Enhancing Customer Satisfaction in Small Specialised Outdoor Sports Retail: The Impact of Expertise and Quality Content in Staff-Customer Interactions

Master Thesis
Jack Azzalin Gibson
Strategic Product Design
October 2025

ŤUDelft

Author
Jack Azzalin Gibson

Graduation Committee
Chair | Dr.ir. S. Bakker-Wu
Faculty of Industrial Design Engineering | TU Delft
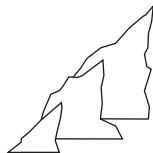*Department of Design, Organisation and Strategy*

Mentor | Ir. J.S.C. van den Hoven
Faculty of Industrial Design Engineering | TU Delft
Department of Design, Organisation and Strategy

TUDelft

Enhancing Customer Satisfaction in Small Specialised Outdoor Sports Retail: The Impact of Expertise and Quality Content in Staff-Customer Interactions

Acknowledgement

This thesis would not have been possible without the support and guidance I received along the way.

First, I would like to thank my supervisory team for your time and assistance, as well as for all the valuable discussions we had. To my chair, Sijia, thank you for guiding me through my chaotic thoughts. To my mentor, Jorg, thank you for encouraging me to go the extra mile and for broadening my perspective.

On a personal note, I want to thank my wonderful parents for their support. To my friends, thank you for taking the time to be here today. It means a lot. To Gaia, thank you for the endless support you give me and for your incredible being.
I love you all very much.

Abstract

This study investigates the relationship between staff-customer interactions and customer satisfaction in specialised outdoor sports retail in the Netherlands. In the growing outdoor sports market, stores and the customer experience are critical, yet customers approach them with vastly different expertise levels. The central hypothesis was that higher customer expertise would negatively moderate the positive effect of the social (the act of conversation, such as receiving advice or asking, and sharing opinions) and cognitive (the substance of the conversation, such as learning and reflection) elements of the staff-customer interaction. Beyond testing this mechanism, this study was designed to investigate which outdoor sports-related topics are valuable to customers with different expertise levels. To achieve both objectives, a mixed-methods approach was employed, combining qualitative interviews with retail managers (N = 3) and a quantitative survey (N = 52). The results suggest that the cognitive dimension of the interaction primarily drives satisfaction. Contrary to the central hypothesis, customer expertise did not moderate the relationship. The type of cognitive stimuli that correlates with satisfaction differs significantly by expertise level: Novice customers are most satisfied when interactions facilitate personal reflection and provide foundational knowledge, while they also uniquely value information that connects them to the local outdoor community. Experts value peer-level discussions on technical and trend-focused topics. For service design, this study offers a new layer for customer journey maps, which can be helpful to analyse the cognitive content linked to different customer needs. Practically, for small specialised outdoor sports retailers, this study translates into a three-step roadmap focused on suggestions regarding staff training, customer satisfaction metrics, and building a community hub. More broadly, for all small specialised retailers, the findings could evolve into a model for understanding customer needs and designing interactions.

Keywords:
Customer Experience, Outdoor Sports, Sports retail, Expertise, Customer satisfaction

Glossary of Key Terms

This glossary defines the key terms used throughout this thesis to provide clarity for the reader.

Small Specialised Outdoor Sports Retail: Small number of outdoor sports stores (between 1 and 10) regionally or nationally distributed that are independently owned (e.g. non-brand-owned), sell products from multiple brands, and focus on a specific niche category, such as outdoor sports. This is distinct from generalist retailers (e.g., Decathlon) and mono-brand stores (e.g., Nike Stores).

Customer Experience (CX): A customer's overall perception of their interaction with a company or a brand. In this thesis, the focus is specifically on the cognitive and social dimensions of the in-store, staff-customer interaction.

Customer Experience Dimensions: The distinct components that constitute the overall Customer Experience. While multiple dimensions exist (e.g., physical, emotional), this thesis focuses specifically on the Cognitive and Social Dimensions, as they are most relevant to the exchange of knowledge and therefore for the staff-customer interaction.

Social Dimension: The act of the staff-customer conversation. It refers to the social behaviours that occur during interactions, such as receiving advice, asking questions, or sharing opinions, but not the content exchanged during those actions.

Cognitive Dimension: The component of the Customer Experience that relates to a customer's mental and intellectual engagement. It includes processes such as learning new information, feeling curious, reflecting on personal needs, and being inspired by the conversation.

Customer Satisfaction: Customer's judgment and emotional response to a product or service experience. The feeling arises from comparing what they expected to get from the service or product with what they actually received, and assessing with a cognitive evaluation whether the service has met their demands

Customer Expertise: A customer's ability to effectively process information and perform product-related tasks.

Novice Customer: A customer with a low level of expertise in a specific product domain. In this study, the authors refer to novice outdoor sports customers. They are characterised by a need for basic guidance, community connection, and interactions that help them build their identity within the sport or hobby.

Expert Customer: A customer with a high level of expertise in the specific product domain (e.g. outdoor sports). In this study, they are characterised by their desire for peer-level conversations on technologies and current trends.

Disconfirmation Paradigm: Marketing theory stating that customer satisfaction is influenced by their level of expertise. As expertise increases, their expectations increase. Since satisfaction is determined by the gap between a customer's pre-existing expectations and the actual performance of the service they receive, the elevated expectations make experts inherently more difficult to satisfy.

Staff-Customer Interaction: The in-person dialogue within the store between store staff and a customer.

Contents

Introduction

1 Introduction

After the COVID-19 pandemic, the global market of outdoor sports has seen a major surge, driven by the restrictions, with new masses of active customers (Outdoor Industry Association, 2025; Ryan, 2025), even more inclined to go out in the wild, propelled by the sharp campaigns, new "fashion" pieces for their favourite sport, and new sports communities. Consequently, this interest shifted the market of outdoor equipment and apparel, which still relies heavily on expert customer service in sports retail. (McKinsey, 2024b)

Outdoor brands leveraged and even created this hype around outdoor sports to sell products which were first relegated only to a very small niche of enthusiasts. Brands such as Arc'teryx and Salomon used trends such as Gorpcore and sold high-tech mountaineering jackets and trekking shoes as everyday pieces. Salomon started a stable collaboration with the avant-garde fashion brand Maison Margiela for capsule collections based on outdoor garments. Amer Sports, which owns both brands, has grown by over 23% in revenues already in 2025, mainly caused by the momentum gained by the two outdoor brands (AMER Sports, 2025; Kwon, 2025; Schulz, 2024). Hoka, a leading ultramarathon footwear brand, saw its high-performance running shoes gain popularity among nurses and fashion-conscious consumers, driven by the distinctive sole design, striking aesthetics, and strategic brand partnerships. Hoka partnered with several fashion brands such as Marni, Nicole McLaughlin and END (HOKA, n.d.) which significantly contributed to the brand's 23% revenue growth in 2025 (Deckers, 2025). Furthermore, an even clearer example of how outdoor is now a popular and remunerative trend is Satisfy. The Parisian running brand, founded in 2015 by a fashion executive, focuses on very exotic and high-quality garments tweaked for running, sold at luxury prices, and marketed as fashion statements. This business model made Satisfy raise 11 million euros in 2024 after doubling the revenues achieved in 2023 (Guyot, 2025; Walsh, 2025). Having the exotic but still running-oriented products, Satisfy differentiates itself vigorously from high-end fashion and even common running brands by keeping close contact with the running community, organising frequent group runs and races across the world, preaching and building this sense of belonging beyond the brand and the exclusive graphic t-shirts. Satisfy embodies perfectly the modern outdoor standards of the new wave of outdoor enthusiasts and casual participants, who are interested in good-looking, everyday wearables for sports, but also seek communities (Schaneman, 2024) where they can share their passion for the sport and probably display their trendy apparel. The relevance of these brands and sports trends is confirmed by 2025 market projections, which show that globally, outdoor sportswear and general sportswear are projected to grow faster in retail sales compared to fashion (McKinsey, 2024b) and that the smaller brands, including Arc'teryx, Hoka and Satisfy, are getting the most traction, generating most of the profits, over old players like Nike and Adidas (McKinsey, 2024b).

The cause of this significant market shift might be the massive rise in popularity in major markets like China and the USA. Trekking, running and trail running grew in popularity by over 100% in China (Taobao, 2024). In the US, research shows that outdoor participants are now over 181 million, representing 27.5 million additions since 2019 (Outdoor Industry Association, 2025; Ryan, 2025). In Europe, the growth in popularity of outdoor activities is less unequivocal, but it can be perceived more subtly in the habits of Europeans. Indeed, more than 30% of Europeans practise sports at least once a week (European Commission, 2022). In particular, the favourite places to practice sports are outdoors and parks (European Commission, 2022) and the most chosen sports include walking, jogging and cycling (Eurostat, 2019). Major European competitions saw an increase in first-timers and an increase overall in participants. The Paris marathon increased by 3000 subscriptions, with 51% of new marathoners, reaching 57 thousand participants in 2025 (Marathon de Paris, 2025; Rock, 2024). The UTMB, Ultra-Trail du Mont-Blanc, probably the most renowned ultra-trail competition in Europe, had an increase in its application numbers by over 30% (HOKA UTMB, 2025), highlighting again how much outdoor sports are becoming significant in the sports sector.

Besides the rise in popularity, there are major differences in numbers and needs of the outdoor consumer customer segments. Looking at a US-based study, generally, the expert and hardcore outdoor customers spend more, but they are only around 5% of the outdoor customers (Outdoor Industry Association, 2025). On the contrary, active and casual (e.g. novice) customers spend less and make up the rest of the outdoor market, with relatively balanced divisions between active and casual (Outdoor Industry Association, 2025). Therefore, the differing spending behaviours and needs of novice versus expert outdoor sports consumers represent a critical distinction that specialised outdoor sports retailers must consider in their service strategy.

As for any other consumer, the customer journey of the outdoor sports consumer is omnichannel (McKinsey, 2024a). They first browse sports stores but still prefer to buy online to get better deals (McKinsey, 2024). Numbers from Adidas and Nike describe that wholesale revenues are higher and grow faster compared to direct-to-consumer revenues (Adidas Group, 2024; NIKE, 2025), meaning that consumers are more willing to buy from third-party websites or stores where they can find better deals. This way of buying is reflected by the consumers' loyalty to brands in the sports section. European Sports consumers switch brands more frequently compared to other categories, such as electronics and DIY consumers (McKinsey, 2024a). For the typical European sports consumer, the brand is important, but as much as price (McKinsey, 2024a). The hardcore and expert sports consumers are slightly more selective; they focus more on the quality of the product, the technologies and sustainability, but then again, retail price is the decisive factor when it comes to buying (ISPO, 2024). On the other hand, the modern sports customers still value visiting sports stores for trying out the product and getting advice from the store staff (McKinsey, 2024a). This phenomenon suggests that sports customers still require the

interaction that physical sports retail provides, besides the brand they're selling, and that emotional and physical connection with the sports product is lasting, even in the modern customer journeys involving next-day deliveries and free try-outs. These conclusions are supported by the sports retail literature (Happ et al., 2021; Mao, 2021; Rahulan et al., 2013; Wills, 2017), which highlights that the interaction between staff and customers is essential for the latter's satisfaction, which then increases loyalty and share of wallet (Chang et al., 2015; Saricam, 2022).

The need for touch and interaction with retailers is probably keeping up the retail sports market, making brands and general retailers even expand their coverage across Europe. Looking at the data, European retailers are planning to expand their networks by between 10% and 30% in the next 5 years (CBRE, 2024). The European Sports retail market, specifically, is leveraging this momentum, growing its revenues that are forecast to reach €98.7 billion in 2025 (IBISWorld, 2025). This physical retail landscape includes several different kinds of outdoor stores: brand-owned stores, generalist sports retailers, and smaller specialised multi-brand stores. Brand-owned stores are operated by a single entity retail format like Nike or Salomon and focus on delivering a pure brand experience. Generalist retailers, such as Decathlon, cover a vast range of sports with an emphasis on accessibility and price. Finally, small specialised multi-brand stores concentrate on a specific sport like running or climbing, offering a curated selection from various brands. In markets such as the Netherlands, these specialised multi-brand stores are highly appreciated, primarily for the breadth of choice they offer. This preference is confirmed by market data showing that both specialised and multi-brand formats are preferred retail channels (Statista, 2025), providing them with a critical lifeline against powerful brand-owned stores. This preference

for smaller specialised retailers is further amplified by the strategies of major players like Nike and Adidas. As these giants increasingly focus on their wholesale and direct-to-consumer e-commerce channels (Adidas Group, 2024; Haleem, 2025), they consequently create a strategic opening for multi-brand retailers. Examining Nike as the market leader reveals their strategic pivot toward e-commerce at the expense of traditional retail (Giunco, 2024). This shift reflects the fundamental difference between sports brands and specialised retailers. Sport brands can rely on wholesale and their ability to generate trends and sales, therefore sacrificing retail. Such large multinational companies focus on broader topics such as market penetration strategies, to attract massive numbers of new consumers, who then turn into loyal customers (Sharp, 2017). At the same time, they possess the budgets to understand customers' sentiment and unmet needs. As the interviews for this study revealed, smaller, regional or national specialised retailers have a reactive and basic strategy. Their most effective approach remains interaction with customers and their loyalty. Also, such smaller store chains implemented the analysis of sales data to refine their strategies, but they often lack the margins and time necessary for comprehensive consumer research. Smaller specialised outdoor retailers could take advantage of the rise of sports retail, but must find ways to compete, leveraging the consumer needs for interaction.

From this analysis is clear that in specialised outdoor sports stores the needs for expert advice and the needs for lower prices are clashing. When can the in-store experience make up for the higher price? Which elements of the interaction with the staff lead to satisfaction of the modern sports customer, and how do these differ between hardcore enthusiasts and casual or beginner consumers? This was the premise of this study, which tries to offer insights into the key strengths and weaknesses of specialised outdoor sport retailers.

The Entire European Sports Retail Market

Excluded:
- Generalists (e.g., Decathlon) cover a vast range of sports with a focus on price.
- Brand-Owned Stores (e.g., Nike, Salomon) deliver a single-brand experience.

Small Specialised Outdoor Sports Retail
- **Small Scale: Independently owned or small chains (1-10 stores).**
- **Specialised on niches like running, trekking or trail running.**
- **Offer a curated selection from various outdoor brands.**

Figure 1: *The Scope of this study*

Literature Review

2 Literature Review

2.1 How literature was retrieved

The core literature was collected using Happ et al., (2021), Jamal & Naser (2002) Lemon & Verhoef (2016) and Verhoef et al., (2009) as a base core literature. AI tools such as Connected Papers and Research Rabbit (see Appendix G) were used to map relevant literature related to the core papers and extend the knowledge of the different topics.

2.2 Customer Experience in Retail

To understand the context of the customer experience in small specialised outdoor sports retail, it's necessary to first understand: What is customer experience, what are its fundamental components and why retailers should consider such components.

2.2.1 Customer Experience

Customer Experience or CX originated from Marketing literature which has investigated this concept from different perspectives since the 1960s (Lemon & Verhoef, 2016). CX can be understood as a customer's journey with a company or a brand which unfolds over time across multiple touchpoints throughout the purchase cycle (Jain et al., 2017; Lemon & Verhoef, 2016; Nam & Kannan, 2020). Generally, literature acknowledged that CX is a holistic multidimensional concept, which involves different responses to experiences (Lemon & Verhoef, 2016). These responses are defined as *dimensions*, and their analysis and names vary slightly, depending on the approach of the scholar (Brakus et al., 2009; Jain et al., 2017; Parasuraman, 1988; Verhoef et al., 2009).

Probably the most renowned and used approach to analyse CX is Service Quality (Lemon & Verhoef, 2016; Roberts et al., 2014) or SERVQUAL model and scale, developed by Parasuraman, Zeithaml, and Berry (1988). Service marketing was originally a distinct discipline from traditional marketing, where the emphasis was put on marketing services and not goods. The original SERVQUAL scale was tested across a broad spectrum of services and touchpoints, such as banking, credit card services, appliance repair and maintenance, and long-distance telephone companies (Parasuraman, 1988), thereby suggesting its generalizability across very different settings. Indeed, the SERVQUAL scale has been used abundantly to measure and understand CX in retail (Brady & Cronin, 2001; Saricam, 2022) leading to new versions of the scale, adapted specifically for this context (Dabholkar et al., 1996; Lee & Lee, 2013; Martinelli & Balboni, 2012; Rahulan et al., 2013; Zhang et al., 2019). Besides the minor differences between the different SERVQUAL scales, the evaluation of CX is performed through different dimensions that incorporate different components of the service delivery, such as the

look of the store, performing the tasks correctly or performing tasks on time. This approach gave the authors the first general outline of how retail CX could be evaluated through different dimensions that cover different reactions to the CX. On the other hand, SERVQUAL measurements lack depth in terms of knowledge and interaction exchanged. (e.g., what was interesting about the experience, what element of the interaction was more important, etc.). Hence, they were considered not applicable enough to give detailed insights to retailers on what kind of elements of the interaction with staff are appreciated and what kind of knowledge is valued by different customers.

2.2.2 Retail Customer Experience

Looking specifically at the CX in retail, Verhoef et al. (2009) gave depth to the CX dimensions. The authors focused on 5 core dimensions introduced by previous marketing scholars (Gentile et al., 2007; Lemon & Verhoef, 2016; Schmitt, 1999; Verhoef et al., 2009) and translated them into the physical retail context. These dimensions are cognitive, affective, emotional, social, and physical. The study introduced one core pillar of this research, the social dimension. Indeed, the authors explain roughly how the customers' interaction with one another and with staff affects their CX, but without giving an in-depth explanation of how this happens. Besides, looking at the dimensions, Verhoef et al. (2009) offers a refined construct to understand CX, and the concepts, per se, are useful to progress in the literature. On the other hand, from a down-to-earth perspective, the paper doesn't offer insights into what these dimensions are and doesn't offer any metrics to verify or analyse these concepts.

Indeed, Bustamante & Rubio (2017) took Verhoef et al. (2009) as a conceptual model, offering more advanced definitions of the dimensions, proposing the In-store customer experience scale, or ISCX. The authors validated the cognitive, affective, social, and physical dimensions proposed by Verhoef et al. (2009) and defined them more concretely, along with proposing a method for measuring their impact. Each dimension covers cognitive, affective, social and physical aspects of the CX through different questions or items: The ***cognitive experience*** relates to how the store's environment and products stimulate a shopper's mind. It's about whether the displays, information, or overall store design encourages thinking, reflecting, awakening curiosity, and even inspiring new ideas and creativity, transforming the shopping experience into a mentally engaging activity. The affective experience captures the emotional and mood responses provoked by the store. This concept builds on Verhoef et al.'s (2009) emotional dimension and was further revised by Bustamante and Rubio (2017) to include both moods and emotions as a single, overarching construct. The revised affective dimension focuses on specific feelings like happiness, excitement, optimism, and a sense of thrill that arise from interacting with the environment of the store and the display of the products, and how these emotions influence customers' behaviour. This unified approach is justified because both dimensions include subjective feelings evoked by in-store stimuli and separating them

is often impractical. This allows the analysis to focus on the more intense emotions like excitement, which are more descriptive of the customer experience than generalised moods. The ***social experience*** focuses on the measure and power of the interactions with other people within the retail setting. This includes not only customer engagement with staff, such as receiving advice or sharing opinions, but also interactions with other customers and the sense of community that the customer might feel from this interaction. Finally, the physical experience refers to physiological responses to the store's environment. It examines whether the physical attributes of the space, like lighting, temperature, spaciousness, or even the tactile qualities of products, make you feel comfortable, energised, and vital, or contrarywise, create sensations of tension or discomfort, directly impacting the well-being during the visit. These dimensions offered the authors a good conceptual base, combining concreteness and depth of analysis. Compared to the SERVQUAL dimensions, which provide insights into functional features and benefits, ISCX dimensions analyse experiences from an extended sensory, emotional, cognitive, behavioural and relational perspectives, which surpass and extend the functional ones (Bustamante & Rubio, 2017). Therefore, the ISCX from Bustamante & Rubio (2017) and Verhoef et al. (2009) were used as first components in the authors' conceptual framework for this purpose. For this research specifically, we focused only on the cognitive and social dimensions as they directly relate to knowledge sharing between staff and customers. This focused approach aligns with the authors' goal of providing actionable insights and recommendations for small specialised outdoor sports retailers. Nevertheless, an in-depth explanation about how the authors employed these two dimensions will follow in the Method section.

2.2.3 Retail Customer Experience and Satisfaction

Discussing Marketing literature and CX dimensions is fine for the sake of literature, but again, taking a retailer's perspective: Why at all should outdoor sports retailers consider reading any of this literature, including this study, to improve their local store that seems to work just fine?

Many Marketing scholars have investigated how CX dimensions can be used to retrieve concrete insights for retailers. Indeed, many focused on how dimensions affect major evaluative metrics such as satisfaction, loyalty, share of wallet and Net Promoter Score (Happ et al., 2021; Hunneman et al., 2015; Keiningham et al., 2007; Liu-Thompkins et al., 2022; Pei et al., 2020) but what are those metrics, and how can small specialised sports retailers approach them through satisfaction?

Among all the measurements, customer satisfaction is probably the most standard practice in Marketing literature. It has been studied how satisfaction serves as a foundational element which then drives other major metrics of CX (Lemon & Verhoef, 2016). Specifically, satisfaction has also been ap-

plied as a primary measure for assessing retail CX (Fränzel & Swoboda, 2024; Friedman et al., 2011; Happ et al., 2021; Huddleston et al., 2009; Jain et al., 2017; Nicod et al., 2020). The literature acknowledges that this metric is influenced by both cognitive and emotional elements. Customer satisfaction refers to a customer's judgment and emotional response to a product or service experience (Burns & Neisner, 2006; Jamal & Naser, 2002; Lemon & Verhoef, 2016). It's essentially how happy a customer is after an interaction or purchase(Pei et al., 2020). This feeling arises from comparing what they expected to get from the service or product with what they actually received, and assessing with a cognitive evaluation whether the service has met their demands (Lemon & Verhoef, 2016; Pei et al., 2020). If the performance meets or exceeds expectations, the customer is likely to be satisfied. Evaluating satisfaction requires a short set of questions, usually between 3 and 5, which involve both cognitive elements (e.g., "*The overall quality of the services provided is excellent*") and emotional reactions (e.g., "*I feel good about coming to XYZ for the offerings I am looking for*") (Happ et al., 2021; Jamal & Naser, 2002; Saricam, 2022).

Satisfaction has been proven to be connected to another metric originated from marketing literature, and particularly popular among companies, which is the Net Promoter Score (NPS) (Lemon & Verhoef, 2016). This single-item measure typically asks customers about their likelihood to recommend a company to others. NPS is a customer loyalty metric conceptualised by Frederick Reichheld to provide a simple, actionable indicator of a firm's growth potential. It is derived from a single survey question asking customers about their likelihood of recommending the company to a friend or colleague. The metric's primary utility is to serve as a simple and actionable management tool to provide direct correlation between customer loyalty and profitable growth, enabling an entire organisation to focus on improving customer relationships (Happ et al., 2021; Keiningham et al., 2007; Reichheld, 2003). A higher NPS is associated with increased customer loyalty and positive word-of-mouth, which can drive new customer acquisition (Happ et al., 2021). Higher satisfaction has been proven to be directly related to higher NPS (Happ et al., 2021), highlighting how satisfied customers are a valid starting point to assess the efficacy of the CX, which can then be extended with other metrics such as the NPS.

