Journal of Services Mar

DOES STRESS MATTER IN MALL EXPERIENCE AND CUSTOMER SATISFACTION?

SCHOLARONE™
Manuscripts

DOES STRESS MATTER IN MALL EXPERIENCE AND CUSTOMER SATISFACTION?

Abstract:

Purpose – This article aims to demonstrate that stress is a relevant feeling to take into account in mall experience and customer satisfaction management. Furthermore, it is proposed that its effects on mall experience and satisfaction differ depending on shopping motivation and frequency.

Design/methodology/approach – The method is based on seemingly unrelated regressions (SUR) models and data were obtained through a survey of 1,088 mall clients. Mall experience is addressed through customer cognitive and affective responses. Both terms together with stress and customer satisfaction with the mall are constructs measured by seven-point Likert scales. Exploratory and confirmatory factor analyses were conducted to validate these measures.

Findings – The results show that stress reduces customers' affective response and satisfaction. The effect of low levels of stress on customer affective response is less negative for frequent shoppers, and the influence of high levels on satisfaction is less negative for them. Furthermore, stress has a U-shaped effect on customers' cognitive response, an effect that is reduced for frequent shoppers.

Practical implications – Mall managers should try to reduce stress in the management of their customers' experience. Moreover, they should increase the shopping frequency of their clients by implementing marketing strategies such as frequency programs and serial concerts, and assist shoppers in reorganizing their shopping goals, by implementing organizing tools and new recommendations and suggestions.

Originality/value – Given that previous work on shopping stress is scarce, the article expands the extant literature by analyzing its effects on mall experience and customer satisfaction. Furthermore, it shows that these effects may vary depending on shopping frequency and motivation.

Keywords: mall experience, customer satisfaction, stress, shopping motivation, shopping frequency.

Article classification: Research paper.

2

1. Introduction

Stress is a common feeling state that may be important in mall environments due to several circumstances that are typical to retail environments, including crowding, parking difficulties, service complexity, scarcity and messy shelves (Baker and Wakefield, 2012; Gilboa and Vilnai-Yavetz, 2013; Sujan et al., 1999). Stress is a psychological response that occurs when a shopper is overwhelmed by any of these circumstances or situations (Lucia-Palacios et al., 2018; Moschis, 2007). Previous research has quantitatively addressed the consequences of stress in retailing, finding that it can increase store abandonment, complicate decision making and reduce repatronage intentions in shopping centers (Albrecht et al., 2017; Baker and Wakefield, 2012; Maier and Wilken, 2014). However, as far as we know, there are still important experiential outcomes whose relationship with stress has not been examined, such as mall experience and customer satisfaction.

Mall experience has received much attention from academics and professionals in recent years because a convenient and pleasant shopping trip can lead to higher spending, greater repurchase intentions and more satisfied and loyal customers (Burton et al., 2017; Umasuthan et al., 2017). Although there are different conceptualizations of the mall experience, most research has suggested that customers assess their shopping experience through cognitive and affective responses (Lemon and Verhoef, 2016; Bustamante and Rubio, 2017; Rose et al., 2012). Cognitive and affective responses are experiential outcomes that try to measure the inner reactions to customers' shopping activity (Jüttner et al., 2013). Furthermore, these responses influence customer satisfaction with the mall (Rose et al., 2012). Satisfaction is a common marketing outcome that has been widely used in the literature to address shoppers' experience in retail settings, and it is considered

a prerequisite for enhancing desirable consumer behaviors such as commitment, loyalty

and positive recommendation (Jha et al., 2017; Im and Ha, 2010; Kim et al., 2018).

Previous research suggests that the effect of stress on consumers' emotions,

purchase decisions and wellbeing may differ across people (Baker and Wakefield, 2012;

Singh and Duque, 2012). These authors propose that a stressful event affects shoppers

differently depending on their shopping motivations and frequency. First, hedonic

shoppers are more flexible and likely to change their entertainment objectives when they

face stressful situations, while utilitarian shoppers tend to continue to pursue a specific

buying objective and struggle with the stress (Pekrun and Stephens, 2009; Wrosch et al.,

2003). For example, a consumer who has gone shopping to relax and walk, without any

specific buying task, may easily decide to change their shopping motivation when faced

with a stressful event that prevents them from relaxing and walking. However, a shopper

with a specific list of items to purchase will strive to fulfill their goals. Second, those who

go shopping more frequently are more familiar with the mall, more involved with the act

of shopping and more knowledgeable about the shopping activity (Overby and Lee, 2006;

Zaidan, 2016). For example, more experienced shoppers are more likely to know how to

avoid crowded and stressful situations or be more familiar with them and know how to

deal with them better. Thus, the feelings and decisions of more frequent shoppers may be

less affected by the stress experienced in a shopping environment than those of people

who rarely go shopping.

As a consequence, the present article has two main goals: 1) to investigate if stress

can affect customers' cognitive and affective responses to the mall experience and

satisfaction with the mall; and 2) to examine if these effects of stress differ depending on

shopping motivation and frequency. To do so, this article employs data obtained from a

survey conducted of 1,088 shoppers during their experience in a Spanish mall and applies

seemingly unrelated regressions (SUR) to estimate the results.

The present research contributes to the marketing literature in three ways. First, it

contributes to literature on the shopping experience by demonstrating that stress is a

relevant factor in influencing experiential outcomes while shopping. Second, it tests

whether the effects of stress on the mall experience and satisfaction differ depending on

shopping motivation and shopping frequency. Third, this research contributes to the

control-value theory of achievement emotions by showing that stressful situations can

influence shoppers' feelings and decisions, and that these effects vary depending on

shopping frequency.

The rest of the article is structured as follows. Section 2 revises the literature on

the retail customer experience and stress in retailing and develops the hypotheses of the

study. Sections 3 and 4 explain the methodology employed and the main results of the

study, respectively. Section 5 offers the main conclusions, including theoretical and

practical implications and future research lines.

2. Theoretical background

2.1. Mall experience and its relationship with satisfaction

This article aims to test how stress affects mall experience; the theoretical model used in

the study is depicted in Figure 1. Mall experience can be defined as "the customers'

subjective and internal response to the stimuli that come from the mall or parts of its

organization (Gilboa and Vilnai-Yavetz, 2013; Gilboa et al. 2016). Due to the complexity

and heterogeneity of this concept, there is a debate in the literature about how to measure

it. Previous research has employed different measures, such as cognitive and affective

responses (Jüttner et al. 2013; Rose et al. 2012), experiential value (Mathwick et al. 2001)

and experiential quality (Klaus and Maklan, 2012). The present article defines mall experience through cognitive and affective responses for three main reasons. First, it is the most used measure and has been considered in a great number of studies (Bustamante and Rubio, 2017; Jüttner et al. 2013; Gilboa and Vilnai-Yavetz, 2013; Lucia-Palacios et al. 2016; Rose et al. 2012). Second, people usually interpret reality through these two basic responses (Jüttner et al. 2013). Third, these measures are usually evoked by stimuli generated by the company and subsequently affect traditional marketing outcomes like satisfaction, patronage intentions, repurchase intentions and loyalty (Kim et al., 2018; Lucia-Palacios et al. 2016; Rose et al. 2012; Umasuthan et al. 2017). Customer cognitive response is defined as the client's assessment of goal fulfillment during the shopping trip (Babin et al., 1994; Jüttner et al., 2013; Lemke et al., 2011). Customer affective response refers to the extent to which a customer feels that the shopping activity has been pleasurable (Gilboa and Vilnai-Yavetz, 2013).

Figure 1 here

Satisfaction is a common outcome of the shopping experience that has been analyzed in a vast body of previous research. It is a prior requirement in order to develop loyalty and increase repurchase intentions, as well as being a measure of service quality (Im and Ha, 2010). This article refers to customers' satisfaction with the mall where they have conducted their shopping activity. Thus, satisfaction is a consumer's judgment of the fulfillment of their expectations about the mall (Gilboa and Vilnai-Yavetz, 2013; Rose et al., 2012). Following previous findings, this article takes for granted that customer cognitive response positively affects customer satisfaction because shoppers are more satisfied when they have achieved their goals (Rose et al., 2012; Kim et al., 2008). Similarly, customer affective response has a positive effect on satisfaction because a

6

pleasurable shopping experience is also likely to be satisfying (Gilboa and Vilnai-Yavetz, 2013; Morrison et al., 2011).

Customer affective response can influence customer cognitive response because affective states can bias people's perceptions, cognitive resources, motivational processes and judgments (Bagozzi et al., 1999; Pekrun and Stephens, 2009; Rose et al., 2012). Previous research has shown that pleasure derived from the shopping activity leads customers to focus their attention on the task of buying, fosters interest and represents an intrinsic motivation, benefiting shopping performance (De Rojas and Camarero, 2008; Luong, 2005). Thus, customer affective response positively influences customer cognitive response.

2.2. Stress, mall experience and satisfaction with the mall

An event is stressful for a person when it exceeds their ability to cope with it (Moschis, 2007). Stress is a psychological subjective state characterized by negative affect and high arousal (Russell and Pratt, 1980). Furthermore, it is associated with physiological reactions, such as sweating and a rapid pulse, and it provokes behavioral responses, such as escaping from uncomfortable situations (Lazarus, 1993; Lazarus and Folkman, 1984).

Stress can be a consequence of both life events and daily hassles. The former refer to dramatic changes that occur in a person's life, such as the death of someone close, getting divorced or moving house, and affect their habits and customs. Daily hassles are irritating, frustrating and distressing demands that, to some degree, are present on a daily basis and include losing things, crowding, traffic jams and work overload (Kanner et al., 1981; Singh and Duque, 2012). The present research focuses on daily hassles.

Several articles have considered stress that arises from in-store hassles such as loud ambient music, messy shelves and crowding, as well as situational circumstances

7

such as time pressure or frustrated purchase experiences (Aylot and Mitchell, 1998; Baker and Wakefield, 2012; Sujan et al., 1999). While the causes of shopping stress are quite clear, there is scant research that analyzes the consequences of stress on shopping experience in the retail setting. To the best of our knowledge, we can only cite the reduction of repatronage intentions (Baker and Wakefield, 2012) and purchase abandonment (Albrecht et al., 2017).

