal love (Keh, Pang, & Peng, 2007). A study conducted by Roberts (2005) indicated that consumers have a strong urge to buy brands they love, some consumers even work hard and earn money to buy the brand they love. The antecedents of brand love vary across industries, for instance, one of the most important factors that influence brand love in the service industry such as retail is social support (Berry, 2000; Long-Tolbert & Gammoh, 2012). Brand love can be defined as a marketplace phenomenon referring to an intense emotion concerning a specific brand that customer experiences (Carroll & Ahuvia, 2006). They also defined it as a satisfied customers' passionate emotional attachment to a particular trade name. Romantic brand love does not consist of brand commitment but consists of intimacy and passion as they are highly interactive (Sternberg & Sternberg, 2018). 'Mall Love' is a new dimension and is built on the brand love description provided by Carroll and Ahuvia (2006). Mall Love (ML) is a novel marketing construct and defined as a delighted visitor's strong emotional attachment to a specific shopping mall. The mall love scale was initially adopted and validated by the founding authors of Brand Love. Mall love includes attributes related to visitors' self-image, their emotional attachment to the mall, the resources they allocate in a specific mall, natural fit with the visitor's identity, and the overall mall image. The self-image expresses how well visitors associate their identity to a specific mall and it portrays consumers as they want to. It also depicts how visiting the mall makes consumers' life lively and makes them feel pleasant. The most important dimension of mall love is the emotional bond of visitors with a specific shopping mall. It is reflected through the visitors' excitement and emotional attachment to that shopping mall. To the contrary, the visitors would experience distress and anxiety; if their preferable shopping mall goes out of existence, depicting their strong emotional bond with it. Another essential element is the resource allocation by visitors in a specific shopping mall. It is based on visitors' willingness to spend their time and money in the mall to make themselves happy and their desire to visit the mall more often. Mall love represents visitors' taste and develop a natural fit between them and the shopping mall.

Utilitarian value influences visitors' attitude, their satisfaction and buying behavior at shopping malls (Kesari & Atulkar, 2016). Utilitarian aspect of technology is commonly measured through perceived ease of use and its perceived usefulness (Hamari & Koivisto, 2015). While using technology, its perceived usefulness and ease of use, act as key determinants of attitude. These determinants also help in measuring usage intention (Davis, 1989; Davis, Bagozzi, & Warshaw, 1992). TAM suggests that one's perception of how easy or difficult the use of a system is; influence their attitude to use it. For this study, utilitarian value is defined as 'the extent to which visitors perceive that escalators in a shopping mall are useful

and easy to use'. Utilitarian value positively influences attitude, however, the relationship of ease of use with attitude is less consistent and it is also supported by the original TAM model suggesting that ease of use becomes less significant when a consumer gets command over the use of technology. It is more relevant when a person is initially using new technology and then over a while, its effect becomes less significant (Vijayasarathy, 2004). In most studies, these determinants such as ease of use and usefulness have a positive effect on users' attitudes (Kesari & Atulkar, 2016). Literature also shows that ease of use directly impacts attitudes whereas indirectly affect visitors' intentions (Morosan, 2016). The utilitarian value act as determinants of attitude towards acceptance and use of technology. Therefore, it is hypothesized:

H1: Utilitarian value has a significant positive relationship with visitors' attitude.

The hedonic value adds to visitors' satisfaction and influences their shopping experience, making it essential for retailers to provide exciting technologies to enhance visitor value (Kim, Lee, Mun, & Johnson., 2017). Besides, the hedonic dimensions also influence the visitor's emotions (Jones, Reynolds, & Arnold, 2006) k,. A recent study suggested that perceived enjoyment is more important to visitors than perceived usefulness. This implies that hedonic dimension is more significant in order to create favourable attitude towards adoption of technology. It provides justification that usefulness alone is not sufficient; if it does not provide enjoyment (Kim et al., 2017). Two main variables employed by researchers to operationalize the hedonic aspect of technology are perceived enjoyment and playfulness. (Hamari & Koivisto, 2015). Some visitors visit shopping malls for enjoyment purposes and hence they may find escalators as playful and a source of enjoyment. To assess shopping experience and visitor behavior in a retail setting, it is essential to measure hedonic value derived by technology use, such as the use of escalators. It is believed that visitors consider the use of escalators as a source of enjoyment and playfulness, positively affecting their attitude. The hedonic dimension ensures to invoke enjoyment, thus making them use the technology more often (Van der Heijden, 2004).

Thus, the presence of escalators in shopping malls becomes a reason for visitors' mall love. Therefore, it is hypothesized:

H2: Hedonic value created through escalator use can have a significant positive impact on mall love among visitors.