As noted in one of the qualitative interviews, another metric, which seems to be quite important for smaller sports retailers and which is driven by satisfaction, is loyalty. Loyalty describes a consumer's sustained preference for, consistent repurchases from, and ongoing support for a particular brand, product, or service (Liu-Thompkins et al., 2022). The connection between loyalty and satisfaction is widely supported in the literature. When customers are satisfied with their experiences, they are more likely to become loyal (Chatzoglou et al., 2022; Happ et al., 2021; Keiningham et al., 2007; Yesmin et al., 2023). This relationship suggests that positive CXs and the resulting satisfaction build the foundation for long-term customer relationships. A high level of customer satisfaction is consistently identified as a primary driver of loyalty, influ-

encing customers' willingness to make future purchases and recommend the business (Chatzoglou et al., 2022; Yesmin et al., 2023). For retailers, loyalty is crucial for achieving competitive advantage and long-term success. A loyal customer base contributes to increased market share, sales, and profitability, as loyal customers are likely to spend more and provide positive word-of-mouth (Chatzoglou et al., 2022). Therefore, maintaining customer loyalty is considered a key challenge for retailers in today's competitive environment (Liu-Thompkins et al., 2022).

Another key outcome linked to satisfaction is share of wallet (SoW), which refers to the proportion of a customer's total spending in a specific category that they allocate to a single retailer (Friedman et al., 2011; Hunneman et al., 2015; Keiningham et al., 2015). Intuitively, a highly satisfied customer should dedicate a larger portion of their budget to the retailer that satisfies them. Indeed, research consistently finds a positive relationship between satisfaction and SoW. For instance, studies in speciality retail and grocery contexts confirm that higher satisfaction is significantly correlated with a greater Share of Wallet (Friedman et al., 2011; Hunneman et al., 2015; Keiningham et al., 2015).

With this study, we'd like to offer specialised outdoor sports retailers a hint of what can be obtained by measuring and understanding satisfaction, which drives, as the authors found in the literature, other major metrics of CX (Happ et al., 2021; Hunneman et al., 2015). By focusing on enhancing customer satisfaction, small sports retailers can foster stronger loyalty, greater customer Share of Wallet (SoW) and increased positive recommendations (NPS), ultimately contributing to sustainable business growth (Friedman et al., 2011; Saricam, 2022).

2.2.4 Retail Customer Experience in Small Specialised Sports Stores

Small specialised outdoor sports retailers, defined in Figure 1, offer a unique ground for researchers and retailers when looking at CX and satisfaction. Despite general customers being accustomed to lower prices and the speed of e-commerce, for outdoor sports customers personal service quality significantly outweighs digital solutions in creating exceptional CX (McKinsey, 2024a) , driving them to keep visiting their local running store. This peculiar phenomenon is possibly connected with three main aspects that characterise small specialised outdoor sports retailers, which are: the high expertise needed, the emotional bonding between customer and outdoor sports, and the different CXs between generalist and specialist retailers.

The first aspect to consider in outdoor sports, but also in sports in general, is the expertise needed during the sport itself and therefore during the interaction when buying outdoor equipment. In retail, the distinction between generalist outlets, such as traditional department stores or discount stores, and speciality apparel stores defines in advance cus-

tomer expectations and the significance of service quality. Customers generally hold lower expectations for extensive customer service at discount stores, while they anticipate more comprehensive service from speciality apparel retailers (Paulins & Geitsfeld, 2003). Speciality store shoppers have been found to judge store personnel as a more important factor in their decision to patronise a store than shoppers at department or discount stores (Gagliano & Hathcote, 1994). This aligns with findings that customers of larger, generalist formats tend to place less emphasis on staff service compared to their speciality store counterparts (Huddleston et al., 2009; Shergill & Chen, 2008).

This effect is present and pronounced with customers in specialised outdoor sports stores who frequently seek in-depth product knowledge and specialised guidance from salespersons. For customers who may have inadequate knowledge about highly technical or specific products, the expertise offered by store personnel provides a crucial differentiator (Friedman et al., 2011; Mao, 2021). This is because sports products, such as activewear, equipment and shoes, often involve complex technical features and directly impact a customer's performance or safety (Boroujerdi et al., 2020; Happ et al., 2021). In these settings, customers desire professional advice that brings confidence in their purchasing decisions, especially for items like specialised running shoes, where precise fit and performance are crucial (Underwood et al., 2001). The ability of sales staff to provide expert analysis, demonstrate product functionality, fit, and offer tailored recommendations based on a firsthand experience of both the product and the customer's specific needs becomes essential (Boroujerdi et al., 2020; Happ et al., 2021). This reliance on expert human interaction means that knowledgeable and credible staff are not just a preference but a prerequisite for a satisfactory CX in physical sports stores (Happ et al., 2021; Mao, 2021; Pei et al., 2020). Indeed, the perception of staff service has a direct positive influence on customer satisfaction in this context, suggesting that the human interaction, enriched by specialised knowledge, is a powerful differentiator against e-commerce (Pei et al., 2020). This assumption highlights the core customer need in small sports stores, which is a high level of service funnelled through a high level of expertise in terms of technology and experience with the products.

Building on the importance of expertise, CX in sports retail is shaped by a deeper connection between the products sold and the communities they represent. Unlike many other retail sectors, sports products, such as team jerseys, but also specialised equipment such as running shoes or even supplementary gels, function as powerful symbols of identity and validate community participation (Schwarz et al., 2022). Consumers build and express their identity through their choice of these items, using them to signal affiliation and authentic membership within sports subcultures (Schwarzenberger & Hyde, 2013). Even in sport-based subcultures that are not centred on a single commercial brand, the use of specific branded sportswear and equipment becomes a critical way to communicate affinity and belonging within the group (Schwarzenberger & Hyde, 2013). This dynamic offers

the outdoor sports marketplace a rare opportunity to foster a sense of community and solidarity, providing clear symbols that bring people together into a group identity. (Underwood et al., 2001). The pervasive and universal nature of sport allows consumers to personally identify with these products in a way few other businesses can achieve (Karg, 2022). Consequently, because these products are essential for expressing identity and entering a desired community, a customer's need to understand and know about them is not just functional; it is deeply personal and consequential. This enhanced need for knowledge places higher importance on expertise. The sports retailer is not just selling a product; they are guiding the customer toward the right symbols and tools to affirm their identity, making staff's expertise a critical component in facilitating this powerful emotional and social connection (Happ et al., 2020; Karg, 2022).

The particularities of outdoor sports stores highlight how much expertise is significant in the interaction between customers and staff. The literature acknowledges that expertise is needed, especially by retailers (Boroujerdi et al., 2020; Chang et al., 2015; Happ et al., 2021; Mao, 2021). Sports expertise, as the authors highlight in this section, is also sought on the part of customers, together with being part of a community, deriving a sense of identity from subculture affiliation and shared symbols (Underwood et al., 2001; Schwarzenberger & Hyde, 2013). This makes the purchasing experience deeply personal (Karg, 2022). Therefore, if the interaction in specialised and small outdoor sports stores is so essential and the interaction is built on expertise, what's the effect of the customer's expertise during the interaction with the staff? And how can specialised sport retailers leverage it?

2.2.5 Concluding Summary

To summarise, this section of the review has established that Customer Experience (CX) is a multi-dimensional concept, with the cognitive and social dimensions being particularly significant for understanding knowledge exchange in physical retail. While various metrics exist, customer satisfaction emerges as a foundational and accessible gauge for retailers, directly influencing critical outcomes like loyalty and Share of Wallet. The unique context of specialised outdoor sports retail amplifies the importance of these elements, as customers actively seek expertise not only for functional guidance but also to affirm their identity within a community. Therefore, the authors will further describe the effect of customer expertise during staff-customer interactions, aiming to display how small specialised sports retailers can leverage this dynamic to enhance customer satisfaction.

2.3 Customer Expertise in Retail

Expertise plays a crucial role in the interaction between staff and outdoor customers, potentially shaping customer needs and satisfaction. In the specialised world of outdoor sports, the products are technical, they involve performance and intimate connections, and customers usually arrive with a sig-

nificant level of knowledge.

This reality leads to a crucial question for retailers and researchers alike: What does the existing literature tell us about the effects of the customer's expertise on retail? This section examines how a customer's level of knowledge is understood to influence their in-store needs and their ultimate satisfaction with the service they receive.

2.3.1 Customer Expertise

In the context of consumer behaviour, *expertise* is recognised as "*the ability to perform product-related tasks successfully*" (Alba & Hutchinson, 1987). It is important to distinguish between two related but separate concepts, which are usually used as synonyms, but are positioned differently on the scale of knowledge: namely, familiarity and expertise. Familiarity can be described as the quantity of a consumer's experiences with a product category. It is simply the number of times someone has been exposed to or interacted with a product, which can include everything from seeing advertisements and browsing in a store to purchasing and using the item (Alba & Hutchinson, 1986). A person who has seen many ads for new running shoes has a higher familiarity with the category.

Expertise, on the other hand, is about the quality and consequence of those experiences (Alba & Hutchinson, 1987). This goes beyond the number of interactions, and it reflects what a consumer has learned and how efficiently they can process information. An expert not only has experience but has developed a sophisticated set of mental skills. This includes having a greater ability to gather new information and to discriminate between what is significant and what is not significant when making a purchase (Jamal & Naser, 2002). For example, while a familiar runner knows solely some midsole names, an expert understands how specific midsole compounds relate to performance on the road and can filter out marketing jargon from meaningful technical details.

The ability to perform tasks successfully is rooted in how expert and novice customers think differently. Novices who lack well-developed knowledge structures, tend to rely on simple, easily processed cues or mental shortcuts, such as brand name, price, or country of origin, and then make judgments (Jamal & Anastasiadou, 2009). Their decision-making is often less systematic. Experts, in contrast, possess more developed conceptual frameworks, allowing them to engage in more analytical processing. They can better understand the meaning of new product information and are likely to have superior knowledge of existing alternatives in the market (Jamal & Anastasiadou, 2009; Jamal & Naser, 2002).

Expertise concepts have very different facets in the outdoor sports sector. In this context, expertise development covers technical understanding of products functionalities, performance attributes, materials, and design features, as well as cultural knowledge about teams, statistics, and traditions (Funk, 2016; Karg et al., 2022; Underwood, 2001). Looking at

the retail CX, sports customers with varying expertise levels demonstrate different knowledge-seeking behaviours in retail environments. In general, outdoor sports customers seek hands-on product experiences that allow evaluation of tactile qualities, movement capabilities, and functional specifications (Happ et al., 2021; Shi, 2024). Literature also suggests that experienced athletes (expert customers) place particular emphasis on comprehensive product testing and specialised technical advice to optimise performance (Happ et al., 2021). Also, probably due to their deep connection with sports as an expression of identity (Schwarzenberger & Hyde, 2013; Shi et al., 2024; Underwood et al., 2001), many sports consumers often believe they are always the most expert when discussing any significant topic related to their favourite sport (Schwarz & Hunter, 2008). Therefore, sports retail staff serve as crucial knowledge sources, providing technical advice that builds customer confidence in product performance (Happ et al., 2021; Wills, 2017), but they must also match the high consideration of customers' expertise level. This results in expertise expectations towards the staff (Chiou et al., 2002; Joy et al., 2023). Indeed, valued staff knowledge in outdoor sports retail covers detailed product attributes, individual performance needs (Chang, 2015), quality assessment, technical design choices (Schwarzenberger, 2013), and cultural understanding of sports communities (Underwood, 2001). This expertise dynamic deeply influences how consumers interact with retail environments, particularly their expectations and evaluations during interactions with staff.

This multifaceted expertise requirement means that specialised outdoor sports retail staff should be highly attentive to expertise in general. The staff should combine technical product knowledge, practical experience, quality assessment capabilities, and cultural understanding to meet the expectations of diverse sports consumers. On the other hand, to the authors' knowledge, the literature doesn't offer specific insights linked to different expertise levels in the sports world. From a retailer's point of view, it's unclear which specific areas different types of expert customers prefer to focus on.

2.3.1.1 How Expertise is Acquired Today

Of course, expertise is gained quite differently compared to when Alba & Hutchinson (1987) published their seminal research. Indeed, a consumer today may have a higher level of expertise and familiarity with products due to traditional ways of gaining knowledge but also the increased amount of "content" and advertising to which they are exposed, due to social media algorithms.

The way consumers gain familiarity and develop expertise has been greatly reshaped by the digital era. The internet has democratized access to any information, making it easier than ever for consumers to achieve familiarity with a massive range of products and brands, expanding the concept of expertise development conceptualised by Alba & Hutchinson. In this environment, the expertise framework has evolved to

one which is less about simple information recall and more about the ability to navigate and evaluate the information landscape (Wineburg & Mcgrew, 2017). Modern expertise today is enriched through different practices, besides first-hand experiences (Alba & Hutchinson, 1987). One of which is practice and repetition on digital platforms. On online review sites, for example, a user's expertise is often defined by the act of generating numerous reviews. This process of repeatedly articulating and justifying evaluations serves as a form of practice that is crucial for developing expertise (Alba & Hutchinson, 1987; Nguyen et al., 2021). This practice leads to modern expert abilities, such as being able to recall almost all existing brands from memory and automatically knowing which brand to buy (Barrutia et al., 2015). Also, product reviews are shared through online communities and platforms, such as Reddit or YouTube which function as powerful learning mediums where consumers capitalise on the diverse skills and experiences of others to solve problems and make informed decisions (Jayanti & Singh, 2010). This is particularly evident in the sports domain, where consumers are often highly engaged and face a wide range of product choices (Funk, 2017), therefore, these platforms help to engage customers' knowledge and ultimately drive purchase. Technology has made vast amounts of information easily accessible from reviews, social media, and blogs making the consumer's ability to evaluate product attributes a critical part of their decision-making process (Funk, 2017).

Along with the influence of the internet and social media, today sports and outdoor sports expertise develops through different stages. Consumers begin with a general awareness of a sport, through practising or watching it, and then, through learning, socialisation, increased exposure through social media and online communities, acquire knowledge about the attitudes, values, and history appropriate to that community (Cunningham et al., 2016; Funk, 2017). As they progress from simple awareness to psychological attachment and commitment, consumers' understanding of sports history and present challenges grows, allowing them to access the deeper associations related to their fandom and therefore link it strongly to their identity (Cunningham et al., 2016; Kahle et al., 2011). Furthermore, sports literature also recognises a distinct form of expertise related to personal experience with products. For specific products like running shoes, the ultimate authority on performance and suitability is the individual user. Because factors like biomechanics and personal comfort are so unique, the consumer must become their own expert advisor, as their individual experience is the ultimate test of the product's value to make a successful purchasing decision (Werd, 2017). Therefore, modern expertise in sports and outdoor sports is a multifaceted concept, encompassing both a deeply internalised, self-perceived knowledge as a spectator but also practical, singular expertise as a user.

In essence, modern sports expertise is accumulated at an accelerated pace through digital interaction. Unlike the experience-based learning of the past, described by Alba & Hutchinson (1987), today's sports consumers are massively exposed to more material and they become sports experts

by combining vast amounts of online information with their own practical needs and first-hand experiences. This fusion of digital knowledge and personal experiences defines the modern sport expertise and modern sport customers.

2.3.2 Effect of Expertise on Retail CX

Distinguishing clearly expertise from familiarity (Alba & Hutchinson, 1987) also determines the recognition of different levels of such expertise. The differences between expertise levels in terms of how to process and use knowledge, make customers alter their needs, expectations and specifically how they evaluate the retail experience.

This variation can be understood by distinguishing between two customer extremes in general retail: novices and experts. Novices, as they cannot comprehend complex product facts, have needs that are centred on and easily satisfied by non-functional attributes and therefore the opinions of salespeople can be more relevant (Jamal & Anastasiadou, 2009). For these customers, preference and hence satisfaction are often driven by how well a brand aligns with their projected self-image rather than the brand's advanced technicalities (Sohail & Awal, 2017).

Expert customers, by contrast, since they engage in a more rational and cognitive evaluation process, their needs shift away from superficial cues toward a product's core functionalities and capabilities (Jamal & Naser, 2002; Sohail & Awal, 2017). Experts use efficient analytical approaches to assess an offering, focusing on its performance and technical merits (Jamal & Anastasiadou, 2009). These differences mean that novice and expert customers respond differently to the retail environment (Joy et al., 2023; Latour & Deighton, 2019). Consequently, creating a positive customer experience requires staff to have the ability to recognise and adapt to these varying needs (Joy et al., 2023). Furthermore, the nature of their needs evolves with knowledge; low-knowledge customers may focus on the quality of a single service encounter, while high-knowledge customers look for more enduring, relational attributes like trust and commitment (Chiou et al., 2002).

2.3.2.1 Variation in Needs for Sports Customers

In the sports and outdoor sports context, expertise and the needs of different levels of expertise have been less considered or generally lack in-depth analysis. Specifically, the variation in needs has been studied not directly through expertise, but through the lens of sports involvement, which is a parallel construct to expertise that still alters the CX through a moderation effect (Shi, 2024). Analysing sport environments like events and stores, the literature has concluded accidentally what these needs might be, but without actually validating these results. At the same time, the requirements of staff to meet those needs have been studied from a managerial perspective, again without giving much precise practical consideration of the outcomes

Sports involvement reflects an individual's interest, participation, emotional connection and the centrality of sport to their identity (Shi, 2024). Consumers with low sports involvement, much like novice retail customers, possess simpler mental models for the sports domain. Consequently, their experience is shaped by expectations and needs for guidance, clarity, and a welcoming environment. They are likely, together with novice customers, to rely on peripheral elements and derive value from ancillary service experiences rather than the core product itself (Yoshida, 2017). This could translate into a need for a well-organised store, or friendly and approachable staff, and easy-to-understand information. Because their knowledge is limited, they need validation and reassurance that the product they are choosing is the "right" one, a need fulfilled through straightforward advice and a positive, non-intimidating atmosphere (Shi, 2024).

Conversely, consumers with high sports involvement have developed complex knowledge structures and predictive models for processing information (Shi, 2024). This creates a fundamentally different set of expectations and consequently of needs, centred on depth, recognition, and intellectual stimulation. Their focus shifts from the store environment and basic services to emotional satisfaction or personalised interactions, core products, and the substance of the interaction (Yoshida, 2017). In practical terms, the authors can assume that highly involved sports customers will have a distinct need for staff who can engage in a high-level, peer-to-peer conversation about nuanced technical specifications, which can emotionally engage them. Their journey of gaining knowledge has made them highly accustomed to the nuances of their sport (Kahle et al., 2011), and therefore they probably require an in-store experience that matches this level of sophistication. These, however, are assumptions and not quantitative conclusions of the literature, due to the lack of actual validation of specific needs and topics that sports customers with high and low involvement, would like to satisfy.

Existing sports literature has addressed the nuanced interactional needs of sports consumers with high and low sport involvement only qualitatively. For instance, it is assumed that highly involved consumers require more than basic product information; they seek experiential validation through physical testing to assess "*feel*" and performance (Happ et al., 2021) and credible advice from staff who are perceived as authentic peers, such as an "*actual runner*" (Mao, 2021; Wills, 2017). Furthermore, it is suggested that they need dialogue that acknowledges the "*science*" behind a product and engages with the "*lore and statistics*" of their sport, thus affirming their social identity (Schwarzenberger & Hyde, 2013; Underwood et al., 2001). On the other hand, customers with a lower level of involvement and expertise might have different needs towards these interactions. However, these descriptions of customer needs, while insightful, are largely derived from qualitative studies, theoretical propositions, and expert assumptions rather than direct quantitative testing.

Having confirmed that assumptions don't find quantitative support from sport literature that focuses on customers, the authors also looked at the sport's managerial literature, which has investigated the requirements of different kinds of sport customers from the retailers' perspective. Studies by Bonfanti and Yfantidou (2021) and Boroujerdi et al. (2020) underscore that attributes such as staff passion, expertise, and customer orientation are critical for creating a memorable shopping experience and fostering loyalty. However, while these works generally mention what is important, their managerial implications often remain at a high level of abstraction. For instance, suggestions to "*invest in expert, passionate personnel*" (Bonfanti & Yfantidou, 2021) or ensure sellers have strong "*information knowledge*" and "*ethical behaviour*" (Boroujerdi et al., 2020) provide broad strategic direction but offer limited practical guidance on the specific topics and methods for staff to satisfy customers.

This literature highlights an effect that has not been studied fully yet in the outdoor sport sector. In the general retail context, it is understood that expertise plays a crucial role when focusing on satisfaction and customer needs. Looking specifically at small specialised outdoor sports retail though, in the authors' understanding, it's clear that expertise plays a central role in CX, especially during the interaction with staff, but the literature does not acknowledge specifically how this expertise impacts their CX, thereby missing an essential component of CX. Furthermore, the varied needs of differing levels of customers' expertise during interaction with staff are only to some degree acknowledged. This reveals a gap in both the literature and general knowledge for specialised sports retailers, whose main focus is interaction and who would benefit greatly from such literature.

2.3.2.2 Moderating Effect of Expertise on Satisfaction

The differences in needs and evaluation criteria between novice and expert customers lead the authors to study the effect of expertise on satisfaction. This effect has been studied by multiple authors through the lens of *moderation*. Specifically, how expertise could have a moderating effect on satisfaction.

A moderation analysis explains how the relationship between two variables changes depending on a third variable. Usually, understanding moderation helps researchers identify specific conditions where relationships between variables strengthen, weaken, or change direction, enabling precise predictions about when effects will occur and with what magnitude (Hayes, 2022; Hair, 2019).

Looking at CX in retail, research suggests that expertise moderates negatively the relationship between retail dimensions and satisfaction (Chiou et al., 2002; Jamal & Anastasiadou, 2009; Jamal & Naser, 2002; Sohail & Awal, 2017), meaning that as expertise increases, the positive impact of the CX dimensions on satisfaction decreases. This moderation operates through expectation formation and disconfirmation

processes, where expert customers develop higher expectations regarding service quality (Jamal and Anastasiadou, 2009), making satisfaction more difficult to achieve as the gap between anticipated and actual service quality widens (Churchill & Surprenant, 1982; Evans, 2006; Jamal & Anastasiadou, 2009). This concept is known as the disconfirmation paradigm. Because experts possess superior knowledge and abilities, they are likely to have significantly higher and specific expectations from service providers (Jamal & Anastasiadou, 2009). According to the paradigm, these elevated expectations make experts inherently more difficult to satisfy. (Churchill & Surprenant, 1982; Evans, 2006; Jamal & Anastasiadou, 2009; Jamal & Naser, 2002).

