An integrative framework of retailscape: Case of grocery retail stores in Saudi Arabia

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A B S T R A C T
The aim of this study is to highlight the importance of retailscapes and their elements and how these elements can enhance customer patronage. The study, therefore, considered customer mood as moderating between retailscapes and customer joy that further leads to customer patronage. Past studies considered some retailscape elements in a different context such as pure services industries. In contrast, this study considered the retail industry. In order to obtain study findings, a convenient sampling technique was used to collect data from targeted respondents. Respondents were the visitors of different retail stores. Since the study was limited to a single city, therefore data were collected in the capital city Riyadh of Saudi Arabia. 300 questionnaires were distributed among the customers, 289 responses were valid and the rest were discarded due to incomplete information. Collected data were analyzed using Smart-PLS and SPSS. Considered hypotheses were tested and found a significant relationship. Results clearly indicating that retailscapes have the ability to influence customer’s patronage by considering retailscape elements in the retail industry.

1. Introduction

The concept has been introduced in earlier studies which stated that services and other purchasing products can be used for having a pleasant experience and functional advantages (Pine et al., 1999). Witnessed in the earlier studies that retailers and providers of services are attracting customers through utilizing different optimism and broad collection/variety of merchandise availability in a single location (Ahmed et al., 2007). In the field of marketing, many research studies conducted that divert the trend of research. Precisely, in the communication of marketing Kotler (1973) was counted among the others who coined the work atmosphere and defines atmosphere. According to him, “atmosphere should be consciously designed to influence shoppers.” Other researchers such as Detsky et al. (1987) have defined atmosphere as “it is the physical environment which influences customer judgment of services.” Bitner (1992) used the term servicescapes as an alternative for the atmosphere in the service industry, and defined it as a “man-made physical environment in which the delivery of service products takes place.” Additionally, these are abilities that can be used to facilitate achieving marketing and services industry goals.

Nevertheless, a conceptual study conducted by Turley and Milliman (2000) has stated that the physical environment has the ability to interact with individuals, further these environmental elements could be the source of joy and re-patronage. Consequently, an attractive physical environment could result in customer positive emotions, which finally in turn pleasure and future re-patronage of customers. In addition, literature also supports the relationship of customer pleasure and customer re-patronage (Chiguvi, 2016; McIlroy and Barnett, 2000; Rai and Medha, 2013).

2. Literature review and hypotheses development

2.1. Retailscape elements

The word retailscape is an alternative word for a physical atmosphere of the retail industry, and this can be defined as; “These are the elements which entice customers and used for the setting of different
services, traditional and conventional aspects which contribute to customer perception and their experience” (Ford et al., 2011). The present study suggested three retailscapes elements consecutively ambiance, social interaction, and exterior. Following is the description for each element.

2.1.1. Ambiance

Background characteristics such as temperature, internal noise, lighting, music, and different scents and odors that affect all the senses (Bitner, 1992) are considered as ambiances. Advancement in business provides the privilege to the customer in order to respond towards services and products according to their own approach (Kotler, 1973). According to Detsky et al. (1987), all those conditions are a part of the ambiance that affects the responses of humans towards the environment. In more details ambiance consisting of a range of elements such as; scent, temperature, different coloring schemes, quality of air, etc. all are considered important elements that are contingent on the features and characteristics of the services offered to customer segments. Further added by Turley and Milliman (2000), in the competitive era, retail stores or any service industry are having a huge number of stimuli’s that attracts customers, these stimuli’s includes music, different coloring, store evaluation opportunities, spending time inside the store, that further leads customer for impulse buying services and products.

Retailers and service providers are revising different experiences with ambiances due to its importance and exciting role that attracts customers due to the fact of fragile behavior of customers, such as they notice if the temperature is too high or too low, music is too noisy if the smell is irritating. The findings in the study of Chebat and Michon (2003), cues of the environment such as proper and balanced ambiance are affecting the perceptions of shoppers directly, further positive and balanced environment increases the level of comfort that please the customers. In a similar context, Cho and Lee (2017) identified the positive association among the environmental cues such as ambient conditions. Further, identified the significant role of ambiance which increases the level of pleasures during purchasing. Further literature also supports that ambient evoke consumer’s internal behavior reaction (Girard et al., 2016).