The hedonic dimension is more significant in order to create favourable attitude towards adoption of technology. It provides justification that usefulness alone is not sufficient; if it does not provide enjoyment (Kim et al., 2017). Creating hedonic value is essential to generate a favorable attitude among visitors (Kim et al., 2017). The hedonic value acts as determinant of visitors 'attitude towards acceptance and use of technology (Blázquez, 2014). In a retail setting, the hedonic value has a strong influence on visitors' attitude, loyalty, and their re-patronage intention (Anderson, Knight, Pookulangara & Josiam, 2014). To satisfy their hedonic need, visitors can use escalators in shopping malls. Marketers are introducing new technologies to

take advantage of all touchpoints with visitors (Blázquez, 2014). This reflects the importance of technology use in shopping malls to create a positive influence on visitors' attitude and behavior. If the use of technology is perceived to be enjoyable, then visitors' attitude and their use of technology are likely to be positive (Hamari & Koivisto, 2015; Vijayasarathy, 2004). Therefore, if visitors consider escalators a source of enjoyment and playfulness. It will positively affect their attitudes, resulting in the frequent use of escalators. Hence, it is hypothesized:

H3: Hedonic value has a significant positive relationship with visitors' attitudes.

Visitors form attitude towards objects (Bagozzi, Gopinath, & Nyer, 1999). It is defined as the probability that a person will show a specific behavior in a particular situation (Osman, Ong, Othman, & Wei Khong., 2014; Osman, Alwi, & Khan., 2016). In retailing, 'affect' plays an integral role because of its inherent interpersonal context. Attitudes are formed based on the belief (Hamari & Koivisto, 2015) and directly affect visitor behavior (Blázquez, 2014). Attitude influences visitors' evaluations related to objects and reflect a person's positive or negative assessment (Kim, Chun, & Song., 2009). The attitude developed may influence their emotional experience. For example, a good mall may evoke happy feelings among visitors; in that 'good' is a measure of attitude whereas 'happy' represents emotional experience. Likewise, if mall is superior, excellent or interesting, visitors may feel pleased, excited, and aroused. This phenomenon particularly makes sense in a developing country like Pakistan; where visitors develop attitude about the shopping environment that evoke their emotional experience. To test the relationship between attitude and emotional experience, following is hypothesized:

H4: Visitors' attitude has a significant positive relationship with their emotional experience.

Attitude is important to be studied as it is antecedent of most behaviours (Jiyeon Hwang, Lee, Kim, Zo, & Ciganek, 2016). When visitors hold a positive attitude towards technology, it significantly influences their behavior at shopping mall (Hwang, Kim & Lee., 2014) reflecting that attitude plays a mediating role in most cases. However, when examining attitude as a mediator, there exist mixed results; in belief-intention linkage, some studies reflect partial mediation of attitude whereas other show its full mediation (Hamari & Koivisto, 2015; Kim et al., 2017; Osman et al., 2014). Attitude influences visitors' evaluations related to objects and reflect a person's positive or negative assessment (Kim et al., 2009). The relationship between experience and love is still understudied (Ferreira et al., 2017). Visitors' positive attitude also significantly affect their impulse buying behavior (Luqman & Lee, 2017). Many researchers (Cho & Lee, 2017; Das & Varshneya, 2017; Helmefalk & Hultén, 2017) have examined the impact of shopping environment on visitors' emotions and concluded a positive association between them. As indicated earlier, this study has primarily taken into consideration the effect of escalator use on visitors' mall love. It also examines the influence of utilitarian and hedonic value created through escalators on visitors' attitude. In this regard, a link between attitude-emotional experience-mall love needs to be established. Therefore, following hypotheses emerge:

H5: Visitors' attitude and emotional experience sequentially mediates the relationship between utilitarian value and their 'mall love.

H6: Visitors' attitude and emotional experience sequentially mediates the relationship between hedonic value and their 'mall love.

Escalators (also known as electric stairs) are structured facilities widely used by shopping malls, airports, railway stations, hotels, tall buildings and offices and other commercial buildings (Kadir & Jamaludin, 2018). In the present era, escalators have become a key feature in all shopping malls reflecting that all floors having same value to visitors who happily ride to the required level (Williams, 2018). In general, escalators provide maximum benefits to its users, such as easy and faster transportation, efficient access to all levels, accommodating greater number of people, require no attendant, and acting as source of pleasure for them. To the contrary, elderly people and children usually feel little frightened and unsafe when using escalators (Bellettiere, Nguyen, Liles, Berardi, Adams, & Dempsey, 2018; Paumgarten, 2008). Literature also reveals that visitors show limited readiness to interact with varied technologies based on the generation they belong to. For instance, the Z generation heavily relies on technology (Priporas, Stylos, & Fotiadis, 2017). Whereas, to encourage a healthy lifestyle, the use of stairs is encouraged in developing countries through different motivational interventions and promotional techniques. (Bellettiere, Liles, BenPorat, Bliss, Hughes, Bishop, & Hovell., 2017; Bellettiere, et al., 2018; Dunton, 2018). Therefore, taking into account the technology of escalators, which is very frequently used in shopping malls, has significant effect on attitude of visitors. Based on already established literature, it is hypothesized:

H7: Visitors' attitude has a significant positive impact on their Escalator use.