To justify the relationship between shopping stress and customers' cognitive and affective responses, the control-value theory of achievement emotions is used (Pekrun, 2006; Pekrun and Stephens, 2009). Control-value theory is an appraisal theory of emotions; that is, it states that emotions appear as a consequence of the individual's interpretation of reality and not of reality itself. This theory has been mainly applied in education research to explain how learning activities can trigger emotions that subsequently can affect students' learning process, motivation and academic performance (Raccannello et al., 2018; McGloin et al., 2017; Hall et al., 2016), with some exceptions in human resource management and consumer research (Albrecht et al., 2017; Staw et al., 1994).

The control-value theory of achievement emotions considers emotions that appear as a consequence of achievement activities or outcomes. Two types of achievement emotions can be differentiated: activity emotions, associated with the activity itself (e.g., enjoyment and stress in shopping), and outcome emotions, related to the outcome of the activity (Pekrun et al., 2002; Pekrun et al., 2006). Outcome emotions include anticipatory emotions, occurring before achievement (e.g., excitement for success or stress for failure), and retrospective emotions, appeared after achievement (e.g., pride after success or frustration after failure). Stress is a feeling state characterized by a negative and high-arousal emotion and can be experienced as an activity emotion (e.g., shoppers are stressed

because of crowding) and as an anticipatory emotion (e.g., shoppers are stressed because they believe they will not achieve their goals).

This theory proposes that two types of appraisals are important for achievement emotions: subjective control and subjective value. The former refers to the individual's belief in their control over achievement activities and their outcomes, and the latter to the importance that the individual gives to these activities and their outcomes (Fisher et al., 2012). A greater degree of perceived control will make shoppers more likely to perceive the shopping experience as enjoyable. In contrast, situations where individuals perceive a loss of control can provoke negative emotions such as frustration, anger and stress, which may reduce pleasure (Lunardo and Mbengue, 2009; Pekrun, 2006). Furthermore, subjective value will determine the intensity of the feeling state and its capacity to influence further cognitive and affective evaluations (Pekrun et al., 2002; Meinhardt and Pekrun, 2003).

Stressful events in retail environments, such as crowding and traffic jams, increase complexity and make the shopping activity more difficult to accomplish, leading to a sensation of loss of control over the retail environment and the shopping activity and making the customer's experience unpleasant. Consistent with previous research on the shopping experience, feelings characterized by high arousal and positive affect, such as excitement, have a direct and positive impact on pleasure (Donovan and Rossiter, 1994; Holmqvist and Lunardo, 2015; Kaltcheva and Weitz, 2006; Mehrabian and Russell, 1974). Following these studies, since stress usually appears in situations that overwhelm the shopper's resources and is characterized by high arousal and negative affect, it should have a negative influence on customer affective response.

Affective states can influence numerous cognitive processes such as the customer's perception of having achieved their shopping goals. While previous research

9

has shown that positive affect encourages goal fulfillment, the findings on negative feelings are less clear (Pekrun and Stephens, 2009). According to the control-value theory of achievement emotions, the effects of a negative feeling on perception will depend on the arousal dimension of the feeling and its interaction with the demands of the shopping activity (Pekrun, 2006; Pekrun and Stephens, 2009). Feelings characterized by unpleasant affect and high arousal, such as stress, can consume customers' cognitive resources during their retail experience and make their shopping experience more challenging (Büttner et al., 2015). Low levels of stress will motivate them to make more effort to achieve their goals (Pekrun and Stephens, 2009). However, higher levels of stress will make them perceive goal achievement as less likely or almost impossible, and they will react to this threat by abandoning their shopping goals (Skinner, 1995). As a consequence, an inverted U-shaped effect of stress on customer cognitive response is proposed. Thus:

H1a: *Stress will have a negative effect on customer affective response.*

H1b: *Stress will have an inverted U-shaped effect on customer cognitive response.*

Satisfaction refers to customers' assessment of meeting their expectations. If their perceived value obtained in the shopping experience is greater than expected, they will be satisfied. In the shopping experience, satisfaction refers to the confirmation or disconfirmation of expectations about the product attributes, the store layout and the service provided in the store, as well as to customers' assessment of the entertainment and pleasure experienced in the store (Babin et al., 1994; Im and Ha, 2010; Mano and Oliver, 1993). Since stress is a psychological state characterized by negative affect and also makes it more difficult for customers to achieve their goals, a negative effect on satisfaction is proposed. Thus, it is hypothesized:

H1c: *Stress will have a negative effect on customer satisfaction*

2.3. Moderating effect of shopping motivation

Shopping motivation refers to customers' predisposition toward a particular shopping activity (Brown et al., 2003). Previous research on motivational shopping has differentiated between utilitarian and hedonic motivations as customer-related characteristics that can affect shoppers' decisions, judgments and emotions during the activity (Kaltcheva and Weitz, 2006). Utilitarian shoppers see the shopping activity as a task that must be completed as efficiently as possible, while hedonic individuals focus on the enjoyment of the activity itself, socializing with others, wandering around the mall and enjoying its lively atmosphere (Büttner et al. 2015; Kaltcheva and Weitz, 2006; Rosenbaum et al., 2017; Scarpi, 2012).

Shopping motivations can change the way consumers perceive the retail environment, influencing their decisions during the shopping activity (Albrecht et al., 2017; Inman et al., 2009; Pan and Zinkhan, 2006). So, the present research expects that this factor could also be relevant in the relationship between stress and customers' cognitive response. Stress causes a loss of cognitive resources and will make the activity more challenging (Lazarus and Folkman, 1984; Worsch et al., 2003). However, this challenge will be faced differently by hedonic and utilitarian shoppers. While hedonic shoppers are likely to reorient their shopping goals when facing a challenging situation, utilitarian shoppers are not (Wolfinbarger and Gilly, 2001). During the shopping task, utilitarian shoppers are focused on accomplishing their goals (Wolfinbarger and Gilly, 2001). As a result, they are not likely to change their shopping goals when faced with a challenging situation. For these shoppers, it is proposed that the inverted U-shaped effect of stress on customer cognitive response will be maintained.

For hedonic shoppers, changing their objectives can alter their perceptions of success or failure in attaining these objectives (Wrosch et al. 2003). When they perceive

that their goals may not be fulfilled because of a stressful situation, they can change their initial objectives to more functional ones, such as buying an item they have seen and leaving the mall. This change is more likely to happen when the situation is highly stressful. For example, individuals who go to the mall to have dinner may want to go to a specific place but, due to crowding and stress, they may decide to change where to eat. In the end, they may conclude that the goal of having dinner has been fulfilled, although not completely. So, they may have a less negative impression of their experience. Thus, it can be stated that for hedonic customers, the effect of stress on customer cognitive response is weaker than for utilitarian shoppers.

H2: *The effect of stress on customer cognitive response will be weaker for hedonic than for utilitarian shoppers*.

2.4. Moderating effects of shopping frequency

Shopping frequency has been widely analyzed by previous research on retailing that can explain different consumer behaviors (Overby and Lee, 2006). Shoppers who attend a shopping mall more often show a more positive attitude to shopping, are more familiar with the mall environment, feel more excited and enthusiastic about shopping and seek higher sensory stimulation during their purchase activity (Kuruvilla et al., 2009; Scarpi, 2012; Zaidan, 2016). So, stressful situations in retail environments may affect frequent and non-frequent shoppers differently. We propose that the effects of stress on mall experience and satisfaction with the mall will be reduced for more frequent shoppers, based on three arguments: 1) frequency leads to a process of habituation; 2) more frequent shoppers are more knowledgeable; and 3) more knowledgeable people are more likely to attain their goals and feel a sense of wellbeing (Fisher et al., 2012; Tang et al., 2016).

Regarding the first argument, the repetition of experiences that may occasionally be stressful can lead individuals to a process of habituation; that is, they get used to these

experiences and react with less intensity when a stressful event takes place (Bolger et al. 1989; Luhmann et al. 2012; Schlotz et al. 2011). In a stressful shopping environment, this habituation occurs because individuals who go shopping more often are more familiar with the coping strategies that are usually employed to avoid or reduce stress. Some of these strategies attempt to alleviate the negative effects of stress by trying to look on the bright side of the shopping situation and, thus, prevent the negative consequences that stress can have on subjective emotions and behavior (Bolger et al. 1989; Duhachek, 2005; Luhmann et al. 2012; Whiting, 2009).

Second, higher shopping frequency consolidates the storage of shopping information in the memory, such as prices, products and store locations (Olavarrieta et al., 2012). So, more frequent shoppers are more experienced and knowledgeable and show superior shopping knowledge (Fisher et al., 2012; Ofir et al., 2008). Knowledgeable shoppers possess a more developed and complete cognitive representation of the shopping task, allowing them to efficiently encode and interpret new information (Rao and Monroe, 1988). This ability to make judgments can lead frequent shoppers to be more efficient at finding products and assessing their attributes and characteristics, so that they find the search process less cognitively demanding than unfamiliar customers do and are less affected by environmental stressors (Chebat et al. 2005; Dogu and Erkip, 2000; Otterbring et al. 2016). Greater efficiency while shopping leads shoppers to attain their goals more easily (Inman et al., 2009). Furthermore, acquiring more knowledge about the shopping activity helps shoppers feel greater control over the task, which according to the control-value theory of achievement emotions can reduce the negative effects of the stressful event on customers' perceptions. So, the effect of stress on customer cognitive response will be weaker for frequent shoppers than for infrequent shoppers.