This moderation can be understood through how satisfaction is formed. For novice customers with limited knowledge, satisfaction is heavily influenced by self-image congruence or other peripheral cues (Sohail & Awal, 2017). For expert customers, these factors become less important, and their satisfaction instead depends on fulfilling functional and performance-related criteria. Similarly, as described in the sports retail literature, highly involved consumers who behave like the experts described by Alba & Hutchinson (1987), are more sensitive and critical when evaluating marketing efforts and retail environments (Koo & Lee, 2019). For these highly involved individuals, satisfaction is less likely to be influenced by superficial cues. Instead, their satisfaction relies on fulfilling functional and performance-related criteria, such as product quality, technical expertise of staff, and the store's authentic connection to the sport. As Koo and Lee (2019) suggest, a poor fit between a store's offerings and their higher expectations moderate their satisfaction, leading to scepticism and lower satisfaction. Conversely, consumers with low sports involvement tend to process their experiences more superficially. Their satisfaction is often shaped by accessible signals like store aesthetics, brand image, and overall service friendliness rather than technical details. Because they are less invested in the technical aspects of the sport, the negative moderation effect on satisfaction is not as strong as it is for highly involved customers (Koo & Lee, 2019). Therefore, the same in-store experience can lead to very different satisfaction outcomes, as the level of sport involvement, and thus expertise, moderates the criteria upon which customer judgment is based.

2.3.3 Concluding summary

Customer expertise is a sophisticated construct, distinct from mere familiarity, that profoundly shapes consumer behaviour, particularly in specialised retail settings like outdoor sports. While modern consumers develop expertise through diverse digital and social channels, the core distinction remains that experts process information analytically, while novices rely on simpler cues. This cognitive difference creates varying needs, with experts seeking in-depth, technology validation and novices prioritising guidance and self-image congruence. Although existing literature acknowledges that expertise negatively moderates satisfaction by elevating customer expectations, the specific needs of different expertise

levels within the sports and outdoor sports context remain under-explored.

This report aims to address this gap by investigating quantitatively: *How does customer sports expertise moderate the relationship between staff interaction quality and customer satisfaction in small specialised outdoor sports retail contexts?* Qualitative research was performed to support and expand the quantitative results. Ultimately, this report combines and discusses the results of the two studies, as explained in Figure 2. First, offering actionable insights for small specialised outdoor sport retailers who heavily depend on staff-customer interactions for their competitive edge, and second, broadening the existing knowledge in marketing and retail literature.
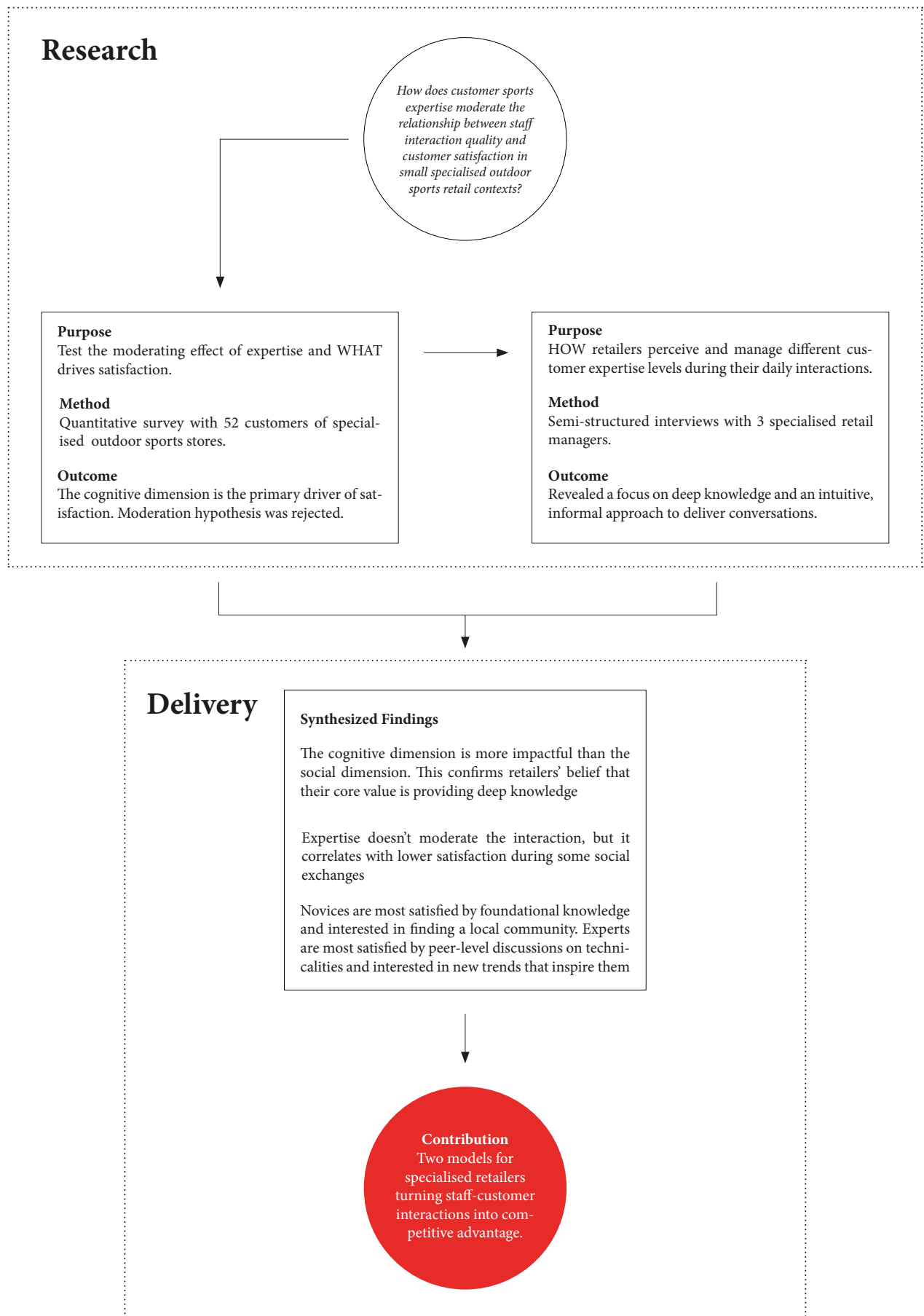
Research

How does customer sports expertise moderate the relationship between staff interaction quality and customer satisfaction in small specialised outdoor sports retail contexts?

Purpose
Test the moderating effect of expertise and WHAT drives satisfaction.

Method
Quantitative survey with 52 customers of specialised outdoor sports stores.

Outcome
The cognitive dimension is the primary driver of satisfaction. Moderation hypothesis was rejected.

Purpose
HOW retailers perceive and manage different customer expertise levels during their daily interactions.

Method
Semi-structured interviews with 3 specialised retail managers.

Outcome
Revealed a focus on deep knowledge and an intuitive, informal approach to deliver conversations.

Delivery

Synthesized Findings

The cognitive dimension is more impactful than the social dimension. This confirms retailers' belief that their core value is providing deep knowledge

Expertise doesn't moderate the interaction, but it correlates with lower satisfaction during some social exchanges

Novices are most satisfied by foundational knowledge and interested in finding a local community. Experts are most satisfied by peer-level discussions on technicalities and interested in new trends that inspire them

Contribution
Two models for specialised retailers turning staff-customer interactions into competitive advantage.

Figure 2: *The process adopted for this study*

Hypotheses

3 Hypotheses

This study builds upon the recognised importance of staff-customer interactions in specialised retail environments, particularly within the outdoor sports sector. Prior research consistently highlights the fact that knowledgeable staff and personalised service are crucial for enhancing customer satisfaction in stores selling technical and identity-linked products (Happ et al., 2021; Mao, 2021; Pei et al., 2020; Schwarzenberger & Hyde, 2013; Underwood et al., 2001). However, the existing literature also points to a significant variable influencing customer behaviour, which is customers' characteristic level of expertise.

Drawing from consumer behaviour theories, it is understood that experts and novice customers approach information, form expectations, and evaluate experiences differently (Alba & Hutchinson, 1987; Jamal & Anastasiadou, 2009; Jamal & Naser, 2002; Joy et al., 2023; Latour & Deighton, 2019). This distinction suggests that the effectiveness of a standard staff interaction might not be uniform across all customer segments. Therefore, this research aims to investigate whether customer's sports expertise alters the strength of the relationship between the quality of staff interaction and overall customer satisfaction. To go beyond the specific statistical result of the main hypotheses and give additional explanation to the retailers, alongside the main research question and hypothesis, two further exploratory questions were developed and are attached in Appendix A.

3.1 The Negative Moderation Effect of Expertise

The literature review establishes that in specialised retail the interaction between staff and customers is foundational. For products that are technical, performance-oriented, and tied to personal identity, the guidance, the opportunity to feel the product, and the knowledge provided by store staff are crucial drivers of customer satisfaction (Happ et al., 2021; Mao, 2021; Schwarzenberger & Hyde, 2013). A positive, informative exchange builds a customer's confidence and validates their decisions, leading to higher satisfaction (Chang et al., 2015; Saricam, 2022).

However, customers are not passive recipients in this exchange; as highlighted, they enter the store with varying levels of pre-existing expertise (Alba & Hutchinson, 1987). Novice customers rely heavily on staff for basic orientation, whereas experts have a deep understanding of technology, market options, and their own specific needs, which makes them more difficult to satisfy (Jamal & Anastasiadou, 2009; Jamal & Naser, 2002). This difference in expertise also fundamentally alters the dynamic of the interaction. Satisfaction is the result of comparing one's expectations to the actual service received (Churchill & Surprenant, 1982). The literature consistently argues that experts, under their deep knowledge, develop much higher and specific expectations (Chiou et al., 2002; Joy et al., 2023). They focus on a product's functional performance and are less influenced by simpler cues, making them critical evaluators and inherently harder to satisfy (Jamal & Anastasiadou, 2009; Sohail & Awal, 2017).

Therefore, while a positive interaction is beneficial for all customers, its relative impact on satisfaction is expected to be weaker for experts. Because their satisfaction is more influenced by their own high expectations, determined by higher expertise, the positive effects of the CX dimensions delivered through the interaction are likely to be diminished. This anticipated weakening of the relationship is expected to manifest as a negative moderation effect of expertise. The conceptual model is presented in Figure 3. Based on this reasoning, the authors propose the following hypothesis:

H1: The positive relationship between staff interaction and customer satisfaction is weaker for customers with higher sports expertise.
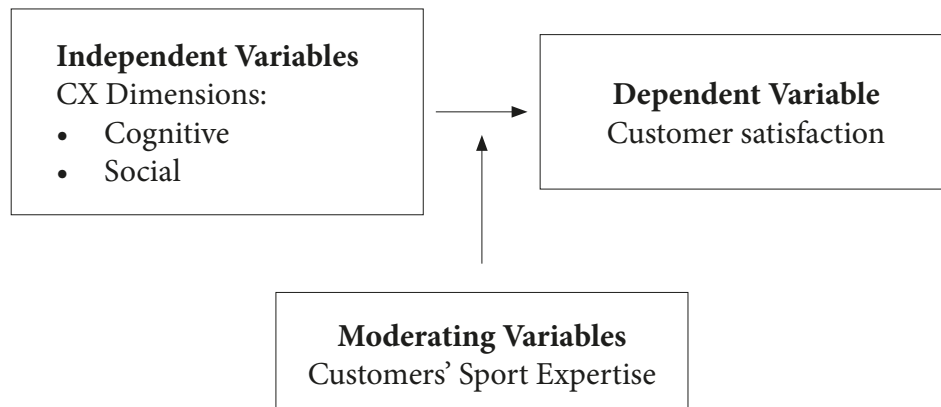

Figure 3: Conceptual Interaction Model between the CX dimensions, Expertise and Satisfaction

Quantitative Research

4 Quantitative Research

4.1 Methods

This chapter discusses the design and methods of the quantitative study, followed by its results. To maintain a clear narrative and since this study is paired with a subsequent qualitative analysis, the discussion of the results and the conclusions sections of the two studies have been combined in Chapter 6.

The quantitative study used an online questionnaire to gather data from in-person intercepts of small specialised outdoor sports retail customers. The procedure was designed with several screening criteria to ensure the quality and relevance of the data, focusing on the context of the interaction, the timing of the survey, and the nature of the shopping experience.

4.1.1 Survey Design

The study was intentionally limited to customers of three outdoor sports stores in the Netherlands to mitigate the influence of cultural variability on service expectations and interaction styles (Furrer et al., 2000; Martin & Murphy, 2017; Nam & Kannan, 2020).

To focus solely on personal shopping experiences, the survey included a screening question that filtered out anyone purchasing items for other people. This control was appropriate because the psychological drivers and satisfaction criteria for personal shopping are fundamentally different from those involved in purchasing for others. Shopping for someone else, especially as a gift, introduces a complex set of external pressures and different goals. The shopper's focus shifts from personal fulfilment to social considerations, such as anticipating the recipient's unknown preferences, managing the pressure to choose the "right" item, and projecting their tastes onto another person (Galak et al., 2016; Lerouge & Warlop, 2006). These external factors would have confounded the results, making it difficult to isolate the effect of the CX on the participant's satisfaction.

Also, given the context of the data collection, where participants might be completing the survey in a rush after their shopping trip, there was a potential risk of inattentive or careless responding. To mitigate this threat to data quality and ensure the validity of the measurement scales, a single attention check was used in the survey. This took the form of an instructed-response item, a widely used and recommended method for identifying and filtering out careless respondents without compromising overall scale validity (Kung et al., 2018). The item presented respondents with five colour options and the direct instruction: "*To show you're reading carefully, please select the second option below*". Participants who failed to select the correct option ("*Blue*") were considered inattentive, and their data were subsequently excluded from the final analysis.

4.1.2 Procedure

The data for the study was collected over 14 days. Customers were approached upon exiting the store with an informal opening question before being invited to participate in the survey, which was developed as a Qualtrics questionnaire. Participants were informed that the survey was designed for completion in under five minutes. After giving consent to participate, the survey involved participants first answering screening questions to ensure a staff interaction had occurred, then proceeding to rate their in-store experience using a series of scales delivered via an online questionnaire.

To reduce the immediate burden and allow for a considered cognitive evaluation (Bagozzi et al., 1999), participants were given a QR code to an online questionnaire or the respondents who weren't available on the spot were given a response window of 24-48 hours post CX in the store. This timing is consistent with industry best practices (Keiningham et al., 2007), also it's recent enough to leverage detailed episodic memory of the store visit (Tourangeau et al., 2000) and allows for a more considered evaluation of the experience (Bagozzi, et al., 1999; Oliver, 2010).

4.1.3 Participants

A total of 55 customers completed the survey. After a first screening, three were excluded: one for failing the attention check and two for selecting *"Shopping for someone else"* in the screening questions. The final sample consisted of 52 participants, with the majority between the ages of 25 and 34 years old.

4.1.4 Pre-test

A pre-test was conducted with a purposive sample of 11 customers to evaluate the survey's clarity and user interface on mobile devices. The pre-test confirmed the reliability of the satisfaction and social experience scales. Based on feedback, revisions were made to the cognitive and expertise scales to improve item clarity and reduce redundancy. The adjustments performed after the pre-test can be found in Appendix C. Furthermore, the follow up ranking questions were moved after the cognitive section to enhance the survey's logical flow. All final scales used in the main study held acceptable reliability ($\alpha > .70$).

4.1.5 Measures

For this study, the core survey questions focused on Cognitive and Social dimensions were adapted from the In-Store Customer Experience (ISCX) scale developed by Bustamante and Rubio (Bustamante & Rubio, 2017). This choice was made over established scales such as SERVQUAL (Parasuraman, 1988) and its retail-specific adaptation R-SERVQUAL (Dabholkar et al., 1996) because such scales focus primarily on process-oriented assessments of service quality based on

customer expectations and perceptions. Both SERVQUAL scales used items which are either less applicable for training interventions (e.g., "*This store has modern-looking equipment and fixtures*") or lack specificity regarding knowledge sharing and interaction richness (e.g., "*This store performs the service right the first time*" or "*Excellent companies will give customers individual attention*"). On the contrary, the ISCX scale emphasises the holistic and social aspects of customer experience, which are more pertinent to the authors' research objective in providing retailers with actionable insights for enhancing staff-customer interactions and improving customer satisfaction (Mao, 2021). The ISCX dimensions and questions provided were further modified for the purpose of the study.

4.1.5.1 Variables

The independent variables were the cognitive and social dimensions. The items for these dimensions were taken from the original ISCX scale developed by Bustamante and Rubio (2017) and subsequently adapted and validated in a sports retail context by Happ et al. (2021). The selection of items was performed keeping an eventual training outcome in mind.

4.1.5.1.1 Independent Variable: Social Dimension

The social dimension was conceptualised as a second-order construct comprising *"interaction with staff"* and *"interaction with other customers"* (Bustamante & Rubio, 2017). For this study, the authors focused exclusively on staff interactions. This decision was supported by Happ et al. (2021), who found that interaction with staff indicated stronger predictive validity (β = 0.62) compared to interaction with other customers (β = 0.49). This finding aligns with broader literature emphasising the central role of staff interactions in sports retail satisfaction (Mao, 2021; Dhurup, 2013; Boroujerdi, 2020; Chang, 2015). The authors also excluded *"I give my opinions to this store's staff"*, which seemed redundant with "*sharing the opinion*", and *"I interact with this store's staff"*, which was already covered by the first screening question and didn't add more depth. The final instrument included 3 items, which are considered a sufficient number to ensure statistical strength, in line with best practices for scale development (Costello & Osborne, 2005; Raubenheimer, 2004). Namely the three items for the social dimensions were: "*I received advice from store staff*", "*I asked the opinions of this store's staff*", and "*I shared my opinions with the store's staff*". As with the other scales, a 7-point Likert scale (1 = *Strongly Disagree*, 7 = *Strongly Agree*). This format was drawn from the original ISCX scale developed by Bustamante and Rubio (2017) and subsequently adapted and validated in a sports retail context by Happ et al. (2021). This format is standard for measuring attitudinal constructs, as it provides a sufficient range of response options to capture variance in customer sentiment (Happ et al., 2021).

4.1.5.1.2 Independent Variable: Cognitive Dimension

This dimension was measured using the 8-item scale, which was revised during the pre-test phase. The scale captures the extent to which the in-store experience stimulates customer learning, curiosity, and reflection. A 7-point Likert scale (1 = *Strongly Disagree*, 7 = *Strongly Agree*) was used for these items, as suggested by the literature (Bustamante & Rubio, 2017; Happ et al., 2021).

The original items from the ISCX scale, such as "*Make me think and reflect*" and "*Awaken my curiosity*", provided a robust foundation for measuring the cognitive experience. However, to make these items more actionable for retailers, they were contextualised using specific knowledge categories identified as highly valuable to sports retail customers. A review of significant literature, supported by an AI-driven thematic analysis through Google AI Studio of key studies, identified several recurring themes in what customers seek from store staff. These include detailed information on technical features, guidance on athletic needs, insights into current trends, and advice on performance characteristics (Chang et al., 2015; Happ et al., 2021; Mao, 2021; Wills, 2017). Customers expect "*professional advice that gives me the feeling of confidence*" (Happ et al., 2021), and value staff with the "*knowledge to explain the product attributes, so that they can choose the right product depending on their sports involvement*" (Chang et al., 2015; Rahulan et al., 2013)

This adaptation process was further guided by the theoretical distinction between the utilitarian and hedonic value that customers derive from a retail experience (Ladeira et al., 2016). Utilitarian value is concerned with the objective, tangible, and functional attributes of products, representing a core motivation for consumers (Ladeira et al., 2016). Conversely, hedonic value involves more of the emotional and experiential aspects of consumption, such as feelings, fun, and fantasy (Ladeira, 2016). To capture utilitarian value, items were developed to address the functional and performance aspects of products, such as "*I discovered creative ideas for combining/adapting products*". To capture hedonic value, items were designed to tap into the more intangible elements of the interaction, for example " *I was inspired to learn more about sports through conversations with staff*". Similarly, items were developed to measure customer reflection on their personal athletic needs (utilitarian) and their interest in the history and evolution of sports brands (hedonic), which is also an element known to strengthen brand associations (Keller, 2003; Underwood et al., 2001).

4.1.5.1.3 Dependent Variable: Customer Satisfaction

Customer satisfaction or absolute satisfaction (Keiningham et al., 2007, 2015), was measured using a multi-item scale with items primarily adapted from previous research in the sports retail context (Happ et al., 2021). Consistent with the literature, a 7-point Likert-type agreement scale was used (1 = *Strongly Disagree*, 7 = *Strongly Agree*).

As an alternative measure to absolute satisfaction, relative satisfaction was considered but deemed unsuitable for the context of this study (see Appendix B4). While relative satisfaction

Measurement	Variable Measured	Scale Type	Question(s) / Statement(s)
Independent Variables	Social Dimension	7-point Likert Scale (1 = Strongly disagree, 7 = Strongly agree)	*I received advice from store staff*
			I asked the opinions of this store's staff
			I shared my opinions with the store's staff.
	Cognitive Dimension	7-point Likert Scale (1 = Strongly disagree, 7 = Strongly agree)	*I learned interesting things about sports products from the store staff.*
			I felt curious about sports or equipment when in conversation with staff.
			I discovered creative ideas for combining/adapting products...
			I discovered interesting ideas about sports through conversations...
			I was inspired to learn more about sports through conversations with staff.
			I was interested during the conversation with the staff.
			I reflected on what best suits my athletic needs based on the conversation...
			I thought about how equipment affects performance during the conversation with the staff
	Value of Topics	Rank-order question (from #1 most valuable to least valuable)	*Thinking about your conversation with the staff, which of these topics came up?*
			Product fit and sizing guidance
			Care and maintenance instructions
			Product comparisons between brands/models
			Material composition and durability information
			Performance advice for extreme/challenging conditions
			Current sports trends and innovations
			Historical information about brands and products
			Advice tailored to my skill/involvement level
			Information about local sports clubs, groups, or events
			Others, not mentioned above:
Moderator Variable	Customer Expertise	7-point scale, (1 = I know little, 7 = I know a lot)	*Knowledge of sports equipment and technology*
			Experience with sports products
			Being informed about materials used in sports equipment
			Being informed about sports brands and their history
			Knowledge of current trends in sports
Dependent Variable	Customer Satisfaction	7-point Likert Scale (1 = Strongly disagree, 7 = Strongly agree)	*I have very positive feelings toward this sports retail store.*
			I feel good about coming to this store for sports products.
			I am satisfied overall with this store and the service they provide.
			I feel satisfied that this store produces the best results for me.
Screening Questions	Interaction Check	Yes / No	*Did you interact with any store staff during your visit...?*
	Shopping Focus	Multiple Choice	*During your visit to the sports store, did you shop: For yourself / For someone else?*
	Attention Check	Multiple Choice (Instructed response)	To show you're reading carefully, please select the second option below.

Table 1: Measurements Overview

offers a valuable competitive perspective by comparing a customer's satisfaction with one firm against their satisfaction with competitors (Keiningham et al., 2007, 2015), its measurement introduces significant methodological complexity. Relative satisfaction would require identifying each participant's unique portfolio of competing stores and asking them to rate each one, significantly increasing the cognitive burden on respondents in a field-intercept setting. Consequently, the absolute satisfaction measure was chosen as the most direct, feasible, and appropriate method for answering the research question within the scope of this project, also according to the literature analysed (Burns & Neisner, 2006; Fränzel & Swoboda, 2024; Happ et al., 2021; Pei et al., 2020).