It is believed, that escalators offer a more convenient, attractive and less demanding pedestrians' access from one level to other. Escalators are urban objects that become a source of visitors' speedy and efficient movement. One main benefit of escalators in a retail setting is that it guides visitors on a given path (Michael, 1999). Additionally, presence of escalator benefits stores' owners so that visitors can easily access any floor resulting in improved brand image. This reflects that numerous benefits of escalator use result in better visitors' attitude and positive emotions among visitors in the shopping malls. Ultimately, visitors' attitude affects the use of escalator among them and lead to mall love. Thus, it is hypothesized:

H8: Visitors' attitude and escalator use sequentially mediates the relationship between utilitarian value and their mall love.

As discussed earlier, escalator use become a source to enhanced visitors' hedonic value such as enjoyment and playfulness. Shopping malls are using such technology, to facilitate visitors and improve their satisfaction regarding shopping experience (Dauriz, Remy, & Sandri, 2014). After their maturity in developed countries, emerging nations like Pakistan have also realized the significance of escalators and are now commonly using it to benefit visitors. Hence, there exists a need to

assess the effect of hedonic value created by escalator use on mall love among visitors, through the sequential mediation of attitude and escalator use. Therefore, it is hypothesized

H9: Attitude and escalator use sequentially mediates the relationship between hedonic value and visitors' mall love.

It has been noted that shopping environment affects visitors' attitude and their emotional experience. Research shows that shopping environment enhances sensory experiences of visitors and serves as strong connection to emotions (Strähle & Hohls, 2018). Pleasure and arousal are generated through use of various characteristics in the shopping malls. Atmospherics influence visitors' emotions which influence their buying intentions, hence managers take into account the designing elements of shopping environments (Bigdeli & Bigdeli, 2014).Visitors' emotional experiences affect their behavior and may generate mall love among them. In the light of available literature, it is hypothesized:

H10: Emotional experience created in shopping malls affect mall love among visitors.

The use of technology has created enjoyable experiences for visitors (Blázquez, 2014). According to Dauriz (2014), shopping malls are using different technologies as a means to improve visitors' satisfaction. Escalators provide comfort and speed when visitors desire to move among different levels (Bodendorf, Osterkamp, Seyfried, & Holl, 2014; Rogsch, 2013). Mall management endeavors to explore ways to reduce visitors' pain points and employ different technologies such as escalators etc. to create visitors' delight. However, there is a dearth of empirical studies on escalators use particularly its influence on visitors' behavior in shopping malls (Bodendorf, et al., 2014). The positive influence of various technologies on visitors suggests that escalators use would also evoke positive feelings, emotions, and excitement among consumers leading to mall love among them. Thus, it is hypothesized:

H11: Escalators Use in shopping malls results in increased mall love among visitors.

## 3) RESEARCH METHODOLOGY

The study is quantitative and explanatory, based on the positivism research philosophy to examine the influence of shopping mall environment on mall love. The study aimed to comprehend the relationships among the theoretical concepts by providing the explanation of mall love among young adults, which is treated as a dependent variable in the research framework. Following a conscious direction of general to specific, this study employed the deductive approach of research. It tested their relevance on the shopping malls in Pakistan through devising the multiple hypotheses entailing the impact of escalator use on the visitors' love towards the shopping malls. The deductive research approach employed in this study is in line with the findings of Rahi, Alnaser, & Ghani (2019) and Stentoft and Halldorsson (2002) who believe that the deductive approach is the most suitable research

approach when testing the theories. The use of the quantitative research method was also in consonance with the deductive research approach adopted for this study. Sukamolson (2007) endorse this deductive-quantitative compatibility saying that the deductive approach is mainly used to test the theory with measurable data and generally focuses on measuring social reality. The survey was the only appropriate technique available to collect data given the widely scattered research population in three cities of the country and its colossal size. The research population comes from three megacities of the country; Karachi, Lahore, and Islamabad. 13 shopping malls were selected; 03 from Islamabad- Rawalpindi, 03 from Lahore, and 07 from Karachi. These thirteen shopping malls were selected based on the commonality of the features which constituted most of the independent variables of the study.

All adult shopping mall visitors in these three megacities make up the population of the study. The main reason for opting for these cities, which was more important from the perspective of this study, was the overwhelming commonality of environmental features. Collectively 985 visitors were approached in all thirteen shopping malls out of which 556 responded with filled questionnaires, accounting for 56% response rate. The sample of 500+ was an appropriate sample for this study, but only 500 questionnaires were usable for taking ahead for data analysis. A convenience sampling technique was used for the shopping mall visitors. Given the nature and volume of the population, this was taken as the most appropriate sampling technique. Other reasons for employment of this technique were being quick to use, economical, and adaptable leading to a timely and effective wealth of quantitative research data. Saunders (2012) spectacularly endorse the use of this sampling technique in a situation like this study. To execute the convenience technique, the study incorporated the mall-intercept method of data collection. Table 2 provides a summary of the instrument/questionnaire containing variables, the number of items against each variable/construct, and the sources from where these items were adopted.

