



# Retail kiosks: how regret and variety influence consumption

Retail kiosks

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## Abstract

**Purpose** – The purpose of this paper is to gain insight regarding the impact of consumer regret on shopping in mall kiosks and its relationship with consumer variety-seeking tendencies.

**Design/methodology/approach** – Two experimental studies are carried out with students and consumers.

**Findings** – Findings of the two studies show that variety and regret play an important role in mall kiosk shopping. Both studies show that individual variety-seeking tendencies naturally stimulate consumers' search for retailers that allow them additional options (i.e. kiosk retailers that provide higher perceived variety) in comparison with those who only offer minimal assortment sizes.

**Research limitations/implications** – Mall kiosks are becoming an increasingly common avenue for the release of innovative products and quick entry into the retail market. These outlets have not been studied through academic research and experimentation, and this paper introduces the importance of consumer decision making in such environments.

**Practical implications** – Considering the findings of this research, it is in the best interest of retailers to minimize the perception of risk involved in purchases at mall kiosk retailers. For example, kiosk retailers should work toward creating service environments where consumers feel a sense of control, as this should help mitigate some of the perceived risks in those retailers.

**Originality/value** – This paper relates two constructs (regret and variety), which have proven to be very important in e-tail and retail shopping, to show how they can minimize consumer's perceived risk during a shopping experience.

**Keywords** Decision making, Consumer behaviour, Shopping centres, Risk assessment

**Paper type** Research paper

## Introduction

A trip to the local mall shows that many brands and products are being offered in more cost-effective environments such as retail kiosks. A kiosk is generally defined as an area inside a store or mall that offers a variety of services related to a specific product category or service. More specifically, mall kiosks are defined as:

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[...] a small retail booth located in the aisle of a shopping mall. A relatively recent innovation in the world of retail, the mall kiosk is now ubiquitous in shopping centers throughout the United States ([www.wisegeek.com/what-is-a-mall-kiosk.htm](http://www.wisegeek.com/what-is-a-mall-kiosk.htm)).

Kiosks come in a variety of forms, such as booths, carts or computer workstations. The majority of research related to kiosks focuses on multimedia kiosks, or “public access kiosks that provide information and services directly to customers” (Rowley and Slack, 2003, p. 329; Rowley, 1995; Moerloose *et al.*, 2005). This may be due to lowered personnel costs and the desire to deploy new technologies in the retailing environment; however, non-multimedia kiosks (mall kiosks or retail kiosks) still represent a very important aspect of the retail landscape. In fact, almost every major US mall has some type of kiosk in it, and in 2007, it was estimated that \$12 billion in sales were in part generated by this form of “specialty leasing program” (Pinnacle Group, 2007).

Mall kiosks offer several advantages for both business owners and consumers. For business owners, mall kiosks offer a cost effective alternative to expensive store leases. Moreover, mall kiosks have the potential to increase the awareness of the product/service offered, capitalize on foot traffic, and stimulate impulse-buying consumption. As Kahn and Wansink (2004) mention, the definition of variety, *per se*, is context-specific. When one particular product (such as beads) is chosen, variety can be defined by various colors of that product. However, when the product itself begins to vary (such as different types of beads), variety may be characterized by more than one attribute, such as color and shape. Hence, variety can be defined in terms of actual vs perceived. In the present research, we focus on the perception of variety in the mall kiosk environment. For consumers, mall kiosks tend to provide more variety and novelty for the same product category than a typical department store. For example, a sunglass kiosk may sell thousands of sunglasses whereas competing stores often carry fewer brands of sunglasses (Swinyard, 1997). Another possible advantage of using kiosks is convenience, since they can provide quick access to very specific items for consumers (Seiders *et al.*, 2000). However, what happens when a consumer regrets and is dissatisfied his/her choice?

This research is motivated by the underlying idea that different types of retail environments exist to satisfy different consumer preferences and needs. Even though existing research supports this idea, research that identifies consumer behavior in mobile retail environments is nonexistent. Research has shown that consumers tend to prefer buying from a conventional retailer (i.e. a department store) over a novel retailer (i.e. a retail kiosk) when they anticipate regret (Simonson, 1992). Further, Machleit and Eroglu (2000) find that different types of retailers (in their study, malls, department stores, grocery stores, and discount stores) trigger significantly different emotional responses from consumers. This underscores the need to conduct research on mall kiosks, as they are a highly prevalent, yet are a very much-understudied retailing environment. More specifically, scholarly research has not considered an important factor that seems to underline the benefit of mall kiosks: the need for variety.