Third, and according to the control-value theory of achievement emotions, since more frequent shoppers are more likely to attain their goals, they can feel greater control over the situation and are more likely to attain wellbeing and create a barrier for negative emotions such as anxiety (Hall et al., 2016). Ham and Larson (1990) found that expected stressful daily events were less upsetting than unexpected events. That is, the possibility of anticipating the stressful event leads to psychological preparation for coping with the hassle and a feeling of control over it (Lunardo and Mbengue, 2009). Shoppers who are more familiar with a shopping environment can anticipate stressful shopping situations and are more prepared for their affective consequences. Therefore, the effects of stress on customer affective response will be lower for frequent shoppers than for infrequent shoppers. Since more frequent shoppers to the mall are more familiar with the shopping activity and are better at anticipating possible stressful situations, they will also have more accurate expectations about what to find in a stressful situation on a given visit to the mall (Ham and Larson, 1990; Schneiders et al., 2006). As a consequence, more frequent shoppers are more likely to confirm their expectations, and in turn to be more satisfied than less frequent ones. Thus, it is hypothesized that:

H3a: *Shopping frequency will reduce the effects of stress on customer affective response.*

H3b: *Shopping frequency will reduce the effects of stress on customer cognitive response.*

H3c: *Shopping frequency will reduce the effects of stress on customer satisfaction.*

3. Methodology

3.1. Model specification

The seemingly unrelated regressions model was applied to test the hypotheses in this study. The model consists of three dependent variables: customer satisfaction with the mall, customer affective response and customer cognitive response. SUR models allow

the errors in the different equations of the model to be correlated for each individual. They use the estimation method of generalized least squares (GLS). These models have two main advantages over structural equation modeling, maximum likelihood and ordinary least squares (OLS): efficiency and control for possible heteroskedasticity. GLS estimators are more efficient than OLS estimators because they estimate path coefficients simultaneously and allow the errors of the different equations to correlate (Zellner, 1962). If the possibility of correlation between error terms is not taken into account, the existence of noise may lead to inconsistent estimators (Greene, 2003). Since several of the variables perform as dependent and independent variables in different equations across the system, heteroskedasticity problems may appear (Autry and Golic, 2010). SUR models alleviate these problems. The model is specified as follows:

(1) $SAT_i = \alpha_{i0} + \beta_1 \times CAR_i + \beta_2 \times CCR_i + \beta_3 \times ST_i + \beta_4 \times SM_i + \beta_5 \times SF_i + \beta_6 \times ST_i \times SF_i + \beta_7 \times CONTROL_i + \varepsilon_i$

(2) $CAR_i = \alpha_{i0} + \beta_1 \times ST_i + \beta_2 \times SM_i + \beta_3 \times SF_i + \beta_4 \times ST_i \times SF_i + \beta_5 \times CONTROL_i + \varepsilon_i$

(3) $CCR_i = \alpha_{i0} + \beta_1 \times CAR_i + \beta_2 \times ST_i + \beta_3 \times ST^2_i + \beta_4 \times SM_i + \beta_5 \times ST_i \times SM_i + \beta_6 \times ST^2_i \times SM_i + \beta_7 \times SF_i + \beta_8 \times ST_i \times SF_i + \beta_9 \times ST^2_i \times SF_i + \beta_{10} \times CONTROL_i + \varepsilon_i$

where SAT_i is the satisfaction with the mall of customer i, CCR_i represents the customer cognitive response of that customer, CAR_i refers to their affective response and ST_i to the stress they suffered. SM_i refers to the shopping motivation of customer i and SF_i to their shopping frequency. $CONTROL_i$ includes a set of control variables formed by gender, age and day of the week, and ε_i represents the error for individual i.

3.2. Sample

Data were collected through a survey conducted in a shopping mall located in Spain during two weeks in June 2015, from Monday to Saturday in the afternoons (12–15h) and

evenings (18–21h). This mall is the second largest in Europe and was visited by 18 million

people in 2015. It received the 2013 MAPIC award for the "Best Shopping and Leisure

Development." Although mall intercept does not imply a random sampling technique,

this is the real context where consumers live their experience and has been widely used

in previous research on the shopping experience (Bustamante and Rubio, 2017; Luk et

al., 2013).

The questionnaire was administered by eight interviewers who had been

previously trained by a marketing researcher. They offered two drinks in some of the bars

in the shopping mall in exchange for participation. In the shopping mall, 1,110

participants were intercepted at the end of their shopping experience. However, after

deleting observations with missing values, 1,088 valid questionnaires were obtained.

3.3. Variables measurement

Customer satisfaction with the mall, customers' affective and cognitive responses and

stress were measured through scales adapted from previous research in the Spanish

market (see table 2). Customer satisfaction was measured on a seven-point Likert scale

adapted from Westbrook and Oliver (1981) and Mattila and Wirtz (2001). Customer

affective response was measured by the semantic-differential scale of pleasure proposed

by Mehrabian and Russell (1974). Customer cognitive response was addressed through

the seven-point Likert scale of utilitarian shopping value proposed by Babin et al. (1994),

also used in Eroglu et al. (2005) and Jones et al. (2006), among others. We have taken

this scale as an approximation to our concept of customer cognitive response, since it

measures customers' perceptions of goal achievement (Jüttner et al., 2013; Lemke et al.,

2011). Stress was measured on a seven-point Likert scale adapted from previous research

that had considered daily shopping hassles as its cause (Baker and Wakefield, 2012;

Russel and Pratt, 1981; Lucia-Palacios et al., 2018). Shopping motivation was a

dichotomous variable that took the value of 1 for utilitarian shoppers, following previous studies that have considered this variable as a moderator in their analyses (Böttger et al., 2017; Luk et al., 2013; Wagner and Rudolph, 2010). Shopping frequency was a continuous variable that measured how many times a customer had attended the shopping mall during the last six months (Inman et al., 2009; Magnini and Karande, 2011; Pan and Zinkhan, 2006). A logarithm for this variable is introduced into the model due to its great dispersion.

Age, gender and day of the week were included as control variables. Age was a continuous variable measured in years. Gender was a dummy that took the value of 1 for females. Day of the week is a dummy that took the value of 1 when the participants were intercepted on Friday evenings and Saturdays, and 0 otherwise.

3.4. Common method bias

Since all the data used in this study have been obtained through a questionnaire and are based on consumers' perceptions, common method variance can cause observational error (or measurement error), as well as biased estimations. Both procedural and statistical methods can be applied to control for the possible existence of these problems (Podsakoff et al., 2003). With respect to procedural methods, participants were informed about the anonymous nature of their answers, which could reduce the possibility of lack of honesty. Furthermore, questions were arranged without any apparent order or logic to ensure that customers could not guess the intentions of the study.

Statistically, if common method bias is present, a sole factor should emerge from the exploratory factor analysis or a sole factor would explain most of the covariance between variables (Krishnan et al., 2006). The exploratory factor analysis revealed a solution formed by four latent variables that jointly explained 84.90% of the model

17

variance, while the largest factor, which was customer affective response, explained 40.84%. As a result, there are no problems related to common method bias.

4. Results

4.1. Descriptive results

Before the econometric analysis of the model, descriptive results related to some of the variables are reported. Most of the customers interviewed were younger than 45, 54.78% were women, 65.16% went shopping to the mall to which the questionnaire referred between once and four times a month, 46.05% attended the mall with a utilitarian motivation − that is, to purchase or browse for a specific item − and 28.86% went shopping on weekends (Table 1).

Table 1 here

.

4.2. Measurement model assessment

The exploratory factor analysis revealed a solution formed by four reflective constructs: customer satisfaction, customer affective response, customer cognitive response and stress. The confirmatory factor analysis revealed the same solution and confirmed that the factors fit the data well and the coefficients calculated were all significant (Table 2; Bentler, 1990; Browne and Cudeck, 1993; Hancock and Mueller, 2006).

Regarding item reliability, every item loaded higher on its respective construct and all loadings were higher than 0.7 (Table 2). The values for Cronbach's alpha and composite reliability exceeded the minimum of 0.7 (Nunnally, 1978). With respect to convergent validity, the values of the average variance extracted (AVE) were above 0.5 for all the latent variables. Discriminant validity was addressed through Fornell and Larcker's (1981) criterion. The square roots of AVE were higher than the correlations between pairs of constructs, confirming discriminant validity (Table 3).

18

Table 2 here
Table 3 here

Four models were calculated using SUR, to include one moderating effect at a time, which allowed us to see whether there were any multicollinearity problems (Table 4). Model 1 tested only direct effects and the quadratic effect of stress on customer cognitive response. Model 2 included the moderating effects of shopping motivation, Model 3 contained the moderating effect of shopping frequency and Model 4 included both moderating effects.

The variables to calculate the quadratic effect of stress and the interaction terms were centered as a way to reduce the multicollinearity that may appear due to the inclusion of these terms. All the variance inflation factor (VIF) values were under the threshold of 5 except for Equation (3) in Models 2, 3 and 4. This high multicollinearity comes from the interaction terms. It is usual when introducing interaction terms and, although it affects the significance and path coefficients of direct effects, it has no effects on the parameters of the interaction terms (Kutner et al., 2004; Studenmund, 2013). Thus, the interpretation of direct effects should be analyzed in Model 1.

Goodness-of-fit measures for SUR models are adequate. It is interesting to highlight that the model explains around 44% of customer satisfaction. Although customer satisfaction with the mall may be influenced by many aspects of the shopping activity, customer experience and stress are important to explain it. In contrast, only 5% of customer affective response (CAR) and 15% of customer cognitive response (CCR) are explained. Thus, stress can only explain a little part of CAR and CCR. This is an expected result, since both responses are also influenced by many other aspects of the shopping activity not considered by this research, such as service quality, shopping companions, ambient music, etc. (Bigné et al., 2005; Dennis et al., 2010; Jackson et al., 2011; Wakefield and Baker, 1998).

19

Regarding the hypotheses, H1a and H1c are supported, because stress has a negative effect on customer affective response and customer satisfaction with the mall. H1b is not supported, because stress has a U-shaped main effect (Figure 2) on customer cognitive response, instead of the inverted U-shaped effect proposed.

Table 4 here

Table 5 here

Table 6 here

Figure 2 here

Shopping motivation has no significant effect on the relationship between stress and customer cognitive response, so H2 is not supported. As a consequence, stress has a U-shaped effect on customer cognitive response, whatever the shoppers' motivations.

Regarding the moderating effects of shopping frequency, all the interaction terms show significance in the SUR models. We represent these interaction effects graphically and conduct a simple slope test (Aiken and West, 1991) to clarify their nature. Shopping frequency has a negative moderating effect on the relationship between stress and customer affective response, which does not support H3a. The simple slope analysis states that, while the slope of the association between stress and customer affective response is –0.113 (t-value = –4.01) when shopping frequency is lower, the slope for the same association is –0.184 (t-value = –5.98) when shopping frequency is higher. So, the slope of this association is more pronounced for more frequent shoppers. However, looking at Figure 3, this moderating effect takes place when stress is low. So, the negative effect of low stress on customer affective response is less negative for more frequent shoppers than for less frequent shoppers, which is in line with H3a. This moderation is important, because most of the individuals surveyed said they felt low levels of stress.