**Table 2** Research Instrument

| Variable | No. of Items | Items Source |
|---|---|---|
| Emotional Experience | 16 | Mehrabian and Russell (1974) |
| Mall Love | 26 | Carroll and Ahuvia (2006) |
| Visitor Attitude | 03 | Lee, Fiore, and Kim (2006) |
| Perceived Ease of Use | 05 | Davis (1989) |
| Perceived Usefulness | 03 | Davis (1989) |
| Perceived Enjoyment | 03 | Igbaria, Iivari, and Maragahh (1995) |
| Perceived Playfulnes | 06 | Moon and Kim (2001) |

To test the inter-item consistency, Cronbach alpha and Composite reliability were examined. Model fitness was tested through Confirmatory Factor Analysis (CFA) using AMOS. It is a user-friendly program for visual SEM through which the user can specify, view, and modify the model graphically (Ong & Puteh, 2017) and has been widely used by recent researchers in the field of consumer behavior while examining the shopping environment stimuli (D'Souza, Taghian, & Brouwer, 2019; Omar, Ghanib, Alzyoud, & Rababh, 2019). The analysis was carried out through Structural Modeling Equation (SEM-AMOS). It deals with models containing many dependent and independent variables, hence it becomes suitable for this study (Hasman, 2015). The sequential mediation of visitors' attitude and emotional experience, and their attitude and escalator were tested using Process macro (Hayes & Preacher, 2014) using SPSS.

## 4) DATA ANALYSIS

Table 3 presents the respondents' demographic profile, showing a mix of respondents in terms of age, gender income, and other demographic characteristics. Preliminary tests were initially conducted for assessing the normality of data. The study comprised 06 constructs among which 02 were independent, 03 mediating, and 01 dependent variable. Table 4 presents the Cronbach alpha value for all six constructs. The values of all constructs were above 0.7 (i.e. the suggested cutoff value for Cronbach alpha) suggesting that all items had inter-item consistency except one construct that was escalator use for which the Cronbach alpha value was estimated to be 0.68. However, according to Haher, Gorup, Shin, Homel, Merola, Grogan, & Murray (1999) values above 0.6 are acceptable.

| Variable | Category | Count | Percentage % |
|---|---|---|---|
| **Gender** | Male | 213 | 42.6 |
| | Female | 287 | 57.4 |
| | Total | 500 | 100 |
| **Age (years)** | 16-20 | 36 | 7.2 |
| | 21-25 | 233 | 46.6 |
| | 26-30 | 142 | 28.4 |
| | 31-35 | 50 | 10 |
| | 36-40 | 25 | 5 |
| | 41 and above | 14 | 2.8 |
| | Total | 500 | 100 |
| **Marital Status** | Single | 349 | 70 |
| | Married | 151 | 30 |
| | Total | 500 | 100 |

| | | | |
|---|---|---|---|
| | Matric | 5 | 1 |
| | Intermediate | 46 | 9 |
| | Graduate | 188 | 38 |
| **Education** | Masters | 190 | 38 |
| | MS/MPhil | 59 | 12 |
| | PhD | 12 | 2 |
| | Total | 500 | 100 |
| | Student | 168 | 35 |
| | Full time employed | 195 | 40 |
| | Part-time employed | 38 | 8 |
| **Job Status** | Self employed | 49 | 10 |
| | Unemployed | 50 | 10 |
| | Total | 500 | 100 |
| | Less than 25000 | 181 | 36 |
| | 25001-50000 | 140 | 28 |
| | 50001-75000 | 59 | 12 |
| **Income** | 75001-100000 | 46 | 9 |
| | more than 100000 | 74 | 15 |
| | Total | 500 | 100 |

Table 3 Demographic Profile of Respondents

As presented in Table 5, the results of the final measurement model represent a good model fit, keeping in view the large sample size of 500 cases. For most of the indices, the observed and explained matrices matched. Based on the model fitness, an adequate model fit is shown in Figure 02.