Thus, the key research question of the present paper is, “How do regret and variety play a role in consumers’ decision making processes when shopping at mall kiosk retailers?” To our knowledge, no study has been conducted to explore this phenomenon. A better understanding of how regret interacts with variety-seeking tendency is desperately needed to help both retailers and marketers understand consumers’ decision to visit mall kiosk retailers. We propose a conceptual model and then use

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experimentation to investigate the effects of regret and variety-seeking tendency on consumer behavior within the context of a retail kiosk environment.

This paper is organized as follows. First, we provide a summary of the relevant literature on regret behavior and variety-seeking tendencies among consumers. Second, we present our conceptual framework and related hypotheses and how they impact a consumer's choice of retailer. Third, we describe the methodology used and empirical results for Study 1 (on students) and Study 2 (on consumers). We conclude with a discussion of the implications of our results, limitations of the studies, and future research.

## **Conceptual framework and background**

### *Regret theory*

Recent researchers use regret theory to help explain consumer behavior and decision-making (Keinan and Kivetz, 2008). According to Zeelenberg and Pieters (2007, p. 3), regret can be referred to as an "emotion that we experience when realizing or imagining that our current situation would have been better, if only we had decided differently." Regret is not experienced if the consumer feels that he/she can alter the current outcome, for example, if the consumer purchases a warranty on a product (Lassar *et al.*, 1998). Studies have shown that regret has direct and damaging effects on consumer satisfaction levels and prompts the assessment of both decisions that were chosen and of those that were not chosen (Keaveney *et al.*, 2007; Zeelenberg and Pieters, 2004). Moreover, regret has been shown to reduce consumers' intent to repurchase and increase consumer brand switching likelihood (Inman *et al.*, 1997).

Much attention has recently been directed toward understanding regret regulation since it is apparent that anticipated regret plays a key part in shaping consumers' decision-making processes for future purchases (Zeelenberg and Pieters, 2006, 2007). Anticipated regret involves both the emotional component of regret as well as some knowledge pertaining to the retailer and product (e.g. through experience, word of mouth, advertisement, etc.). The theory of regret regulation suggests that consumers are regret averse; and as sophisticated consumers, they seek to regulate future regret (Zeelenberg and Pieters, 2006). Furthermore, research finds that consumers even go as far as deferring their purchase-time decisions when they seek to avoid future regret (Cooke *et al.*, 2001). With reference to the consumer behavior literature, however, sparse research has been conducted to study the relationship between the effects of regret on purchase/repurchase intentions at mall kiosk retailers. Thus, more research is needed in this area to better understand this aspect of the consumers' decision-making processes.

### *Variety theory*

Variety-seeking tendency, or the degree to which a person expresses the desire to try new and different things (Donthu and Gilliland, 1996; Homburg and Giering, 2001) is the topic of several research streams; the most relevant of which to the present research is decision making. Kahn and Wansink (2004) show that higher perceived variety leads to greater consumption. In terms of retail assortments, Morales and colleagues (2005) find that when a consumer's internal category structure matches that of the retailer, the result is higher perceived variety and more satisfaction with the chosen items. In contrast, overchoice research indicates that there is an upper limit to the positive outcomes associated with greater perceived variety (Mick *et al.*, 2004; Iyengar and Lepper, 2000).

Research on variety-seeking tendency has investigated several aspects of this behavior, including that “a typical person” may want more variety (Ratner and Kahn, 2002), that variety-seeking may induce the purchase of a generic product in place of a brand (Herstein and Tifferet, 2007), and that variety-seeking may serve as a method to mitigate boredom (Trochia and Beatty, 2003).

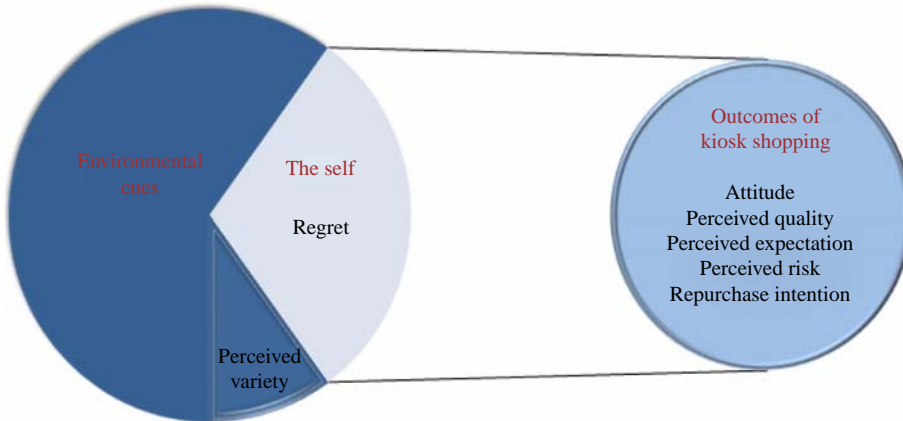
Mall kiosks tend to have a small assortment in very few categories but a large variety within that category and assortment. For example, a sunglasses kiosk in a mall would carry the sunglasses product category with a fairly limited assortment of types of sunglasses and then a large variety within each of those assortments of products. At present, the extant literature has defined the terms category, assortment, and variety. A common example of a product category (or specific generic) is toothpaste. Within this category, an assortment may refer to a large set of brands that compete on any number of subcategories, such as tartar control toothpastes (Chernev, 2005; Gajanan *et al.*, 2007). Assortment itself can vary on several dimensions. Kahn and Wansink (2004) define assortment structure in terms of the organization of an assortment and the relative symmetry in the frequencies of the items of the assortment. The retail marketing literature has offered the following explanations. Within a product category, there are competing brands (assortment), and within those brands, each will have its own set of choices for that category or variety (Berger *et al.*, 2007; Cachon and Kök, 2007). With respect to this research, it is postulated that mall kiosks offer greater variety than department stores.