Figure 3 here

Shopping frequency reduces the U-shaped effect of stress on customer cognitive response, because the path coefficients of the interaction are contrary to those of stress alone. The simple slope test and the graphic representation can provide us with a clearer interpretation (Aiken and West, 1991). The simple slope test states that the linear effect of stress on customer cognitive response is different to zero for medium- and high-frequency shoppers, while it is just slightly significant for less frequent shoppers at medium and high levels of stress and nonsignificant at low levels of stress. Figure 4 shows that, while the effect of stress on customer cognitive response is reduced for more frequent shoppers, it maintains a clear U-shape for more infrequent shoppers. This moderation takes place for medium levels of stress; that is, the curve of the quadratic effect is clearly flattened. A joint interpretation of the simple slope test and the graph states that the moderating effect takes place mainly at the minimum point of the curve and at the beginning of the positive slope. That is, the most negative effect of stress on customer cognitive response (minimum point of the curve) is lower for more frequent shoppers and the positive effect of stress is stronger for them than for infrequent shoppers. So, we can conclude that the effects of stress on customer cognitive response would be reduced for more frequent shoppers compared to less frequent shoppers, which is in line with H3b. Nevertheless, the main effect proposed was inverted U-shaped, not U-shaped.

Figure 4 here

The moderating effect of shopping frequency on the relationship between stress and customer satisfaction with the mall is positive and slightly significant according to the results of the SUR model, confirming H3c. The simple slope test indicates that the slope of the association between stress and satisfaction is significant and negative when we consider both lower levels of shopping frequency (–0.127, t-value = –5.04) and

higher levels (–0.105, t-value = –3.83). Figure 5 shows that the moderating effect takes place for high levels of stress.

Figure 5 here

Regarding the control variables, the results show that females are more satisfied with the mall, although they find it more difficult to accomplish their shopping goals. Older individuals find that their mall experience is less pleasurable and satisfying (only significant at 10%) than younger shoppers. Furthermore, customers find it more difficult to be satisfied with the mall at weekends (Friday evenings and Saturdays) compared with the rest of the week.

5. Discussion and theoretical implications

This article aims to address how stress influenced mall experience, measured through customers' cognitive and affective responses, as well as customer satisfaction with the mall. In addition, this research takes into account the fact that the effect of stress on experiential outcomes and satisfaction may differ depending on shopping motivation and shopping frequency. The findings expand our knowledge on the influence of stress on mall experience and satisfaction.

Stress worsens customer affective response, reducing shopping pleasure. This confirms previous research that has shown that stressing events while shopping, such as crowding, reduce pleasure (Baker and Wakefield, 2012). Furthermore, stress has a U-shaped effect on customer cognitive response. Thus, it is more difficult to achieve shopping goals when stress is increased but stays at a low level. When stress reaches greater levels, its effect on goal fulfillment changes into a positive one. This contradicts our expectation that stress would have a major inverted U-shaped effect on customer cognitive response, so more research is needed.

22

Regarding customer satisfaction with the mall, customers' affective and cognitive responses increase it, but stress reduces it. This means that stress reduces satisfaction directly, but may also affect it by worsening mall experience. Additionally, and in accordance with previous research, stress may affect other marketing goals, such as spending, time spent shopping and repatronage intentions (Baker and Wakefield, 2012; Lucia-Palacios et al., 2018). However, there are still other mall outcomes that can be affected by stress, such as mall loyalty or mall image. Repeated stressful events at a mall could deteriorate its image and even undermine its customers' loyalty. Future studies could address the effects of stress on these mall outcomes.

Considering shopping motivation, the present article did not propose any direct effect on mall experience or customer satisfaction, but it did find a positive influence on customer cognitive response and a negative one on satisfaction. This means that utilitarian shoppers find it more difficult to be satisfied with the mall. However, they are more likely to fulfill their goals and to show a more positive cognitive response.

This research proposed that the general inverted U-shaped effect of stress on cognitive response would be reduced for hedonic shoppers compared to utilitarian ones. However, as mentioned, the findings show a general U-shaped effect that is not reduced for hedonic individuals. These results are not consistent with those of Albrecht et al. (2017). Those authors concluded that stress had a U-shaped effect on purchase abandonment for utilitarian shoppers and an inverted U-shaped effect for hedonic ones. Purchase abandonment is not the same as customer cognitive response. Nevertheless, the argumentation is similar because it is based on the shoppers' perceptions of goal attainability. These findings suggest that the moderating effect of motivation is not so clear, opening a new debate in the literature.

Two possible explanations are proposed for why stress has a U-shaped effect on customer cognitive response for both utilitarian and hedonic shoppers. First, utilitarian shoppers may not be able to change their goals, but may restructure them or rearrange them slightly. That is, utilitarian shoppers may have a hierarchy in their shopping motivations, not all of their goals having the same priority. For example, customers may be looking for several items of clothing, but can postpone the buying of items that are located in the most crowded stores and focus on others, even if they were secondary in the shoppers' priority hierarchy. A second explanation is that shoppers are reluctant to acknowledge they have failed whatever their shopping motivation. They make a greater effort and, therefore, are more likely to achieve their goals in a stressful situation (Staal, 2004). Future research is required to shed some light on this issue.

Related to shopping frequency, the findings show a positive effect of this variable on customer affective response. This means that more frequent shoppers are more likely to enjoy their shopping experience than less frequent shoppers (Scarpi, 2012; Zaidan, 2016). With respect to the moderating effects of this variable, the findings show that low levels of stress have a less negative effect on customer affective response for frequent shoppers than for infrequent ones. This moderating effect takes place when the levels of stress are low, disappearing for high levels of stress. Frequent shoppers are more knowledgeable and experienced and can anticipate when they will face a stressful shopping experience. This anticipation makes them more prepared to feel stress and their feelings will be less affected. The trustworthiness of this finding must be highlighted, because most of the participants reported having suffered low levels of stress during their shopping experience in the shopping center. The findings also show a moderating effect of shopping frequency on the relationship between stress and customer satisfaction. In

this case, the moderation takes place when stress is high, so high levels of stress affect the satisfaction of more frequent shoppers to a lesser extent than less frequent shoppers.

Stress has a U-shaped effect on customer cognitive response for less frequent shoppers, while it is reduced for more frequent shoppers. Although these effects are not exactly as proposed, they confirm the theoretical argumentation of the present article. Shoppers who attend the mall more often are more experienced, have better knowledge of the shopping task and are more habituated to potentially stressful shopping events. As a consequence, the effects of stress on customer cognitive response are less important for more frequent shoppers. Thus, for less frequent shoppers, the main effect of stress on customer cognitive response found for any kind of shoppers is maintained. Low but increasing levels of stress influence goal fulfillment negatively and higher levels influence it positively after the customer has changed their goals. However, the stress experienced by more frequent shoppers is not as important for their goal attainability because they will use coping strategies based on action, rational thinking and positive thinking (Whiting, 2009). That is, they will be more likely to face the stressful situation, thinking about its bright side or trying to solve it, which leads to a positive effect of stress on cognition.

The contribution of the present article is threefold. First, it contributes to the literature on the shopping experience, since it has advanced our knowledge about the influence of stress on shoppers' feelings, decisions and behavior in the shopping experience. Previous research had found that stress could reduce repatronage intentions (Baker and Wakefield, 2012), biased product perceptions and decisions (Maier and Wilken, 2014) and had mixed effects on store abandonment depending on shopping motivation (Albrecht et al., 2017). This article adds a negative effect of stress on customer affective response and satisfaction and a U-shaped effect on customer cognitive response.

Second, the article contributes to the literature on the study of stress by analyzing two moderating factors in the relationships between stress and mall experience and customer satisfaction; namely, shopping motivation and shopping frequency. Shopping frequency reduces the effects of stress on customers' cognitive and affective responses and satisfaction with the mall. Finally, the article contributes to the control-value theory of achievement emotions, by demonstrating that stressful shopping situations can influence achievement emotions due to the loss of control, and that previous experience performing a task can alter the effects of emotions on goal achievement and pleasure.

6. Managerial implications

This research offers several practical implications. Managers should try to reduce customers' stress while shopping in order to provide them with a pleasant and satisfactory experience. To do so, and in accordance with prior research, mall managers should act on the main causes of stress; namely, crowding, parking hassles and traffic jams. For example, they could reduce perceptions of crowding by providing relaxing zones in the mall and supervising the service provided by the stores' personnel, increasing their availability (Lucia-Palacios et al., 2018). They should make parking easier for their customers by installing better signs to indicate free parking spaces and by regulating the traffic at the entrances and exits of the mall. A convenient mall layout could help customers cope with their level of stress, helping them to achieve their shopping goals and improving their shopping experience.

Regarding the effects of stress on customer cognitive response, our findings recommend assisting customers in their goal achievement. That is, in a stressful situation, managers should facilitate their customers to change or modify their goals earlier. To do so, shopping malls could provide shoppers with apps where they can list their shopping goals, so they can reorganize those goals when their priorities change. Furthermore, they

could give shoppers suggestions and recommendations. For example, the app could recommend shoppers where to go across the mall according to their shopping goals, store locations or crowding, or it could suggest new shopping goals according to their previous preferences.

Levels of stress have more severe effects on mall experience for infrequent shoppers' affective and cognitive responses, so mall managers should try to increase shopping frequency. We propose two strategies that mall managers could use to increase shopping frequency. First, the mall could launch special offers to increase visit frequency or implement frequency reward programs, by using discounts on different services offered based on their visit or purchase frequency. A concrete example could be discounts on drinks, meals and recreational activities for shoppers who increase the number of visits every two months. This period is proposed because according to our data most of the people surveyed went to shopping centers between one and four times a month. To offer such discounts, mall managers should measure shopping frequency. They could do so through a mobile app or with a loyalty card that customers could validate at the entrance to the mall and on their exit at checkpoints set up in the mall. Second, to increase the frequency of shoppers' mall trips, managers could organize serial events (Kopalle et al. 2012). By this we mean a series of events along the same theme, so that they will increase the visit frequency of the same shoppers. These events could consist of a series of fashion shows, rock concerts or exhibitions in a given period of time. For example, mall managers could organize an exhibition about women in history, by providing information through posters and activities across the mall about two or three different women every week.