2.1.2. Social interaction

Interaction is a behavior of communication that could be with two or more objects particularly when they are effective for each other. Customer experience with an organization could be framed in two different perspectives; social environment and physical/non-physical environment (Ali and Omar, 2014). The social environment is consisting of employee vs. employee, customer vs. customer, customer vs. employee, etc. Whereas, the physical environment is consisting of tangible elements such as signs/symbols, layout, different equipment, designs, non-tangible elements such as scent, colors, temperature, etc. (Bitner, 1992). Past studies indicated the importance and significant impact of social interaction between customer vs. employee, and customer-to-customer (Kim and Choi, 2013). Social interaction link supported by the study conducted by Cetin and Dincer (2014), results indicated that social environment leads further to customer satisfaction and other types of customer behavior. Earlier studies were found clearly supporting social interaction between customer to customer and to employees (Bitner, 1992; Bennett and Bennett, 1981; Loudon and Bitta, 1993), further these studies are focusing on physical environment and physical object on employees and customer’s perspectives, that further leads interaction among customer to customer and employees. Studies and a general perception also supports that customer sometimes prefers a place where human’s interaction is considered as a common practice such as shopping mall where every customer expect help and service from a service provider (Loudon and Bitta, 1993).

Due to social interaction, the customers and employees get together to interact and remain loyal to the workplace, and customers reconsider the visit on behalf of trust and friendship with employees, customers feel pleasure by reconsideration (Beatty et al., 1996). Moreover, employee interaction with customers creates a positive image of the industry and customers feel pleasure and reconsider the industry for future purchasing behavior (Jang et al., 2015).

2.1.3. Exterior

Less attention has been given to the exterior of the service industry. Although the exterior of any store required much care due to the leading set of elements which normally seen by a customer (Berman and Evans, 1995). If the exterior of the industry is not managed well, the rest elements of the industry might not matter (Turley and Milliman, 2000), these are the elements, which should be attractive and well-formulated, which persuades positive behaviors for retail stores and or service industry to be successful (Berman and Evans, 1995).

These exterior contains the front of the industry, marquee, entrances, attractive display, building architecture, car parking, etc. (Turley and Milliman, 2000), lack of research were found to cover this share. For instance, Ward et al. (1992) examined the prototypicpality of a store design the degree to which a store has attributes in common with other similar stores, Edwards and Shackley (1992) examined the impacts of external window displays, and Pinto and Leonidas (1995) examined the effect of car parking and place or location on the quality perceptions. Berman and Evans (1995) distributed atmospheric elements into four different categories: The exterior, the interior, the design and layout variables, point of purchase, and internal decor variables. Further
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care due to the leading set of elements which
normally seen by a customer at first. If the exterior of
the industry is not managed well, the rest elements
of the industry might not matter (Turley and
Milliman, 2000) and these are the elements that
should be attractive and well-formulated, which
persuades positive behaviors for retail stores and or
service industry to be successful (Berman and Evans,
1995). All mentioned studies found in their
investigation that exterior variables have inspirational
effects on the behavior of retail
consumers. Several aspects were adopted to review
external variables by Grossbart et al. (1975) during
the assessing and impact of external characteristics
of the macro environment, in this case, shopping
district on shopper behavior. Additionally, the study
reveals “while customers form definite perceptions
of a large complex macro-environment these
perceptions vary among individuals.” Whereas on
other hand, very limited literature has been found so
far that could explore the exterior importance in
service industries. Numerous past studies took place
that dealt with interior and its impact on customer
perception. In order to fill this gap suggested by
Turley and Milliman (2000), this portion needs more
work and needs further investigation. Since the
exterior of any industry has the first cue that is seen
by the customer (Berman and Evans, 1995), and this
must be attractive and pleasing to induce approach
behavior (Turley and Milliman, 2000).

2.2. Retailscape elements and customer
patronage

In the present study word, retailscapes is coined
from the early study of Bitner (1992) who used the
servicescape and defined it as an “internal service
environment that is framed to combined different
visual sets in traditional shopping places, further this
includes with different colors, relaxed movements,
decorations with different features, and obviously
with some stimulation senses such as temperature,
scents, etc. that creates appealing responses of
customers (Teller and Reutterer, 2008). Earlier
studies highlighted the importance and positive
influence of environmental elements, conventionally
and still receiving consideration from environmental
psychologists and researchers (Porteous et al., 1997;
Wang et al., 2015). For more than two and half
decades, these distinctions and elements are still
considered as important and relevant (Mari and
Poggesi, 2013). Several studies conducted in order to
discuss the importance of these elements such as
Detsky et al. (1987) highlighted the importance of
tangible and intangible elements that consist of
ambiance, industry design, internal interaction, etc.