#### *Model*

Variety-seeking tendency has been studied extensively as it relates to internet shopping, mainly because that particular medium allows consumers to visit multiple stores with very little cost in time or convenience. In particular, Girard *et al.* (2003) show that high variety-seekers have a greater preference for shopping on the internet. This concept applies to why some consumers may frequent retail kiosks – they offer more variety and convenience. In the case of kiosks, the stores tend to offer a wide selection of a particular product, even though the number of products is normally limited. Thus, high variety-seekers searching within a category may find shopping at kiosks to be less frustrating than low variety-seekers. Additionally, switching to another similar outlet within a mall context would be difficult, since kiosks tend to be quite unique in their offerings. With reference to kiosk retailers, consumers are currently not as knowledgeable, which is expected.

Figure 1 shows the proposed multidimensional perspective of how consumers make decisions within kiosk retailing environments. Owing to the complex nature of consumer behavior, which consists of both influences from the self and external environmental cues, examining consumer behavior from a multidimensional approach allows for a more thorough understanding of a rather dynamic consumption process. The framework consists of both the self-component, such as the feeling of regret a consumer can experience, and the environmental cues, such as the perceived variety of the shopping environment. Thus, this figure demonstrates the outline of the present research in terms of extant regret and variety theory and introduces the outcomes of interest which serve as key variables for the studies which will later be presented.

Research has shown that consumers will tend to stay with options that are the norm in order to regulate any anticipation of regret (Simonson, 1992). Given that consumers



**Figure 1.**  
Conceptualized  
multidimensional  
perspective of consumer  
behavior in a retail kiosk

are well aware of the emotion of regret and its effect on satisfaction levels and attitude (Inman *et al.*, 1997), it can be inferred that when no regret is anticipated, consumers' attitudes toward mall kiosk retailers will increase. Based on high variety-seekers' preference for more options within an assortment and regret research regarding consumer attitudinal responses, it is predicted that high variety-seekers will have more favorable attitudes toward mall kiosks than low variety-seekers in the no regret (i.e. control) condition. When regret is induced, both high and low variety-seekers should have less favorable attitudes toward mall kiosk retailers than they would in the control condition in which no regret is being induced. It is proposed that:

- H1a.* High variety-seekers will have more favorable attitudes toward mall kiosk retailers than low variety-seekers in the no regret condition.
- H1b.* In the regret condition, all subjects will have less favorable attitudes toward kiosk retailers than subjects in the control condition (i.e. no regret).
- H1c.* High variety-seekers will have more favorable attitudes toward kiosk retailers than those who are categorized as low variety-seekers.

Also, as literature shows, there is a negative relationship between regret and consumers evaluations and perceptions of consideration sets (Lin and Huang, 2006; Inman *et al.*, 1997). Alongside *H1a*, where high variety-seekers have more favorable attitudes toward kiosk retailers than low variety-seekers in the control condition, it is hypothesized that they will also have a more positive perception of quality for kiosk retailers than low variety-seekers in the control condition. Collectively, it is contended that:

- H2a.* High variety-seekers will have more positive perceptions of quality for products sold at mall kiosk retailers than low variety-seekers in the no regret condition.
- H2b.* In the regret condition, subjects will have less positive perceptions of quality for products sold at mall kiosk retailers than subjects in the control condition (i.e. no regret).

*H2c.* In the high variety-seeking behavior condition, all subjects will have more positive perceptions of quality for products sold at mall kiosk retailers than those categorized as low variety-seekers.

