

From Regrets to Returns: How Interaction Quality and Store Image Shape Store Revisit Intentions

Muhammad Waqas, Muhammad Ali Khan, Muhammad Adnan Waseem, Nauman Wajid

Abstract

Purpose: Given the lack of understanding surrounding search regret, this study aims to draw on the regret regulatory theory to investigate the outcomes of search regret and effective strategies to reduce its adverse effects.

Design/methodology/approach: Using time-lagged data from 331 salespeople-customers dyads, this study investigates the connection between search regret, store image, interaction quality, and store revisit intentions.

Findings: Customers develop negative perceptions of the store, subsequently reducing their intentions to revisit. Salespeople's interaction quality can reduce the negative impact of search regret on store image and revisit intentions. Furthermore, store image serves as a mediator between search regret and revisit intentions.

Originality/value: This study marks the first attempt to investigate the store image and revisit intentions as outcomes of search regret and examines the moderating role of salespeople's interaction quality in reducing the negative consequences of search regret.

Keywords: Search regret; Store image; Revisit intention; Interaction quality; Regret regulation theory

Introduction

Imagine searching for a specific product, only to leave the store empty-handed or with a consolation purchase. This scenario is more than just an inconvenience; it represents a critical moment, a crisis situation, where businesses risk losing customers forever. A study on North American retail revealed that products not available on store shelves led consumers to shop elsewhere, resulting in a sales loss of USD 71.4 billion for retailers (Statista, 2022a). In some product categories, such as fashion stores, 40% of the store visits are regularly unsuccessful (Statista, 2022b). Such negative shopping experiences can result in store blame, switching behaviours, dissatisfaction and negative word of mouth (Chen and Rao, 2023; Reynolds *et al.*, 2006; Turri and Watson, 2023). The problem is not necessarily a lack of knowledge of inventory management but how to overcome the consumers' negative feelings of regret when they are unable to locate their desired product in the store. This study investigates this issue, examining search regret and its implications for retailers.

Search regret is “a post-search dissonance that results from an unsuccessful pre-purchase search during which the consumer is unable to locate the product and purchases nothing or is forced to purchase a substitute” (Reynolds *et al.*, 2006, p. 339). Feelings of regret lead individuals to change their future actions and seek a second chance to improve previous outcomes (Pizzutti *et al.*, 2022; Zeelenberg and Pieters, 2004). Extant research shows that regret can negatively influence consumer behaviour (Barta *et al.*, 2023; Barton *et al.*, 2022). For instance, consumer regret can lead to dissatisfaction, negative attitude (Ni and Ueichi, 2024), distrust, anxiety (Workman and Lee, 2019), hoarding behaviour (Vinoi *et al.*, 2024), brand switching (Zeelenberg and Pieters, 2004), and negative consumption behaviours (Keaveney *et al.*, 2007; Krishen *et al.*, 2010; Röding *et al.*, 2023).

Despite extensive research on regret, there exists a significant gap in the literature regarding search regret, its consequences, and strategies to reduce its adverse effects. Previous studies have investigated regret of buying defective products or failed services (e.g., Walchli and Landman, 2003), the influence of regret on satisfaction and repurchase intentions (e.g., Junaid *et al.*, 2024; Keaveney *et al.*, 2007), and regret in online versus offline shopping (e.g., Park *et al.*, 2015). However, research has primarily focused on buyer regret rather than search regret. To date, only Reynolds *et al.* (2006) have examined the phenomenon of search regret, however, their study did not address its impact on store revisit intentions and store image, nor did it suggest ways to reduce search regret. These gaps in the knowledge of search regret raise important questions: How does search regret affect store image and store revisit intentions? and How can retailers minimise the adverse effects of search regret? These questions are important given the inevitability of inventory shortages due to various uncertainties.

This research makes three theoretical contributions. First, it uses time-lagged data (two waves, two months apart) to examine the relationship between search regret, store image, interaction quality and store revisit intentions. Unlike previous research, which links search regret to blaming and active coping (Reynolds *et al.*, 2006), this study applies regret regulatory theory (Zeelenberg and Pieters, 2007) to show that search regret leads to negative store perceptions and decreased revisit intentions. Thus, this research broadens the understanding of retail store-specific consequences of search regret in retail marketing literature (e.g., Keaveney *et al.*, 2007; Reynolds *et al.*, 2006). Second, this research explores how salespeople's interaction quality can reduce the negative effects of search regret, providing the first evidence that high-quality interactions with salespeople can reduce the adverse impact of search regret on store image and revisit intentions. Finally, this study demonstrates that store image mediates the relationship between search regret and revisit intentions. From a practical standpoint, these findings suggest that retailers should invest in improving the expertise, knowledge, and communication skills

of in-store employees to improve store image and customers' revisit intentions after a failed shopping experience.

Theoretical Background and Hypotheses Development

Search Regret and Regret Regulation Theory

The current understanding of search regret largely stems from studies on post-purchase regret (e.g., Barta *et al.*, 2023). Post-purchase regret occurs when individuals realise their situation could have been better if they had made different choices (Zeelenberg *et al.*, 1996). This regret can lead to negative outcomes such as blaming the retailer, switching behaviours, dissatisfaction, and negative word-of-mouth (Zeelenberg and Pieters, 2004). According to regret regulation theory (Zeelenberg and Pieters, 2007), consumers make decisions to avoid future regret, often choosing well-known, reputable brands to reduce the risk of disappointment. Established brands, known for reliability and quality, offer a sense of security and trust, helping consumers feel confident that their expectations will be met.