In addition, Bitners (1992) elaborated more
precisely the environmental factors in service
settings and named the dimensions of servicescapes.
The term servicescapes explored cross-national
markets and investigated important elements of the
service industry. Detsky et al. (1987) described the
term servicescapes, which includes elements such as
the different style of interior architecture, style of
layout, and style of decor, different lighting schemes,
odors, music, and hygiene, and suggested these
elements as influential elements, which could be
considered for customer's re-patronage intentions.
According to Detsky et al. (1987); there is a positive
agreement among service marketers, that the
physical environment of the service industry is
critical in integrated marketing and identical for
customer future re-patronage.

Customer re-patronage is the reasons consumers
choose one place to shop rather than another, it is
deep pointing because consumers will choose stores
for a number of reasons such as retailscapes elements, convenient location, service quality, social
interaction, hygienic reasons, place commitment,
emotional attachment. The importance of the
environmental factors and their link with customer
re-patronage can be calculated from the past ironic
literature. For instance, leisure service settings
(Detsky et al., 1987; Wakefield and Blodgett, 1994;
1996) are the key initiators to contribute in the
service industry, whereas in the food industry
(Chang, 2016; Edwards and Gustafsson, 2008; Harris
and Ezeh, 2008; Han and Ryu, 2009; Heung and Gu,
2012). Some studies such as Ali et al. (2016) and
Newman (2007) considered the airport terminals and
measured the environmental factors of international airports, which influences customer
emotionally and cognitively. Recommendations from
the earlier studies for service providers include
managing and organize the in-store stimuli to attract
customers for future reconsideration. Further, it is
important for the service providers to know the
products and services for the customers and to
create mental responses that involve different acts of
buying through different beliefs, for instance, ideas,
memories, curiosity, thoughts (Bustamante and
Rubio, 2017). Based on the discussion above the
following hypothesis is suggested:

H0: There is a positive relationship between
retailscape and customer patronage.

2.3. Retailscape elements and customer joy

Several empirical studies highlighted the
importance of environmental elements such as
servicescapes, retailscapes, etc. that induces the
perception of customer towards service quality and
products. Some aspects are different when it comes
to diversified industries such as regular fine dining
may require a specific set of ambiances, while fast
food may require different from the regular one
(Bitner, 1992). Exploring’s of Bitner (1992) has
indicated that functionality and design/layout are
noticeable in a complex service setting; however, in
discount stores, these are facilitating and fulfilling
the functional needs. Correspondingly, mood-
altering and interesting designs were found to
intensify customer pleasure fulfillment in service
settings (Wakefield and Blodgett, 1996). Morin and
Espie (2007) found that music moderates between service attitude and customer perception. Retailscapes literature suggesting several ideas. First, services are a part where employees and customers are interacting with each other's, leading to different needs in regards to tangible surroundings considerations. Secondly, retailscapes can provoke different customer responses that further lead those categorized services in specific ways. Thirdly, dimensions of retailscapes are vital to design, plan and execute the services inside the industry, and can be considered as significant (Ostrom et al., 2010). These and many more are the ideas that suggest the link existed between how strategies of industries are shaped and defined by the images of customers. Furthermore, these provide the starting point for the service firms to consider the best align that integrates service offerings (Ostrom et al., 2010) and mixing layout/design, into real service practicing and system. Based on the discussion above the following hypothesis is suggested:

H₂: There is a positive relationship between retailscapes elements and customer joy.

2.4. Customer joy and customer patronage

Generally adopting the marketing concept leads to the pleasure of customers and directing a path to profits. To make this sure organizations thus make their customers happy and pleased for future reconsideration and patronage. Customer pleasure and joy is a feeling that is expected by the customers from the service providers for future patronage (Chiguvi, 2016). Patronage is a commitment for repurchasing from the preferred service industry regardless of any marketing and situational factors, which might consequently be resulting switching behavior (Chiguvi, 2016). In addition, it is a commitment for re-purchasing goods or services repeatedly and spreading a word of mouth to nears and dears (McIlroy and Barnett, 2000).