Though high variety-seekers want to explore unfamiliar products, they are not impervious to the fact that those products are inherently more risky. In addition to the interactive effect between variety-seeking behavior and the cognitive awareness of riskier options, emotions have an impact in consumption dynamics as well. For example, negative emotions have been linked to risk-taking behaviors (Chuang and Lin, 2007); therefore in the interest of retailers, it is best that they try to reduce the perceived risk that comes with the purchase. It is postulated that this is part of the motivational tension system (i.e. more variety-seeking tends to mean more exploratory behavior, more information-seeking tendency, and thus more unfamiliar products and situations), which high variety-seekers have when choosing retailers or products. Hence, it is posited that:

*H3a.* High variety-seekers will perceive greater risk of products sold at mall kiosks in comparison to low variety-seekers when regret is induced.

*H3b.* When regret is induced, all subjects will perceive greater risk toward products sold at mall kiosks than the control condition.

*H3c.* High variety-seekers will perceive greater risk of products sold at mall kiosks in comparison to low variety-seekers.

## Study 1

### *Methodology*

We are interested in learning how kiosk retailers can influence consumers' attitudes, as well as the perceptions of quality and risk of products sold at these respective retailers. Of particular interest in the present study is the difference between high and low variety-seekers in potentially regretful consumption decisions.

*Overview of study and independent variables.* All participants were exposed to web-based, hypothetical purchase-decision scenario manipulations of regret adapted from the Kahneman and Tversky's (1982) study. Participants were either exposed to an induced regret condition or a control condition; examples can be provided upon request. Regret was measured using a seven-point, multi-item scale with strongly agree/strongly disagree as endpoints consisting of the following three questions: "Based on the scenario, Mary regrets the choice she made"; "Based on the scenario, Mary feels sorry for her decision"; and "Based on the scenario, Mary should have chosen the alternative choice" with a Cronbach's  $\alpha$  of 0.98. Variety-seeking was measured using a seven-point, multi-item scale with strongly agree/strongly disagree as endpoints consisting of the following three items: "I like to try different things"; "I like a great deal of variety"; and "I like new and different styles" with a Cronbach's  $\alpha$  of 0.86 (Donthu and Gilliland, 1996). Variety-seeking behavior was created using a median-split to produce the categorical variable of high (low) variety-seeking attribute. The experiment is a 2 (Regret: Induced regret vs Control)  $\times$  2 (Variety-seeking behavior: High variety-seekers vs Low variety-seekers) between-subjects design.

*Sample, procedure, and dependent measures.* A total of 102 students from two different universities, one in the eastern and one in the southern part of the USA,



participated in the study. The mean age was 22 years and ranged from 20 to 24. Participants were instructed to proceed to a designated web site that enabled them to participate in a research study. From the web site, manipulated purchase-decision scenarios were displayed and participants were simply instructed to respond to the “questions with regard to the scenarios.” All participant identification information and responses are kept confidential throughout the study to protect the anonymity of the subjects.

Effects of regret and variety-seeking behavior were assessed across several dependent variables. Evaluations of attitude toward kiosk retailer were collected using a seven-point, multi-item scale with endpoints of “unfavorable/favorable,” “bad/good,” and “negative/positive,” with a Cronbach’s  $\alpha$  of 0.98 (Day and Stafford, 1997). Perceived quality of products sold at a kiosk retailer was also collected using a seven-point, multi-item scale with endpoints of “strongly disagree/strongly agree.” The three items consist of:

- (1) “Kiosks sell quality products”;
- (2) “Kiosks sell low quality products”; and
- (3) “Products sold at kiosks have the value of quality”.

The “Kiosks sell low quality products” item was reverse coded. Cronbach’s  $\alpha$  for the quality perception multi-item scale was 0.80. Participants were also asked to rate their perceived expectation of products sold at a kiosk retailer using a seven-point, multi-item scale with endpoints of “strongly disagree/strongly agree.” The three items consist of:

- (1) “Consumers have high expectations of products sold at kiosks”;
- (2) “Consumers have low expectations of products sold at kiosks”; and
- (3) “Consumers have high hopes for products sold at kiosks”.

The “Consumers have low expectations of products sold at kiosk” item was reverse coded. Cronbach’s  $\alpha$  for the expectation perception multi-item scale was 0.68. Assessment of perceived risk of products sold at kiosk retailer was collected using a seven-point, multi-item scale with endpoints of “strongly disagree/strongly agree.” The three items included: “Consumers perceive products sold at kiosks to be higher in risk”; “When buying a product from a kiosk, the consumer is taking his/her chances”; and “When buying a product from a kiosk, the consumer is making a gamble” with a Cronbach’s  $\alpha$  of 0.78.

### *Results*

Analysis of covariance was conducted to assess the effects of regret and variety-seeking behavior while controlling for gender[1]. Results are presented in Tables I and II.