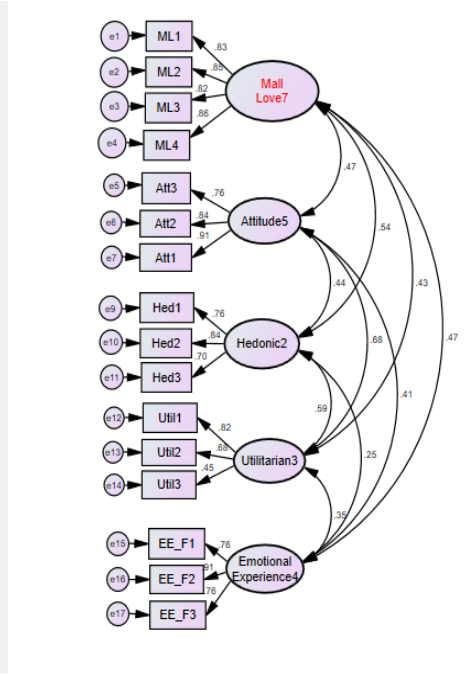


Figure 2 - Measurement Model

| S.No | Variable | Items Retained | Cronbach alpha |
|---|---|---|---|
| 4 | Hedonic | 03 | 0.92 |
| 5 | Utilitarian | 03 | 0.89 |
| 6 | Emotional Experience | 03 | 0.88 |
| 7 | Attitude | 03 | 0.88 |
| 8 | Escalator Use | 03 | 0.68 |
| 9 | Mall Love | 04 | 0.94 |

Table 5 Model Fit Indices for Final Measurement Model

| ChiSq /DF | RMR | GFI | CFI | TLI | RSEA | NFI |
|---|---|---|---|---|---|---|
| 2.58 | 0.040 | 0.943 | 0.965 | 0.955 | 0.056 | 0.944 |

For Hedonic Value, the factor loading of all three summated scales 0.7, Average Variance Extracted is 0.60 and Composite Reliability is 0.81. For Utilitarian Value, the factor loadings of 02 items were 0.76 and 0.74 whereas for the third item it was 0.45, Average Variance Extracted was 0.45 and Composite Reliability is 0.70. For emotional experience, the factor loading of all three summated scales 0.7, Average

Variance Extracted was 0.66, and Composite Reliability 0.7. Factor loadings of items of attitude 0.5, Average Variance Extracted is 0.88 0.5, and Composite Reliability 0.7. The summated scale items of escalator use showed factor loading of 0.5, Average Variance Extracted is 0.53 0.5, and Composite Reliability 0.77. For mall love, the factor loading for all three items 0.5, Average Variance Extracted is 0.50, Composite Reliability was 0.68. Hence, the Average Variance Extracted of all variables is above 0.50 (see Table 6).

**Table 6 Factor Loading, Composite Reliability & Average Variance Extracted**

| Construct | Code | Items Retained | Factor loading | CR | AVE |
|---|---|---|---|---|---|
| **Hedonic Value** | Hed1 | Enjoyment | 0.76 | 0.81 | 0.60 |
| | Hed2 | Playfulness | 0.84 | | |
| | Hed3 | Mesmerism | 0.70 | | |
| **Utilitarian Value** | Uti1 | Usefulness | 0.82 | 0.7 | 0.50 |
| | Uti2 | Ease of use | 0.69 | | |
| | Uti3 | Attention | 0.45 | | |
| **Emotional Experience** | EE1 | Satisfaction | 0.76 | 0.85 | 0.66 |
| | EE2 | Relaxation | 0.91 | | |
| | EE3 | Excitement | 0.76 | | |
| **Attitude** | Att1 | Usefulness | 0.90 | 0.71 | 0.88 |
| | Att2 | Meaningfulness | 0.84 | | |
| | Att3 | Pleasantness | 0.77 | | |
| **Escalator Use** | UE1 | Present | 0.73 | 0.77 | 0.53 |
| | UE2 | Future | 0.86 | | |
| | UE3 | Activity | 0.47 | | |
| **Mall love** | ML1 | Self-Image | 0.82 | 0.68 | 0.9 |
| | ML2 | Emotional Bond | 0.84 | | |
| | ML3 | Resource Allocation | 0.81 | | |
| | ML4 | Natural Fit | 0.86 | | |

AMOS- graphics version 22 was utilized for assessing the structural model. The study encompasses a large sample size of 500 respondents, maximum likelihood method was applied, considering it the most preferable method provided fairly normally distributed data and large sample size (Kline, 2005). The final measurement model comprised 06 total variables including; 02 exogenous variables,

one endogenous variable, and 03 mediating variables. The exogenous variables consisted of utilitarian value and hedonic value. The mediating variables include emotional experience, attitude and escalator use whereas the endogenous variable was mall love. The model holds casual paths among the exogenous, mediating, and endogenous variables. The paths diagram of standardized estimates is depicted in Figure 3.