However, this relationship is debatable and arguable as long as customer's expectations are high and receive good value, other than that they would obtain it from rival suppliers (McIlroy and Barnett, 2000). Thus, customer patronage should have sustained through customer pleasure that accompanied emotional attachment that is formed with service providers to generate willingness and consistency in the relationship with preferences, premium, and patronage (Rai and Medha, 2013). Based on the discussion above the following hypothesis is suggested:

H₃: There is a positive relationship between customer joy and customer patronage.

2.5. Customer mood as moderator

The past studies defined customer mood as; it is an exposure to retrieve the information which may affect the individual's capabilities for the information to recall (Gardner et al., 1985). According to Frijda (2009); customer mood is "the designation for the appropriate affects which states about not specific and/or/everything about in the world in general." However, according to Frijda (1993) and Wyer et al. (1999); feeling states are called mood, and can be considered as affective states for long-lasting that are experienced without concurrent awareness of the customer's elicitors (Kanfer and Klimesoski, 2002). Further, moods can have frequently more understated impacts on the information process. Such as, positive and good moods have been linked with the propensities toward empirical processing (Isen, 2000), whereas, in contrast, negative and bad moods are linked with additional care and organized processing. Further positive and good mood evokes the use of scripts, and firmly social information processing, whereas negative and bad mood increases the use of individual information (Gohm and Clore, 2000). Positive and good moods are evoking more enjoyment and exploration of new ideas and can improve creativity (Isen, 2000).

However, past literature is witnessed that customer mood is not a unique term in the service industry. This is obvious that service providers of the business industry are using different marketing strategies and different techniques to influence their customer's mood in a positive way and make them pleased. For instance, Han and Ryu (2009) highlighted that how various store attributes can create different consumer reactions and had discovered that the design of the industry makes a big difference to consumer mood, which further leads to customer re-patronage. These attributes include the atmosphere of the service industry and the total designing in-store atmospheric environment for consumers, where the service providers are confident to create a positive mood during the customer visit, and in response, customers producing favorable in-store behavior e.g. number of hours spent, spending more money, re-patronage intentions and communication positively (Osman et al., 2014). Thus, the in-store atmospheric constructs such as different lighting, different coloring, different styles of music may have the capabilities to enable immediate impact on the customer decision-making process. Nevertheless, the store atmospherics has the potential to be an effective and influential tool for marketing if service providers understand how to utilize these elements (Osman et al., 2014). Since mood is considered as the state of mind, therefore many past studies considered the ambiance elements very effective for diverting the customer mood. For instance, Taylor and Cosenza (2002) showed that ambient cues contain all intangible elements such as music, lighting, scent, and temperature, whereas, design cues contain architecture, attractive decoration, different colors of the store, and overall design of the business industry. Some store elements are influential by some varied sub-elements. Such as, the factors that can affect music can be its style, volume,
An indicated by Babin and Darden (1996) that a service industry’s tangible features have strong impacts on consumer's level of excitement during their visit, which directly influence the shopping expenditures and value of shopping for customer future repatronage and consideration. It was stated in the study of Bloch et al. (1994), that tangible environment influencing consumer's emotional states, which affect the consumer behavioral responses (approach behavior). Another study conducted by Guégen (2012) and showed that a pleasant ambiance has the ability to activate a positive mood which in turn makes customers pleased and increases their intentions for repatronage in the future. Moreover, past studies considered mood as one of the moderating variables between customer behavior and the atmosphere of the business industry (Lucia-Palacios et al., 2016). Furthermore, their study results indicated that arousing and positive prior moods could moderate the generation of affective and cognitive responses derived from service industries features. Some other past studies cited that mood could prejudice the perception of customers towards environmental variables and the impact of these variables on customer behavior (Babin and Darden, 1996; Mano, 1999). Based on the discussion above and past recommendations the present study suggesting the following hypotheses:

H0: Customer mood is moderating between retailscape elements and customer joy.

2.6. Theoretical framework

Based on the literature review and gaps in the research, the following research framework was developed as shown in Fig. 1. Specifically, the research investigates the relationship between retailscape elements, customer mood, customer joy, and customer patronage in KSA grocery retail stores.