*Manipulation check.* Analysis of covariance was performed to ensure that regret operated as intended. The degree of regret for regret response has significant effects on the manipulation check; specifically, there is a significant difference between induced regret and the control condition ( $F(1,102) = 189.28, p < 0.001$ ), with means in the appropriate directions ( $M = 5.45$  vs  $2.59$ ). Thus, the effect of the regret manipulation is significant, along with the desired means.

*Attitude toward kiosk retailer.* Consistent with *H1a*, the analysis yielded a regret by variety-seeking behavior interaction ( $F(1,97) = 5.95, p < 0.05$ ). As shown in Figure 2, the manipulation of regret resulted in differences in attitude toward kiosk retailers between high- and low variety-seekers. High variety-seekers have significantly more favorable ( $p < 0.05$ ) attitude toward kiosk retailers than low variety-seekers in the control condition ( $M = 6.39$  vs  $5.85$ ). As anticipated, *H1b* is confirmed, with the finding that there was a significant effect for regret ( $F(1,97) = 600.00, p < 0.001$ ), with pairwise comparisons indicating that subjects had significantly more favorable ( $p < 0.05$ ) attitude toward kiosk retailer in the control condition in comparison to the induced regret condition ( $M = 6.10$  vs  $1.87$ ). No support is found for *H1c*, since there is no overall main effect of variety-seeking behavior ( $F < 1$ ) on attitude toward kiosk retailers.

*Perceived quality of products sold at kiosk retailer.* For the perception of quality for products sold at kiosk retailers, *H2a* is not supported given that the analyses did not reveal a regret by variety-seeking behavior interaction ( $F < 1$ ). Supporting *H2b*, however, the analysis did result in a main effect of regret ( $F(1,97) = 8.23, p < 0.05$ ), indicating that subjects had significantly more positive ( $p < 0.05$ ) quality perceptions of products sold at kiosk retailers in the control condition than the induced regret condition ( $M = 4.12$  vs  $3.75$ ). No overall main effect for variety-seeking behavior is found ( $F < 1$ ) on perceived quality of products sold at kiosk retailers; therefore, *H2c* is not confirmed.

*Perceived risk of products sold at kiosk retailer.* *H3a* is supported. Analyses indicate a regret by variety-seeking behavior interaction ( $F(1,96) = 12.37, p < 0.05$ ). High variety-seekers perceived risk of products sold at a kiosk retailer to be significantly

**Table I.**  
Study 1: effect of regret and variety-seeking behavior conditions on attitude, quality and risk perceptions

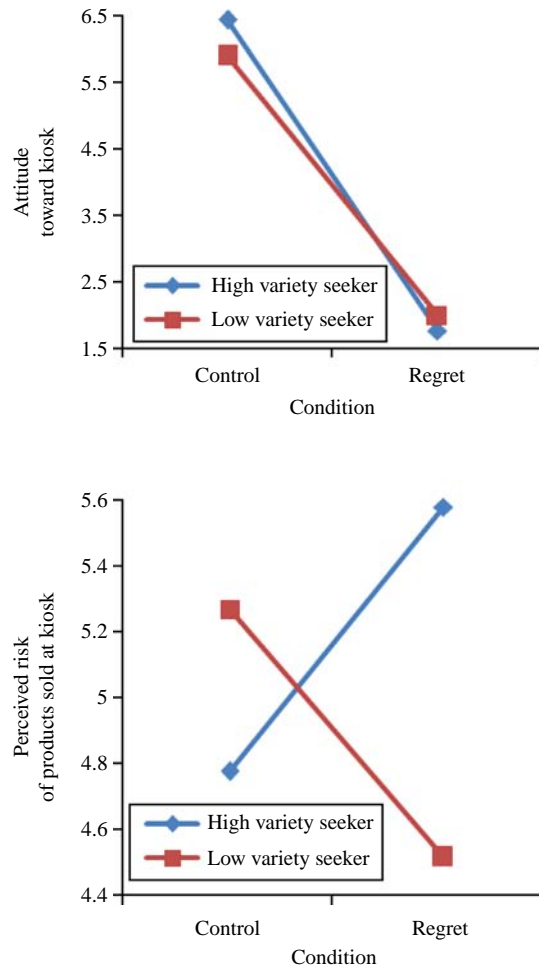
Independent variables	F-values		
	Attitude toward kiosk	Perceived quality of products sold at kiosk	Perceived risk of products sold at kiosk
<i>Main effects</i>			
Regret ( <i>R</i> )	600.00*	8.23**	0.01
Variety-seeking behavior ( <i>V</i> )	0.88	0	2.26
<i>Interaction effects</i>			
<i>R</i> × <i>V</i>	5.95**	0.43	12.37**