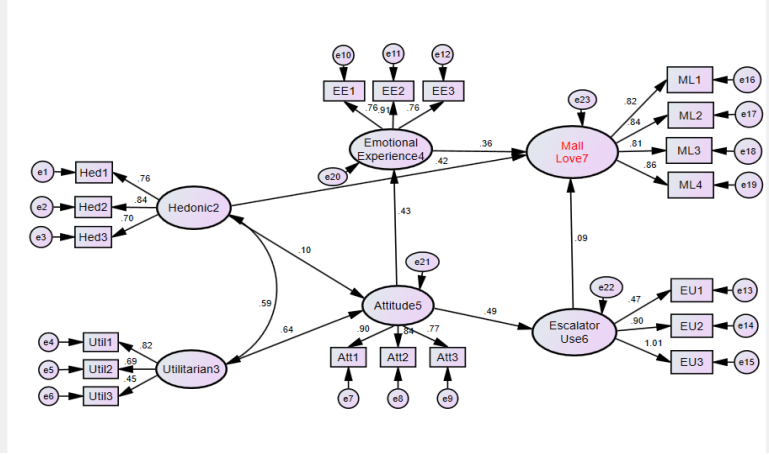


Figure 3 - Path Diagram- Standardized Estimates

Table 7 presents the model fitness summary of the key indices used for assessing the model fit. All the indices are meeting the model fitness requirements. Chi-Square value is below 5, RMR is below 0.05, GFI, CFI, TLI, and NFI values are above the suggested cutoff point of 0.90. RMSEA is 0.057 which is considered to be a reflection of a good model fit.

Table 7 Model Fit Indices for Structural Model

| CMIN/DF | RMR | GFI | CFI | TLI | RMSEA | NFI |
|---|---|---|---|---|---|---|
| 3.48 | 0.057 | 0.909 | 0.935 | 0.923 | 0.070 | 0.912 |

The model was accepted and was utilized further for examining the expected relationships between the independent and dependent variables. The direct effects between the independent and dependent variables were assessed through the structural model in AMOS; however, the indirect effects were examined using the Hayes Process in SPSS. The standardized beta coefficient value for this direct path between hedonic value and mall love is 0.433 with a significant p-value of 0.000. The critical ratio for the path is estimated to be 8.365, which is $\geq$ 1.96

proving the path statistically significant. This means that the hedonic value created through the use of escalators in shopping malls leads to the creation of mall love among mall visitors. The standardized beta coefficient value for this direct path between visitors' emotional experience and their mall love is 0.381 proving that emotional experience created in a shopping mall is positively related to the creation of mall love among mall visitors. The direction of the relationship between the two variables is found to be positive. The results also revealed that the use of escalators in shopping malls results in the generation of mall love among mall visitors. The effect of the relationship between visitors' attitude and their emotional experience was expressed by the statistically significant beta value of 0.562 indicating a statistically significant positive relationship reflecting that positive visitor' attitude leads to enhanced emotional experience in shopping malls. The relationship between customers' attitude and their use of escalator is expressed by a standardized beta value of 0.360 with a significant p-value indicating a significant positive relationship between the two variables. The result revealed that visitors' attitude is positively associated to use to escalators in shopping malls. The findings of this study show that the hedonic value created through the use of escalators in shopping malls does not affect visitors' attitude. The effect of the relationship between utilitarian value created through escalator use and customers' attitude was expressed by the standardized beta value of 0.651 with a probability value of 0.000 indicating a statistically significant positive relationship. The results revealed that utilitarian value created through the use of escalators in a shopping mall has a significant positive effect on visitors' attitudes. For a statistical summary of results refer to Table 8.

Table 8 Standardized Regression Weights

| ***H*** | **Direct Path** | **Estimate** | **C.R.** | **P value** | **Comment** |
|---|---|---|---|---|---|
| $H_1$ | UTIL ---> ATT | 0.651 | 6.985 | *** | *Accepted* |
| $H_2$ | HED ---> ML | 0.433 | 8. 365 | *** | *Accepted* |
| $H_3$ | HED ---> ATT | 0.072 | 1.587 | 0.113 | *Rejected* |
| $H_4$ | ATT ---> EE | 0.562 | 8.235 | *** | *Accepted* |
| $H_7$ | ATT ---> EU | 0.360 | 7.776 | *** | *Accepted* |
| $H_{10}$ | EE ---> ML | 0.381 | 7.776 | *** | *Accepted* |
| $H_{11}$ | EU ---> ML | 0.164 | 2.144 | 0.032 | *Accepted* |

Full form of the symbols: UTI-Utilitarian, HED- Hedonic, EE- Emotional Experience, ATT-Attitude, EU- Escalator Use, ML- Mall Love

The study utilized the bootstrapping Process developed by Preacher and Hayes (2004) to assess the relationship between shopping mall environment and mall love in presence of a mediator. It is a non-parametric resampling test and does not depend on the normality assumption (Hair, Sarstedt, Hopkins, & Kuppelwieser, 2014; Pardo & Román, 2013). The significance of the mediation was tested through the bootstrapping process using AMOS 22. Results from the sequential

model analysis indicated that the hedonic value created in the shopping mall is insignificantly and indirectly related to mall love through customers' attitude and their escalator use (β=0.0102, SE=0.0059, p=0.0766). The confidence interval of 95% on 5000 bootstraps samples was including zero (-0.0011, 0.225). The r-square value (0.2074) indicated the variance explained through the model under study. As zero falls between the confidence interval values, the hypothesis is thus, rejected. This indicates that visitors' attitude and use of escalators in a shopping mall does not mediate the relationship between hedonic value created through escalator use and mall love. The utilitarian and hedonic value created in a shopping mall is significantly and indirectly related to mall love through customers' attitude and their escalator use (β=0.0233, SE=0.0083, p=0.0021). The confidence interval of 95% on 5000 bootstraps samples was including zero (0.0083, 0.0405). The result revealed that visitors' attitude and emotional experience strengthen the relationship between utilitarian value created through escalator use and visitors' mall love (See Table 9).