Contrary to scholarly work on examining post-purchase regret (e.g., Barta *et al.*, 2023; Park *et al.*, 2015), studies on search regret focus on the dissonance experienced earlier in the consumer decision-making process when a product is not acquired. Search regret arises when customers feel they have over-considered their options, investing too much time and effort into the decision-making process (Barta *et al.*, 2023). Regret regulation theory posits that consumers try to mitigate regret by altering their perceptions of events (Zeelenberg and Pieters, 2007), but when decisions cannot be reversed or delayed, they may adjust their future intentions as a coping mechanism ((Zeelenberg and Pieters, 2004). This might involve changing perceptions of the store or reducing future visit intentions to alleviate regret. The theory also outlines alternative-focused and feeling-focused strategies, where consumers may avoid visiting the store or develop negative feelings toward the brand (Zeelenberg and Pieters, 2007).

Search regret can be understood through cognitive dissonance theory, which suggests that individuals experience discomfort when their beliefs or attitudes conflict (Festinger, 1957). In search regret, this discomfort arises from a mismatch between the consumer's expectation of finding a desired product and the reality of not locating it or settling for a less preferred alternative. Consumers often begin their search with specific expectations, and when these are unmet, a conflict occurs between their initial hopes and the disappointing outcome, leading to dissatisfaction and regret. This dissonance is heightened if the consumer buys a substitute that doesn't fully meet their needs, deepening the sense of compromise. Afterwards, the consumer may reflect on the failed search, questioning their decisions and the effort spent, which increases the dissonance and leads to search regret. To ease this discomfort, consumers might rationalise their purchase, seek reassurance, or avoid thinking about unmet expectations. However, if these strategies are unsuccessful, the regret can persist and affect future behaviour.

Store Image

Store image refers to how a store is perceived by shoppers based on its functional and psychological attributes (Martineau, 1958). It reflects beliefs and attitudes about the store's attributes (Hsu *et al.*, 2010), encompassing both tangible factors like location, product range, and price, and intangible elements such as ambience, staff behaviour, and sensory cues (Graciola *et al.*, 2020). Emotions like warmth, belonging, and excitement also shape store image (Lindquist, 1974). Merchandise availability plays an important role in shaping store image (Hopkins and Alford, 2001), with perceptions of product assortment influencing shopping preferences (Burlison and Oe, 2018). Research shows that a narrow product assortment can dilute a retailer's image (Dekimpe *et al.*, 2023), and stock-outs can negatively impact store perception (Kowalczyk *et al.*, 2021). Consumers are more satisfied when desired products are readily available, reducing search time and travel (Yoo *et al.*, 2000). According to

the regret regulation framework, consumers may cope with search regret by blaming the store (Reynolds *et al.*, 2006). Therefore, it is posited:

H1: Search regret negatively impacts store image.

Revisit Intentions

Revisit intentions refer to a customer's likelihood of returning to a store they have previously visited (Kazancoglu and Demir, 2021). Positive or negative emotions from a store experience shape customers' attitudes and influence their future behaviour (Cakici *et al.*, 2019; Röding *et al.*, 2023). A positive store experience increases the likelihood of a return visit (Junaid *et al.*, 2024; Kumar *et al.*, 2021). Research shows that the effort involved in searching is negatively linked to product return intentions (Maity and Arnold, 2013). For instance, minimising service failures can boost revisit intentions in restaurant settings (Cho *et al.*, 2017). Search regret occurs when customers feel they made a wrong decision after extensive searching and evaluation, leading to dissatisfaction and a reduced likelihood of revisiting the store (Pizzutti *et al.*, 2022; Reynolds *et al.*, 2006). Once regret is experienced, customers are more inclined to choose a different store in the future (Zeelenberg and Pieters, 2004). These findings suggest that search regret can erode customer loyalty and reduce repeat business. Therefore, it is hypothesised that:

H2: Search regret negatively impacts store revisit intentions.

Customers' purchase decisions are shaped by their perceptions of stores (Lourenço *et al.*, 2015). Perceived quality is directly linked to repurchase intentions (Wu and Chen, 2014). A positive brand perception often leads to higher perceived quality (Chiang and Jang, 2007). Image is widely recognised as a factor influencing brand choice, post-purchase evaluation, and future behaviour (Ye *et al.*, 2023; Zhang *et al.*, 2018). Positive behavioural intentions are

frequently driven by the trust consumers have in a brand, which is shaped by a strong brand image (Chiang and Jang, 2007). Additionally, store image has been shown to enhance overall satisfaction with the retailer (Bezes, 2022). Therefore, the following hypothesis is proposed:

H3: Store image positively impacts store revisit intentions.

As previously indicated (H1), search regret negatively impacts store image, which in turn affects revisit intentions (H3). This suggests that store image mediates the relationship between search regret and revisit intentions. According to regret regulation theory (Zeelenberg and Pieters, 2007), consumers manage their regret by forming negative perceptions of the store to maximise short-term outcomes and by avoiding the store in the future to optimise long-term outcomes. Therefore, the following hypothesis is proposed:

H4: Store image mediates the relationship between search regret and store revisit intentions.

Interaction Quality

Interaction quality refers to “a customer’s perception of the combined attitudes, behaviours and expertise of the service employee that shapes the customer’s overall evaluation of their interaction with the employee during the service delivery” (Kim *et al.*, 2016, p. 428). This construct includes the attitudes, behaviour, and expertise of employees (Yang *et al.*, 2022) and forms customers’ perceptions of service delivery (Junaid *et al.*, 2024). Interaction quality is crucial in retail, where ongoing interactions with management, staff, and frontline employees significantly impact customer experience (Butt *et al.*, 2023; Raggiotto *et al.*, 2023). Frontline employees are expected to handle customer transactions, requests, and concerns efficiently (Yang *et al.*, 2022). When customers cannot find a desired product, they often express dissatisfaction with these employees, making the quality of these interactions a key factor in shaping service perceptions (Nakamori *et al.*, 2024). Interpersonal interaction, such as in-store

guidance, can enhance customer satisfaction and retailer evaluation (Gurel-Atay *et al.*, 2010). Recent studies suggest that positive customer interactions can lead to favourable behavioural outcomes (Song *et al.*, 2022). Thus, it can be posited that the quality of interaction during a failed product search significantly influences service evaluations and may reduce the negative impact of search regret. Therefore, it is hypothesised that:

H5: Interaction quality moderates the negative relationship between search regret and store image, such that the relationship is weak when interaction quality is high (vs. low).