4.1.5.1.4 Moderator Variable: Customer Expertise and Sport Preference

The moderator variable, customer expertise, was measured using a multi-item scale adapted from established research in service environments (Jamal & Anastasiadou, 2009; Jamal & Naser, 2002). For this study, the items were contextualised for the sports retail domain, focusing on a customer's self-perceived knowledge of equipment, brands, materials, and technical features. A 7-point semantic differential scale was employed, using bipolar anchors (e.g., "*I know very little*" to "*I know a lot*"). This is a format well-validated for measuring self-assessed expertise (Bell et al., 2005; Rocklage et al., 2021) and confirmed via pre-testing to be suitable for mobile interface. The final item order was structured to align with the theoretical distinction between utilitarian (e.g., equipment technology) and hedonic (e.g., brand history) knowledge (Ladeira, 2016). To conclude the survey, participants were asked to specify their primary sport, allowing for contextualization of their expertise.

4.1.5.2 Value of the topics

To gain a more actionable understanding of the information exchanged during interactions, follow-up questions were conditionally shown to participants who indicated a moderate to high level of agreement (a score of 4 or above on a 7-point scale) with the item: "*I learned interesting things about sports products from the store staff*".

First, participants selected which topics from a comprehensive list came up during their interaction. Second, they were asked to rank those same selected topics from most to least valuable. The list of advice topics presented to the participants was developed from the same thematic analysis of sports retail literature used to adapt the cognitive scale, considering both utilitarian and hedonic values. (Happ et al., 2021; Ladeira et al., 2016; Mao, 2021; Ruihley & Pate, 2017; Schwarzenberger & Hyde, 2013).

An agreement score on this statement, while useful, confirms that an interaction occurred but fails to capture what information was exchanged and how valuable that information was to the customer. This distinction is relevant, as the literature suggests that consumer evaluation of information is heavily dependent on their existing knowledge; novice customers, for instance, are more likely to rely on general salesperson opinions, but in general, customers evaluate information based on prior experience and specific needs (Jamal & Anastasiadou, 2009; Karg, 2022). By employing a rank-order format, these questions forced participants to make trade-offs, thereby revealing their informational priorities.

Finally, based on pre-test feedback, the ranking criterion was refined from "*most helpful*" to "*most valuable*". The term "valuable" was chosen to better encompass not just functional utility but also the potentially memorable and impactful encounter, which is a key driver of high satisfaction (Pine & Gilmore, 1998; Bitner, Booms, & Tetreault, 1990). The final overview of the questions is shown in Table 1.

4.1.6 Data Preparation and Scale Validation

Before conducting the main regression analyses, a series of preliminary procedures was performed on the final data set (N=52), which can be found in Appendix E4.

First, the internal consistency or reliability of the scales was assessed using Cronbach's Alpha. This analysis confirmed that the scales for customer satisfaction (α = .933), cognitive dimension (α = .879), and customer expertise (α = .927) were reliable. However, the 3-item social dimension scale yielded a poor Cronbach coefficient (α = .279). Consequently, the three social items were treated as separate independent variables in all subsequent analyses.

Second, a descriptive analysis of the key variables was conducted. This initial screening of data is recommended to ensure the data is appropriate for any regression statistical models (Field, 2024; Hair et al., 2019). The distribution for the cognitive and expertise dimensions was found to be reasonably symmetric. The distribution of customer satisfaction exhibited a clear negative skew, a widespread finding in satisfaction data, as most respondents tend to report being satisfied rather than dissatisfied (Peterson & Wilson, 1992). The social variables displayed varied distributions. For instance, the histogram for the item "*I shared my opinions with the store's staff*" showed a bimodal pattern, with clusters of respondents at both the low and high ends of the scale. This suggests the presence of two distinct subgroups in the sample: those who do not share opinions and those who actively do. While these varied distributions provided valuable insights into customer behaviour, none of the independent or moderator variables showed a lack of variance or a distribution so extreme as to be unsuitable for inclusion in a regression model. Regression analysis is generally robust to moderate deviations from normality in the predictor variables (Hair et al., 2019). Therefore, this preliminary analysis confirmed the suitability of the data for the planned moderation tests

In preparation for the moderation analysis, the predictors and moderator variables were mean-centred. This transfor-

mation ensures that if the interaction coefficients (e.g., Cognitive dimension x Expertise) are not significant, the regression coefficients (e.g., Cognitive; Expertise) are interpretable as conditional effects, as recommended by Field (2024) when performing moderation analysis.

Finally, before interpreting the final regression models, a set of diagnostic tests was conducted to ensure that the assumptions of multiple regression were met. The test was performed with all the combinations of variables that were used in the final regression. The assumption of no perfect multicollinearity was satisfied, as all Variance Inflation Factor (VIF) values were well below the conservative threshold of 10, and all Tolerance values were above 0.1(Field, 2012; Hair et al., 2019). The Durbin-Watson statistic was found to be close to the ideal value of 2 for all the items, indicating that the assumption of Autocorrelation was met. Furthermore, an examination of all scatterplots of standardised residuals against standardised predicted values revealed a random pattern of points, supporting the assumptions of both linearity, homoscedasticity, and homogeneity of variance for all variables. Finally, a histogram and a Normal P-P plot of the residuals showed only minor deviations from a perfect normal distribution, confirming that the assumption of normally distributed errors was reasonably satisfied for all the variables(Field, 2012; Hair et al., 2019).

4.1.7 Data Analysis

Following these preparatory steps, the primary analysis employed hierarchical multiple regression to test the hypothesised moderating effect of customer expertise on the relationship between the CX dimensions and customer satisfaction. This was followed by a series of exploratory analyses designed to add depth to the findings. A non-parametric Mann-Whitney U Test was performed on the ranking data to understand how customer priorities differ between low and high expertise levels. Finally, to analyse the main effect of the cognitive dimension on satisfaction, a Spearman Correlation was conducted to identify which specific cognitive items were the strongest predictors of satisfaction for each expertise group. All the tests were performed on SPSS. The detailed reasoning and SPSS results can be found in Appendix E4.

4.2 Results

To test the Conceptual Interaction Model explained in Figure 3, the data analysis employed multiple regression analysis, following the approach used by Jamal and Anastasiadou (2009) and Jamal and Naser (2002) for examining moderation effects in service satisfaction research. The regression was then followed by Mann-Whitney U test, performed on the ranking data to understand what topics customers value most, based on two levels of expertise. Then, given the results of the multiple regression analysis, the authors explored the drivers of satisfaction, but looking only at the cognitive dimension, split between the two expertise levels through a Spearman correlation analysis.

The data collected from 52 participants were subjected to preliminary analysis to validate the measurement instruments and prepare the data before proceeding to the primary hypothesis tests and subsequent exploratory analyses. This section details the results of each analytical phase.

4.2.1 Effects on Satisfaction of Cognitive and Social Dimensions

Since the interactions between CX dimensions and expertise were not significant for satisfaction, as shown by Model 2 values in Table 2, the authors interpret the main effects from Model 1 of the regression, according to Hayes (2022) and Aiken (1991).

The cognitive dimension was the strongest predictor of customer satisfaction ($B = 1.080$, $p < .001$). The three items intended to measure the social dimension did not form a reliable scale ($\alpha = .279$). When analysed as separate variables, only one of the three emerged as a clear, significant predictor. The variable of "*I shared my opinions...*" ($B = .283$, $p = .046$) positively contributed to customers' overall satisfaction. Notably, neither "*I received advice..*" ($B = .571$, $p = .096$) nor "*I asked the opinions..*"($B = .271$, $p = .064$) had a statistically significant impact on satisfaction.

When directly comparing the relative influence of these dimensions, the standardised effect for the cognitive dimension ($\beta = .699$) was considerably larger than that of the only significant social variable, "*I shared my opinions...*" ($\beta = .288$).

4.2.2 Expertise and Its Effect on Satisfaction

While expertise did not moderate the fundamental relationship between the CX and satisfaction, it independently showed a significant inverse relationship with satisfaction. This pattern was evident in the regression models focused on the direct effect of the social variables on satisfaction. A significant negative effect of Expertise on satisfaction was found when customers were "*Receiving Advice*" ($B = -.319$, $p = .006$) and when they were "*Sharing Opinion*" ($B = -.389$, $p = .002$). This consistent negative coefficient indicates that as a customer's self-assessed expertise increases, keeping the two social variables constants, their reported level of satisfaction tends to decrease. This direct negative relationship was absent when analysing the Cognitive dimension of the experience($B = -.109$, $p = .200$) and "*Asking for Opinions*" ($B = .271$, $p = .054$), where the effect of expertise on satisfaction was not statistically significant (Table 2).

4.2.3 Analysis of Priorities with Ranking Data

To understand what kind of information customers value most, the authors analysed their rankings of different top-

ics. The analysis employed a Mann-Whitney U Test to test whether there is a difference between low and high expertise groups (Table 3).

The analysis revealed a statistically significant difference for "*Technical specifications and performance features*" (U = 36.00, z = -2.92, p = .004). An inspection of the mean ranks indicated that this topic was ranked as more valuable by the high-expertise group (*M Rank* = 9.10) than the low-expertise group (*M Rank* = 18.70). A significant difference was also found for "*Current sports trends and innovations*" (U = 1.00, z = -2.04, p = .042) with the high-expertise group ranking it as more valuable (*M Rank* = 2.33) than the low-expertise group (*M Rank* = 5.80). Conversely, all the other topics demonstrated universal importance, showing no significant relationship with expertise.

Finally, the analysis uncovered a unique case for the topic of "*Information about local sports clubs, groups, or events*". The Mann-Whitney U test could not be performed. While 13 participants in the low-expertise group provided a rank for this topic, no participants in the high-expertise group did.

4.2.4 Satisfaction Drivers Based On Cognitive Items and Expertise Levels

Examining the regression results, the authors determined that the cognitive dimension was the primary predictor. Therefore, it was further investigated which of the eight individual cognitive items was the strongest, using Spearman's rank order correlation (Table 4).

For the low expertise group (N = 37), the single strongest predictor of satisfaction was "*I reflected on what best suits my athletic needs...*" (ρ = .613, p < .001). This was followed very closely by "*I felt curious about sports or equipment...*" (ρ = .610, p < .001) and "*I learned interesting things...*" (ρ = .562, p < .001). For the high-expertise group (N = 15), the results were "*I was inspired to learn more...*" being the strongest predictor (ρ = .831, p < .001), followed by "*I was interested during the conversation*" (ρ = .662, p < .001), and "*I learned interesting things about sports products*" (ρ = .630, p = .012).

4.2.5 No Evidence of Moderation

The central hypothesis of this study is that customer sports expertise would moderate the relationship between staff interaction quality and customer satisfaction. Specifically, it was expected that the general influence of a high-quality interaction would be weaker for customers with higher expertise.

To test this hypothesis, a series of hierarchical multiple regression models was employed to analyse the different components of the interaction with staff, which the authors broke down into several items. The regression interactions terms, indicated as Model 2 in Table 2, were composed of the cognitive dimension and each of the three individual social variables: "*Receiving Advice*", "*Asking the Opinion*", and "*Sharing the Opinion*". The analysis revealed that the interaction between expertise and the cognitive dimension was non-significant (B = -.036, p = .757), as were the interactions with the social variables of "*Receiving Advice*" (B = -.215, p = .345), "*Asking for Opinions*" (B = -.116, p = .312), and "*Sharing Opinions*" (B = .028, p = .798).
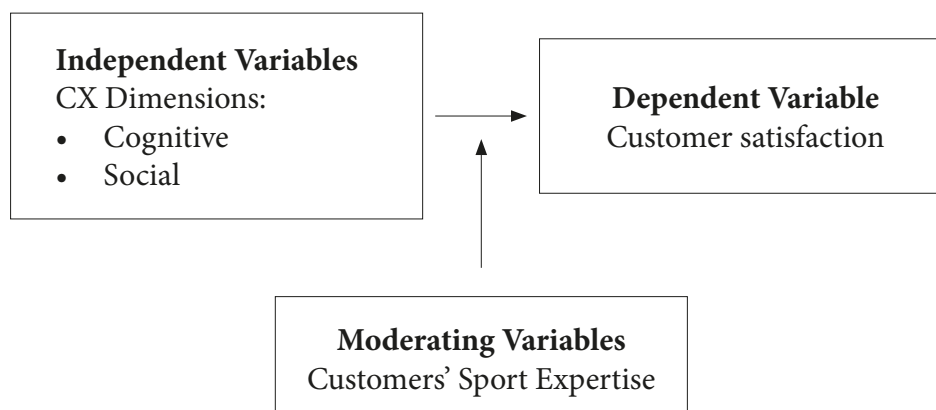

Figure 3: Conceptual Interaction Model between the CX dimensions, Expertise and Satisfaction

Variable	B	SE	β	Sig.
Analysis 1: Social Dimension (Receiving Advice)				
Model 1				
(Constant)	5.67	.160		
Social Variable 1 (Receiving Advice)	.571	.337	.223	.096
Expertise	-.319	.111	-.379**	.006**
Model 1 Statistics	$R^2 = .169$, $F(2, 49) = 4.98$, $p = .011$			
Model 2				
Receiving Advice x Expertise	-.215	.226	-.125	.345
Interaction Test (Model 2)	$\Delta R^2 = .184$, $F(1, 48) = 0.91$, $p = .345$			
Analysis 2: Social Dimension (Asking the Opinion)				
Model 1				
(Constant)	5.67	.159		
Social Variable 2 (Asking Opinion)	.271	.143	.257	.064
Expertise	-.23	.114	-.27	.054
Model 1 Statistics	$R^2 = .180$, $F(2, 49) = 5.38$, $p = .008$			
Model 2				
Asking Opinion x Expertise	-.116	.113	-.154	.312
Model 2 Statistics	$\Delta R^2 = .198$, $F(1, 48) = 1.04$, $p = .312$			
Analysis 3: Social Dimension (Sharing the Opinion)				
Model 1				
(Constant)	5.67	.158		
Social Variable 3 (Sharing Opinion)	.28	.138	.288*	.046*
Expertise	-.389	.118	-.46**	.002**
Model 1 Statistics	$R^2 = .190$, $F(2, 49) = 5.74$, $p = .006$			
Model 2				
Sharing Opinion x Expertise	.028	.109	.036	.798
Model 2 Statistics	$\Delta R^2 = .191$, $F(1, 48) = 0.07$, $p = .798$			
Analysis 4: Cognitive Dimension				
Model 1				
(Constant)	5.67	.116		
Cognitive Composite	1.08	.154	.699***	<.001***
Expertise	-.109	.084	-.13	.200
Model 1 Statistics	$R^2 = .562$, $F(2, 49) = 31.39$, $p < .001$			
Model 2				
Cognitive × Expertise	-.036	.116	-.031	.757
Model 2 Statistics	$\Delta R^2 = .001$, $F(1, 48) = 0.10$, $p = .757$			

Dependent Variable: Satisfaction score

Note. B = unstandardised regression coefficient; SE = standard error; β = standardised regression coefficient.
*$p < .05$. **$p < .01$. ***$p < .001$.

Table 2: *Summary of Hierarchical Multiple Regression Analyses Predicting Customer Satisfaction*

Value of the Topic	Low Expertise Mean Rank	High Expertise Mean Rank	U	z	p
Technical specifications and performance features	18.70	9.10	36.00	-2.92	.004**
Product fit and sizing guidance	18.11	23.58	65.50	-1.22	.223
Care and maintenance instructions	5.50	5.50	8.00	0.00	1.000
Product comparisons between brands/models	17.74	18.88	101.00	-0.29	.771
Material composition and durability information	14.26	9.00	33.00	-1.56	.118
Performance advice for extreme/challenging conditions	5.67	3.80	4.00	-1.12	.263
Advice tailored to my skill/involvement level	15.52	19.25	41.00	-0.80	.422
Current sports trends and innovations	5.80	2.33	1.00	-2.04	.042*
Historical information about brands and products	2.00	2.00	1.00	0.00	1.000
Information about local sports clubs, groups, or events	7.00	n/a	n/a	n/a	n/a

Note. Low Expertise Group N = 37; High Expertise Group N = 15. A lower Mean Rank indicates a higher valuation. **The test for "Information about local sports clubs" could not be performed as the high-expertise group was empty (N=0).**

*p < .05, **p < .01.

Table 3: *Mann-Whitney U Test Results for Topic Value Rankings by Expertise Group*

Cognitive Item	Low Expertise Group (N=37) Spearman's ρ	High Expertise Group (N=15) Spearman's ρ
I learned interesting things about sports products	.562***	.630*
I felt curious about sports or equipment	.610***	.099
I discovered creative ideas for combining/adapting products	.320	.071
I discovered interesting ideas about sports	.478**	.455
I was inspired to learn more about sports	.431**	.831***
I was interested during the conversation	.406*	.662***
I reflected on what best suits my athletic needs	.613***	.449
I thought about how equipment affects performance	.464**	.254

*p < .05. **p < .01. ***p < .001.

Table 4: *Correlations Between Cognitive Items and Satisfaction*

Qualitative Research

5 Qualitative Research

5.1 Methods

This chapter discusses the design and methods of the qualitative study, followed by its results. The quantitative survey was followed by qualitative interviews to explore and expand the findings (Creswell & Creswell, 2014). This approach aimed to achieve data triangulation, by employing different methods to gather insights to enhance the overall validity and richness of the research, incorporating the perspective of the retailers. By comparing the statistical results from the customer survey with the knowledge of store managers, this phase was employed to neutralise the authors' potential biases and create a holistic and robust understanding of the customer experience (Jick, 1979), ensuring that the study's conclusions were not only statistically sound but also practically important to the stakeholders they are intended to inform.

5.1.1 Data Collection

Participants were recruited via convenience sampling through personal connections within the outdoor sports retail sector in the Netherlands. Three of the five small Dutch specialised outdoor sports retailers contacted agreed to be interviewed. The interviews were held online with semi-structured conversations in which managers were presented with some of the study's early conclusions to verify the resonance and plausibility of such results. The script of the interviews is attached in Appendix F.

Firstly, the survey revolved around the practical differences managers observe when interacting with high and low expertise customer groups and whether their store had developed strategies to leverage these differences. This approach allowed the authors to investigate the main research question while also making the concept of moderation understandable to retailers. Furthermore, since the quantitative results indicated that information about the community was valued exclusively by customers with lower expertise, the interviews explored how retailers perceive and approach community engagement in practice. Concurrently, to understand the interaction from the expert's side, the interviews investigated how retailers respond to and strategically exploit the demand for technical specifications and emerging trends.

Secondly, the interviews were to expand the context behind the quantitative findings, particularly regarding current staff training practices, if specialised sports stores employ measures such as satisfaction or NPS (Net Promoter Score), and the challenges of working with different customer expertise levels. Additionally, the interviews sought to identify gaps in the quantitative research and to uncover unmet needs or emerging themes that could guide future research directions.

5.1.2 Analysis

Theme analysis was performed on Atlas.ti on the three interviews, and seven themes were extrapolated: Deep Expertise and Honest Service; Unstandardised Approach for Novice and Expert Customers; Passion-Driven and Informal Training; Unexploited Community Hub; Proactive vs. Reactive Trend Spotting and Curation; Immediacy and Tactile Engagement; Less Measures and More Feeling.

5.2 Interviews Results

The analysis of the three interviews conducted with specialised outdoor sports retail managers revealed seven key themes related to their business strategies, customer engagement, and market positioning. All of them shared core values on how to run the store and how to interact with clients, resulting in great strengths but also missed opportunities.

5.2.1 Deep Expertise and Honest Service

All three managers identified deep product knowledge, a curated selection, and honest advice as their primary competitive advantages. Manager 2 described his stores as a "*cluster of knowledge,*" where multiple services meet. These services included higher expertise of the staff, but also physiotherapists and running specialists for different disciplines. He also mentioned that compared to brand-owned stores, their advantage was having multiple brands and products to compare. Manager 1 stated similarly that his store's expertise originates from deeper and first-person product selection, therefore providing the customers only products from varied brands, which he trusted and knew personally. Manager 3, whose staff are all ultra-runners, positioned their advice as "*more honest*" compared to single-brand stores, since almost everything is chosen and tried before suggesting it to the customer. Also, having access to very different brands led both Manager 3 and Manager 2 to the strategic use of niche, high-end products to differentiate the store and cater to emerging trends, such as equipment for the sport of Hyrox or adding some very high-end trail running shoes like Norda, to attract expert clientele.

5.2.2 Unstandardised Approach for Novice and Expert Customers

A consistent finding was the use of an intuitive, non-standardised process for segmenting and interacting with different customer types. All managers identified distinct customer archetypes, including the beginner, the expert, and "*pseudo-expert*", based on how they interact and what their needs are. Consequently, they adapt their communication style accordingly, but without any structured approach and without any guidelines on topics to cover. All of them shared a similar approach based on posing at the beginning general questions to every kind of customer, but then it is up to the staff where to carry the conversation and how to adapt their conversation style.

5.2.3 Passion-Driven and Informal Training

This informal approach was also noted in the training. The interviews revealed a universal reliance on passion-driven training that happens more accidentally, rather than structured, formal programs. Training methods included observation and following of senior staff, sometimes quick post-interaction debriefs, and personal product testing by staff. Manager 3 described the use of modern channels to share knowledge, including brand webinars, group chats, and YouTube reviews. He also reported a practice of matching staff to customers based on shared interests to personalise the service and leverage staff's particular knowledge. All three managers emphasised hiring staff who are already passionate about the sport, but none of them seemed to have any specific plans on how to carry out training.

5.2.4 Unexploited Community Hub

The preliminary quantitative results revealed a unique need specific to the novice customer, which was confirmed with the final analysis. While experts showed no interest in the topic it was noted that novice customers valued "*Information about sport clubs*". This result was further investigated in the interviews. The theme was perceived as important to the managers, but it was coupled with an acknowledgement of the practical difficulties in execution by all three managers. Manager 1's approach was the most passive, involving recommendations of local clubs, but just hoping that customers would remain active. Manager 2 suggested that building a community was important, but found it required a lot of work to implement fully. Manager 3's store was the most active, organising monthly brand-sponsored community runs and events, while still noting that establishing a vibrant and especially deeply rooted daily community remained a challenge and that it's something they need to work on.

5.2.5 Proactive vs. Reactive Trend Spotting and Curation

While all managers practised inventory curation, their methods for identifying trends varied. The approaches of Manager 1 and Manager 2 were primarily reactive, with inventory decisions driven by direct customer requests and analysis of sales data. In contrast, Manager 3 described a distinctly proactive strategy of "*actively monitoring elite athletes and social media*" to identify emerging trends and stock products before they achieve mainstream popularity, thereby positioning the store as a trendsetter.

5.2.6 Immediacy and Tactile Engagement

Another fundamental value of the physical retail space was consistently attributed to tactile engagement and the immediacy of purchase. All managers highlighted the importance of the customer's ability to "*try on, touch, and feel the product*". Manager 3 emphasised the importance of immediacy in his store's model. Unlike bigger competitors like brand-owned stores or generalists who have customers try products in-store and then ship them later, the physical store allows customers to "*take it home right now.*" He was also the only manager to comment on emerging in-store technology like advanced display options, expressing interest in its potential while remaining sceptical of "old-school" methods like treadmill analysis.

5.2.7 Less Measures and More Feeling

The final notable theme that emerged was the general absence of formal systems for measuring customer satisfaction, with all three managers relying instead on informal, qualitative indicators. The managers reported that their assessment of customer satisfaction is derived from passive and observational data. This includes monitoring unsolicited online reviews (Manager 2), observing repeat business and customer referrals (Manager 3), and determining satisfaction from a general "*feeling*" of happy customers in the store (Manager 3). Manager 1 defined his primary success metric not as immediate feedback but as long-term loyalty, exemplified by a customer returning a year later with a well-used product. This reliance on informal metrics was contrasted by Manager 3, who stated that while they "*monitor sales and products a lot better,*" there is no "*real measuring*" of customer satisfaction or any other satisfaction metric, despite acknowledging that "*[they] probably should.*" Therefore, while customer loyalty and satisfaction are significant to their value proposition, the measurement of these constructs remains an underdeveloped aspect of their operations.