Table 9 - Mediation Results

| H | Path | IF | SE | T-Stats | Sig | LL | UL | Comment |
|---|---|---|---|---|---|---|---|---|
| $H_5$ | Util-Att-EE-ML | 0.0476 | 0.0124 | 7.4359 | *** | 0.0265 | 0.0745 | *Partial Mediation* |
| $H_6$ | Hed-Att-EE-ML | 0.0354 | 0.0089 | 7.3299 | *** | 0.0198 | 0.0546 | *Partial Mediation* |
| $H_8$ | Util-Att-EU-ML | 0.0233 | 0.0083 | 3.094 | 0.0021 | 0.0083 | 0.0405 | *Partial Mediation* |
| $H_9$ | Hed-Att-EU-ML | 0.0102 | 0.0059 | 1.774 | 0.0766 | -0.0011 | 0.0225 | Rejected No *Mediation* |

## 5) CONCLUSION & DISCUSSION

Overall, the study examined the influence of hedonic and utilitarian value created through the use of escalator on visitors' attitudes and emotional experiences that influence their escalator use and leads towards mall love. The study also assessed the sequential mediation of attitude and emotional experience. The results revealed that respondents' attitude and emotional experience developed through hedonic and utilitarian value showed a positive association with mall love among adult visitors reflecting strong emotional attachment and passion for their preferred shopping malls.

Hypothesis -1 was tested to examine the relationship between utilitarian value and attitude of mall visitors. The findings confirmed the positive association of utilitarian value with visitors' attitudes. The positive relationship between the

independent variable utilitarian value and the dependent variable visitors' attitude was represented by beta value 0.651***. The findings discovered that factors such as the usefulness and ease of use of escalators give rise to a positive attitude for shopping malls among Pakistani mall visitors. Visitors' responses regarding usefulness of escalator is in line with the findings of Basir et al. (2018) that concluded that escalators are the most efficient means of transporting the largest number of people between floors. Hence, such utilitarian benefits create positive perception among its users. Visitors in shopping malls benefit from the escalator use they provide comfort in moving across different floors. Hence, the ease offered by the use of escalators in malls results in the formation of positive attitude among visitors. Therefore, the visitors enjoy the utilitarian benefit derived from escalators use. The presence of escalators in shopping malls and their use makes the malls more attractive to visitors.

Hypothesis-2 was tested for the relationship between hedonic value and mall love. The results showed that hedonic value has a positive and highly significant association with mall love, represented by beta value 0.433***. This reflects that visitors find the escalators playful and enjoyable and these characteristics make up the hedonic value that has a direct influence on their mall love. It is inferred from the results that mall love is developed as a consequence of hedonic value. The study conducted by Khandeparkar and Motiani (2018) supports this stance by mentioning that hedonic value acts as an antecedent to brand love. Keeping in view the market segments that visit shopping malls, it is pertinent to mention that they primarily seek for enjoyment and pleasure that affects their love for malls. This result is also in line with the findings of Matzler, Bidmon, and Grabner-Kräuter (2006) which showed that nontangible products/services possessing high pleasure potential are more likely to evoke positive emotions among consumers. The result is also supported by the study of Blázquez (2014) that found out that hedonic value affects visitors' cognitive and emotional states. Therefore, the positive relationship between the two variables reflects that mall love is based on a hedonic perspective, as it is linked to the generation of positive and exciting feelings among mall visitors. This view is also supported by the work of Carroll and Ahuvia (2006) which shows that hedonic aspects promote brand love more than utilitarian aspects of brands.

Hypothesis-3 was tested for an association between hedonic value and visitors' attitudes. The hedonic dimension did not show any significant relationship with the visitors' attitude. The relationship was reflected in the beta value of 0.072 (sig 0.113). This reflected that visitors do not form attitudes related to shopping malls based on the hedonic dimension, although it affects their feelings and emotions leading to mall love. This finding strongly contradicts the literature. Numerous studies are showing a positive association between hedonic value and visitors' attitudes. For instance, the study of Kim et al. (2017) suggested that the hedonic dimension is more significant to create a favourable attitude towards technology. Likewise, another study conducted by Anderson et al. (2014) also showed a positive association between hedonic perspective and visitors' attitude. However, the hedonic value created through escalator use in shopping malls did not show a significant impact on visitors' attitudes in Pakistan necessitating the need to examine the relationship further in diverse milieus.