7. Limitations and future research

Finally, this research has some limitations that can offer opportunities for further research. First, the data collection took place in a Spanish shopping mall. Other contexts,

such as downtown commercial areas or shopping malls in other countries, could provide evidence different from ours. Second, this research employs cross-sectional data. Future studies could address this issue with a dynamic sample, using longitudinal data, which could increase the interest of the present findings. Could stress have implications in the long run? That is, do repeated stressful shopping experiences have an impact on long-term marketing outcomes such as engagement and loyalty? Third, the article proposed to control for shopping motivation when examining the role of stress in the retail customer experience. However, no evidence of the moderating effect of shopping motivations on the relationship between stress and customer cognitive response was found, contradicting our expectations. So, there may be additional variables that interact with shopping motivation and modify the effects of stress on customer cognitive response. Although not shown in this article, the authors tested whether shopping frequency could interact with shopping motivation, since a less effortful experience could alleviate the effects of stress on customer cognitive response for utilitarian customers (Magnini and Karande, 2011). No significant interaction was found, however. Further research could consider whether there are additional situational and individual characteristics that modify the relationships proposed here. For example, future research could consider the impact of goal abstractness, instead of differentiating between utilitarian and hedonic shopping motivations, since shoppers with more concrete goals could be affected by stress more significantly than those with more abstract goals. Fourth, this research addressed the quadratic effect of stress on customer cognitive response, but other relationships among the variables of interest could be analyzed. Future studies could consider whether there is a mediation effect of customer affective and cognitive response in the relationship between stress and satisfaction with the mall. Finally, future work could consider

additional effects of stress on shopping behavior that have not been analyzed, such as time and money spent in the store or the mall.

References

Aiken, L.S. and West, S.G. (1991). *Multiple regression: Testing and interpreting interactions*. Sage: London.

Albrecht, C.M., Hattula, S. and Lehmann, D.R. (2017). "The relationship between consumer shopping stress and purchase abandonment in task-oriented and recreation-oriented consumers", *Journal of the Academy of Marketing Science*, Vol. 45 No. 5, pp. 720-740.

Autry, C.W. and Golicic, S.L. (2010). "Evaluating buyer–supplier relationship–performance spirals: A longitudinal study", *Journal of Operations Management*, Vol. 28 No. 2, pp. 87-100.

Aylot, R. and Mitchell, V.W. (1998). "An exploratory study of grocery shopping stressors", *International Journal of Retail and Distribution Management*, Vol. 26 No. 9, pp. 362-373.

Babin, B.J., Darden, W.R. and Griffin, M. (1994). "Work and/or fun: measuring hedonic and utilitarian shopping value", *Journal of Consumer Research*, Vol. 20 No. 4, pp. 644-656.

Bagozzi, R.P., Gopinath, M. and Nyer, P.U. (1999). "The role of emotions in Marketing", *Journal of the Academy of Marketing Science*, Vol. 27 No. 2, pp. 184-206.

Baker, J. and Wakefield, K.L. (2012). "How consumer shopping orientation influences perceived crowding, excitement and stress at the mall", *Journal of the Academy of Marketing Science*, Vol. 40 No. 6, pp. 791-806.

Bentler, P. M. (1990). "Comparative fit indexes in structural models", *Psychological Bulletin*, Vol. 107 No. 2, pp. 238–246.

Bigné, J.E., Andreu, L. and Gnoth, J. (2005). "The theme park experience: an analysis of pleasure, arousal and satisfaction", *Tourism Management*, Vol. 26 No. 6, pp. 833-844.

29

Bolger, N., DeLongis, A., Kessler, R.C. and Schilling, E.A. (1989). "Effects of daily stress on negative mood", *Journal of Personality and Social Psychology*, Vol. 57 No. 5, pp. 808-818.

Böttger, T., Rudolph, T., Evanschitzky, H., and Pfrang, T. (2017). "Customer inspiration: Conceptualization, scale development, and validation", *Journal of Marketing*, Vol. 81 No. 6, pp. 116-131.

Brown, M., Pope, N. and Voges, K. (2003). "Buying or browsing? An exploration of shopping orientations and online purchase intention", *European Journal of Marketing*, Vol. 37 No. 11/12, pp. 1666–1684.

Browne, M. W. and Cudeck, R. (1993). *Alternative ways of assessing model fit. Reprinted in Testing Structural Equation Models*, ed. K. A. Bollen and J. S. Long, pp. 136–162. Newbury Park, CA: Sage.

Burton, J., Nasr, L., Gruber, T. and Bruce, H.L. (2017). "Special section: advancing customer experience and big data impact via academic–practitioner collaboration", *Journal of Services Marketing*, Vol. 31 No. 2, pp. 142-147.

Bustamante, J. C. and Rubio, N. (2017). "Measuring customer experience in physical retail environments", *Journal of Service Management*, Vol. 28 No. 5, pp. 884-913.

Büttner, O. B., Florack, A. and Göritz, A.S. (2015). "How shopping orientation influences the effectiveness of monetary and nonmonetary promotions", *European Journal of Marketing*, Vol. 49 No. 1/2, pp. 170–189.

Chebat, J.C., Gélinas-Chebat, C. and Therrien, K. (2005). "Lost in a mall, the effects of gender, familiarity with the shopping mall and the shopping values on shoppers' wayfinding processes", *Journal of Business Research*, Vol. 58 No. 11, pp. 1590-1598.

Chiou, J. S. and Ting, C. C. (2011). "Will you spend more money and time on internet shopping when the product and situation are right?" *Computers in Human Behavior*, Vol. 27 No. 1, pp. 203-208.

De Rojas, C. and Camarero, C. (2008). "Visitors' experience, mood and satisfaction in a heritage context: evidence from and interpretation center", *Tourism Management*, Vol. 29 No. 3, pp. 525-537.

Dennis, C., Newman, A, Michon, R, Brakus, J.J. and Wright, L.T. (2010). "The mediating effects of perception and emotion: Digital signage in mall atmospherics", *Journal of Retailing and Consumer Services*, Vol. 17 no. 3, pp. 205-215.

Dogu, U. and Erkip, F. (2000). "Spatial factors affecting wayfinding and orientation: a case study in a shopping mall", *Environment and Behavior*, Vol. 32 No. 6, pp. 731-755.

Donovan, R.J., Rossiter, J.R., Marcoolyn, G. and Nesdale, A. (1994), "Store atmosphere and purchasing behavior", *Journal of Retailing*, Vol. 70 No. 3, pp. 283-294.

Doucé, L. and Jansens, W. (2013). "The presence of a pleasant ambient scent in a fashion store: the moderating role of shopping motivation and affect intensity", *Environment and Behavior*, Vol. 45 No. 2, pp. 215-238.

Duhachek, A. (2005). "Coping: A multidimensional, hierarchical framework of responses to stressful consumption episodes", *Journal of Consumer Research*, Vol. 32 No. 1, pp. 41–53.

Eroglu, S.A., Machleit, K.A. and Barr, T.F. (2005). "Perceived retail crowding and shopping satisfaction: the role of shopping values", *Journal of Business Research,* Vol. 58 No. 8, pp. 1146-53.

Fornell, C. and Larcker, D.F. (1981). "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, Vol. 18 No. 1, pp. 39–50.

Gilboa, S. and Vilnai-Yavetz, I. (2013). "Shop until you drop? An exploratory analysis of mall experiences", *European Journal of Marketing*, Vol. 47 No. 1/2, pp. 239-259.

Gilboa, S., Vilnai-Yavetz, I. and Chebat, J.C. (2016). "Capturing the multiple facets of mall experience: developing and validating a scale", *Journal of Consumer Behaviour*, Vol. 15 No. 1, pp. 48-59.

Greene, W.H. (2003). *Econometric Analysis 5th Ed.*, Prentice Hall, New Jersey, NJ.

Hall, N. C., Sampasivam, L., Muis, K. R., and Ranellucci, J. (2016). "Achievement goals and emotions: The mediational roles of perceived progress, control, and value", *British Journal of Educational Psychology*, Vol. 86 No. 2, pp. 313-330.

Ham, M. and Larson, R. (1990). "The cognitive moderation of daily stress in early adolescence", *American Journal of Community Psychology*, Vol. 18 No. 4, pp. 567-585.

Hancock, G. R., and R.O. Mueller, ed. (2006). *Structural Equation Modelling: A Second Course.* Charlotte, NC: Information Age Publishing.

Holmqvist, J. and Lunardo, R. (2015). "The impact of an exciting store environment on consumer pleasure and shopping intentions", *International Journal of Research in Marketing*, Vol. 32 No. 1, pp. 117-119.

Im, H. and Ha, S. (2010). "An exploration of the cognitive-affective model of satisfaction in a shopping context: A test of competing models", *The Service Industries Journal,* Vol. 31 No. 13, pp. 2273-2288.

Inman, J.J., Winer, R.S. and Ferraro, R. (2009). "The interplay among category characteristics, customer characteristics, and customer activities on in-store decision making", *Journal of Marketing*, Vol. 73 No. 5, pp. 19-29.

Jackson, V., Stoel, L. and Brantley, A. (2011). "Mall attributes and shopping value: differences by gender and generational cohort", *Journal of Retailing and Consumer Service*s, Vol. 18 No. 1, pp. 1-9.

Jha, S., Balaji, M.S., Yavas, U. and Babakus, E. (2017). "Effects of frontline employee role overload on customer responses and sales performance: Moderator and mediators", *European Journal of Marketing*, Vol. 51 No. 2, pp. 282-303.

Jones, M.A., Reynolds, K.E. and Arnold, M.J. (2006). "Hedonic and utilitarian shopping value: investigation differential effects on retail outcomes", *Journal of Business Research,* Vol. 59 No. 9, pp. 974-981.

Jüttner, U., Schaffner, D., Windler, K. and Maklan, S. (2013). "Customer service experiences: developing and applying a sequential incident laddering technique", *European Journal of Marketing*, Vol. 47 No. 5/6, pp. 735-769.