Notes: \* $p < 0.001$ ; \*\* $p < 0.05$

**Table II.**  
Study 1: dependent variable means for attitude, quality and risk perceptions

Independent variables	Attitude toward kiosk	Perceived quality of products sold at kiosk	Perceived risk of products sold at kiosk
<i>Regret condition</i>			
Induced regret	1.87	3.75	5.08
Control	6.10	4.12	5.05
<i>Variety-seeking behavior</i>			
Low variety-seeker	4.07	3.95	4.93
High variety-seeker	3.98	3.93	5.19





**Figure 2.**  
Study 1: effects of regret and variety-seeking behavior conditions on attitude and risk perceptions

higher in comparison to low variety-seekers ( $p < 0.05$ ) when regret was induced ( $M = 5.58$  vs  $4.52$ ). There was no overall main effect of regret or variety-seeking behavior ( $F < 1$ ), disconfirming *H3b* and *H3c*.

### Discussion

The results of Study 1 offer several explanations for why high variety-seekers may choose to shop at mall kiosks more often than low variety-seekers. This study shows that high variety-seekers tend to have more favorable attitudes and expectations of products sold at mall kiosk retailers in comparison to low variety-seekers. As postulated by Zeelenberg and Pieters' (2004, 2007) regret regulation theory, consumers are typically regret averse and will adjust decisions in current situations to avoid negative future outcomes such as regret. For example, a consumer with low variety-seeking tendencies may feel uncomfortable about shopping at an alternative retailer vs one which he is

familiar with – due to lack of experience and knowledge about this newer retailer. Owing to this discomfort and anticipation of a potential negative outcome of this decision, the low variety-seeker may choose to stay with a retailer he is more accustomed to. In this case, low variety-seekers may be avoiding kiosk retailers as a form of regret regulation, since they are not naturally apt to try new products or atmospheres and tend to be more brand loyal (Laroche *et al.*, 2003).

The notion that kiosks offer more variety within an assortment is appealing only to those who seek a wide range of products within an assortment size. Additionally, since high variety-seekers have more favorable attitudes toward products sold at kiosks, it is expected that they perceive that products sold at kiosks are relatively more risky. Naturally, given the multiple number of times high variety-seekers place themselves in situations that allow for potential regret in comparison to low variety-seekers, it is expected that they feel that the range of products sold at kiosks will possibly not meet their anticipations. However, high variety-seekers tend to have a higher tolerance for regret when it comes to buying products sold at kiosks; this may be the reason for post-purchases at these retailers from high variety-seekers.

While Study 1 addresses the question of what type of individuals (i.e. high vs low variety-seekers) are partial to the greater assortment sizes provided at kiosk retailers and in which condition (i.e. regret vs no regret), verifying post-purchase intentions in the condition of greater perceived variety in the mall kiosk retailing context is of interest due to the findings in Study 1 and has yet to be examined. Therefore, Study 2 will focus on this question.

## Study 2

Researchers have shown that, provided the amount of variety does not reach an overload condition, increased variety leads to positive consumer experiences such as increased consumption (Kahn and Wansink, 2004), higher brand quality perception when product offerings have higher variety (Berger *et al.*, 2007), and greater range of tastes being satisfied (Lancaster, 1990). Moreover, research has consistently shown that consumers who have positive consumption experiences instead of regretful experiences show greater repurchase intentions in the future (Keaveney *et al.*, 2007), and thus it is proposed that:

- H4a.* In the high-perceived variety condition, individuals will have significantly higher repurchase intentions from mall kiosk retailers than in the low-perceived variety condition when regret is not induced.
- H4b.* When regret is induced, consumers will have lower repurchase intentions from a mall kiosk retailer.
- H4c.* In the high-perceived variety condition, consumers will have significantly higher repurchase intentions from mall kiosk retailers.

## Methodology

*Overview of study and independent variables.* The procedures of Study 2 were adapted from Study 1, however, instead of using a web-based approach, paper handouts of the manipulation and surveys were administered. Regret was measured using a seven-point, multi-item scale with strongly agree/strongly disagree as endpoints consisting of the following three questions: “Based on the scenario, Joe regrets the choice

he made”; “Based on the scenario, Joe feels sorry for his decision”; and “Based on the scenario, Joe should have chosen the alternative choice” with a Cronbach’s  $\alpha$  of 0.88. For the perceived variety manipulation, participants were either exposed to the high variety perception or the low variety perception; examples can be provided upon request. Perceived variety was measured using a nine-point, multi-item scale with strongly agree/strongly disagree and very little variety/very much variety as endpoints consisting of the following four questions: “This assortment of sunglasses gives Joe a lot of variety to choose from”; “This assortment of sunglasses likely gives Joe at least one brand/style he likes”; “This assortment of sunglasses offers Joe more ways to enjoy his sunglasses”; and “How much variety do you think there is in this assortment?” with a Cronbach’s  $\alpha$  of 0.89 (Morales *et al.*, 2005). The experiment is a 2 (Regret: Induced regret vs Control)  $\times$  2 (Perceived variety assortment: High vs Low) between-subjects design.