H6: Interaction quality moderates the indirect (via store image) relationship between search regret and revisit intention, such that the relationship is positive and strong when interaction quality is high (vs. low).

Methodology

Data collection

A field study was conducted to collect time-lagged (two waves, two months apart) data from 331 salesperson-customer dyads across 92 stores selling garments (n=26), shoes (n=24), cosmetics (n=23), and nutrition products (n=19). The time-lagged design allowed for capturing temporal dynamics and provided stronger causal inferences than cross-sectional studies. Stores were located in a country within the Indian Subcontinent, where a significant proportion of consumers prefer shopping in malls over online shopping (Statista, 2023). Malls are popular destinations for a wide range of products, including garments, shoes, cosmetics, and nutrition items. This preference for in-person shopping experiences keeps malls bustling with diverse customer interactions, making them ideal locations for collecting relevant data. Stores selling garments, shoes, cosmetics, and nutrition products were selected due to the high level of consumer engagement required in the decision-making process for these categories. These products typically involve high involvement and often require customer assistance from sales

staff, making them ideal for studying salesperson-customer interactions. The stores were chosen from urban commercial districts known for their steady customer flow and diverse demographics.

This study aimed to capture the emotions of search regret, regardless of store size or format. To ensure consistency, only franchise stores of renowned brands with standard formats and sizes across different locations were selected. This approach focused on customers' emotional responses while controlling for variability in in-store presentation and product range. While store size and format influence merchandise availability and store image, the study sought to isolate the emotional aspect of search regret and its direct impact on store image and revisit intentions.

A diverse sample was chosen to maximise variance in customers' search regret, store perceptions, and revisit intentions, enhancing the generalisability of the findings. Purposive sampling was used to reach 611 salespeople in various malls, focusing on those with significant customer interaction, as their insights were vital for assessing interaction quality. Salespeople were selected based on experience and customer engagement roles to ensure the data's relevance. Participants were briefed on the study's objectives and assured of anonymity and confidentiality to encourage candid responses. Of the 611 contacted, 348 met the criteria and agreed to participate.

At time 1, researchers used mall intercept purposive sampling, approaching customers who left the 92 selected stores without purchasing and had interacted with in-store salespeople about unavailable products. Data on search regret and demographics were collected from 522 customers. Two months later, at time 2, these customers were emailed a second questionnaire to gather data on store image and revisit intentions, resulting in 358 responses (68.58% response rate). After screening the data for missing values, straight-lining and matching the

data from two sources and different rounds based on the unique codes, responses from 331 salespeople-customers dyads were retained for data analysis. This study adopted an a priori type of power analysis using G*Power 3.1 software to calculate the minimum sample size. To conduct power analysis, this study set effect size, significance level, and statistical power at 0.15, 0.05, and 0.95 respectively with two predictors. G*Power yielded a minimum sample size of 74. Thus, the sample of 331 obtained can be considered adequate for data analysis. Furthermore, Hair *et al.*(2006) suggest a sample of 5 respondents for each indicator variable. Thus, a sample of 331 met the assumption of multivariate data analysis as it satisfied the 5:1 criterion of sample estimation.

The process of data collection continued for 3 weeks, between April and May 2023. The questionnaire was developed in English and only those respondents were selected who were able to read and understand the English language. The sample consisted of 59.8% female and 36.3% male. 17.8% had a school certificate, 51.4% had an undergraduate degree and 25.1% had a master's degree. 52.6% of respondents were 18-24 years old, 21.8% were 25-34 years old, 12.4% were 35-44 years old, 8.2% were 45-54 years old, and 1.8% were 55 years old and above.

Measures

Well-established scales, extensively used in prior research, were selected, with their face and content validity already confirmed. To ensure reliability and validity, studies were referenced where these scales had been thoroughly tested through pilot studies, expert reviews, and statistical analyses, confirming their consistent accuracy. The survey consisted of five sections: (a) search regret; (b) store image; (c) revisit intention; (d) interaction quality; and (e) demographics. All the items in the questionnaire were adapted from the previous studies. The construct of search regret was measured through a 4-item scale and was adapted from Reynolds

et al. (2006). A 3-item scale for measuring revisit intentions was adapted from Kim and Moon (2009). Store image was measured through a 4-item scale developed by Baker *et al.* (1994). Lastly, the moderator variable of interaction quality was measured through a 4-item scale developed by Ekinçi (2001). Except for demographic characteristics, all items were measured using a 7-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree).

Common method variance

The aim of gathering data through a time-lagged approach and from two distinct sources was to mitigate common method variance. Further, this study used a 3-item latent marker variable in the questionnaire. The inclusion of the marker variable did not significantly enhance the R² value (revisit intention's R² = 0.85 with and without the marker variable). Therefore, it can be concluded that common method variance was not a concern in this study.

Data analysis and results

Measurement model

Before data analysis, the assumptions of multivariate analysis, including normality and outliers, were assessed. Normality was confirmed as skewness and kurtosis values fell within the acceptable range (± 1.96). A few multivariate outliers identified using Mahalanobis distance were removed. The validity of the measurement model was then examined through confirmatory factor analysis (CFA) using maximum likelihood estimation in AMOS 25. The results of the CFA model fit show satisfactory indices, with $\chi^2 = 132.598$, $df = 71$, $\chi^2/df = 1.868$, GFI = 0.95, CFI = 0.98, TLI = 0.98, IFI = 0.99, RMSEA = 0.051, SRMR = 0.027 (Hair *et al.*, 2006). Table 1 shows that all indicator variables yielded satisfactory standardised loadings and t-values.