3. Research methodology

3.1. Research instruments

Measurements items (Table 1) for the retailscape elements such as “ambiance, social interaction, and exterior” were adapted/adopted from Bustamante and Rubio (2017) and Siu et al. (2012). Consecutively, 6 items were adapted for ambiance from Siu et al. (2012), 9 items were adapted for social interaction from Bustamante and Rubio (2017), and 3 items were adopted from Siu et al. (2012) for the exterior. The other measurement variables such as customer mood taken as a moderator between customer joy and retailscape elements and 3 items were adapted for customer mood from Bustamante and Rubio (2017). Items for customer joy were adapted from Ali et al. (2016), and customer patronage items were adapted from Panichpathom (2016). For customer joy total of 3 items were adapted from Ali et al. (2016), however, 4 items were considered for customer patronage that was adapted from Panichpathom (2016). 7 point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree) was used to assess these items. The questionnaire was distributed in the car parking area of targeted retail stores.

3.2. Sampling design and data collection

The questionnaires of this study were distributed among the customers of retail stores in car parking zone face to face interaction. 3 retail stores were selected for the distribution of questionnaires. Participants were taken in confidence and instructed before filling the questionnaires. 297 questionnaires were returned from the three hundred participants. Among 297 returned responses, deemed usable responses were 289. This number is fulfilling the required criteria (Westland, 2010). By taking an account 99% confidence level, st.dev. of 0.5 and +1% margin of error. Table 2 shows the respondents list and some demographic characteristics.
Hair et al., 201’s Next, discriminant validity was assessed for the measurement items. For it, a measurement model and structural model were analyzed using PLS. In the future, I will come back to this retail store and will recommend my friends and/or associates to shop at this retail store. I will advise customers who ask my opinion on this retail store’s products/services, makes me feel happy. The sign and logos of this retail store are easy to be understood and there are sufficient signs and logos outside this store. I consider myself a member of the community of customers who shop at this store. I give my opinion to this retail store’s employees/employer, I receive information from this retail store’s employees, I seek advice from this retail store employee, I give my opinion to this retail store’s employees, I interact with this retail store’s employees. The environment of this retail store, the display of its products, services, makes me feel happy. The sign and logos of this retail store are large enough to be seen, the sign and logos of this retail store are easy to be understood. I advise customers who ask my opinion on this retail store’s products/services, makes me feel happy. The sign and logos of this retail store are easy to be understood. I consider myself a member of the community of customers who shop at this store.

Table 1: Constructs validity and reliability

| Construct | Items                                                                 | Loadings | CR  | (AVE) | Cronbach’s Alpha |
|-----------|------------------------------------------------------------------------|----------|-----|-------|-----------------|
| AMB       | The temperature in the retail store is comfortable                     | 0.754    |     |       |                 |
|           | The air quality in the retail store is good                             | 0.771    |     |       |                 |
|           | The odor in this retail store is pleasant                               | 0.728    |     |       |                 |
|           | The lighting in this retail store is adequate                           | 0.759    |     |       |                 |
|           | The lighting in the retail store is easy on eye                        | 0.818    |     |       |                 |
| CP        | I will continue, have shopped at this retail store                     | 0.909    | 0.950 | 0.827 | 0.930           |
|           | It is very likely for me to shop at this retail store again             | 0.920    |     |       |                 |
| EXT       | The sign and logos of this retail store are large enough to be seen     | 0.923    | 0.935 | 0.827 | 0.893           |
|           | The sign and logos of this retail store are easy to be understood       | 0.897    |     |       |                 |
| INT       | I give my opinion to this retail store’s employees/employer            | 0.809    | 0.934 | 0.613 | 0.920           |
|           | I receive information from this retail store’s employees               | 0.822    |     |       |                 |
|           | I seek advice from this retail store employee                           | 0.786    |     |       |                 |
|           | I share my opinions with this retail store’s employees                 | 0.864    |     |       |                 |
|           | I interact with this retail store’s employees                           | 0.814    |     |       |                 |
|           | The environment of this retail store, the display of its products, services, makes me feel happy | 0.837    |     |       |                 |
| MD        | I feel delighted at some time during my visit to this retail store     | 0.874    | 0.926 | 0.757 | 0.891           |
|           | I felt delighted at some time during my visit to this retail store     | 0.887    |     |       |                 |
|           | I felt delighted at some time during my visit to this retail store     | 0.851    |     |       |                 |
|           | I will recommend my friends and/or associates to shop at this retail store | 0.890    |     |       |                 |