Discussion and Conclusion

6 Discussion and Conclusion

This study was designed to address a significant gap identified in the literature review: while the importance of expertise is known, the literature doesn't offer specific insights linked to different expertise levels in the sports world. To investigate this, the study posed the central research question: *How does customer sports expertise moderate the relationship between staff interaction quality and customer satisfaction in small specialised outdoor sports retail contexts?* This was followed by a central hypothesis that the positive effect of these interactions would be diminished for customers with higher sports expertise. The results, however, rejected this hypothesis and, combined with the qualitative interviews, revealed a nuanced and insightful understanding of the in-store experience compared to other literature on the topic.

6.1 Experts' Social Load

The primary finding of this research is the rejection of the central moderation hypothesis: *The positive relationship between staff interaction and customer satisfaction is weaker for customers with higher sports expertise.* The analysis revealed no evidence that customer expertise weakens the positive relationship between the quality of staff interaction and customer satisfaction in the outdoor sports physical retail. This suggests that the value of high-quality staff-customer interactions is robust and universally beneficial for novice and expert sports customers alike. This finding aligns with the general approach mentioned by retail managers in interviews conducted for this study, where managers agreed that positive interactions are considered crucial for all kinds of customers.

This raises a critical question: If expert sports customers are harder to satisfy according to the retail and marketing literature , why did their expertise not moderate the effect of the customer experience? The answer could lie not in moderation, but in the direct, partial effect of expertise itself. Despite the absence of a general moderating effect, as expertise increased, satisfaction decreased when "*Receiving advice*" and when "*Sharing Opinion*", when these two variables are kept constant. This effect was not present for the cognitive dimension of the staff-customer interaction, nor for the social variable "A*sking the Opinion*". These results could be a detailed application of the disconfirmation paradigm, which states that higher initial expectations possessed by expert customers create a wider gap with the actual service received, leading to lower satisfaction (Churchill & Surprenant, 1982; Evans, 2006; Jamal & Anastasiadou, 2009; Jamal & Naser, 2002). Applied to this study, it suggests that expert customers hold elevated expectations for the quality of staff-customer interactions in sports stores, making them inherently harder to impress than novices in these specific moments of the interaction.

The absence of a moderation effect and the new perspective on the disconfirmation paradigm improve the conclusions of previous research by clarifying the context where an ex-

pert's critical view is most active. When experts engage in interactions, they may start with a satisfaction deficit due to higher expectations. As a result, advice from staff that doesn't align with the expert's complex knowledge might be seen as inadequate. Even positive interactions may not fully address this initial gap, leading to frustration and diminished satisfaction. Such interactions might no longer be seen as valuable consultations but a potentially frustrating ones or one where expertise isn't properly recognised. Likewise, when an expert shares their opinion, they anticipate being treated as a knowledgeable peer, which means they might not feel sufficiently validated. If staff fail to acknowledge their perspective, it could undermine the customer's sense of identity and lower their satisfaction. During the interview with Manager 2, this theme was mentioned. Some customers may wish to discuss anything related to their favourite outdoor sport extensively. This desire is fulfilled only when sales staff possess in-depth knowledge of the equipment, which isn't always the case. All the retail managers interviewed for this study mentioned that the exchange of knowledge is sometimes overlooked or taken for granted. A structured approach to integrate deeper knowledge could help enhance satisfaction for expert customers by validating their expectations and fostering higher-level conversations.

In contrast, this negative effect disappears when the interaction shifts to cognitive stimuli or when the expert customer is proactively asking opinions. This suggests that in these moments, the expert's mindset probably shifts from that of a critical evaluator to an interested learner, thus neutralising the negative effect of expertise on satisfaction. While expert customers might acquire useful knowledge, which is a cognitive gain, they are also assessing the credibility of the employee during the interaction.

Therefore, this study suggests that while experts value the in-store experience, their satisfaction could be particularly sensitive during some staff-customer interactions, highlighting these moments as critical touchpoints that require a higher degree of understanding from retail staff. The moderation hypothesis was not supported because expertise does not appear to change the value of a good interaction, but it could change the starting point from which that value is judged. Expert and novice customers alike probably appreciate a helpful, engaging staff. The difference could be that for an expert, that positive experience could be working against a pre-existing satisfaction deficit created by their higher critical standards, as noted by the literature (Jamal & Anastasiadou, 2009; Jamal & Naser, 2002). This explains why the authors see a direct negative effect of expertise on satisfaction when two social variables were kept constant, but no evidence that expertise diminishes the importance of the interaction itself.

6.2 The Cognitive Dimension Leads to Satisfaction

When directly comparing the relative influence of CX dimensions on satisfaction, the cognitive dimension of the experi-

ence, what a customer learns, discovers, or is inspired by, is a substantially more powerful driver of satisfaction than the three social variables the authors analysed. This was true for all customers, regardless of their expertise level. This result reinforces the value proposition identified in the interviews with all three retail managers, who emphasised that deep product knowledge and expert advice as their primary differentiators and key selling points. It confirms that customers in specialised sports stores are fundamentally seeking knowledge and insight (Happ et al., 2020; Mao, 2021).

Among the social behaviours, only "*I shared my opinions*" emerged as a significant predictor of satisfaction, for both levels of expertise. This suggests that for all customers, the interaction is most satisfactory not as a one-way transfer of information, but rather a dialogue in which customers are encouraged to share their knowledge and feel their perspective is valued. The act of sharing opinions could be seen as an expression of their identity and affiliation with the sport's subculture, a key element of the sports consumer experience (Schwarz et al., 2022; Underwood et al., 2001).

In conclusion, the act of socialising seems, per se, less impactful for customers' satisfaction, compared to the cognitive reaction to the information exchanged (e.g. sparking interest, creativity, inspiration). Indeed, looking from the perspective of the Kano model (Kano et al., 1984) the interpretation suggests that the social behaviours could be a "*must have*" during the CX, whereas the content of the exchanges could be the actual "*performance*" enhancer for the satisfaction of outdoor sports customers, thereby highlighting the relevance of the analyses performed on the different kinds of values assigned to the topics.

6.3   Value of Topics for Levels of Expertise

The literature review established that the cognitive differences between novice and expert customers could create varying needs. The findings of this study confirm and elaborate on this, specifying exactly what these needs could be in the context of staff-customer interactions. The analysis of topic values further explains the distinct needs of different customer segments. Outdoor novice customers appear to be interested in the retail store as a potential first step into the local sports community, a need that experts have probably already fulfilled. Therefore, as expertise in a specific outdoor sport increases, the focus of the interaction moves towards deeper technical details and the current evolutions of the sport.

The most telling finding for the novice segment is their interest towards information about local sports communities. The Mann-Whitney U test indicates that zero experts ranked this topic, which was exclusively picked by novice customers, highlighting that for the latter, the retail store could be perceived as a potential, but untapped, opportunity into an outdoor sports subculture. This finding supports the literature that frames outdoor sports products and participation

as crucial tools for identity construction and community affiliation (Underwood et al., 2001; Schwarzenberger & Hyde, 2013). The novice customer is not just buying a shoe; they are buying entry into a community, therefore seeking validation and a sense of belonging (Schwarzenberger & Hyde, 2013). This could align with the analysis of the cognitive items which found that novice satisfaction is driven by "*learning interesting things", "feeling curious*", but also "*reflecting on athletic needs*". A community provides the ideal context for exchange and interaction between outdoor sports enthusiasts. Through peers' experiences, novices can explore the different facets of the outdoor sport, like training programs, injuries and explore different subcultures. The practical implication should be a strategic shift from merely recommending communities to actively creating them. Instead of pointing to an external sports club as the managers suggested, retailers have an opportunity to become the community and knowledge hub themselves, leveraging the face-to-face contact and the deep experience of the staff, to foster their own store-centric community. This is particularly crucial, given that the outdoor sports retail market's recent exponential growth is largely driven by new novice customers, as one of the managers interviewed noted. By fulfilling this fundamental need of belonging, retailers could build powerful and lasting loyalty from the ground up with the largest growing consumer segment of the outdoor market, as indicated by the market data (Outdoor Industry Association, 2025).

Conversely, consumers with a higher level of sport expertise have different priorities which reflect their advanced knowledge and desire for intellectual stimulation. Their high valuation of topics like "*technical specifications*" and "*current sports trends*" could be a direct expression of the analytical processing that defines expertise (Jamal & Naser, 2002). Possessing well-developed conceptual frameworks (Alba & Hutchinson, 1987), experts are not seeking basic education. Instead, they need a higher-level, peer-to-peer dialogue that engages them. Their satisfaction is driven by being "*inspired to learn more*" and feeling "*interested*", as the analysis of cognitive items showed, which are cognitive rewards that could be unlocked through deeper conversation. An experienced runner, for example, is likely more driven by the inspiration to explore the niche technical details of the sport. They might therefore place less emphasis on general community topics and more on the opportunity for a peer-level discussion about a new shoe with tear-resistant material or the latest vest worn by professionals. This paints a clear picture of the expert as someone potentially hungry for technical information that respects their existing knowledge base. For retailers, this means conversations should be planned to "*geek out*", as one of the Managers described. The results suggest that there may be a desire to discuss and explore the details of new technologies, debate current trends, or examine the functional trade-offs of different products. The strategy of Manager 3, who curates a niche inventory based on trends set by professional outdoor athletes, is a perfect example of satisfying this need. While universally important topics like sizing and care could be foundational "*must-haves*", this analytical engagement could act as the true "*performance enhancer*" for upper expertise satisfaction.

6.4 Theoretical Implications

The central theoretical finding of this study, that the cognitive dimension of staff-customer interaction is the primary driver of customer satisfaction, directly addresses the previously identified gap in the sports and retail literature and deepens the existing literature on CX specifically within the sports and outdoor sports retail context. While prior research in sports retail and retail in general has consistently highlighted the importance of expertise and staff-customer interactions (Happ et al., 2021; Mao, 2021; Jamal & Naser, 2002; Jamal & Anastasiadou, 2009), the authors' analysis in this study into individual cognitive items should allow literature to move beyond this general assertion and recommends specific theoretical implications regarding this topic. Alongside its contributions to retail, marketing and CX literature, this study offers insights for the fields of Service Design by proposing a new analytical layer for customer journey mapping.

6.4.1 Refined Model of Social and Cognitive Dimensions

A key theoretical contribution of this study is its revision of the relationship between the social and cognitive dimensions of the in-store experience, particularly in relation to the findings of Happ et al. (2021). Their study defined that the most significant ISCX dimension to achieve customer satisfaction in sport stores was the social dimension, specifically the interaction with the staff. At first glance, the finding that the cognitive dimension is dominant over the social appears to be in opposition. However, a deeper examination of the authors' methodology and the specific items that constitute the authors' cognitive dimension could reinforce and extend Happ's conclusion.

In this study, every measured cognitive item was intentionally framed around the interaction with staff. From the literature review, the authors concluded that the items that drive satisfaction in the authors' context all come from staff-customer interactions. The cognitive dimension used in this study was still connected with the original by Bustamante and Rubio (2017) and used by Happ et al. (2021), but every item was linked to the interaction with staff, thus making it a combination of the cognitive and social dimensions. According to the results, for novice customers, satisfaction could be a two-part process driven by the combination of cognitive stimuli during conversation. High cognitive predictors were "*learning interesting things*", "*feeling curious*", but also "*reflected on what best suits my athletic needs*", highlighted by the non-parametric analysis. For experts, the key predictors are about a higher-level experience of being "*inspired to learn more*", "*interested during the conversation*" and still "*learned interesting things about sports products*". This suggests that the cognitive benefits may not be delivered in a vacuum, but rather they could be the direct product of a successful staff-customer interaction and thus a product of the social dimension. Therefore, the authors' results do not diminish the importance of the social dimension, but they specify what should happen within that interaction to be effective.

While Happ et al. (2021) confirmed the crucial role of staff interaction, the findings of this research specify the cognitive stimuli this interaction should focus on to generate satisfaction: education and self-reflection for the novice, inspiration and learning and engagement for the expert. The authors' study thus reframes the cognitive dimension not as a separate dimension to the social, but as the very content that could give the interaction its value.

6.4.2 Connecting Learning, Reflection, and Identity for the Novice Customer

The findings of this research indicate that for novice customers of specialised outdoor sports stores, satisfaction is a two-part cognitive process: the acquisition of new knowledge, followed by its personalisation. The findings suggest that novice customers are most satisfied not only when they are "*learning interesting things*" and "*feeling curious*," but crucially, when they are prompted to "r*eflect on what best suits [their] athletic needs*." This directly supports and extends the literature that frames sports products as powerful symbols of identity related to personal feelings, such as desired performance, the fit or the athletic goal (Underwood et al., 2001; Schwarzenberger & Hyde, 2013).

For the novice customers, the purchase is not merely a transaction, but an act of identity construction and a moment of reflection and understanding of their athletic needs. They are seeking the right tools and symbols to affirm their entry into a new sports subculture (Karg, 2022). The staff's role, therefore, should not just be to transfer information, but to facilitate a process of self-discovery through the products and by the involvement of the novice in a community.

This finding challenges the limitations of traditional service analysis like SERVQUAL, which focuses on functional features and benefits of the service(Parasuraman, 1988). In the niche of outdoor sports, a service can be delivered correctly (e.g. the staff provide facts), but without the second, reflective step where that information is personalised, the interaction fails to meet the novice's identity-related need. The satisfaction comes from the confidence gained when abstract product features are translated into a personal solution. Therefore, SERVQUAL is insufficient for analysing these contexts, because it lacks a method for deeply analysing the content shared during the staff-customer interaction, which is critical for the CX.

6.4.3 Reframing the Role of Expertise

This study could also reframe the role of expertise within the disconfirmation paradigm, discussed in the retail literature (Jamal & Naser, 2002; Jamal & Anastasiadou, 2009). Expert outdoor sports customers, with sophisticated knowledge of the sports and well-developed conceptual frameworks (Alba & Hutchinson, 1987), enter the store with higher and specific expectations of the service encounter(Jamal & Naser, 2002;

Jamal & Anastasiadou, 2009). The direct negative effect of expertise suggests that the staff-customer interactions in these stores might be failing to meet some of the elevated standards. When an expert receives advice or shares their opinion, they could be critically evaluating the staff's response against their knowledge base. Any perceived gap between their expectation and the actual service delivered, such as a lack of nuance, outdated information on the sport, or a failure to recognise the customer's own expertise, could widen the disconfirmation gap, leading to lower reported satisfaction (Alba & Hutchinson, 1987).

The findings show this negative effect is not present during interactions that involve cognitive stimuli. Outdoor experts are most satisfied when they are "*inspired to learn more*" and "*feel interested*". This suggests that when a staff-customer interaction successfully delivers a powerful cognitive reward, it might override the expert's critical filter. In this scenario, the interaction could no longer be a service to be evaluated against a high standard, but a peer-to-peer exchange that could provide genuine value. The satisfaction could not stem from the social act of receiving advice, but from the cognitive stimuli within that advice.

Therefore, the authors can refine the conclusions presented by Jamal (2002) and Alba (1987) for the specific case of specialised outdoor sports retail, having analysed specifically the interaction with staff. The results suggest that outdoor sports experts' satisfaction could be contingent on the quality of the cognitive stimuli delivered through staff-customer interaction. A generic social exchange with the staff might trigger their critical evaluation and result in lower satisfaction. However, high-level interaction that delivers inspiration and novel insights regarding current trends or technical details has the potential to satisfy them, since it probably fulfils the sophisticated need for intellectual engagement that defines their expertise. Hence, expertise might negatively impact satisfaction during some social retail interactions as Jamal (2002) and Alba (1987) concluded, but this effect could be neutralised when the interaction delivers superior cognitive stimuli.

6.4.4 Implications for Design Literature

The theoretical contribution of this study for service design could be a new method for analysing staff-customer interactions within the customer journey. Current service design tools, like customer journey maps, are excellent at identifying the sequence of customer actions and emotions (Lemon & Verhoef, 2016; Nam & Kannan, 2020). However, having identified in this study that the most important aspect of CX in specialised stores could be the staff-customer interaction, such tools can be adapted to understand the phenomenon better and ultimately better design it.

As the qualitative analysis suggested, during the prepurchase phase in a context like small specialised retail, staff-customer interactions are critical but left to the individual's abilities. Therefore, analysing the dialogues is essential to uncover needs and correlate them with reactions such as satisfaction.

This study proposes that customer journey maps should evolve to incorporate a new layer of analysis focused on the cognitive stimuli exchanged during staff-customer interactions. Thus, designers mapping customer journeys in niche environment, similar to specialised outdoor sports stores where staff-customer interaction is key, should consider two variables: The cognitive stimuli exchanged by the customer (e.g., questions about technical details or trends); The customer's underlying needs connected to the stimuli. The needs could be segmented according to customers' personal characteristics that impact such needs. This study, for example, uses expertise to distinguish between a novice's need for identity-building and an expert's need for peer-level discussions..

This layer would not just note that a conversation happened, as current customer journey maps do, but it would specify the content of the interaction that correlates with needs and eventually leads to behaviours and reactions, such as satisfaction.

6.5 Practical Implications

The findings of this study offer a clear advantage for specialised retailers, suggesting that a great opportunity to outperform bigger brands and e-commerce could lie not in competing on price or logistics, but in smaller details of the interaction-based customer experience.

A key practical question arising from the literature was how can specialised retailers turn the unique dynamics of their staff-customer interactions into a competitive advantage? The findings of this study offer a direct answer to this question. These can be summarised first, in a three-stage roadmap that could help small outdoor sports retailers evolve from a model based on sales figures to one built on enhanced training, satisfaction and community. This transformation could be a strategic pivot of the core strengths of specialised retailers in the highly competitive market of outdoor sports. Furthermore, the roadmap could be further expanded and adapted as a general model for any specialised retail sector.

6.5.1 Implement specific Staff Training Program

The first and most critical stage for small specialised outdoor sports retailers should be the development of a sophisticated training program for store staff. The current approach, as observed in the interviews, relies on an informal and contingent sharing of knowledge. This approach leaves the needs of novice and expert customers open to interpretation and lags behind the structured method implemented by bigger brands. This research suggests that new training efforts should cover two areas:

First, the analysis suggested that the only social behaviour to significantly drive satisfaction for all customers was their ability to "*Share my opinions*". Therefore, training could focus on actively soliciting and engaging with the customer's

perspective. For a novice outdoor sports customer, this could mean creating a space where they can share their uncertainties, current struggles with the sport, and athletic goals, allowing the staff to better personalise their advice. For an expert customer, it could mean approaching them as a knowledgeable peer and turning the interaction into a collaborative exchange of experiences.

Second, the content of the conversation could be adjusted. For novice customers, staff could act as educators and guides, delivering foundational knowledge in a way that sparks curiosity and encourages reflection on their athletic needs. For experts, training might move beyond basic product facts. It could instead focus on cultivating a high-level conversational ability, enabling staff to discuss technical innovations and current trends in a way that inspires and intellectually engages them. To achieve this, exploiting the approach modern sports consumers take when researching products and topics (Barrutia et al., 2015; Cunningham et al., 2016; Funk, 2017; Jayanti & Singh, 2010), small specialised outdoor sports retailers could monitor communities, athletes, reviews on YouTube, Reddit and social media to spot trending topics, products, or to understand new values and attitudes. This would allow them to build knowledge on the topics and trends relevant to both novice and expert customers, preparing them to discuss these subjects effectively during interactions.

6.5.2 Implement New Metrics

Following the implementation of new training, the second stage could involve a fundamental shift in how staff performance is measured. As the interviews revealed, the current reliance on sales figures and "*feeling*" of satisfaction as the primary metric is a significant limitation, as it reflects past transactions and subjective impressions rather than future potential and actual numbers. To understand the business's health and growth drivers, small specialised outdoor sports retailers could begin to measure customer metrics alongside the sales figures. As the authors highlight in this study, satisfaction offers a great starting point, which links with other metrics, such as loyalty and Share of Wallet (Happ et al., 2021; Keiningham et al., 2007). The analysis of satisfaction or any other metric, should not be about achieving a high score for its own sake, but about analysing the feedback to understand precisely which elements, besides the cognitive and social components, are generating or not, value for the customers. This approach would permit retail management to understand concretely the strengths and weaknesses of the relationships being formed with their specific customers. These insights would result in a valuable asset for long-term sustainability, complementing the short-term sales figures.

6.5.3 Store as a Community Hub

With a well-trained staff and a data-driven understanding of what satisfies customers, small specialised outdoor sports retailers could take the most transformative step: evolving into a genuine community hub. The bonds established through satisfying interactions could be the building blocks of a loyal community. This could move the store beyond an ordinary retail space to a central point of connection for outdoor sports enthusiasts. Also, this step might serve an unsolved need that emerged from the interview with Manager 3. He indeed recognised how well-bonded communities within outdoor sports stores are lacking. By creating an environment that serves the novice's need for an entry into the local scene and the expert's desire for high-level engagement, the retailer would create a powerful and rooted customer base that would further attract the expanding novice customer segment. This community-centric model might provide a competitive advantage that is difficult for online sellers or generalist stores to replicate.

6.5.4 Model for Specialised Retail Experience

The principles derived from the roadmap for specialised outdoor retailers could be generalised into a model for other specialised stores. This model would allow retailers to diagnose their unique customer experience, identify opportunities, and turn them into a competitive strategy that drives satisfaction, loyalty and Share of Wallet (SoW).

The first step should be to understand the specific needs of the customer base related to interaction with staff. Retailers should conduct quantitative research, such as brief in-store intercept surveys or short online questionnaires. The goal would be to identify the unique characteristics of their clientele (e.g., levels of expertise, personal goals) and to discover which topics and cognitive stimuli (e.g., product technicalities, trends, personal reflection) correlate most strongly with satisfaction, loyalty and SoW.

With a clear understanding of what topics and cognitive stimuli satisfy, generate loyalty and SoW in different customer segments, the next step would be to analyse these findings and improve them with external research. Retailers might monitor relevant social media, YouTube channels, and online forums like Reddit to understand trending topics, points of confusion, or unmet needs in their product domain. For a niche skincare chain, for example, this might mean identifying an ingredient viral on social media, that customers are curious about.

The final step would be to translate these insights into two deliverables: first, a specific training program for staff focused on the topics identified in steps 1 and 2. Second, this research could directly inform product curation, guiding the retailer to stock niche brands or innovative products that are difficult to explain on e-commerce but are better suited for an in-person demonstration.