Hypothesis-4 confirmed that visitors' attitude enriches their emotional experience for a shopping mall. The relationship was represented through significant beta coefficient value 0.562*** showing that visitors generate a positive attitude towards shopping malls that leads to their emotional experience. Hypothesis-7 confirmed the relationship between visitor attitude and escalator use, as it was found highly significant, represented by beta value 0.360*** reflecting a moderate relationship between the two variables shows that visitors' attitude affects the use of escalators in shopping malls. These findings are aligned with most of the previous findings such as Chandrawati and Lau (2016); Izquierdo-Yusta, Olarte-Pascual, & Reinares-Lara (2015); Kim et al. (2017); Qureshi et al. (2018) which support the use of technology-based on visitors' attitude. It concludes that visitors' positive attitude reinforces the use of escalators in shopping malls.

Hypothesis-11 was tested for the association between escalator use and mall love. Interestingly, escalator use positively affected visitors' love for the mall. The beta coefficient value for the relationship was 0.164*** proving the relationship be statistically significant. The literature reviewed does not show sufficient studies that had examined the relationship between the dependent variable mall love and the independent variable escalator use. However, the study of Bodendorf et al. (2014) discovered that mall management is employing different technologies to increase visitors' touchpoints to enhance visitors' delight. The findings of this study suggest that the presence and use of escalators in shopping malls make the malls even more attractive for visitors and evoke emotional feelings of love towards the shopping mall. This is due to the ease, comfort, playfulness, and enjoyment dimensions associated with the use of escalators in shopping malls. The positive association of escalator use with mall love turned out to be a unique finding of this study. hedonic and utilitarian value, through the mediation of visitor attitude and emotional experience, resulted in the creation of mall love. The utilitarian dimension generates a positive attitude among visitors whereas the hedonic dimension results in the generation of mall love. However, mall love being a new construct require further deliberations and research. Mall Love is a new construct particularly for a developing country like Pakistan and is still in the infancy stage. the framework also considers the role of technology on visitors' mall love by assessing the use of escalators in shopping malls. The findings revealed that technology plays a critical role in shaping mall love among adult mall visitors. This study will act as a guideline for further research in the domain of mall love, mall visitors; escalator use, attitude. Mediation of attitude and escalator and mediation of attitude and emotional experience were also assessed. Firstly, the path between utilitarian value and mall love was mediated through attitude and escalator use however the findings indicated insignificant mediation of attitude and escalator use between hedonic value and mall love. It was revealed that attitude and emotional experience significantly mediates the relationship between hedonic value, utilitarian value, and mall love. Results indicated a significant positive association between the mediating and dependent variables, showing that improved emotional experience results in the generation of mall love among visitors in Pakistan. The findings are in line with the work of Quartier, Vanrie, and Cleempoel (2014) that concludes that improved experience affects visitors' emotions and enhance perceptions. Additionally, as indicated by

Hwang and Kandampully (2012) love itself is a very strong emotional experience in the consumer-brand relationship. This verifies that visitors' positive emotional experience gives rise to mall love, establishing that emotional experience is an antecedent of mall love.

The study examined if technology act as a stimulus in the shopping environment to create mall love; for which escalator being most common and widely available, was used as a proxy of technology. The study is novel as it provides insight into the hedonic and utilitarian perspective of escalator-use in shopping malls of Pakistan that has not been explored much in the marketing literature. The study, therefore, attempts to fill the gaps and add to the existing marketing literature particularly for shopping malls, escalators use, mall love, and TAM. Mall love has emerged as a novel construct and has proved to be enhanced by visitors' positive emotional experience as a result of the shopping environment. Escalator-use that is popular and common in shopping malls acted as a proxy of technology use. To conclude, technology has proved to be a key environmental stimulus in generating mall love, suggesting that malls must direct their energies towards introducing innovations based technologies to enhance visitors' mall love. This may include introducing convenience based technological solutions for mall visitors such as parking sensors to detect available parking spots and mobile applications to offer an easy and quick guide to visitors to identify preferable spots in the multi-level malls. To engage with mall visitors and to create a lasting bond with them, mall management can also use mobile apps and social media platforms. It will help to create a buzz about upcoming events, new tenants in the mall, and to solicit new ideas from mall visitors to bring in positive changes. They may also offer unmanned vending machines for a quick purchase of snacks and beverages such as chips, chocolates, ice-creams, soft drinks, juices, and water. Future studies should undertake an in-depth study based on qualitative measures, to get the mall management perspective on other technologies as a stimulus of shopping environment and mall love and explore the role of moderating variables such as the moderating effect of social class and the results may be compared for different demographic profiles of market segments.

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