4. Data analysis

In order to analyze the data, SPSS was utilized to get the descriptive statistics of the participants. Descriptive statistics include the demographic profile of participants and the internal consistency of items. Further, PLS-SEM was utilized in order to analyze the study framework. Two stages procedure measurement model and structural model were analyzed by using PLS-SEM. The measurement model is used to validate the measurement items, whereas, a structural model is used to test the significance of path coefficient and loadings. For the structural model, testing the significance of path coefficient and loadings a famous method of bootstrapping (5000 resample) was used (Hair et al., 2016). In addition, PLS is an advance and well-established method that is used and recommended by earlier studies to estimate path analysis in the structural model. In social sciences, this method is increasing due to faultlessness (Hair et al., 2016). Fig. 2 shows the structural model.

4.1. Measurement model

Convergent validity was tested in the initial phase of the measurement model. This was asses through composite reliability, Cronbach’s alpha, factors loading, and AVE. Attained results can be seen in Table 1. Next, discriminant validity was asses, this refers that measures are not a reflection of other variables, which indicates the lower correlations between the interest measure and other constructs. Table 3 indicates the AVE (Square Root) of each construct that is larger than its corresponding coefficient correlation towards adequate discriminant validity (Fornell and Larcker, 1981).

4.2. Heterotrait-monotrait (HTMT)

Through (Heterotrait-Monotrait) HTMT discriminant validity were tested, Table 4 indicates the obtained results of HTMT values that are greater than HTMT=.85 value of 0.85 according to Kline (2015) then discriminant validity is a problem. Results in Table 4 clearly show all the values that are fulfilling the required criteria that are lower than 0.85. Other results are showing the weights of the first-order
constructs on the designated second-order construct indicating that retailscapes are the second-order factor with three significant first-order dimensions that include ambiance, social interaction, and exterior.

![Structural model](image)

**Fig. 2: Structural model**

**Table 3: Discriminant validity**

| Constructs | AMB  | CJ   | CP   | EXT  | MD   | RS   | SI   |
|------------|------|------|------|------|------|------|------|
| AMB        | 0.773|      |      |      |      |      |      |
| CJ         | 0.502| 0.870|      |      |      |      |      |
| CP         | 0.503| 0.521| 0.909|      |      |      |      |
| EXT        | 0.324| 0.572| 0.504| 0.909|      |      |      |
| MD         | 0.479| 0.705| 0.633| 0.845|      |      |      |
| RS         | 0.673| 0.587| 0.515| 0.768| 0.636|      |      |
| SI         | 0.384| 0.409| 0.321| 0.615| 0.477| 0.909| 0.783|

**Table 4: Heterotrait-monotrait ratio (HTMT)**

| Constructs | AMB  | CJ   | CP   | EXT  | MD   | RS   | SI   |
|------------|------|------|------|------|------|------|------|
| AMB        | 0.570|      |      |      |      |      |      |
| CJ         | 0.558| 0.634|      |      |      |      |      |
| CP         | 0.362| 0.637| 0.553|      |      |      |      |
| EXT        | 0.574| 0.552| 0.826| 0.744|      |      |      |
| MD         | 0.792| 0.644| 0.557| 0.811| 0.734|      |      |
| RS         | 0.428| 0.454| 0.351| 0.680| 0.560|      |      |

**4.3. First-order constructs**

In order to model the relationship among the research constructs and retailscapes (i.e., ambiance, social interaction with customers/employees, and exterior factors), the present research had been used a reflective second-order model since the research model theoretically operationalized at higher levels of abstraction establishing higher-order models for retailscapes elements. Flow for this model is based on Chin’s (2010) approach to using reflective type hierarchical latent variable model. Reporting the output of the analysis was based on the elements outlined by Hair et al. (2014) and Ramayah et al. (2018). Based on these grounds, the research used the PLS-SEM program, for analyzing the measurement and structural model. Table 5 can be seen for weight and T-values.