Table 1: Indicator loadings

Indicator	Standardised Estimate	SE	t-value
<i>Search Regret</i>			
SR1: I regret the search experience of the product.	0.85	.097	11.560
SR2: If I could do it over, I would change my search experience of the product.	0.60	.090	9.495
SR3: I have a great deal of regret for my search experience of the product.	0.76	0.077	11.560
<i>Interaction Quality</i>			
IQ1: I am always willing to help customers.	0.91	.039	28.311
IQ2: I am consistently courteous with customers.	0.91	.034	27.301
IQ3: I am competent in doing my job	0.93	.034	29.363
IQ4: I give customers prompt service.	0.95	.033	31.378
<i>Revisit Intention</i>			
RI1: In the near future, I would like to visit this store.	0.97	.023	45.599
RI2: I have a strong intention to visit this store with my friends and family in the near future.	0.97	.021	45.599
RI3: I will prefer this store over other stores.	0.92	.026	34.496
<i>Store Image</i>			
SI1: The store was a pleasant place to shop.	0.91	.030	30.892
SI2: The store had a good image.	0.95	.035	30.892
SI3: The store had good overall service.	0.96	.035	32.265
SI4: The store provided an attractive shopping experience.	0.94	.036	30.329

Source(s): Table by authors.

Table 2 shows that Cronbach's α and composite reliability (CR) values for all variables exceeded 0.7, surpassing the 0.60 cut-off (Hair *et al.*, 2006). The average variance extracted

(AVE) values ranged from 0.54 to 0.90, also exceeding the 0.50 threshold. These CR and AVE results confirm adequate convergent validity. Discriminant validity was assessed using the Fornell-Larcker criterion (Fornell and Larcker, 1981). The results show that all correlation coefficients were lower than the square roots of the AVE for each variable, indicating adequate discriminant validity.

Table 2: Construct reliability and convergent validity

Construct	α	CR	AVE	1	2	3	4
1. Interaction Quality	0.96	0.959	0.855	0.925			
2. Search Regret	0.772	0.776	0.542	-0.438	0.736		
3. Store Image	0.969	0.967	0.881	0.859	-0.472	0.939	
4. Revisit Intentions	0.964	0.965	0.901	0.836	-0.509	0.913	0.949

Note: Diagonal bold entries are the square root of AVE; all others are correlation coefficients. Source(s): Table by authors.

Structural model and hypotheses testing

To test the hypothesised model, structural equation modelling (SEM) was used, yielding adequate fit measures: $\chi^2 = 71.460$, $df = 32$, $\chi^2/df = 2.233$, $GFI = 0.95$, $CFI = 0.99$, $TLI = 0.98$, $IFI = 0.99$, $RMSEA = 0.061$, and $SRMR = 0.028$. Table 3 summarises the hypotheses testing, showing that H1, H2, and H3 are supported. Specifically, search regret negatively impacted store image ($\beta = -0.47$, $t = -7.532$) and revisit intentions ($\beta = -0.11$, $t = -2.997$), while store image positively influenced revisit intentions ($\beta = 0.87$, $t = 22.519$).

Table 3: Direct path.

Hypothesised relationships	Standardized β	Unstandardized β	SE	t-value	Result
H1: SR \rightarrow SI	-0.48	-0.71	0.093	-7.707***	Supported
H2: SR \rightarrow RI	-0.11	-0.19	0.063	-2.997**	Supported
H3: SI \rightarrow RI	0.87	1.1	0.048	22.798***	Supported

Note: ** $p < 0.01$, *** $p < 0.001$. Source(s): Table by authors.

To test H4, H5, and H6, a nonparametric bootstrapping regression procedure was conducted using the PROCESS macro for IBM SPSS (Model 7), with 5000 iterations at 95% confidence intervals (CIs). H4 was supported, as search regret had an indirect negative effect on revisit intentions through store image ($\beta = -0.13$, LLCI = -0.19, ULCI = -0.05), indicating partial mediation. The moderation effect of interaction quality on the relationship between search regret and store image, as well as on the indirect effect of search regret on revisit intentions via store image, was also confirmed. Store image varied significantly with high and low levels of interaction quality ($\beta = 0.15$, LLCI = 0.08, ULCI = 0.26). Similarly, the conditional indirect effects of search regret on revisit intentions through store image varied at different levels of interaction quality ($\beta = 0.14$, LLCI = 0.07, ULCI = 0.22), supporting H5 and H6. Table 4 presents the mediation, moderation, and moderated mediation results.

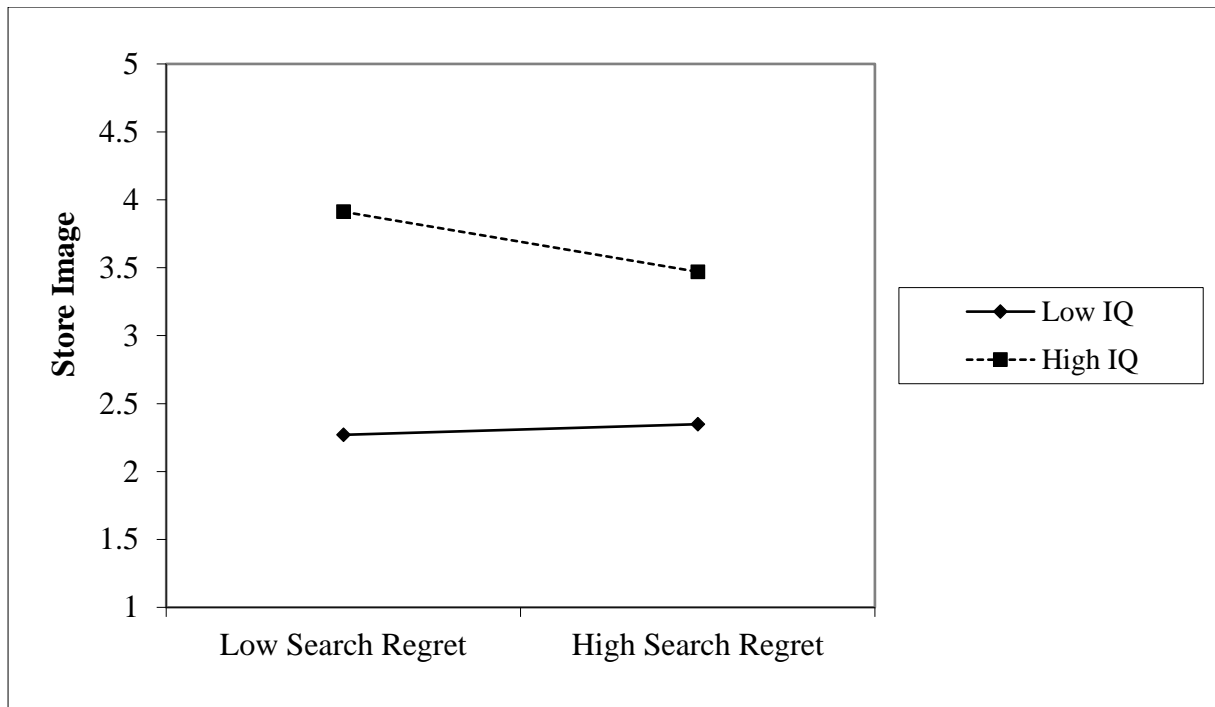
Table 4: Mediation effect of store image and the moderation effect of interaction quality.