This approach could provide a structured way for small retailers to leverage customer expertise, customer experience and staff-customer relationships as an advantage and turn them into a competitive strategy.
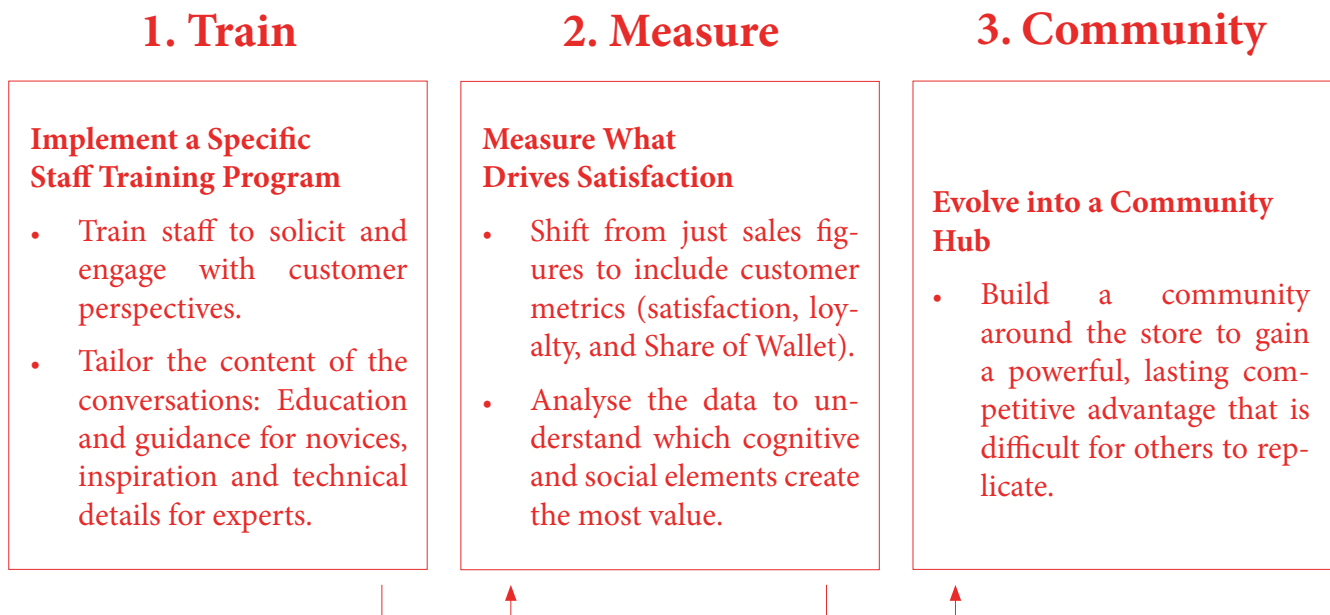
1. Train

Implement a Specific Staff Training Program

- Train staff to solicit and engage with customer perspectives.
- Tailor the content of the conversations: Education and guidance for novices, inspiration and technical details for experts.

2. Measure

Measure What Drives Satisfaction

- Shift from just sales figures to include customer metrics (satisfaction, loyalty, and Share of Wallet).
- Analyse the data to understand which cognitive and social elements create the most value.

3. Community

Evolve into a Community Hub

- Build a community around the store to gain a powerful, lasting competitive advantage that is difficult for others to replicate.

Figure 4: Roadmap for Small Specialised Outdoor Sports Retailers

1. Understand

Identify Needs

- Conduct quantitative research (e.g., in-store surveys) to identify the unique needs and characteristics levels of your customer base that correlates with measurable outcomes such as satisfaction, loyalty and SoW.

2. Analyse

Synthesize and Enrich with Context

- Analyse quantitative data to understand different needs and correlations.
- Monitor social media, online forums, and trends to enrich internal findings and identify unmet needs or painpoints

3. Deliver

Translate Insights into Two Deliverables

- A specific staff training program supported by the data retrieved in previous steps.
- A curated product selection that matches customer needs and characteristics.

Figure 5: Model for Specialised Retailers

6.6 Limitations and Future Developments

While this study provides valuable insights into the dynamics of the in-store customer experience in small outdoor sports retail, it is important to acknowledge some limitations that could offer directions for future research.

A primary limitation is the relatively small sample size (N = 52), which had an uneven distribution between the low-expertise (N = 37) and high-expertise (N = 15) groups. As the authors recognised in the preliminary research, there are fewer expert customers compared to the other segments (Outdoor Industry Association, 2025). While the sample was sufficient to detect strong main effects, it may have lacked the statistical power to identify a moderation effect. A larger and more balanced sample would provide greater confidence in the stability of the current findings, particularly the conclusion that moderation was not present. Future research should aim to replicate this study with a larger and diverse sample to validate these results and ensure they are not an artefact of limited statistical power.

Secondly, the study's findings are contextually specific to Dutch running stores. The dynamics of staff-customer interactions, the nature of expertise, and the needs of customers may differ in other retail formats, such as retailers focused on different sports like cycling and team sports, or retailers focused on other niches such as skincare or electronics. Similarly, as the authors highlighted in the method section, cultural differences in customer expectations can influence service expectations (Furrer et al., 2000; Martin & Murphy, 2017; Nam & Kannan, 2020). Therefore, the generalizability of findings to other physical retail sectors and geographical contexts might not be guaranteed. Further explanation can be found in Appendix B. Future research should extend this study's framework to different categories of physical retail and diverse cultural settings to test the applicability of the conclusions.

Thirdly, the original items from the ISCX scale, such as "*Make me think and reflect*" and "*Awaken my curiosity*", provide a foundation for measuring the cognitive experience. However, to make these items valuable to retailers, they were contextualised using specific knowledge categories identified as valuable to outdoor customers. A review of significant literature, supported by Google AI-driven thematic analysis of key studies (see prompts in Appendix H), identified several recurring themes in what customers seek from staff-customer interactions (Chang, 2015; Happ et al., 2021; Mao, 2021; Wills, 2017). While this adaptation aimed to increase the validity and practical relevance of the authors' measures by modifying the wording of a previously validated instrument, the reliability and replicability of the authors' adapted cognitive items may be reduced compared to the original ISCX scale. The properties and reliability of the original scale cannot be assumed to fully transfer to the authors' items. Therefore, a potential replicating study might have different themes due to the potential different outcomes of the analysis supported by the same AI tool. Although the authors' approach provided a reasoning for these edits, future research could build on this research by employing thorough text mining (Mao, 2021) or qualitative interviews on a larger amount of authentic customer data, such as online reviews and specialised forums. This more exhaustive approach would allow for the development and validation of a refined scale for measuring the cognitive dimension of the retail experience.

Finally, due to time constraints, this study measured customer satisfaction as an absolute construct. While this is a standard approach, it does not take into account the competitive landscape in which retailers operate. The research reveals that a more powerful predictor of customer loyalty and spending is not absolute satisfaction, but rather relative satisfaction, that is, how a customer's satisfaction with one firm compares to their satisfaction with its competitors (Keiningham et al., 2007, 2015). This study reveals that comparative multi-store research is needed. Furthermore, valuable future studies should incorporate measures of relative satisfaction to investigate whether the positive in-store experiences identified in this study not only create satisfied customers but also establish a clear long-term competitive advantage in the marketplace.

References

References

Adidas Group. (2024). Adidas continues to grow double digits in the third quarter of 2024 Adidas. https://www.adidas-group.com/en/media/press-releases/adidas-continues-to-grow-double-digits-in-the-third-quarter-of-2024

Aiken, L. S. (1991). Multiple Regression: Testing and Interpreting Interactions.

Alba, J. W., & Hutchinson, J. W. (1987). Dimensions of Consumer Expertise. https://academic.oup.com/jcr/article/13/4/411/1796768

AMER Sports. (2025). AMER Sports reports record first quarter 2025 financial results, raises full year revenue and EPS guidance. (2025). https://investors.amersports.com/news/financial-news/news-details/2025/Amer-Sports-Reports-Record-First-Quarter-2025-Financial-Results-Raises-Full-Year-Revenue-and-EPS-Guidance/default.aspx

Bagozzi, Gopinath, & Nyer. (1999). The role of emotions in marketing. Journal of the Academy of Marketing Science, 27(2), 184-206.

Barrutia, J. M., Echebarria, C., Paredes, M. R., Apaolaza, V., & Hartmann, P. (2015). Could consumer resources be even more important than firm resources to explain perceived value in e-commerce contexts? In The Business and Management Review (Vol. 6, pp. 10–11).

Bell, S. J., Auh, S., & Smalley, K. (2005). Customer relationship dynamics: Service quality and customer loyalty in the context of varying levels of customer expertise and switching costs. Journal of the Academy of Marketing Science, 33(2), 169–183. https://doi.org/10.1177/0092070304269111

Bethlehem, J. (2010). Selection Bias in Web Surveys. International Statistical Review, 78(2), 161–188. https://doi.org/10.1111/j.1751-5823.2010.00112.x

Bitner, M. J., Booms, B. H., & Tetreault, M. S. (1990). The Service Encounter: Diagnosing Favorable and Unfavorable Incidents. In Journal of Marketing (Vol. 54, pp. 71–84).

Bonfanti, A., & Yfantidou, G. (2021). Designing a memorable in-store customer shopping experience: Practical evidence from sports equipment retailers. International Journal of Retail and Distribution Management, 49(9), 1295–1311. https://doi.org/10.1108/IJRDM-09-2020-0361

Boroujerdi, S. S., Husin, M. M., Malaysia, T., Lumpur, K., Mansouri, M. H., & Alavi, A. (2020). Crafting a Successful Seller-Customer Relationship for Sports Product: AHP Fuzzy Approach. New Approaches in Sport Sciences (NASS), 2(3), 53–78. https://doi.org/10.22054/nass.2020.50968.1051

Brady, M. K., & Cronin, J. J. (2001). Some New Thoughts on Conceptualizing Perceived Service Quality: A Hierarchical Approach. In Journal of Marketing (Vol. 34, pp. 34–49).

Brakus, J. J. ˘ S., Schmitt, B. H., Zarantonello, L., & Simon, W. E. (2009). Brand Experience: What Is It? How Is It Measured? Does It Affect Loyalty? Journal of Marketing, 73, 1547–7185.

Burns, D. J., & Neisner, L. (2006). Customer satisfaction in a retail setting. International Journal of Retail and Distribution Management, 34(1), 49–66. https://doi.org/10.1108/09590550610642819

Bustamante, J. C., & Rubio, N. (2017). Measuring customer experience in physical retail environments. Journal of Service Management, 28(5), 884–913. https://doi.org/10.1108/JOSM-06-2016-0142

CBRE. (2024). European Retail Occupier Survey 2024. https://www.cbre.com/insights/reports/european-retail-occupier-survey-2024

CEDEFOP. (2024). Sales workers: Skills opportunities and challenges [2023 update]. https://www.cedefop.europa.eu/en/data-insights/sales-workers-skills-opportunities-and-challenges-2023-update

Chang, H. J., Cho, H. J., Turner, T., Gupta, M., & Watchravesringkan, K. (2015). Effects of store attributes on retail patronage behaviors: Evidence from activewear specialty stores. Journal of Fashion Marketing and Management, 19(2), 136–153. https://doi.org/10.1108/JFMM-03-2014-0019

Chatzoglou, P., Chatzoudes, D., Savvidou, A., Fotiadis, T., & Delias, P. (2022). Factors affecting repurchase intentions in retail shopping: An empirical study. Heliyon, 8(9). https://doi.org/10.1016/j.heliyon.2022.e10619

Chiou, J. S., Droge, C., & Hanvanich, S. (2002). Does Customer Knowledge Affect How Loyalty is Formed? Journal of Service Research, 5(2), 113–124. https://doi.org/10.1177/109467002237494

Churchill, G. A., & Surprenant, C. (1982). An Investigation into the Determinants of Customer Satisfaction. Journal of Marketing Research, 19(4), 491. https://doi.org/10.2307/3151722

Costello, A. B., & Osborne, J. W. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. - Practical Assessment, Research & Evaluation. 10. http://www.statsoft.com/textbook/

Couper, M. P. (2000). A REVIEW OF ISSUES AND APPROACHES.

Creswell, J. W., & Creswell, J. D. (2014). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches.

Cunningham, G. B., Fink, J. S., & Doherty, A. (2016). ROUTLEDGE HANDBOOK OF THEORY IN SPORT MANAGEMENT.

Dabholkar, P. A., Thorpe, D. I., & Rentz, J. O. (1996). A Measure of Service Quality for Retail Stores: Scale Development and Validation.

Deckers. (2025). Deckers Brands reports fourth quarter and full fiscal Year 2025 financial results. (2025). https://ir.deckers.com/news-events/press-releases/press-release/2025/Deckers-Brands-Reports-Fourth-Quarter-and-Full-Fiscal-Year-2025-Financial-Results/default.aspx

Du, J., Jordan, J. S., & Funk, D. C. (2015). Managing mass sport participation: Adding a personal performance perspective to remodel antecedents and consequences of participant sport event satisfaction. Journal of Sport Management, 29(6), 688–704. https://doi.org/10.1123/JSM.2014-0225

European Commission. (2022). Sport and physical activity: Full report. Publications Office of the European Union.

Eurostat. (2019). Performing (non-work-related) physical activities by sex, age and educational attainment level. https://doi.org/10.2908/HLTH_EHIS_PE3E

Evans, M. (Martin J.). (2006). Consumer behaviour.

Field, A. (2012). Discovering statistics using SPSS: And sex and drugs and rock'n'roll (3. ed., repr). Sage.

Field, A. (2024). Discovering statistics using IBM SPSS statistics (6th edition). Sage.

Fränzel, N., & Swoboda, B. (2024). Reciprocal Effects of Cognitive, Affective, and Social Customer Experience on Customer Loyalty and Word-of-Mouth in Omnichannel Fashion Retailing. Marketing ZFP, 46(4), 3–18. https://doi.org/10.15358/0344-1369-2024-4-3

Friedman, D. C., Brown, T. A., & Taran, Z. (2011). Specialty store expertise as a driver of satisfaction and share of wallet. International Review of Retail, Distribution and Consumer Research, 21(4), 375–389. https://doi.org/10.1080/09593969.2011.595497

Funk, D. C. (2017, April). Introducing a Sport Experience Design (SX) framework for sport consumer behaviour research. In Sport Management Review (Vol. 20, Issue 2, pp. 145–158). Elsevier Ltd. https://doi.org/10.1016/j.smr.2016.11.006

Furrer, O., Liu, B. S.-C., & Sudharshan, D. (2000). The Relationships between Culture and Service Quality Perceptions: Basis for Cross-Cultural Market Segmentation and Resource Allocation. Journal of Service Research, 2(4), 355–371. https://doi.org/10.1177/109467050024004

Gagliano, B., & Hathcote, J. (1994). Customer Expectations and Perceptions of Service Quality in Retail Apparel Specialty Stores.

Galak, J., Givi, J., & Williams, E. F. (2016, December). Why Certain Gifts Are Great to Give but Not to Get: A Framework for Understanding Errors in Gift Giving. In Current Directions in Psychological Science (Vol. 25, Issue 6, pp. 380–385). SAGE Publications Inc. https://doi.org/10.1177/0963721416656937

Gentile, C., Spiller, N., & Noci, G. (2007). How to Sustain the Customer Experience:. An Overview of Experience Components that Co-create Value With the Customer. European Management Journal, 25(5), 395–410. https://doi.org/10.1016/j.emj.2007.08.005

Gilmore, J. H., & Pine, J. (1998). Welcome to the experience economy. Harvard Business Review, 76 4, 97–105.

Giunco. (2024, July 28). Nike: An epic saga of value destruction | LinkedIn. https://www.linkedin.com/pulse/nike-epic-saga-value-destruction-massimo-giunco-llplf/?trackingId=WPCi0TUQTmOkJ%2FLBYMoGyQ%3D%3D

Guyot, O. (2025, January 24). Satisfy secures €11 million in funding to target €100 million revenue. FashionNetwork.com. https://ww.fashionnetwork.com/news/Satisfy-secures-11-million-in-funding-to-target-100-million-revenue,1695766.html

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). MULTIVARIATE DATA ANALYSIS EIGHTH EDITION. www.cengage.com/highered

Haleem, A. (2025, June 27). Nike Digital sales sink in Q4, tariffs to impact revenue. Digital Commerce 360. https://www.digitalcommerce360.com/article/nike-digital-sales/

Happ, E., Scholl-Grissemann, U., Peters, M., & Schnitzer, M. (2021). Insights into customer experience in sports retail stores. International Journal of Sports Marketing and Sponsorship, 22(2), 312–329. https://doi.org/10.1108/IJSMS-12-2019-0137

Hayes F., A. (2022). Introduction to Mediation, Moderation, and Conditional Process Analysis.

HOKA. (n.d.). HOKA®. Collaborations. Netherlands. (n.d.). HOKA. https://www.hoka.com/en/nl/collaborations/

HOKA UTMB. (2025). A community more engaged than ever! HOKA UTMB Mont-Blanc. Https://montblanc.utmb.world/news/tirage-au-sort-utmb-2025.

Huddleston, P., Whipple, J., Mattick, R. N., & Lee, S. J. (2009). Customer satisfaction in food retailing: Comparing specialty and conventional grocery stores. International Journal of Retail and Distribution Management, 37(1), 63–80. https://doi.org/10.1108/09590550910927162

Hunneman, A., Verhoef, P. C., & Sloot, L. M. (2015). The Impact of Consumer Confidence on Store Satisfaction and Share of Wallet Formation. Journal of Retailing, 91(3), 516–532. https://doi.org/10.1016/j.jretai.2015.02.004

IBISWorld. (2025). Sporting equipment retailing in Europe. Copyright © 1999-2025 IBISWorld, Inc. https://www.ibisworld.com/europe/industry/

sporting-equipment-retailing/200591/#IndustryStatisticsAndTrends;

ISPO. (2024). Consumer Insights Report Special Edition. https://www.ispo.com/en/outdoor/outdoor-ispo-industry-navigator

Jain, R., Aagja, J., & Bagdare, S. (2017). Customer experience – a review and research agenda. In Journal of Service Theory and Practice (Vol. 27, Issue 3, pp. 642–662). Emerald Group Publishing Ltd. https://doi.org/10.1108/JSTP-03-2015-0064

Jamal, A., & Anastasiadou, K. (2009). Investigating the effects of service quality dimensions and expertise on loyalty. European Journal of Marketing, 43(3–4), 398–420. https://doi.org/10.1108/03090560910935497

Jamal, A., & Naser, K. (2002). Customer satisfaction and retail banking: An assessment of some of the key antecedents of customer satisfaction in retail banking. International Journal of Bank Marketing, 20(4), 146–160. https://doi.org/10.1108/02652320210432936

Jayanti, R. K., & Singh, J. (2010). Pragmatic learning theory: An inquiry-action framework for distributed consumer learning in online communities. Journal of Consumer Research, 36(6), 1058–1081. https://doi.org/10.1086/648689

Jick, T. D. (1979). Mixing Qualitative and Quantitative Methods: Triangulation in Action. Administrative Science Quarterly, 24(4), 602–611. JSTOR. https://doi.org/10.2307/2392366

Joy, A., Wang, J. J., Orazi, D. C., Yoon, S., LaTour, K., & Peña, C. (2023). Co-creating affective atmospheres in retail experience. Journal of Retailing, 99(2), 297–317. https://doi.org/10.1016/j.jretai.2023.05.002

Kahle, R, L., Close, & G, A. (2011). Consumer Behavior Knowledge for Effective Sports and Event Marketing.

Kano, N., Seraku, N., & Takahashi, F. (1984). Attractive Quality and Must-Be Quality. Journal of the Japanese Society for Quality Control, 41, 39–48.

Karg, A. (2022). Strategic Sport Marketing (Karg, Adam, Shilbury, David, Westerbeek, Hans etc.) (Z-Library).

Keiningham, T. L., Cooil, B., Aksoy, L., Andreassen, T. W., & Weiner, J. (2007). The value of different customer satisfaction and loyalty metrics in predicting customer retention, recommendation, and share-of-wallet. Managing Service Quality: An International Journal, 17(4), 361–384. https://doi.org/10.1108/09604520710760526

Keiningham, T. L., Cooil, B., Malthouse, E. C., Buoye, A., Aksoy, L., Keyser, A. D., & Larivière, B. (2015). Perceptions are relative: An examination of the relationship between relative satisfaction metrics and share of wallet. Journal of Service Management, 26(1), 2–43. https://doi.org/10.1108/JOSM-12-2013-0345

Keller, K. L. (2003). Brand Synthesis: The Multidimensionality of Brand Knowledge. In JOURNAL OF CONSUMER RESEARCH (Vol. 29).

Koo, J., & Lee, Y. (2019). Sponsor-event congruence effects: The moderating role of sport involvement and mediating role of sponsor attitudes. Sport Management Review, 22(2), 222–234. https://doi.org/10.1016/j.smr.2018.03.001

Kung, F. Y. H., Kwok, N., & Brown, D. J. (2018). Are Attention Check Questions a Threat to Scale Validity? Applied Psychology, 67(2), 264–283. https://doi.org/10.1111/apps.12108

Kwon, J. (2025). Amer Sports raises 2025 guidance on strong demand for Arc'Teryx and Salomon footwear. The Business of Fashion. https://www.businessoffashion.com/news/retail/amer-sports-raises-2025-forecast-arcteryx-salomon/

Ladeira, W. J., Nique, W. M., Pinto, D. C., & Borges, A. (2016). Running for

pleasure or performance? How store attributes and hedonic product value influence consumer satisfaction. International Review of Retail, Distribution and Consumer Research, 26(5), 502–520. https://doi.org/10.1080/09593969.2016.1182934

Latour, K. A., & Deighton, J. A. (2019). Learning to Become a Taste Expert.

Lee, S., & Lee, S.-C. (2013). The Influence of Sport Sponsorship Communication on Sport Fans' Rating of Retail Service Quality. In IJSC-Journal.com ORIGINAL RESEARCH International Journal of Sport Communication (Issue 6, pp. 312–324). www.IJSC-Journal.com

Lemon, K. N., & Verhoef, P. C. (2016). Understanding customer experience throughout the customer journey. Journal of Marketing, 80(6), 69–96. https://doi.org/10.1509/jm.15.0420

Lepkowski, J. M., Singer, E., Tourangeau, R., Groves, R. M., Fowler, F. J., & Couper, M. & F. J. F. J. & M. P. C. & J. M. L. & E. & R. T. (2009). Survey Methodology.

Lerouge, D., & Warlop, L. (2006). Why It Is So Hard to Predict Our Partner's Product Preferences: The Effect of Target Familiarity on Prediction Accuracy, Journal of Consumer Research, Volume 33, Issue 3, Pages 393–402,. https://doi.org/10.1086/508523

Liu-Thompkins, Y., Khoshghadam, L., Shoushtari, A. A., & Zal, S. (2022). What drives retailer loyalty? A meta-analysis of the role of cognitive, affective, and social factors across five decades. Journal of Retailing, 98(1), 92–110. https://doi.org/10.1016/j.jretai.2022.02.005

Mao, L. L. (2021). Understanding retail quality of sporting goods stores: A text mining approach. International Journal of Sports Marketing and Sponsorship, 22(2), 330–352. https://doi.org/10.1108/IJSMS-03-2020-0029

Marathon de Paris. (2025). The world's largest marathon—Marathon de Paris 2026. https://www.schneiderelectricparismarathon.com/en/news/the-worlds-largest-marathon/290

Martin, K. D., & Murphy, P. E. (2017). The role of data privacy in marketing. Journal of the Academy of Marketing Science, 45(2), 135–155. https://doi.org/10.1007/s11747-016-0495-4

Martinelli, E., & Balboni, B. (2012). Retail service quality as a key activator of grocery store loyalty. Service Industries Journal, 32(14), 2233–2247. https://doi.org/10.1080/02642069.2011.582499

McKinsey. (2024a). State of Retail 2024-Europe: Transition and transformation in nongrocery retail. https://www.mckinsey.com/industries/retail/our-insights/state-of-retail-europe

McKinsey. (2024b). The State of Fashion.