*Sample, procedure, and dependent measures.* Upper-level marketing research undergraduate students who were trained in data collection procedures served as data collectors for the snowball non-student sample. This method has been utilized in previous retailing research (Bitner *et al.*, 1990; Reynolds *et al.*, 2006; Jones *et al.*, 2006). A total of 80 surveys were collected from a non-student sample in the southwestern part of the USA. The mean age was 31 years and ranged from 18 to 68. In order to maximize the generalizability of the sample population, Study 2 was conducted using paper surveys instead of a web-based survey; this allowed for the data to be collected in various locations of the southwestern metropolitan area instead of limiting this research to any single population segment. Participants were instructed to read the purchase-decision scenario and try to put themselves in the situation in answering the survey questions.

The effects of both regret and perceived variety were assessed across two dependent variables. Repurchase intentions at a kiosk retailer were collected using a seven-point scale with endpoints of “disagree/agree.” The three items were “It is very likely that Joe will repurchase from a similar retailer-type in the future”; “Joe will repurchase from a similar retailer-type the next time he needs a consumer product”; and “Joe will definitely try a similar retailer-type,” with a Cronbach’s  $\alpha$  of 0.87.

### Results

Analysis of covariance was conducted to evaluate the effects of regret and perceived variety while controlling for gender. Results are presented in Tables III and IV.

*Manipulation check.* Analysis of covariance was performed to guarantee both the manipulations of regret and perceived variety was successful. Regret response was significantly different between the induced regret and the control condition ( $F(1,77) = 157.23, p < 0.001$ ), with means in the desired direction ( $M = 5.54$  vs 2.29).

Independent variables	F-values Repurchase intentions
<i>Main effects</i>	
Regret (R)	48.01 **
Perceived variety (PV)	14.47 **
<i>Interaction effects</i>	
R $\times$ PV	8.11 *
<b>Notes:</b> * $p < 0.05$ ; ** $p < 0.10$	

**Table III.**  
Study 2: effects of regret  
and perceived variety on  
repurchase intentions

The perceived variety response was also significantly different ( $F(1,77) = 114.42, p < 0.001$ ), with means in the appropriate directions for the high-perceived variety condition in comparison to the low-perceived variety condition ( $M = 7.48$  vs  $3.79$ ).

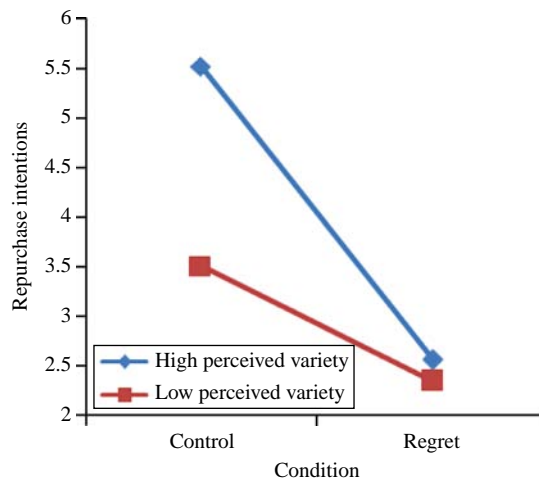
*Repurchase intentions from kiosk retailer.* Consistent with *H4a* and depicted in Figure 3, results indicate a regret by perceived variety interaction ( $F(1,75) = 8.109, p < 0.05$ ). Subjects manipulated to perceive high variety reported significantly higher repurchase intentions at a kiosk retailer in the control condition than those manipulated to perceive low variety ( $M = 5.533$  vs  $3.517$ ). As hypothesized in *H4b*, a main effect of regret was found ( $F(1,75) = 48.013, p < 0.001$ ), with respondents reporting significantly lower ( $p < 0.05$ ) repurchase intentions at a kiosk retailer in the regret induced condition in comparison to the control condition ( $M = 2.458$  vs  $4.525$ ). There was also a main effect of perceived variety ( $F(1,75) = 14.469, p < 0.001$ ), with subjects in the high variety condition reporting greater intention to repurchase from a kiosk retailer than the low variety condition ( $M = 4.050$  vs  $2.933$ ), supporting *H5c*.