Hypothesised relationships	Effect	Boot SE	Boot 95% CIs		Model fit summary	Result
			LLCI	ULCI		
H4: SR→SI→RI	-0.13	.03	-.19	-.05	R=0.89; R ² =0.80; F=668.39	Supported
H5: SR*IQ→SI	0.15	.04	.08	.26	R=0.85; R ² =0.72; F=273.70	Supported
H6: SR*IQ →SI→RI	0.14	.03	.07	.22	R=0.89; R ² =0.80; F=668.39	Supported

Source(s): Table by authors.

Simple slopes were also calculated to make meaningful interpretations of interactions. Figure 1 shows that the association between search regret and store image was weaker for consumers with a high level of interaction quality than those with a low level of interaction quality.

Figure 1: The moderating effect of interaction quality



Note: IQ=Interaction quality. Source(s): Figure by authors.

Discussion and conclusion

This study contributes to the literature by investigating the relationships between search regret, revisit intentions, store image, and interaction quality. The findings reveal that search regret negatively impacts store image. This finding is consistent with previous studies (e.g., Dekimpe *et al.*, 2023; Kowalczyk *et al.*, 2021) that link stock-outs to negative store perceptions. Similarly, search regret was found to reduce revisit intentions, aligning with research suggesting that regret leads to dissatisfaction and a lower likelihood of returning to the store (Pizzutti *et al.*, 2022). The study also confirms a positive relationship between store image and revisit intentions, echoing existing research that ties store image to brand choice, post-purchase evaluation, and future behaviour (Ye *et al.*, 2023; Zhang *et al.*, 2018). Moreover, store image mediates the relationship between search regret and revisit intentions, supporting the notion that customers' decisions are shaped by their perceptions of the store (Lourenço *et al.*, 2015).

Overall, these results suggest that search regret can lead to negative store perceptions and reduce revisit intentions, highlighting the importance of maintaining well-stocked inventory to avoid customer dissatisfaction. The findings also suggest that even if customers experience search regret, their decision to revisit the store will largely depend on their overall image of the store. In essence, improving store image can mitigate the negative effects of search regret, potentially preserving customer loyalty despite occasional disappointments.

This research also contributes to the retail marketing literature by examining the moderating role of interaction quality between search regret and store image, which was confirmed. The findings indicate that interaction quality also moderates the indirect relationship between search regret and revisit intention through store image. These results align with previous studies showing that interaction quality is crucial in shaping customers' perceptions of service quality (Nakamori *et al.*, 2024) and influencing behavioural outcomes (Song *et al.*, 2022). Interpersonal interactions, such as in-store guidance, can enhance shopping satisfaction and positively impact retailer evaluation (Gurel-Atay *et al.*, 2010). These findings suggest that the quality of staff interactions can help mitigate the negative effects of stock-outs and search regret. Positive in-store guidance and support can enhance shopping satisfaction, improve how customers evaluate the retailer, and potentially counteract the negative effects of search regret.

Theoretical contributions

This research contributes to retail marketing theory in several ways. Using regret regulation theory and data from 331 salesperson-customer dyads, the study evaluated the causal effects of search regret on store image and repurchase intentions. While existing studies explore aspects like regret's impact on repurchase intentions (Liao *et al.*, 2017), post-purchase regret (Dutta *et al.*, 2011), antecedents of buyer regret (Keaveney *et al.*, 2007), and blame stemming from search regret (Reynolds *et al.*, 2006), there is limited evidence on how search regret affects

store image and revisit intentions. The findings highlight that retailers should maintain adequate stock to prevent search regret, which can adversely affect store image and revisit intentions.

Second, consistent with regret regulation theory, the study reveals that search regret triggers a negative perception spiral, diminishing store image and reducing revisit intentions. By examining store image as a mediating factor, this research goes beyond Reynolds *et al.* (2006), who examined only the antecedents and consequences of search regret, and contributes to the advancement of nomological networks of predictors and outcomes of store image (Elshiewy and Peschel, 2022).

Third, the research investigates interaction quality as a moderating factor, finding that it reduces the negative impact of search regret on store image. This suggests that retailers can mitigate the adverse effects of stock shortages by effectively managing frontline staff to ensure positive customer interactions. This study is the first in retail literature to explore a moderated mediation model linking search regret to revisit intentions via store image, filling a significant gap. Findings from extant retailing literature show that interaction quality leads to several favourable outcomes, such as willingness to buy (Hochstein *et al.*, 2021), and customer satisfaction (Holmqvist *et al.*, 2019). However, the role of interaction quality as a boundary condition of the negative link between search regret and outcome variables, including store image and revisit intentions, remains untapped in previous studies. Therefore, this research fills this gap in the literature and enhances the understanding of the important role of interaction quality.