Nam, H., & Kannan, P. K. (2020). Digital Environment in Global Markets: Cross-Cultural Implications for Evolving Customer Journeys. Journal of International Marketing, 28(1), 28–47. https://doi.org/10.1177/1069031X19898767

Nguyen, P., Wang, X. S., Li, X. I., & Cotte, J. (2021, February). Reviewing Experts' Restraint from Extremes and Its Impact on Service Providers. In Journal of Consumer Research (Vol. 47, Issue 5, pp. 654–674). Oxford University Press. https://doi.org/10.1093/jcr/ucaa037

Nicod, L., Llosa, S., & Bowen, D. (2020). Customer proactive training vs customer reactive training in retail store settings: Effects on script proficiency, customer satisfaction, and sales volume. Journal of Retailing and Consumer Services, 55. https://doi.org/10.1016/j.jretconser.2020.102069

NIKE. (2025). NIKE, Inc. Reports Fiscal 2025 second quarter results. https://investors.nike.com/investors/news-events-and-reports/investor-news/investor-news-details/2024/NIKE-Inc.-Reports-Fiscal-2025-Second-Quarter-

Results/default.aspx

Oliver, R. L. (2010). Satisfaction: A Behavioral Perspective on the Consumer: A Behavioral Perspective on the Consumer (2nd ed.). . Routledge. https://doi.org/doi.org/10.4324/9781315700892

Outdoor Industry Association. (2025). Explore Outdoor Retail Sales Trends—Outdoor Industry Association. https://oia.outdoorindustry.org/exec-summary-outdoor-retail-sales-trends-2025

Parasuraman, A. (1988). SERVQUAL:A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality 12 Journal of Retailing (Vol. 64).

Paulins, V. A., & Geitsfeld, L. V. (2003). The effect of consumer perceptions of store attributes on apparel store preference. Journal of Fashion Marketing and Management, 7(4), 371–385. https://doi.org/10.1108/13612020310496967

Pei, X. L., Guo, J. N., Wu, T. J., Zhou, W. X., & Yeh, S. P. (2020). Does the effect of customer experience on customer satisfaction create a sustainable competitive advantage? A comparative study of different shopping situations. Sustainability (Switzerland), 12(18). https://doi.org/10.3390/SU12187436

Peterson, R. A., & Wilson, W. R. (1992). Measuring Customer Satisfaction: Fact and Artifact.

Poynter, R. (2010). The Handbook of Online and Social Media Research: Tools and Techniques for Market Researchers.

PricewaterhouseCoopers [PwC]. (n.d.). Experience is everything: Here's how to get it right. https://www.pwc.com/us/en/services/consulting/library/consumer-intelligence-series/future-of-customer-experience.html

Rahulan, M., Troynikov, O., Watson, C., Janta, M., & Senner, V. (2013). Consumer purchase behaviour of sports compression garments A study of Generation Y and Baby Boomer cohorts. Procedia Engineering, 60, 163–169. https://doi.org/10.1016/j.proeng.2013.07.055

Raubenheimer, J. (2004). AN ITEM SELECTION PROCEDURE TO MAXIMISE SCALE RELIABILITY AND VALIDITY. SA Journal of Industrial Psychology.

Reichheld, F. F. (2003). The one number you need to grow. https://hbr.org/2003/12/the-one-number-you-need-to-grow

Roberts, J., Kayand´e, U., & Stremersch, S. (2014). From Academic Research to Marketing Practice: Exploring the Marketing Science Value Chain,". International Journal of Research in Marketing, 31 (2), 127–40.

Rock. (2024, October 6). The 2024 Berlin Marathon: Three Interesting data insights (Plus more). Running With Rock. Https://runningwithrock.com/berlin-2024/.

Rocklage, M. D., Rucker, D. D., & Nordgren, L. F. (2021). Emotionally Numb: Expertise Dulls Consumer Experience. Journal of Consumer Research, 48(3), 355–373. https://doi.org/10.1093/jcr/ucab015

Ruihley, B. J., & Pate, J. R. (2017). For the love of sport: Examining sport emotion through a Lovemarks lens. Communication and Sport, 5(2), 135–159. https://doi.org/10.1177/2167479515607048

Ryan, T. J. (2025). OIA study finds outdoor stores still missing emerging casual consumers | SGB Media Online. https://sgbonline.com/exec-oia-study-finds-outdoor-stores-still-missing-emerging-casual-consumers/

Saricam, C. (2022). Analysing Service Quality and Its Relation to Customer Satisfaction and Loyalty in Sportswear Retail Market. Autex Research Journal, 22(2), 184–193. https://doi.org/10.2478/aut-2021-0014

Saunders, N. (2025) LinkedIn post on retail challenges related to online shopping fulfilment pressures [Wall Street Journal article commentary].

https://www.linkedin.com/posts/neilretail_an-article-in-the-wall-street-journal-claims-activity-7299763269114707968-pr3Q/

Schaneman, B. (2024, December 11). Shop-Eat-Surf. A look at what 2024 might hold for the outdoor industry. Shop Eat Surf Outdoor. https://shop-eat-surf-outdoor.com/news/a-look-at-what-2024-might-hold-for-the-out-door-industry/134326/

Schmitt, B. (1999). Experiential Marketing. Journal of Marketing Management, 15(1–3), 53–67. https://doi.org/10.1362/026725799784870496

Schulz, M. (2024, October 22). Arc'teryx became an unexpected fashion icon. What's next? Vogue Business. https://www.voguebusiness.com/story/fashion/arcteryx-became-an-unexpected-fashion-icon-whats-next

Schwarz, E. C., & Hunter, J. D. (2008). ADVANCED THEORY AND PRACTICE IN SPORT MARKETING.

Schwarzenberger, V., & Hyde, K. (2013). The role of sports brands in niche sports subcultures. International Journal of Sports Marketing and Sponsorship, 15(1), 35–51. https://doi.org/10.1108/ijsms-15-01-2013-b004

Sharp, B. (2017). How brands grow: What marketers don't know. Oxford University Press.

Sheehan, E. (2024). Global Retail Outlook 2024. Deloitte. https://www.deloitte.com/global/en/Industries/consumer/analysis/global-retail-outlook.html

Shergill, G. S., & Chen, Y. (2008). Customer perceptions of factory outlet stores versus traditional department stores. Marketing Intelligence and Planning, 26(1), 77–96. https://doi.org/10.1108/02634500810847165

Shi, H., Zhang, L., Zhang, H., Ding, J., & Wang, Z. (2024). How Sports Involvement and Brand Fit Influence the Effectiveness of Sports Sponsorship from the Perspective of Predictive Coding Theory: An Event-Related Potential (ERP)-Based Study. Brain Sciences, 14(9). https://doi.org/10.3390/brainsci14090940

Siegel, S., & Castellan Jr., N. J. (1988). Nonparametric statistics for the behavioral sciences, 2nd ed. (pp. xxiii, 399). Mcgraw-Hill Book Company.

Sohail, M. S., & Awal, F. (2017). Examining the impact of self-image congruence on brand preference and satisfaction: The moderating effect of expertise. In Middle East J. Management (Vol. 4, Issue 2, pp. 133–149).

Statista. (2025). Preferred purchase channel for sports brands in the Netherlands 2019. https://www.statista.com/statistics/1086912/preferred-purchase-channel-for-sports-brands-in-the-netherlands/

Sudman, S., & Bradburn, N. (1973). Effects of Time and Memory Factors on Response in Surveys.

Taobao. (2024). 淘宝&天猫：2025春夏运动户外行业趋势白皮书. https://www.sohu.com/a/838842576_121758897

Tourangeau, R., Rips, L. J., & Rasinski, K. (2000). The Psychology of Survey Response.

Underwood, R., Bond, E., & Baer, R. (2001). Building Service Brands via Social Identity: Lessons from the Sports Marketplace. Journal of Marketing Theory and Practice, 9(1), 1–13. https://doi.org/10.1080/10696679.2001.11501881

Verhoef, P. C., Lemon, K. N., Parasuraman, A., Roggeveen, A., Tsiros, M., & Schlesinger, L. A. (2009). Customer Experience Creation: Determinants, Dynamics and Management Strategies. Journal of Retailing, 85(1), 31–41. https://doi.org/10.1016/j.jretai.2008.11.001

Walsh, M. (2025). Satisfy expands and Chinese trail brands enter the world stage. Trailmix. https://wearetrailmix.substack.com/p/satisfy-expands-and-chinese-trail

Wills, R. (2017). Specialty Running Stores and the Sports Medicine Professional: A Natural Partnership. In Athletic Footwear and Orthoses in Sports Medicine (pp. 265–267). Springer International Publishing. https://doi.org/10.1007/978-3-319-52136-7_19

Wineburg, S., & Mcgrew, S. (2017). LATERAL READING: READING LESS AND LEARNING MORE WHEN EVALUATING DIGITAL INFORMATION. https://ssrn.com/abstract=3048994

Yesmin, Most. N., Hoque, S., Hossain, Md. A., Jahan, N., Fang, Y., Wu, R., & Alam, Md. J. (2023). SERVQUAL to Determine Relationship Quality and Behavioral Intentions: An SEM Approach in Retail Banking Service. Sustainability, 15(8), 6536. https://doi.org/10.3390/su15086536

Zhang, J., Zhang, J., & Zhang, M. (2019). From free to paid: Customer expertise and customer satisfaction on knowledge payment platforms. Decision Support Systems, 127. https://doi.org/10.1016/j.dss.2019.113140

Appendices

Appendix A: Exploratory Questions

While H1 and the main research question provide a specific inquiry and testable prediction, they does not capture the whole complexity of the phenomenon of the staff customer interaction to provide concrete insights to retailers. To build a richer understanding and address other gaps identified in the literature, this study is also guided by the following exploratory research questions:

EQ1: *How can specialised outdoor sport retailers leverage the effect of expertise during the staff-customer interaction?*

EQ1 extends the inquiry of the main research question into practical strategy. While the literature suggests expertise is fundamental for CX in specialised retail, such as outdoor sports ones (Boroujerdi et al., 2020; Chang et al., 2015; Happ et al., 2021; Mao, 2021) and expertise impacts fundamentally how CX is perceived by different customers (Jamal & Naser, 2002), it offers little guidance on how retailers and outdoor sports retailers can understand and exploit this effect.

EQ2: *What are the specific conversational needs that influence satisfaction for novice versus expert customers during staff customer interactions in a specialised outdoor sports retail setting?*

EQ2 addresses another key gap in the literature. While studies indicate that novices seek "*guidance*" and experts seek "*functional validation*" and that purchases can be linked to identity construction for beginners (Underwood et al., 2001; Happ et al., 2021; Friedman et al., 2011; Mao, 2021; Wills, 2017; Yoshida, 2017), the specific elements that fulfil these needs during the staff-customer interaction remain under-explored.

The relationship between H1, the main research question, and these exploratory questions is complementary. H1 tests a specific, statistical interaction (e.g. moderation). In contrast, the research questions are designed to discover the value of the content during the staff-customer interaction, based on different levels of expertise. The answers to EQ1 and EQ2 will provide the necessary context to interpret practically the results of H1.

Appendix B:

B1   Retail CX Across Different Cultures

This study was intentionally limited to customers of European, specifically Dutch, stores to control for cultural variability in service expectations and interaction styles. The literature highlights significant cultural differences between countries such as the EU, the USA, and China in staff-customer dynamics, such as expectations regarding formality (Furrer et al., 2000) , approaches to in-store technology (Nam & Kannan, 2020), and even data privacy norms (Martin & Murphy, 2017). The focus of this study wasn't on using these differences but acknowledging the fact that they may affect CX in different ways. By focusing on a single, relatively homogeneous cultural context, therefore analysing interaction only within Dutch stores, the study aimed to mitigate the influence of these variables on the relationship between interaction quality and satisfaction. For these reasons, the study used street intercepts and not an online survey. Further explanation will follow in the chapter.

B2   Personal Shopping versus Shopping for Others

Since the study was focused exclusively on personal shopping experiences, but intuitively, customers could have been shopping for others such as friends or family, the authors investigated how personal shopping versus shopping for others might influence CX. Research indicates that the psychological drivers and satisfaction metrics for purchasing for others or a gift for someone else are fundamentally different from those involved in buying for oneself. Gift-giving introduces complex factors such as pressure to meet the recipient's unknown expectations, and a consumer egocentrism where one's preferences are projected onto the recipient (Galak et al., 2016; Lerouge, & Warlop, 2006). To isolate the direct relationship between a customer's personal experience and their own satisfaction, a screening question at the beginning of the survey was asked to select only participants shopping primarily for themselves.

B3   Survey Timing and Administration Rationale

The timing and method of survey administration were carefully considered to balance the need for accurate memory recall and the risks of respondent burden or memory alteration.

While a completely online survey methodology offers advantages in cost and speed (Couper, 2000), it was rejected for its looseness. A general online survey cannot reliably target the recent, in-person customers of specialised sports stores since it relies on the memory of customers of the interaction, therefore depending on the good or bad memories which are worth remembering (Lepkowski et al., 2009). Relying on email lists or social media has similar risks, since it would likely result in an unrepresentative, self-selected sample who happen to be willing to remember a particular event in a sports store; therefore, the authors, as researchers, would not have control over the randomness of customers (Bethlehem, 2010). Conversely, a purely in-person intercept survey, while solving the coverage problem, introduces its own set of challenges. While an immediate, on-the-spot survey offers the highest potential for accurate recall of specific episodic details (Tourangeau et

al., 2000), this approach is sometimes considered impractical. It imposes a significant respondent burden immediately after a probably satisfying shopping experience. Literature highlighted that it could lead to high refusal rates or survey fatigue (Poynter, 2010; Schwarzenberger & Hyde, 2013; Shi et al., 2024; Underwood et al., 2001). Conversely, a long delay of several weeks or months was also rejected since research demonstrates that such a timeframe leads to memory decay, less accurate reporting (Sudman & Bradburn, 1973; Tourangeau et al., 2000)and a tendency for satisfaction ratings to become artificially inflated and less varied as respondents rely on general impressions rather than specific memories (Peterson & Wilson, 1992).

Therefore, a mixed-method approach was adopted, and hence respondents who weren't available on the spot outside the stores were given a response window of 24- 48 hours after their CX. This timing is still consistent with industry best practices for linking feedback to specific experiences (Keiningham et al., 2007). Leaving more time after the CX even allowed for a more considered, cognitive evaluation of the experience rather than a purely emotional one (Bagozzi et al., 1999; Oliver, 1997), while still being recent enough to leverage detailed episodic memory recall (Tourangeau et al., 2000). Participants were then provided with a QR code to an online questionnaire, reducing the immediate burden and allowing them to respond at their convenience within their optimal time window.

B4 Absolute and Relative Satisfaction

During the literature review, the authors came across two main types of satisfaction measurement: relative and absolute. Looking at the core literature on CX and retail, it was clear that the preferred option was the measurement of absolute satisfaction (Burns & Neisner, 2006; Fränzel & Swoboda, 2024; Happ et al., 2021; Pei et al., 2020). On the other hand, some literature has investigated, as the authors discussed briefly in the review, the efficacy of general satisfaction compared to relative (Keiningham et al., 2007, 2015), therefore, the authors explored whether the general satisfaction was indeed the optimal solution for this study. Based on the analyses of Keiningham et al. (2007) and Keiningham et al. (2015), the methodological challenges of measuring relative satisfaction, as opposed to absolute satisfaction, are significant and extend across the entire research process, from instrument design to data analysis. These challenges help to explain the popularity of simpler, though less predictive, absolute metrics, such as absolute satisfaction, in both academic and practitioner contexts. The studies of Keiningham et al. (2007) and Keiningham et al. (2015) were performed on brands; therefore, for this study, they were used as a conceptual basis to better understand how relative satisfaction would apply in the context of sports stores

A primary methodological difficulty comes from the fundamental shift in survey design required to capture relative perceptions. Traditionally, absolute satisfaction measurement relies on a single approach where a customer evaluates a sin-

gle firm in isolation (Burns & Neisner, 2006; Fränzel & Swoboda, 2024; Happ et al., 2021; Pei et al., 2020). In contrast, to measure relative satisfaction as conceptualised by Keiningham et al. (2015), the research instrument must first identify each customer's "*usage set,*" therefore, their specific portfolio of used brands within a given category. The survey cannot simply ask about one brand but also request respondents to provide satisfaction ratings for all competitors they actively patronise. Looking at the context of this thesis, if this methodology would have been adapted for stores, the researchers would have asked the customers to compare all the sports stores they visit regularity, determining an increased cognitive load on the customers.

Furthermore, a significant methodological obstacle also lies in the metric of relative satisfaction itself. Absolute satisfaction is a directly measured variable; a customer's rating on a scale is the final data point (Burns & Neisner, 2006; Fränzel & Swoboda, 2024; Happ et al., 2021; Pei et al., 2020). Relative satisfaction, however, is a derived construct. As demonstrated by Keiningham et al. (2015), the primary use of relative satisfaction is the rank of a brand's satisfaction score compared to the scores of other brands in the customer's usage set. This rank is not asked directly but must be calculated during the analysis phase. This introduces an essential data transformation step that does not exist in absolute measurement. The analysis of the regression and other variables would have also involved this complex assessment, moving the focus from interpreting a single score, besides all the other regression analyses, to understanding a position within a competitive hierarchy.

Finally, the statistical analysis needed to connect relative satisfaction to customer behaviour is significantly more complex. Unlike the straightforward correlations or basic regression often used for absolute satisfaction, a relative approach requires sophisticated modelling. As Keiningham et al. (2015) show, one cannot simply correlate rank with more advanced metrics as spending. Instead, researchers must test and compare a variety of advanced predictive models, such as the Wallet Allocation Rule (WAR) or Zipf distribution models. This means there is no single, straightforward statistical path. This analytical load stands in contrast to the simpler methods used for absolute satisfaction, making the relative approach far more time-consuming to implement correctly.

Therefore, considering the time and practical constraints of the field research and the analytical scope of this thesis, a general satisfaction measure was selected. This approach aligns with established practice in retail research and allows for a robust yet feasible analysis without imposing an undue burden on respondents or requiring the complex, modelling inherent to relative satisfaction

Appendix C Pre-test Survey

Before the main data collection, a pre-test was conducted. The primary aims of this phase were to evaluate the survey's user interface, particularly on mobile devices; to assess the feasi-

bility of the in-person recruitment strategy across different stores; and to refine the wording, structure, and performance of the newly adapted survey questions from the ISCX scale. The pre-test was administered to a small, purposive sample of 11 customers of one sports store.

A key component of this pre-test phase was an initial reliability analysis of the multi-item scales to assess their internal consistency. Cronbach's Alpha was calculated for each construct, and this preliminary analysis confirmed the reliability of all scales. The 4-item customer satisfaction scale demonstrated good internal consistency, yielding a Cronbach's Alpha of .772. Similarly, the 3-item social experience scale also showed acceptable reliability with a Cronbach's Alpha of .771. As both of these values exceeded the threshold of .70 for acceptable reliability, the items for the satisfaction and social scales were deemed to be performing as intended. One item of the satisfaction scale had an Alpha if Deleted of .991, but it was kept ultimately since this pre-test was performed with a very small number of customers (N = 11) therefore, the results could have changed throughout the collection. Consequently, no further revisions were made to these two scales, and they were retained in their original form for the main survey. On the other hand, the first iterations of the cognitive and expertise scales showed Alphas of .770 and .749, respectively, but the pre-test revealed several areas for improvement. The same happened with the structure of the follow-up ranking section, originally positioned after the social experience questions, which underwent a more detailed revision process as described in the following sections.

Pre-test Survey

1. Store Visit Filter

"Have you visited a sports retail store in Europe within the last 6 months?"

- Yes → Continue

- No → End survey

2. Employee Interaction Filter

"During your most recent sports store visit, did you interact with any store staff (for advice, product information, or assistance)?"

- Yes → Continue

- No → End survey

3. Geographic Consistency

"Where did your most recent sports store experience take place?"

- European country → Continue

- non-European country → End survey

4. Personal Shopping Focus

"When you visit sports stores, are you typically shopping:"

- For yourself → Continue

- For family members/others → Continue

- Both equally → Continue

5. Store Experience Frequency

"What percentage of your sports purchases in the last year involved visiting a physical store (either to try products or make the purchase)?"

- 0-20% → End survey

- 21-40% → Continue

- 41-60% → Continue

- 61-80% → Continue

- 81-100% → Continue

Store Type Identification

"Which store did you most recently visit for sports products?"

- Decathlon

- Nike (standalone store)

- Adidas (standalone store)

- Footlocker

- JD Sports

- Local specialty sports store

- Department store with sports section

- Other: _____

Main Survey Questions

Cognitive Experience

Please indicate your level of agreement (1 = Strongly Disagree, 5 = Strongly Agree):

1. I learn interesting things about sports products and their technical features from store staff.

2. I feel curious about different sports and equipment when in the store environment.

3. I am inspired to learn more about sports through conversations with staff.

4. I reflect on what best suits my athletic needs based on product information provided.

5. I discover interesting ideas about sports trends and innovations from staff members.

6. I find the history and evolution of sports brands interesting when explained by sales associates.

7. I think about how equipment affects performance during product demonstrations.

8. I am stimulated to think more deeply when information about materials and

technology is presented.

Social Experience with Staff - Section 1

Please indicate your level of agreement (1 = Strongly Disagree, 5 = Strongly Agree):

Core Question:

"*I receive valuable advice from store staff.*"

Social Experience with Staff - Section 2

If previous answer ≥ 3, display:

Which types of advice do you typically receive from store staff? (Select all that apply):

- ☐ Technical specifications and performance features
- ☐ Product fit and sizing guidance
- ☐ Care and maintenance instructions
- ☐ Sport-specific recommendations for my activities
- ☐ Product comparisons between brands/models
- ☐ Material composition and durability information
- ☐ Performance advice for extreme/challenging conditions
- ☐ Current sports trends and innovations
- ☐ Historical information about brands and products
- ☐ Advice tailored to my skill/involvement level
- ☐ Other advice not listed above: _____(open text box)

Satisfaction with Store Experience

Please rate your agreement (1 = Strongly Disagree, 7 = Strongly Agree):

1. *I have very positive feelings toward this sports retail store.*

2. *I feel good about coming to this store for sports products.*

3. *I am satisfied overall with this store and the service they provide.*

4. *I feel satisfied that this store produces the best results for me.*

Expertise in Sports-Related Topics

Please rate your agreement (1 = Strongly Disagree, 7 = Strongly Agree):

I know a lot about sports equipment technology and performance features.

I am experienced with sports product features.

I am well-informed about sports brands and their history.

I have extensive knowledge about current trends in sports equipment.

I am well-informed about materials used in sports equipment manufacturing.