Kaltcheva, V.D. and Weitz, B.A. (2006). "When should a retailer create and exciting store environment?" *Journal of Marketing*, Vol. 70 No. 1, pp. 107-118.

Kanner, A.D., Coyne, J.C., Schaefer, C. and Lazarus, R.S. (1981). "Comparison of two modes of stress measurement: Daily hassles and uplifts versus major life events", *Journal of Behavioral Medicine*, Vol. 4 No. 1, pp. 1-39.

Kim, M. K., Park, M. C., Park, J. H., Kim, J. and Kim, E. (2018). "The role of multidimensional switching barriers on the cognitive and affective satisfaction-loyalty link in mobile communication services: Coupling in moderating effects", *Computers in Human Behavior*, Vol. 87, pp. 212-223.

Kim, C., Zhao, W. and Yang, K.H. (2008). "An empirical study of the integrated framework of e-CRM in online shopping: evaluating the relationships among perceived value, satisfaction, and trust based on customers' perspectives", *Journal of Electronic Commerce in Organizations*, Vol. 6 No. 3, pp. 1-19.

Kopalle, P. K., Sun, Y., Neslin, S. A., Sun, B. and Swaminathan, V. (2012). "The joint sales impact of frequency reward and customer tier components of loyalty programs", *Marketing Science*, Vol. 31 No. 2, pp. 216-235.

Klaus, P. and Maklan, S. (2012). "EXQ: a multiple-item scale for assessing service experience", *Journal of Service Management*, Vol. 23 No. 1, pp. 5-33.

Krishnan, R., Martin, X. and Noorderhaven, N.G. (2006). "When does trust matter to alliance performance?" *Academy of Management Journal*, Vol. 49 No. 5, pp. 894-917.

Kuruvilla, S.J., Joshi, N. and Shah, N. (2009), "Do men and women really shop differently? An exploration of gender differences in mall shopping in India", *International Journal of Consumer Studies*, Vol. 12 No. 3, pp. 225-236.

Kutner, M.H., Nachtsheim, C.J. Neter, J. and Li, W. (2004). *Applied Linear Statistical Models 5th ed.*, McGraw-Hill, New York, NY.

Lam, S. Y., Ho-ying Fu, J., and Li, D. (2017). "The influence of thematic product displays on consumers: An elaboration-based account", *Psychology & Marketing*, Vol. 34 No. 9, pp. 868-883.

Lazarus, R.S. (1993). "From psychological stress to the emotions: a history of changing outlooks", *Annual Review of Psychology*, Vol. 44 No. 1, pp. 1-21.

Lazarus, R.S. and Folkman, S. (1984). *Stress, Appraisal, and Coping*, Springer, New York, NY.

Lemke, F., Clark, M. and Wilson, H. (2011). "Customer experience quality: an exploration in business and consumer contexts using a repertory grid technique", *Journal of the Academy of Marketing Science*, Vol. 39 No. 6, pp. 846-869.

Lemon, K. N. and Verhoef, P. C. (2016). "Understanding customer experience throughout the customer journey", *Journal of Marketing*, Vol. 80 No. 6, pp. 69-96.

Lucia-Palacios, L., Pérez-López, R. and Polo-Redondo, Y. (2016). "Cognitive, affective and behavioural responses in mall experience: A qualitative approach2, *International Journal of Retail and Distribution Management*, Vol. 44 No. 1, pp. 4-21.

Lucia-Palacios, L., Pérez-López, R. and Polo-Redondo, Y. (2018). "Can social support alleviate stress while shopping in crowded retail environments?" *Journal of Business Research*, Vol. 90, pp. 141-150.

Luhman, M., Hofmann, W., Eid, M. and Lucas, R.E. (2012). "Subjective well-being and adaptaion to life events: a meta-analysis on differences between cognitive and affective well-being", *Journal of Personality and Social Psychology*, Vol. 102 No. 3, pp. 592-615.

Luk, S.T.K., Sharma, P., and Chen, I.S.N. (2013). Shopping motivation as a moderator in the retail service evaluation. *Journal of services marketing*, Vol. 27 No. 1, pp. 40-48.

Lunardo, R. and Mbengue, A. (2009). "Perceived control and shopping behavior: the moderating role of the level of utilitarian motivational orientation", *Journal of Retailing and Consumer Services*, Vol. 16 No. 6, pp. 434–441.

Luong, A. (2005). "Affective service display and customer mood", *Journal of Service Research*, Vol. 8 No. 2, pp. 117-130.

Maier, E. and Wilken, R. (2014). "The impact of stress on consumers' willingness to pay", *Psychology and Marketing*, Vol. 31 No. 9, pp. 774-785.

Magnini, V. P. and Karande, K. (2011). "Understanding consumer services buyers based upon their purchase channel2, *Journal of Business Research*, Vol. 64 No. 6, pp. 543-550.

Mano, H. and Oliver, R.L. (1993). "Assessing the Dimensionality and Structure of Consumption Experience: Evaluation, Feeling, and Satisfaction", *Journal of Consumer Research*, Vol. 20 No. 3, pp. 451-466.

Mathwick, C., Malhotra, N. and Rigdon, E. (2001). "Experiential value: conceptualization, measurement and application in the catalog and Internet shopping environment", *Journal of Retailing*, Vol. 77 No. 1, pp. 39-56.

Mattila, A.S. and Wirtz, J. (2001), "Congruency of scent and music as a driver of in-store evaluations and behavior", *Journal of Retailing,* Vol. 77 No. 2, pp. 273-289.

McGloin, R., McGillicuddy, K. T., and Christensen, J. L. (2017). "The impact of goal achievement orientation on student technology usage in the classroom", *Journal of Computing in Higher Education*, Vol. 29 No. 2, pp. 240-266.

Mehrabian, A. and Russell, J.A. (1974). *An approach to environmental psychology*, MIT Press, Cambridge, MA.

Meinhardt, J., and Pekrun, R. (2003). "Attentional resource allocation to emotional events: An ERP study", *Cognition and Emotion*, Vol. 17 No. 3, pp. 477-500.

Morrison, M., Gan, S. Dubelaar, C. and Oppewal, H. (2011), "In-store music and aroma influences on shopper behavior and satisfaction", *Journal of Business Research*, Vol. 64 No. 6, pp. 558-564.

Moschis, G.P. (2007). "Stress and consumer behavior", *Journal of the Academy of Marketing Science*, Vol. 35 No. 3, pp. 430-444.

Nunnally, J.C. (1978*). Psychometric theory*, McGraw-Hill, New York, NY.

Ofir, C., Raghubir, P., Brosh, G., Monroe, K.B. and Heiman, A. (2008). "Memory-based store Price judgments: the role of knowledge and shopping experience", *Journal of Retailing*, Vol. 84 No. 8, pp. 414-423.

Olavarrieta, S., Hidalgo, P., Manzur, E. and Farías, P. (2012). "Determinants of in-store price knowledge for packaged products: An empirical study in a Chilean hypermarket", *Journal of Business Research*, Vol. 65 No. 12, pp. 1759-1766.

Otterbring, T., Wästlund, E. and Gustafsson, A. (2016). "Eye-tracking customers' visual attention in the wild: Dynamic gaze behavior moderates the effect of store familiarity on navigational fluency", *Journal of Retailing and Consumer Services*, Vol. 28, pp. 165-170.

Overby, J.W. and Lee, E.J. (2006). "The effect of utilitarian and hedonic online shopping value on consumer preference and intentions", *Journal of Business Research*, Vol. 59 No. 10/11, pp. 1160-1166.

Pekrun, R. (2006). "The control-value theory of achievement emotions: Assumptions, corollaries, and implications for educational research and practice", *Educational Psychology Review*, Vol. 18 No. 4, pp. 315–341.

Pekrun, R., Goetz, T., Titz, W., and Perry, R. P. (2002). "Academic emotions in students' self-regulated learning and achievement: A program of quantitative and qualitative research". *Educational Psychologist*, Vol. 37 No. 2, pp. 91–106.

Pekrun, R. and Stephens, E. J. (2009). "Goals, emotions, and emotion regulation: Perspectives of the control-value theory", *Human Development*, Vol. 52 No. 6, pp. 357-365.

Podsakoff, P.M., MacKenzie,S.B., Lee, J.Y. and Podsakoff, N.P. (2003). "Common method Biases in behavioral research: a critical review of the literature and recommended remedies", *Journal of Applied Psychology*, Vol. 88 No. 5, pp. 879-903.

Raccanello, D., Hall, R., and Burro, R. (2018). "Salience of primary and secondary school students' achievement emotions and perceived antecedents: Interviews on literacy and mathematics domains", *Learning and Individual Differences*, Vol. 65, pp. 65-79.

Rao, A.R., and Monroe, K.B. (1988). "The moderating effect of prior knowledge on cue utilization in product evaluations", *Journal of Consumer Research*, Vol. 15 No. 2, pp. 253-264.

Rose, S., Clark, M., Samouel, P. and Hair, N. (2012). "Online customer experience in e-retailing: an empirical model of antecedents and outcomes", *Journal of Retailing*, Vol. 88 No. 2, pp. 308-322.

Rosenbaum, M.S., Kelleher, C., Friman, M., Kristensson, P. and Scherer, A. (2017). "Re-placing place in marketing: a resource-exchange place perspective", *Journal of Business Research*, Re-placing place in marketing: a resource-exchange place perspective", Vol. 79, pp. 281-289.

Russell, J.A. and Pratt, G. (1980). "A description of the affective quality attributed to environments", *Journal of Personality and Social Psychology*, Vol. 38 No. 2, pp. 311-322.

Scarpi, D. (2012). "Work and fun on the Internet: The effects of utilitarianism and hedonism online", *Journal of Interactive Marketing*, Vol. 26 No. 1, pp. 53-67.

Schlotz, W., Yim, I.S., Zoccola, P.M., Jansen, L. and Schulz, P. (2011). "The perceived stress reactivity scale: Measurement invariance, stability and validity in three countries", *Psychological Assessment*, Vol. 23 No. 1, pp. 80-94.

Schneiders, J., Nicolson, N.A., Berkhof, J., Feron, F.J., van Os, J. and de Vries, M.W. (2006). "Mood reactivity to daily negative events in early adolescence: relationship to risk for psychopathology", *Developmental Psychology*, Vol. 42 No. 3, pp. 543-554.