Finally, building on regret regulation theory, the study demonstrates how consumers cope with search regret by developing negative perceptions of the store and reducing revisit intentions.

This research extends the scope of regret regulation theory by incorporating store image and revisit intentions as outcomes of search regret, enriching the marketing literature.

Practical contributions

The research highlights key managerial implications for retailers. First, this study shows that search regret strongly predicts negative store image and decreased revisit intentions. Therefore, retailers should focus on controlling and minimising search regret by effectively managing their inventory. Second, retailers should focus not only on inventory management but also on enhancing frontline staff interactions, as interaction quality moderates the impact of search regret on store image. Improving in-store salespeople's technical skills, social skills, and empathy is crucial. Salespeople should actively listen to customers, show genuine empathy for their inconvenience, and provide useful information on special orders, alternative products, upcoming sales, and restocking dates. Third, managers should motivate salespeople to exceed expectations by implementing incentive programs that reward exceptional service. Fourth, stores should assist shoppers in finding alternative locations for out-of-stock items to reduce negative impacts and encourage future visits. Additionally, retailers should work harder to ease the search experience by providing ample information through the use of advanced in-store technology, such as beacons, virtual assistants, digital signage, inventory kiosks, and IoT devices. These tools can help reduce search regret by guiding customers to their desired products, offering real-time inventory updates, and providing personalised assistance, ensuring a seamless and satisfying shopping experience.

Finally, a negative store image reduces customers' revisit intentions. Retailers should ensure advertised inventory is available and every aspect of the store, including layout, ambience, and customer service, contributes to a positive shopping experience. Adequate staffing with knowledgeable salespeople is essential for providing accurate inventory information.

A key policy implication of this research is that retailers should focus on enhancing the search experience by providing comprehensive product information, ensuring product availability, and delivering excellent service. Minimising stockouts is crucial, as they lead to customer dissatisfaction and regret. Implementing advanced inventory tracking systems and databases can effectively verify product availability, thereby improving customer satisfaction and enhancing the store's image.

This research has important societal implications as well. Reducing search regret through improved interaction quality enhances consumers' quality of life by alleviating stress and saving time, allowing them to focus on more fulfilling activities. High customer service standards can set a positive benchmark and improve public attitudes towards retail interactions. Furthermore, a positive retail environment boosts consumers' mental well-being by making their shopping experiences more satisfying and less frustrating.

Limitations and directions for future research

This research has few key limitations that highlight areas for further study. First, it relied on survey-based factors, which can introduce response biases and limit insights due to self-reporting. Future research should incorporate experimental designs for greater control and depth. Second, the study focused on B2C products within a specific geographic area, limiting its generalisability. Broader research should examine various product types, including B2B, and expand to different regions to better understand consumer behaviour. Third, the research was localised to the Indian subcontinent, which may restrict the applicability of results to other global markets. Future studies should include diverse regions, cultures, and socioeconomic contexts to enhance the findings' relevance. Fourth, this study does not consider the effects of store size and format. Future research should examine how store size and format influence the relationship between search regret and its outcomes, specifically addressing the question: How

do store size and format influence the relationship between search regret and customer-related outcomes, such as satisfaction, revisit intentions, and brand loyalty?

Fifth, the study only used interaction quality as a moderator, overlooking other significant factors. Future research should consider additional moderators, such as product category, search experience, and shopping time pressure, to provide a more comprehensive understanding of the influences on search regret and store image. The sixth limitation of the study is the absence of consideration for the role of product category, brand, store distance, and technology in interaction quality, suggesting that future research should explore how these factors influence the dynamics of customer-staff interactions and their impact on search regret and store image. Similarly, this research did not explore the influence of demographic factors, such as income and occupation, on search regret. Future studies could investigate how these demographics affect the level of search regret. Finally, this study measured revisit intentions rather than actual behaviour, offering insights into stated intentions but not real actions. Future research should observe actual consumer behaviour to more accurately assess the impact of search regret on revisit behaviour, specifically addressing the question: How does search regret impact actual consumer behaviour, particularly in terms of revisit behaviour, as opposed to stated revisit intentions?

References

- Baker, J., Grewal, D. and Parasuraman, A. (1994), “The influence of store environment on quality inferences and store image”, *Journal of the Academy of Marketing Science*, Vol. 22 No. 4, pp. 328–339.
- Barta, S., Gurrea, R. and Flavián, C. (2023), “Consequences of consumer regret with online shopping”, *Journal of Retailing and Consumer Services*, Vol. 73, p. 103332.
- Barton, B., Zlatevska, N. and Oppewal, H. (2022), “Scarcity tactics in marketing: A meta-analysis of product scarcity effects on consumer purchase intentions”, *Journal of Retailing*, Vol. 98 No. 4, pp. 741–758.
- Bezes, C. (2022), “Overall satisfaction formation across channels: an empirical study”, *International Journal of Retail & Distribution Management*, Vol. 50 No. 8/9, pp. 922–941.
- Burlison, J. and Oe, H. (2018), “A discussion framework of store image and patronage: a literature review”, *International Journal of Retail & Distribution Management*, Vol. 46 No. 7, pp. 705–724.
- Butt, A., Ahmad, H., Ali, F., Muzaffar, A. and Shafique, M.N. (2023), “Engaging the customer with augmented reality and employee services to enhance equity and loyalty”, *International Journal of Retail & Distribution Management*, Vol. 51 No. 5, pp. 629–652.
- Cakici, A.C., Akgunduz, Y. and Yildirim, O. (2019), “The impact of perceived price justice and satisfaction on loyalty: the mediating effect of revisit intention”, *Tourism Review*, Vol. 74 No. 3, pp. 443–462.
- Chen, J. and Rao, V.R. (2023), “Evaluating strategies for promoting retail mobile channel using a hidden Markov model”, *Journal of Retailing*, Vol. 99 No. 1, pp. 66–84.
- Chiang, C.-F. and Jang, S.S. (2007), “The effects of perceived price and brand image on value and purchase intention: Leisure travelers’ attitudes toward online hotel booking”, *Journal of Hospitality & Leisure Marketing*, Vol. 15 No. 3, pp. 49–69.