**Table 5: Weights of the first-order constructs on the designated second-order constructs**

| Second-order constructs | First Order Constructs | Weight | T-Value |
|-------------------------|------------------------|--------|---------|
| Retailscapes            | Ambiance               | 0.673  | 12.627  |
|                         | Social Interaction     | 0.909  | 66.084  |
|                         | Exterior               | 0.768  | 24.788  |

**4.4. R-square (R²)**

The coefficient of determination R² was assessed to check the structural model. R² is used for measuring the predictive accuracy of the models. R² is useful in depicting the model’s strength to predict and explain the dependent latent variables. R² values
0.19, 0.33, and 0.67 are weak, moderate, and substantial respectively (Chin, 1998). Present research model, the R² of dependent variables appeared within the preview of substantial prediction, the values related to these are given in Table 6. Based on the PLS algorithm results, R² values for customer patronage=0.660, and emotional response=0.635 which is considered substantial.

| Constructs | R Square | R Square Adjusted |
|------------|----------|-------------------|
| CJ         | 0.629    | 0.626             |
| CP         | 0.676    | 0.674             |

4.5. Structural model

Suggestions have been obtained from the earlier studies to assess the structural model (Hair et al., 2016). It is suggested that R², Beta values, and t-values through the procedure of bootstrapping with resamples of 5000 (Hair et al., 2016). The positive and significant results can be seen in Table 7, where it shows the relationship between retailscape elements and customer patronage with a β=0.051, p<0.01, and between retailscape and customer joy the value of β=0.147, p<0.01, also the result shows the positive and significant beta values between customer joy and customer patronage where β=0.791, p<0.01. The values for R² are of customer patronage and customer joy is 0.676 and 0.629, which is higher than the recommended for example (Cohen, 1988). In the next step the f² was assessed, in Table 6 the result shows the significant relationship of p-values. For measuring the effect size, the present research adopted the (Cohen, 1988) recommendations which stated that 0.02 for small effects, 0.15 for medium, and 0.35 for larger effects. Table 6 shows all the relationships had large relationship effects.

| Table 7: Structural estimates (hypotheses testing) |
|--------------------------------------------------|
| Hypotheses | Beta | T-Value | t-square | Decision |
| H1: RS     | CP   | 0.051   | 1.252    | 1.265 | Supported |
| H2: RS     | CJ   | 0.147   | 2.755    | 0.768 | Supported |
| H3: CJ     | CP   | 0.791   | 26.481   | 1.268 | Supported |
| H4: RS* CM, CJ | 0.243   | 13.900   | 0.103   | Supported |

Note: Critical t-values. *1.96 (p<0.05); **2.58 (p<0.01)

4.6. Moderation analysis

The present research study considered customer mood as one of the moderators between retailscape elements and customer joy. For moderation analysis in PLS, the product indicator approach was adopted. In the considered approach, the possibility of the moderating effect, retailscape, and customer mood were multiplied to create an interaction construct (retailscape items * customer mood) to predict customer patronage.

5. Limitations

The limitation part discusses flaws and provides sometimes future research directions. Like others, this research also has some limitations. The study was limited to only one city; future studies can target other cities as well; the study targeted only grocery stores further studies can target other industries such as specialized retailers for example electronics, household stores, etc. The study was limited to consider only three retailscape elements, further studies can increase the number of retailscape elements. In addition, the study suggested only a moderator, future studies can consider more and different moderators (Lucia-Palacios et al., 2016). Interesting results could be predicted if the consequences i.e. customer patronage with other variables.

6. Conclusion

Present study findings are the empirical support of the existing body of knowledge, which supports the importance of retailscape on customer patronage and customer joy, particularly in retail stores. Recommendations from past studies include investigating further in different retail industries. More specifically, very little attention has been paid to the Saudi Arabian retail industry, and this further needs to be more explored. As of limited efforts, the researchers did not find any relevant empirical studies in the past literature conducted in Saudi Arabia. Moreover, this study also investigates the moderating effects between retailscape and customer joy. Total 4 hypotheses were tested. All the tested hypotheses were having a significant relationship. The significant results clearly indicating that retailscape has the ability to influence customer’s patronage by considering retailscape elements. Further, moderating element “customer mood is also moderating between customer joy and retailscape.

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Compliance with ethical standards

Conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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