Singh, S. and Duque, L.C. (2012). "Moderating role of stress in evaluating negative services: encounters with the police", *Journal of Service Research*, Vol. 15 No. 2, pp. 231-241.

Skinner, E. A. (1995). *Perceived control, motivation, and coping*, Thousand Oaks: SAGE, Portland, OR.

Staal, M. A. (2004). Stress, cognition, and human performance: A literature review and conceptual framework. NASA/TM-2004-212824.

Staw, B. M., Sutton, R. I., and Pelled, L. H. (1994). "Employee positive emotion and favorable outcomes at the workplace", *Organization Science*, Vol. 5 No. 1, pp. 51-71.

Studenmund, Arnold H. (2013). *Using Econometrics: A Practical Guide, 6th ed.*, Pearson, Harlow, UK.

Sujan, M., Sujan, H., Bettman, J.R. and Verhallen, T.M.M. (1999). "Sources of consumers' stress and stress and their coping strategies", *European Advances in Consumer Research*, Vol. 4, pp. 182–187.

Umasuthan, H., Park, O. J. and Ryu, J. H. (2017). "Influence of empathy on hotel guests' emotional service experience", *Journal of Services Marketing*, Vol. 31 Vol. 6, pp. 618-635.

Wagner, T., and Rudolph, T. (2010). "Towards a hierarchical theory of shopping motivation. *Journal of Retailing and Consumer Services*, Vol. 17 No. 5, pp. 415-429.

Wakefield, K.L. and Baker, J. (1998). "Excitement at the mall: Determinants and effects on shopping response", *Journal of Retailing*, Vol. 74 No. 4, pp. 515-539.

Wenzel, S., and Benkenstein, M. (2018). "Together always better? The impact of shopping companions and shopping motivation on adolescents' shopping experience", *Journal of Retailing and Consumer Services*, Vol. 44, pp. 118-126.

Westbrook, R.A. and Oliver, R.L. (1981). "Developing better measures of consumer satisfaction: some preliminary results", Advances in Consumer Research, 8, K.E. Monroe, ed. Provo, *UT: Association for Consumer Research*, pp. 94-99.

Whiting, A. (2009). "Push, scream, or leave: how do consumers cope with crowded retail stores? Journal of Services Marketing", Vol. 23 No. 7, pp. 487-495.

Wolfinbarger, M., and Gilly, M. C. (2001). "Shopping online for freedom, control, and fun", *California Management Review*, Vol. 43 No. 2, pp. 34–55.

Wrosch, C., Scheier, M. F., Miller, G. E., Schulz, R. and Carver, C. S. (2003). "Adaptive self-regulation of unattainable goals: goal disengagement, goal reengagement, and subjective well-being", *Personality and Social Psychology Bulletin*, Vol. 29 No. 12, pp. 1494–1508.

Zaidan, A.A. (2016). "Tourism shopping and new urban entertainment: A case study of Dubai", *Journal of Vacation Marketing*, Vol. 22 No. 1, pp. 29-41.

Zellner, A. (1962). "An efficient method of estimating seemingly unrelated regressions and tests for aggregation bias", *Journal of the American Statistical Association*, Vol. 57 No. 298, pp. 348-368.

Table 1 Sample characteristics

Age (%)		Gender (%)		Shopping frequency (% times monthly)		Shopping motivation		Day of week	
< 25	33.9	F	54.8	< 1	18.5	U	46.1	Mon–Fri	71.1
26–35	23.6	M	45.2	1–2	41.1	H	53.9	Fri–Sat	28.9
36–45	23.4			3–4	23.1				
46–55	12.9			> 5	17.4				
> 56	6.2								

F: Feminine, M: Masculine, U: Utilitarian shopping motivation, H: Hedonic shopping motivation.

Table 2 Items and measurement model

	Loadings	Cronbach's Alpha	Composite reliability	AVE
Customer satisfaction (SAT)				
I enjoyed this establishment/mall	0.867			
I am satisfied with the establishment/mall I've been in	0.873	0.931	0.920	0.820
Going to this establishment/mall has been a good choice	0.849			
Customer affective response (CAR)				
How did you feel in the establishment XXX/mall between (…) and (…)?				
Unhappy/happy	0.899			
Annoyed/content	0.898			
Sad/Joyful	0.921	0.969	0.957	0.841
Hopeless/hopeful	0.896			
Unsatisfied/satisfied	0.896			
Bored/cheerful	0.888			
Customer cognitive response (CCR)				
I got what I was looking for in this establishment/mall	0.895			0.733
I couldn't find what I was looking for in this establishment/mall	0.895			
While browsing, I just found what I needed	0.842	0.914	0.927	
I'm disappointed because I'll have to go to another establishment/mall to finish my shopping	0.846			
Stress (ST)				
How often did you experience the following sensations in the establishment XXX/mall?				
Frenzy	0.761			
Tension	0.954			
Anxiety	0.950	0.942	0.966	0.807
Nervousness	0.954			
Acceleration	0.922			

Chi-sq. model vs. saturated (χ^2= 666.845, 129df, p<0.001); Chi-sq. baseline vs. saturated (χ^2= 22,278.608, 153 df, p<0.001); root mean square error of approximation (RMSEA)= 0.062; non-normed fit index (NNFI)= 0.971; Comparative fit index (CFI)= 0.976; standardized root mean squared residual (SRMR)=0.031.

Table 3 Discriminant validity

	SAT	CAR	CCR	ST
SAT	**0.906**			
CAR	0.324	**0.917**		
CCR	0.189	0.118	**0.856**	
ST	0.030	0.038	0.005	**0.898**

SAT: customer satisfaction; CAR: customer affective response; CCR: customer cognitive response; ST: stress; CR: composite reliability; AVE: Average variance extracted; N.A.: not applicable.
The diagonal contains the squared roots of AVE.

Table 4 Results for satisfaction as dependent variable

	Model 1	Model 2	Model 3	Model 4
R²	0.440	0.439	0.441	0.441
CAR → SAT	0.421***	0.420***	0.425***	0.425***
CCR → SAT	0.191***	0.191***	0.187***	0.187***
ST → SAT (H1c)	**-0.042*****	-0.042***	-0.039***	-0.039***
SM → SAT	-0.094***	-0.094***	-0.095***	-0.095***
SF → SAT	0.021	0.021	0.019	0.019
SF x ST → SAT (H3c)			**0.026****	**0.026****
Gender → SAT	0.075**	0.075**	0.074**	0.074**
Age → SAT	-0.002*	-0.002*	-0.002	-0.002
Day of week → SAT	-0.093***	-0.093***	-0.081***	-0.081***
Constant	-0.017	-0.017	-0.014	-0.014
GoF measures				
Chi² (9, 1078)	854.37***	855.00***	856.53***	856.53***
VIF range	(1.02; 1.21)	(1.02; 1.21)	(1.02; 1.21)	(1.02; 1.21)
RMSE	0.541	0.541	0.540	0.540
Breusch–Pagan (chi-square)	0.019	0.027	0.001	0.001
AIC/BIC	7,545.009/ 7,669.811	7,548.401/ 7,683.188	7,537.864/ 7,682.635	7,541.55/ 7,696.305

*** $p<0.01$; ** $p<0.05$; * $p<0.1$

SAT: customer satisfaction; CAR: customer affective response; CCR: customer cognitive response; ST: stress; SM: shopping motivation; SF: shopping frequency; VIF: variance inflation factor; RSME: root square mean error; AIC: Akaike information criterion; BIC: Bayesian information criterion.

Table 5 Results for customer affective response as dependent variable

	Model 1	Model 2	Model 3	Model 4
R²	0.054	0.054	0.057	0.057
ST → CAR (H1a)	**-0.150*****	-0.150***	-0.153***	-0.153***
SM → CAR	0.049	0.049	0.051	0.051
SF → CAR	0.077***	0.077***	0.079***	0.079***
SF x ST → CAR (H3a)			**-0.038****	**-0.038****
Gender → CAR	0.025	0.025	0.025	0.025
Age → CAR	-0.004**	-0.004**	-0.004**	-0.004**
Day of week → CAR	-0.008	-0.008	0.007	0.007
Constant	-0.226***	-0.226***	-0.231***	-0.231***
GoF measures				
Chi² (7, 1080)	61.82***	61.82***	65.65***	65.65***
VIF range	(1.01; 1.06)	(1.01; 1.06)	(1.01; 1.06)	(1.01; 1.06)
RMSE	0.788	0.788	0.786	0.786
Breusch–Pagan (chi-square)	0.019	0.027	0.001	0.001
AIC/BIC	7,545.009/ 7,669.811	7,548.401/ 7,683.188	7,537.864/ 7,682.635	7,541.55/ 7,696.305

****p<0.01; **p<0.05; *p<0.1*

SAT: customer satisfaction; CAR: customer affective response; CCR: customer cognitive response; ST: stress; SM: shopping motivation; SF: shopping frequency; VIF: variance inflation factor; RSME: root square mean error; AIC: Akaike information criterion; BIC: Bayesian information criterion.

Journal of Services Marketing

Table 6 Results for customer cognitive response as dependent variable

	Model 1	Model 2	Model 3	Model 4
R²	0.144	0.145	0.151	0.151
CAR → CCR	0.489***	0.491***	0.497***	0.498***
ST → CCR (H1b)	**-0.138****	-0.102	-0.130**	-0.113*
ST2 → CCR	**0.052****	0.058**	0.049***	0.050**
SM → CCR	0.135**	0.149**	0.133**	0.133*
SM x ST → CCR (H2)		**0.072**		**-0.000**
SM x ST2 → CCR (H2)		**-0.012**		**0.034**
SF → CCR	0.032	0.032	0.093**	0.092**
SF x ST → CCR (H3b)			**0.177****	**0.175****
SF x ST2 → CCR (H3b)			**-0.049****	**-0.048****
Gender → CCR	-0.156***	-0.156***	-0.153***	-0.153***
Age → CCR	0.003	0.003	0.003	0.003
Day of week → CCR	0.088	0.086	0.094*	0.092*
Constant	-0.135	-0.140	-0.277**	-0.275**
GoF measures				
Chi² (12, 1075)	183.41***	184.11***	192.95***	193.32***
VIF range	(1.02; 4.68)	(1.02; 9.51)	(1.02; 6.25)	(1.02; 9.65)
RMSE	1.042	1.042	1.038	1.038
Breusch–Pagan (chi-square)	0.019	0.027	0.001	0.001
AIC/BIC	7,545.009/ 7,669.811	7,548.401/ 7,683.188	7,537.864/ 7,682.635	7,541.55/ 7,696.305

***p<0.01; **p<0.05; *p<0.1*

SAT: customer satisfaction; CAR: customer affective response; CCR: customer cognitive response; ST: stress; SM: shopping motivation; SF: shopping frequency; VIF: variance inflation factor; RSME: root square mean error; AIC: Akaike information criterion; BIC: Bayesian information criterion.