- Cho, S.-B., Jang, Y.J. and Kim, W.G. (2017), “The moderating role of severity of service failure in the relationship among regret/disappointment, dissatisfaction, and behavioral intention”, *Journal of Quality Assurance in Hospitality & Tourism*, Vol. 18 No. 1, pp. 69–85.
- Dekimpe, M.G., Gijsbrechts, E. and Gielens, K. (2023), “Proximity-store introductions: A new route to big-box retailer success?”, *Journal of Retailing*, Vol. 99 No. 4, pp. 621–633.
- Dutta, S., Biswas, A. and Grewal, D. (2011), “Regret from postpurchase discovery of lower market prices: do price refunds help?”, *Journal of Marketing*, Vol. 75 No. 6, pp. 124–138.
- Ekinci, Y. (2001), “The validation of the generic service quality dimensions: an alternative approach”, *Journal of Retailing and Consumer Services*, Vol. 8 No. 6, pp. 311–324.
- Elshiewy, O. and Peschel, A.O. (2022), “Internal reference price response across store formats”, *Journal of Retailing*, Vol. 98 No. 3, pp. 496–509.
- Festinger, L. (1957), *A Theory of Cognitive Dissonance*, Stanford University Press, Stanford, CA.
- 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.
- Graciola, A.P., De Toni, D., Milan, G.S. and Eberle, L. (2020), “Mediated-moderated effects: High and low store image, brand awareness, perceived value from mini and supermarkets retail stores”, *Journal of Retailing and Consumer Services*, Vol. 55, p. 102117.
- Gurel-Atay, E., Giese, J.L. and Godek, J. (2010), “Retailer evaluation: the crucial link between in-store processes and shopping outcomes”, *The International Review of Retail, Distribution and Consumer Research*, Vol. 20 No. 3, pp. 297–310.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E. and Tatham, R.L. (2006), “Multivariate data analysis 6th ed”, *Uppersaddle River: Pearson Prentice Hall*.
- Hochstein, B., Bolander, W., Christenson, B., Pratt, A.B. and Reynolds, K. (2021), “An investigation of consumer subjective knowledge in frontline interactions”, *Journal of Retailing*, Vol. 97 No. 3, pp. 336–346.
- Holmqvist, J., Van Vaerenbergh, Y., Lunardo, R. and Dahln, M. (2019), “The language backfire effect: How frontline employees decrease customer satisfaction through language use”, *Journal of Retailing*, Vol. 95 No. 2, pp. 115–129.

- Hopkins, C.D. and Alford, B.L. (2001), “A new seven-dimensional approach to measuring the retail image construct”, *Academy of Marketing Studies Journal*, Vol. 5 No. 2, pp. 105–114.
- Hsu, M.K., Huang, Y. and Swanson, S. (2010), “Grocery store image, travel distance, satisfaction and behavioral intentions: Evidence from a Midwest college town”, *International Journal of Retail & Distribution Management*, Vol. 38 No. 2, pp. 115–132.
- Junaid, M., Rasheed, M.F., Goudarzi, K. and Tariq, A. (2024), “Advancing customer experience through service design in mega shopping malls”, *International Journal of Retail & Distribution Management*, Vol. 52 No. 1, pp. 89–106.
- Kazancoglu, I. and Demir, B. (2021), “Analysing flow experience on repurchase intention in e-retailing during COVID-19”, *International Journal of Retail & Distribution Management*, Vol. 49 No. 11, pp. 1571–1593.
- Keaveney, S.M., Huber, F. and Herrmann, A. (2007), “A model of buyer regret: Selected prepurchase and postpurchase antecedents with consequences for the brand and the channel”, *Journal of Business Research*, Vol. 60 No. 12, pp. 1207–1215.
- Kim, P.B., Gazzoli, G., Qu, H. and Kim, C.S. (2016), “Influence of the work relationship between frontline employees and their immediate supervisor on customers’ service experience”, *Journal of Hospitality Marketing & Management*, Vol. 25 No. 4, pp. 425–448.
- Kim, W.G. and Moon, Y.J. (2009), “Customers’ cognitive, emotional, and actionable response to the servicescape: A test of the moderating effect of the restaurant type”, *International Journal of Hospitality Management*, Vol. 28 No. 1, pp. 144–156, doi: 10.1016/j.ijhm.2008.06.010.
- Kowalczyk, L., Breugelmans, E. and Campo, K. (2021), “It’s not there, I love it! How relevance to objective needs of an unavailable item impacts emotions, store image, and behavior”, *Journal of Retailing and Consumer Services*, Vol. 63, p. 102749.
- Krishen, A.S., Bui, M. and Peter, P.C. (2010), “Retail kiosks: how regret and variety influence consumption”, *International Journal of Retail & Distribution Management*, Vol. 38 No. 3, pp. 173–189.