*Discussion*

Findings from Study 2 further validate the results found in Study 1. We can conclude that perceived variety and regret both play a fundamental role in consumers' repurchase intentions at mall kiosk retailers, as conceptualized in Figure 1. Experimental findings suggest that higher perceived variety works to bring consumers back to mall kiosk

**Table IV.**  
Study 2: dependent variable means for repurchase intentions

Independent variables	Repurchase intentions
<i>Regret condition</i>	
Induced regret	2.46
Control	4.53
<i>Perceived variety</i>	
Low-perceived variety	2.93
High-perceived variety	4.05



**Figure 3.**  
Study 2: effects of regret and perceived variety conditions on repurchase intentions

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retailers as long as regret is nowhere in the picture. As studies have shown, regret has harmful effects on consumer behavior and decision-making processes (Zeelenberg and Pieters, 2004). Thus, the results of Study 2 are consistent with those of Study 1 and extant literature.

### General discussion

As we have discovered in our empirical research, individual variety-seeking tendencies naturally stimulate consumers' search for retailers that allow them additional options (i.e. retailers providing higher perceived variety) in comparison to those who offer only minimal assortment sizes. Given the situation, however, high variety-seekers feel much discomfort when they experience regret from their purchases at kiosk retailers. In line with this, Keaveney *et al.* (2007) find that more information searching and alternative evaluation lead to more buyer regret.

Hence, high variety-seekers report significant reductions in kiosk product expectations when regret enters into their consumption experience. Low variety-seekers, on the other hand, innately expect products sold at kiosks retailers to not meet their expectations due to the knowledge they perceive to have about retailers in general. Therefore, low variety-seekers' perceived quality and expectations of products sold at mall kiosk retailers were much higher when consumer regret was involved, in comparison to high variety-seekers.

### Theoretical and managerial implications

Given the findings of this research, it is in the best interest of retailers to minimize the perception of risk involved in purchases at mall kiosk retailers. Note that the perception of risk for products sold at kiosks is comparable in the eyes of both high- and low variety-seekers. Therefore, kiosk retailers should work toward creating service environments in which consumers feel a sense of control, as this should help mitigate some of the perceived risks in those retailers (Ward and Barnes, 2001). What is most interesting, however, is that when a product purchased at a mall kiosk fails to meet a consumer's expectation, and hence the induction of the experience of regret, it is the low variety-seekers that report significantly lower perceptions of risk for products sold at these retailers and not necessarily the high variety-seekers.

This opens the door to a better understanding of how mall kiosk retailers can better attract those who fall into the low variety-seeking category, since these consumers are not as eager to shop at mall kiosk retailers. Research shows that mall-based promotions continue to be of critical importance, as these retailers face immense competition from strip malls and e-tailers, among others (Parsons, 2003; LeHew and Fairhurst, 2000). For example, promotions and advertisements, which are targeted toward low-variety seeking consumers, can focus on key product attributes that help minimize the risk perceptions of their products. In contrast, for high variety-seeking consumers, the mere fact that mall kiosk retailers exhibit greater perceived variety through their promotions can serve as an incentive to shop at mall kiosk retailers. Accordingly, the management of risk perceptions of products sold at mall kiosk retailers not only encourages high variety-seekers to repurchase products from mall kiosks, but it also allows for low variety-seekers to try products at a different retailer they have yet to experience.

As a potential limitation to Study 1, a student sample was used and therefore confines the results of this specific study to a particular demographic. We also employed a hypothetical purchase-decision scenario in both Studies 1 and 2, instead of having subjects actually participate in real-life purchase-decision situations; for that reason, these findings are limited under the conditions of ecological validity. Additionally, the product (i.e. sunglasses) used in these studies is considered a reasonably priced product; other products that may be deemed inexpensive or fairly expensive may have varying effects on consumer responses.

With regards to future research, it may be worthwhile to consider how gender interacts with variety-seeking tendencies to impact purchases at mall kiosk retailers. In other retail environments, research shows that females tend to have more of a “shopper” orientation in comparison to males and also have higher variety-seeking tendency (Noble *et al.*, 2006). Another avenue for future research centers around atmospherics, an important aspect of consumer response to retailers. Research shows that retailers can alter variables such as music, lighting, and odor among many more so as to target their market (Turley and Milliman, 2000). The impact of such atmospheric variables is of interest to kiosk retailers with respect to methods of enhancing their environments. Further understanding of kiosk retailing will provide better insight into the underlying wants and needs of consumers, as well as provide both academics and practitioners with a format with which to enhance such retailing environments.

#### Note

1. The results of a 45-student subject pilot study revealed a significant gender difference for retailer knowledge. For this reason, gender served as a covariate in Study 1.

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