Figure 1 Conceptual model.
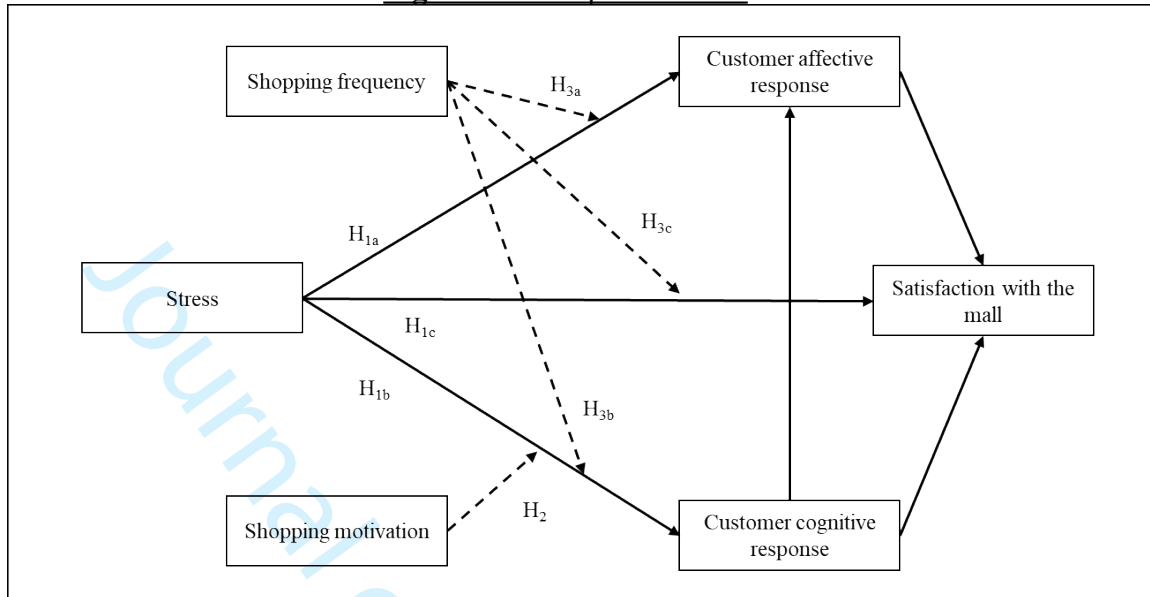
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
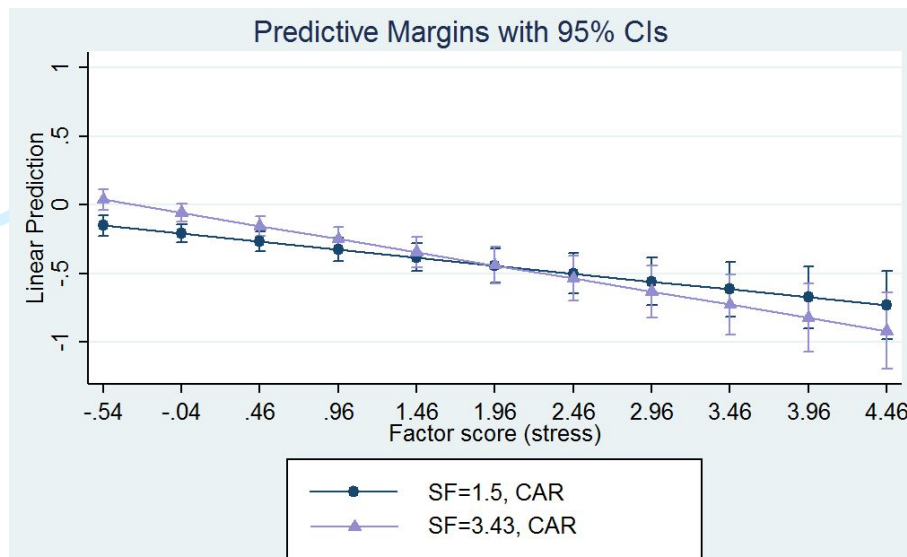45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Figure 2 U-shaped effect of stress on customer cognitive response.
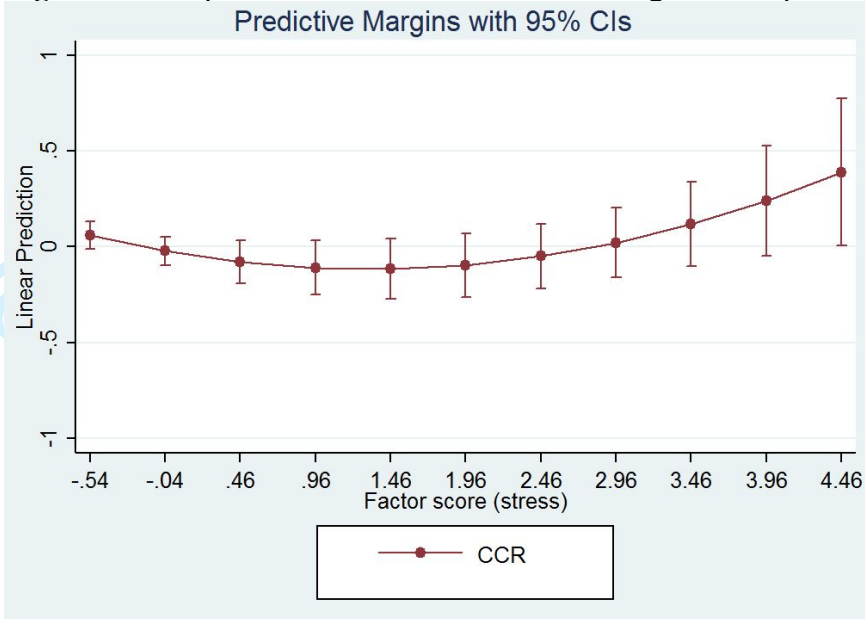
CCR: Customer cognitive response

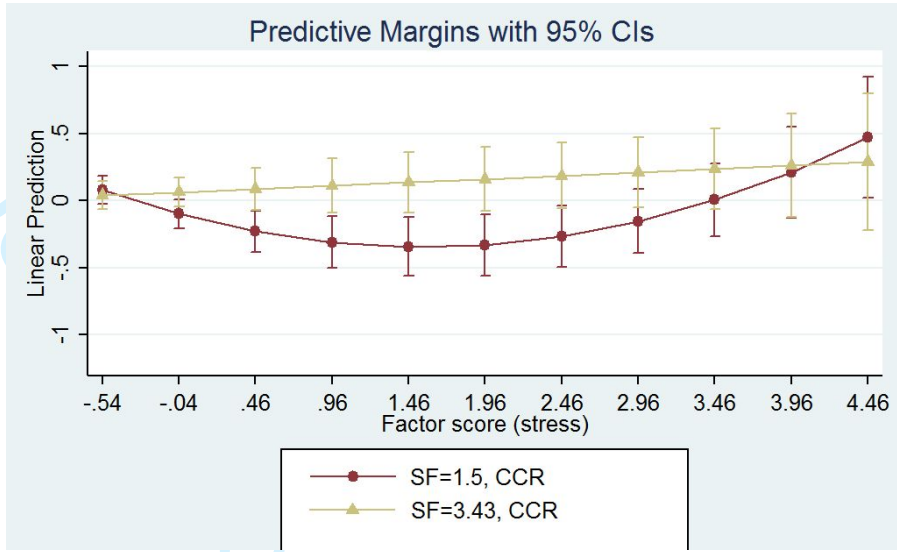**Figure 3** Moderating effect of shopping frequency on the relationship between stress and CAR.

SF: Shopping frequency; CAR: Customer affective response

Figure 4 Moderating effect of shopping frequency on the relationship between stress and CCR.

SF: Shopping frequency; CCR: Customer cognitive response

Figure 4 Moderating effect of shopping frequency on the relationship between stress and customer satisfaction.
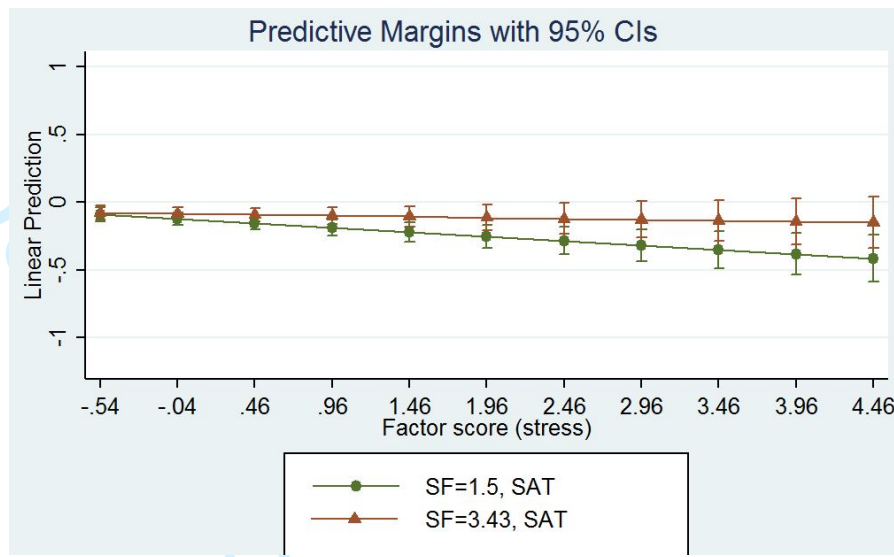
SF: Shopping frequency; SAT: Customer satisfaction with the mall