- Kumar, S., Jain, A. and Hsieh, J.-K. (2021), "Impact of apps aesthetics on revisit intentions of food delivery apps: The mediating role of pleasure and arousal", *Journal of Retailing and Consumer Services*, Vol. 63, p. 102686.
- Liao, C., Lin, H.-N., Luo, M.M. and Chea, S. (2017), "Factors influencing online shoppers' repurchase intentions: The roles of satisfaction and regret", *Information & Management*, Vol. 54 No. 5, pp. 651–668.
- Lindquist, J.D. (1974), "Meaning of Image", *Journal of Retailing*, Vol. 50 No. 4, pp. 29–38.
- Lourenço, C.J., Gijbrecchts, E. and Paap, R. (2015), "The impact of category prices on store price image formation: an empirical analysis", *Journal of Marketing Research*, Vol. 52 No. 2, pp. 200–216.
- Maity, D. and Arnold, T.J. (2013), "Search: An expense or an experience? Exploring the influence of search on product return intentions", *Psychology & Marketing*, Vol. 30 No. 7, pp. 576–587.
- Martineau, P. (1958), "The personality of the retail store.", *Harvard Business Review*, Vol. 36 No. 1, pp. 47–55.
- Nakamori, T., Newell, S.J., Han, B.T. and Leingpibul, T. (2024), "The impact of in-store sales personnel's altruistic behaviors on store image: a cross-category study in Japan", *The International Review of Retail, Distribution and Consumer Research*, Vol. 34 No. 1, pp. 33–51.
- Ni, S. and Ueichi, H. (2024), "Factors influencing behavioral intentions in livestream shopping: A cross-cultural study", *Journal of Retailing and Consumer Services*, Vol. 76, p. 103596.
- Park, J., Hill, W.T. and Bonds-Raacke, J. (2015), "Exploring the relationship between cognitive effort exertion and regret in online vs. offline shopping", *Computers in Human Behavior*, Vol. 49, pp. 444–450.
- Pizzutti, C., Gonçalves, R. and Ferreira, M. (2022), "Information search behavior at the post-purchase stage of the customer journey", *Journal of the Academy of Marketing Science*, Vol. 50 No. 5, pp. 981–1010.

- Raggiotto, F., Compagno, C. and Scarpi, D. (2023), “Care management to improve retail customers’ and employees’ satisfaction”, *Journal of Retailing and Consumer Services*, Vol. 72, p. 103280.
- Reynolds, K.E., Folse, J.A.G. and Jones, M.A. (2006), “Search regret: Antecedents and consequences”, *Journal of Retailing*, Vol. 82 No. 4, pp. 339–348.
- Röding, T., Wagner, G., Steinmann, S., Mennekes, T. and Schramm-Klein, H. (2023), “How to infuse mobile technologies in frontline service encounters? An experimental analysis of customer perceptions of service competence”, *The International Review of Retail, Distribution and Consumer Research*, pp. 1–18.
- Song, M., Xing, X., Duan, Y., Cohen, J. and Mou, J. (2022), “Will artificial intelligence replace human customer service? The impact of communication quality and privacy risks on adoption intention”, *Journal of Retailing and Consumer Services*, Vol. 66, p. 102900.
- Statista. (2022a), “Main causes of out-of-stock in the retail industry in North America in 2020, by estimated loss value”, available at: <https://www.statista.com/statistics/1199072/causes-of-out-of-stock-in-retail-industry-north-america/> (accessed 21 November 2023).
- Statista. (2022b), “How often does it happen that you leave a retail store and that your visit has not been completely successful?”, available at: <https://www.statista.com/statistics/937513/frequency-of-unsatisfactory-retail-store-visits-in-the-netherlands-by-store-type/> (accessed 13 October 2023).
- Statista. (2023), “Reasons for choosing offline shopping in India as of November 2023”, available at: <https://www.statista.com/statistics/1425346/india-offline-shopping-preference/#:~:text=In%20a%20survey%20about%20retail,the%20product's%20authenticity%20and%20quality.> (accessed 6 August 2024).
- Turri, A.M. and Watson, A. (2023), “Product assortment, choice overload, and filtering technology across retail contexts”, *The International Review of Retail, Distribution and Consumer Research*, Vol. 33 No. 3, pp. 219–239.

- Vinoi, N., Shankar, A., Mehrotra, A., Kumar, J. and Azad, N. (2024), “Enablers and inhibitors of digital hoarding behaviour. An application of dual-factor theory and regret theory”, *Journal of Retailing and Consumer Services*, Vol. 77, p. 103645.
- Walchli, S.B. and Landman, J. (2003), “Effects of counterfactual thought on postpurchase consumer affect”, *Psychology & Marketing*, Vol. 20 No. 1, pp. 23–46.
- Workman, J.E. and Lee, S.-H. (2019), “Fashion trendsetting, attitudes toward money, and tendency to regret”, *International Journal of Retail & Distribution Management*, Vol. 47 No. 11, pp. 1203–1222.
- Wu, S.-I. and Chen, Y.-J. (2014), “The impact of green marketing and perceived innovation on purchase intention for green products”, *International Journal of Marketing Studies*, Vol. 6 No. 5, p. 81.
- Yang, D., Chen, X., Ma, B. and Wei, H. (2022), “When can interaction orientation create more service value? The moderating role of frontline employees’ trust in managers and employee deep acting”, *Journal of Retailing and Consumer Services*, Vol. 65, p. 102841, doi: 10.1016/j.jretconser.2021.102841.
- Ye, Y., Yang, Y. and Huang, Q. (2023), “Identifying and examining the role of pop-up store design: A mixed-methods study”, *Journal of Retailing and Consumer Services*, Elsevier, Vol. 75, p. 103503.
- Yoo, B., Donthu, N. and Lee, S. (2000), “An examination of selected marketing mix elements and brand equity”, *Journal of the Academy of Marketing Science*, Vol. 28 No. 2, pp. 195–211.
- Zeelenberg, M., Beattie, J., Van der Pligt, J. and De Vries, N.K. (1996), “Consequences of regret aversion: Effects of expected feedback on risky decision making”, *Organizational Behavior and Human Decision Processes*, Vol. 65 No. 2, pp. 148–158.
- Zeelenberg, M. and Pieters, R. (2004), “Beyond valence in customer dissatisfaction: A review and new findings on behavioral responses to regret and disappointment in failed services”, *Journal of Business Research*, Vol. 57 No. 4, pp. 445–455.
- Zeelenberg, M. and Pieters, R. (2007), “A theory of regret regulation 1.0”, *Journal of Consumer Psychology*, Wiley Online Library, Vol. 17 No. 1, pp. 3–18.

Zhang, H., Wu, Y. and Buhalis, D. (2018), "A model of perceived image, memorable tourism experiences and revisit intention", *Journal of Destination Marketing & Management*, Vol. 8, pp. 326–336.