Demographics

Please provide the following information:

Age: ___

Gender:

- Male
- Female
- Other
- Prefer not to say

Sport Type:

What sport(s) do you primarily participate in? (Select all that apply)

- Running
- Cycling
- Football/Soccer
- Basketball
- Tennis
- Hiking
- Fitness/Gym
- Other: _____

C1 Independent Variable: Cognitive Dimension

A primary consideration during the pre-test was whether to include a "*Not Applicable*" (N/A) or "*No Opinion*" response option in the Cognitive dimension section. This consideration popped up after two respondents mentioned that some topics were not covered during their discussion with the staff. This was particularly relevant for items that depended on a specific type of conversation with staff, such as discussing the history of a brand, which may not have occurred during every visit. While the inclusion of such an option can reduce the pressure on respondents to fabricate false responses for topics they have not considered, the literature on this topic is equivocal. Research by Krosnick et al. (2002) found that omitting a "*no-opinion*" option can encourage respondents to perform the necessary cognitive work to report a genuine attitude, and that including such option did not reliably improve data quality. Based on these findings, the decision was made to omit a formal N/A option. Instead, the items were rephrased to be more directly tied to the staff interaction, thereby reducing ambiguity and making it more general. For example, the item "I *learned interesting things about sports products and their technical features from store staff*" was revised to the more general and applicable "*I learned interesting things about sports products from the store staff.*" Similarly,

"*Bring interesting ideas to mind*" was edited to "I *discovered interesting ideas about sports through conversation with the staff*."

One item, "*I was stimulated to think more deeply during conversations with staff*," was ultimately removed during this final revision phase as it was deemed conceptually redundant to other items, such as "*I reflected on...*" and "*I thought about...*" and therefore added little unique value to the overall scale. One item took its place: "*I discovered creative ideas for combining or adapting sports products through conversation with the staff*", which seemed more insightful and could have changed depending on the expertise level.

This revision resulted in a final set of eight cognitive items that were more contextually specific, which showed good consistency (α = .861) after testing them with a larger pool of customers (N=24), during the final collection of the responses.

C2   Value of the Topics

Initially, a follow up section designed to deconstruct the value of advice was placed immediately following the social dimension item, "I *received advice from store staff*". However, the pre-testing phase revealed a conceptual limitation with this approach. The term "*advice*" did not fully capture the essence of the staff-customer interaction, which is fundamentally a cognitive process of receiving, processing, and evaluating various types of information. To better align the survey structure with this reality, the entire section was moved to follow the cognitive experience scale.

The list of topics to rank, presented in the follow up section to participants, was derived from the same thematic analysis of sports retail literature used to adapt the cognitive scale, ensuring methodological consistency. A key addition to this list was the item "*Information about local sports clubs, groups, or events*" This was included to capture the community-building aspect of sports retail, as literature suggests that sponsoring local events can attract consumers (Chang, 2015) and that a sense of belonging to a sports subculture is a powerful motivator for engagement (Ruihley, 2017; Schwarzenberger, 2013).

Furthermore, a significant revision was made to the wording of the ranking question itself, changing the key criterion from "*most helpful*" to "*most valuable*." The term "*helpful*" was deemed to be an overly utilitarian descriptor, representing a common service expectation rather than a memorable and impactful experience, which is a key differentiator in the modern retail economy (Gilmore & Pine, 1998). The term "*valuable*" was chosen for its broader scope, encompassing not just functional utility but also the potential for an employee to create a "*truly out-of-the-ordinary*" and personally memorable encounter, which is a key driver of high satisfaction (Bitner et al., 1990)

Finally, a minor change was implemented based on pre-test observations. The prompt "*Click and drag the items to move them up or down the list*" was added to the ranking question to explicitly encourage participants to actively consider and refine their list, since it was observed that most of the respondents tended to leave the topics without moving them, therefore altering the results.

C3   Moderator Variable: Customer Expertise

The measurement of customer expertise was revised too. The initial version of the scale was designed as a series of semantic differential items. This approach was aligned with previous research measuring consumer expertise (Jamal, 2002). However, pre-testing revealed practical issues related to a poor mobile user interface on the survey platform. To address this usability concern, the scale was redesigned using a standard 7-point Likert format (e.g., "*I know little*" to "*I know a lot*"), which is still a widely used and validated approach for measuring attitudes and self-assessed constructs in consumer research (Bell, 2005; Rocklage, 2021).

During this revision, the content of the items was also refined to improve clarity and reduce redundancy. The initial set of questions was found to have overlapping items, with two separate questions focusing on "*technical features*" and "*product features*". These were combined to create a more distinct set of knowledge domains. The item concerning "*trends*" was broadened from a narrow focus on equipment to encompass general sports trends, and the wording of the item related to materials was simplified for better comprehension.

Furthermore, the final item order was structured to align more with the theoretical distinction between utilitarian and hedonic value (Ladeira, 2016). Items concerning products, functional knowledge, such as equipment technology, product experience, and materials, were grouped closely as they represent the utilitarian dimension of expertise. Items related to more experiential and brand-focused knowledge, such as brand history and current trends, were grouped to represent the hedonic dimension.

All the final adjustments were tested again with a small batch of respondents (N=24) during the collection of the final survey, and showed acceptable reliability values (α = .815)

Appendix D: Main study survey

Informed consent | Intro

Welcome to this survey. Please read the following information carefully and then answer the questions below.

You are being invited to participate in a research study titled What Drives Customer Satisfaction in Sports Stores? This study is being done by Jack Azzalin Gibson, a Master's student at TU Delft, Faculty of Industrial Design Engineering. The purpose of this research is to determine which aspects of the in-store customer experience have the most significant impact on customer satisfaction in sports retail environments. It will take you less than 5 minutes to complete. The results of this survey will be used in our research and may be published in a report, in which case all the data will still be published anonymously. We will be asking you about your age, satisfaction with the employee interaction, and satisfaction with the overall experience.

To ensure confidentiality and minimize any risks, this survey will be conducted anonymously. We will not collect IP addresses or any other personal data that can identify you. All data will be securely stored and anonymized before analysis. Only the researchers involved with this study will have access to the data for the duration of the MSc thesis +2 months.

Your participation in this study is completely voluntary. You can withdraw at any time, and you are free to omit any question. As the survey is anonymous, individual responses cannot be identified or withdrawn after submission.

If you have any questions or difficulties during the survey, reach out to: j.azzalingibson@student.tudelft.nl

By clicking on "Next page", I agree that I have read and understood the information given about the study and I consent that this information will be used for publications, reports and presentations.

— Page Break —

Interaction check | Intro

Skip to

End of Survey if No Is Selected

Did you interact with any store employees during your visit to the sports store (for advice, product information, assistance, or anything else)?

○ Yes
○ No

Shopping for | Intro

Skip to

End of Survey if For someone else Is Selected

During your visit to the sports store, did you shop:

○ For yourself
○ For someone else

Main

Q2 | Social

Now, consider your interactions with the store's employees during the visit. Please indicate how much you agree with each statement based on your personal experience with staff.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I received advice from store employees.	○	○	○	○	○
I asked the opinions of this store's employees.	○	○	○	○	○
I shared my opinions with the store's employees.	○	○	○	○	○

Q1_new | Cognitive

Think about what you learned or discovered during your visit to the sports store. Please indicate your level of agreement with each statement:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I learned interesting things about sports products from the store staff	○	○	○	○	○
I felt curious about sports or equipment when in conversation with staff	○	○	○	○	○
I discovered creative ideas for combining or adapting sports products through conversation with the staff	○	○	○	○	○
I discovered interesting ideas about sports through conversations with the staff	○	○	○	○	○
I was inspired to learn more about sports through conversations with staff.	○	○	○	○	○
I was interested during the conversation with the staff	○	○	○	○	○
I reflected on what best suits my athletic needs based on the conversation with the staff	○	○	○	○	○
I thought about how equipment affects performance during the conversation with the staff	○	○	○	○	○

Q3 | Type of topic

Thinking about your conversation with the staff, which of these topics came up? (Select all that apply):

☐ Technical specifications and performance features

☐ Product fit and sizing guidance

☐ Care and maintenance instructions

☐ Product comparisons between brands/models

☐ Material composition and durability information

☐ Performance advice for extreme/challenging conditions

☐ Advice tailored to my skill/involvement level

☐ Current sports trends and innovations

☐ Historical information about brands and products

☐ Information about local sports clubs, groups, or events

☐ Other not listed above

[_____]

Q25 | Value of the topic   ✱

Please rank the topic from most valuable(#1) to least valuable. Click and drag an item to move it up or down the list:

↳ Technical specifications and performance features	1
↳ Product fit and sizing guidance	2
↳ Care and maintenance instructions	3
↳ Product comparisons between brands/models	4
↳ Material composition and durability information	5
↳ Performance advice for extreme/challenging conditions	6
↳ Advice tailored to my skill/involvement level	7
↳ Current sports trends and innovations	8
↳ Historical information about brands and products	9
↳ Information about local sports clubs, groups, or events	10
↳ Other not listed above	11

Q27 | Expertise   💡

Tell us how much you know about sports products and sports. 1 indicates the lowest level and 7 indicates the highest level:

	I know little	2	3	4	5	6	I know a lot
Knowledge of sports equipment and technology	○	○	○	○	○	○	○
Experience with sports products	○	○	○	○	○	○	○
Being informed about materials used in sports equipment	○	○	○	○	○	○	○
Being informed about sports brands and their history	○	○	○	○	○	○	○
Knowledge of current trends in sports	○	○	○	○	○	○	○

Q6 | Which sport   ✱

While you were answering the last question, what type of sports were you thinking about?

○ Running

○ Cycling

○ Football/Soccer

○ Basketball

○ Tennis

○ Hiking

○ Fitness/Gym

○ Other [_____]

Q4 Satisfaction

Please rate how you feel overall about your experience in the store:

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I have very positive feelings toward this sports retail store.	○	○	○	○	○	○	○
I feel good about coming to this store for sports products.	○	○	○	○	○	○	○
I am satisfied overall with this store and the service they provide.	○	○	○	○	○	○	○
I feel satisfied that this store produces the best results for me.	○	○	○	○	○	○	○

QA Attention check

To show you're reading carefully, please select the second option below.

- ○ Red
- ○ Blue
- ○ Green
- ○ Yellow
- ○ Purple

Demographic

Q7

How old are you?

- ○ Under 18
- ○ 18-24 years old
- ○ 25-34 years old
- ○ 35-44 years old
- ○ 45-54 years old
- ○ 55-64 years old
- ○ 65+ years old

Demographics
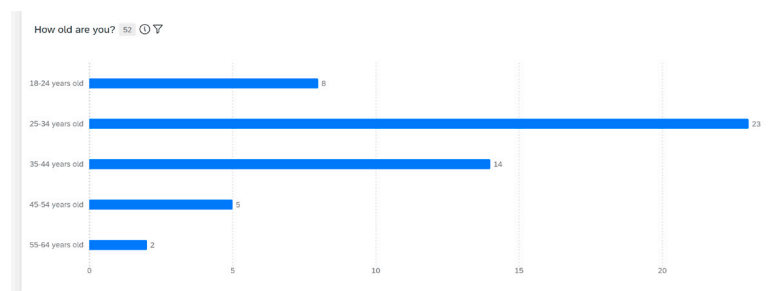
Appendix E: Detailed Data Analysis

E1 Moderating Effect

This study set out to understand how the in-store experience, particularly the quality of staff interactions, influences customer satisfaction in sports retail. The central research question was whether a customer's personal sports expertise moderates this relationship.

To test the hypothesised moderating effect, a hierarchical multiple regression analysis was conducted, a method previously employed in similar service satisfaction research (Bell et al., 2005). This approach involves entering variables into the regression model in sequential blocks. In the first block, the main effects of the independent variables (cognitive and social dimensions) and the moderator (expertise) were entered. In the second block, the interaction term, representing the potential moderation effect, was added. This hierarchical procedure was chosen, in line with the recommendations of Hair et al. (2019) and while a forced entry (simultaneous) regression would yield identical coefficients for the final model (Hayes F., 2022), the hierarchical approach still provides a valuable test of the moderation hypothesis itself.

Given that this study tests for moderation of customer outdoor sports expertise, the effect of each CX dimension on satisfaction cannot be captured by a single coefficient, as it varies depending on the customer's level of sports expertise. For the cognitive dimension and three social variables, the authors conducted separate regression analyses using the following model:

Satisfaction Score = b_1 (CX Dimension) + b_2 (Expertise) + b_3 (CX Dimension × Expertise) + ε(Age)

The critical parameter in this model is b_3, which includes the interaction coefficient between the CX dimension and customer expertise. A significant b_3 indicates that expertise moderates the relationship between the CX dimension and satisfaction, meaning the effect varies across different expertise levels. If b_3 is not significant, expertise does not meaningfully change the effect of the CX dimension, allowing for model simplification and interpretation of b_1 as the general effect while controlling for expertise.

If a significant moderation is detected (b_3 is significant), the analysis will require investigating the interaction to understand how the CX dimension affects satisfaction at different levels of expertise (Hayes, 2022). The sign of the interaction coefficient (b_3) indicates the directional trend of moderation. A positive b_3 suggests that the impact of the CX dimension becomes more positive (or less negative) as expertise increases, while a negative b_3 indicates the impact becomes more negative (or less positive) with higher expertise levels. Age was included in the error terms since it was not part of the analysis.

E2   Mann-Whitney U test

The Mann-Whitney U test was selected to compare the topic priorities between low- and high-expertise groups within the follow up section on the value of the topics section. This analysis involved comparing a categorical grouping variable, which was the Expertise, against a dependent variable measured on an ordinal scale, therefore, the ranked topics. The expertise groups were divided into "Low", which included expertise with means equal to or under 4 and "High", which included the rest. These two groups determined a between-group design, and therefore, the Mann-Whitney was best suited (Siegel & Castellan Jr., 1988). A parametric test, such as an independent-samples t-test, was inappropriate because it assumes the data is measured on an interval scale, where the distance between points is equal. Ranking data does not meet this assumption, as the value between ranks 1 and 2 is not equivalent to the value between ranks 10 and 11. The Mann-Whitney U test is the correct non-parametric alternative in this scenario, as it compares the distribution of ranks between two independent groups without assuming equal intervals(Siegel & Castellan Jr., 1988).

E3   Pearson and Spearman Correlations

Based on the results of the hierarchical regression, the authors explored which individual cognitive items were the strongest predictors of satisfaction for each expertise group. The two expertise groups were the ones used to perform the Mann-Whitney U test, therefore, with Low expertise, with means equal to or under 4 and "High", which included the rest.

In the first place, the authors checked that the 8 cognitive items and the expertise scores were normally distributed, combining the observation of the items' histograms and the results of the Shapiro-Wilk test. The results (see appendix E4) were ambiguous, showing few not normally distributed histograms combined with significant Shapiro-Wilk values (all items with $p < .001$) for the cognitive items. From the literature, the authors had contradictory statements. As the sample gets larger (above 30), the sampling distribution tends to have a normal distribution (Field, 2012). Having opposing assumptions regarding normality, the authors performed only Spearman correlations to investigate this topic, since the test doesn't assume normality of the data (Field, 2012; Siegel & Castellan Jr., 1988).

E4 SPSS Tests and Results

Final Reliability Analysis

Reliability Statistics

Cronbach's Alpha	N of Items
,279	3

Item Statistics

	Mean	Std. Deviation	N
Social - I received advice from store employees.	4,6346	,48624	52

Reliability Statistics

Cronbach's Alpha	N of Items
,927	5

Item Statistics

	Mean	Std. Deviation	N
Expertise - Knowledge of sports equipment and technology	3,38	1,694	52

Reliability Statistics

Cronbach's Alpha	N of Items
,879	8

Item Statistics

	Mean	Std. Deviation	N
Cognitive - I learned interesting things about sports products from the store staff	4,13	,908	52

Reliability Statistics

Cronbach's Alpha	N of Items
,933	4

Item Statistics

	Mean	Std. Deviation
Satisfaction - I have very positive feelings toward	5,88	1,247

Normality Checks.

Simple Histogram of Social - I received advice from store employees.

Simple Histogram of Social - I asked the opinions of this store's employees.

Simple Histogram of Social - I shared my opinions with the store's employees.

Simple Histogram of Cogntive_score


Simple Histogram of Expertise_score

Simple Histogram of Satisf_score
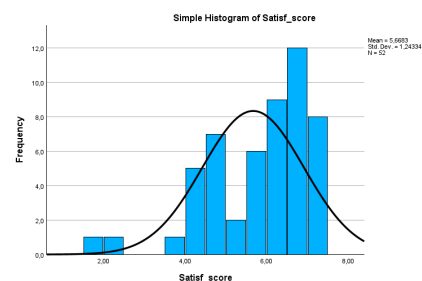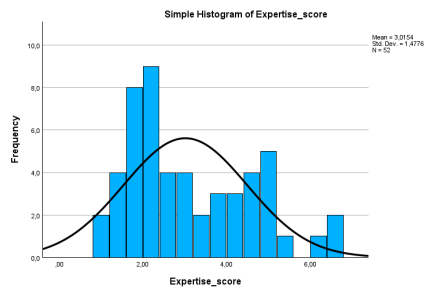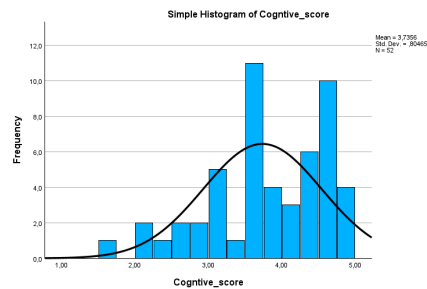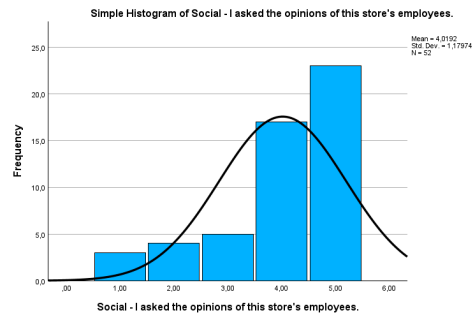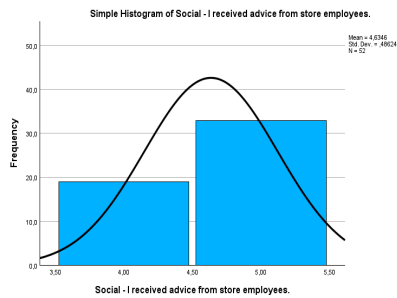
Results of the Shapiro-Wilk Test on the Cognitive Items

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Cognitive - I learned interesting things about sports products from the store staff	,287	52	<,001	,772	52	<,001
Cognitive - I felt curious about sports or equipment when in conversation with staff	,208	52	<,001	,872	52	<,001
Cognitive - I discovered creative ideas for combining or adapting sports products through conversation with the staff	,195	52	<,001	,872	52	<,001
Cognitive - I discovered interesting ideas about sports through conversations with the staff	,245	52	<,001	,854	52	<,001
Cognitive - I was inspired to learn more about sports through conversations with staff.	,223	52	<,001	,886	52	<,001
Cognitive - I was interested during the conversation with the staff	,257	52	<,001	,815	52	<,001
Cognitive - I reflected on what best suits my athletic needs based on the conversation with the staff	,366	52	<,001	,661	52	<,001
Cognitive - I thought about how equipment affects performance during the conversation with the staff	,249	52	<,001	,806	52	<,001

a. Lilliefors Significance Correction

Normality Checks for the 8 individual Cognitive Items
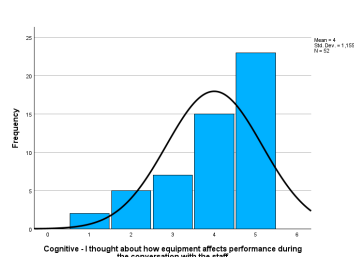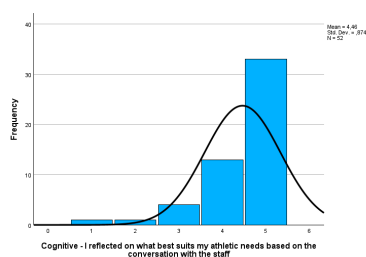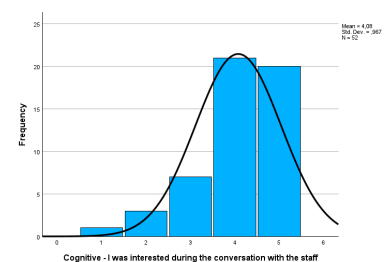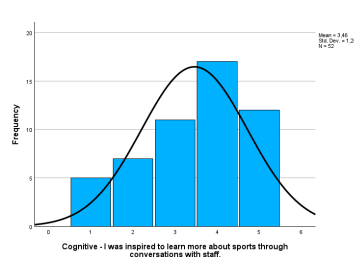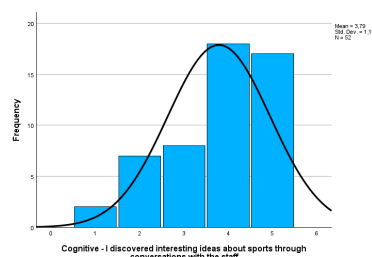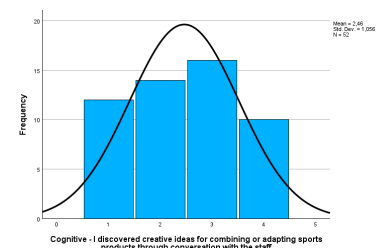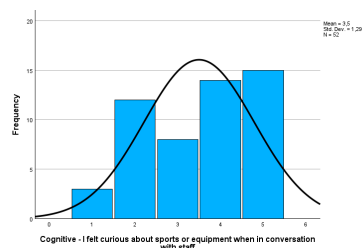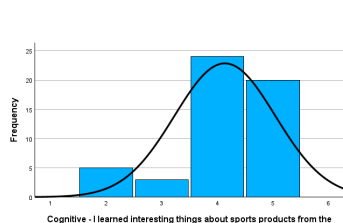
Histogram of Standardized Residuals for Regression Model
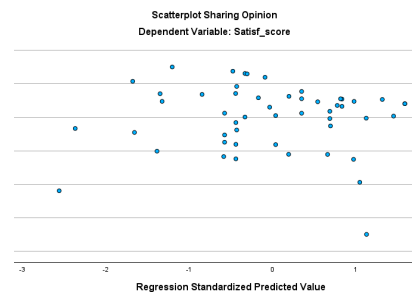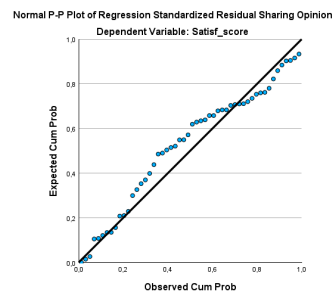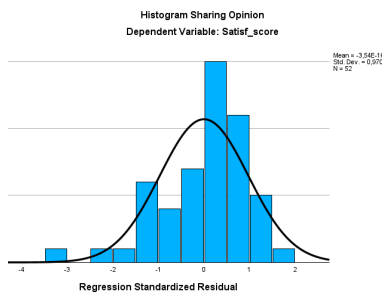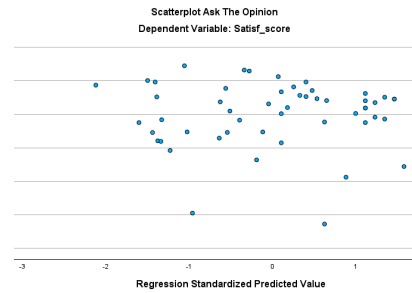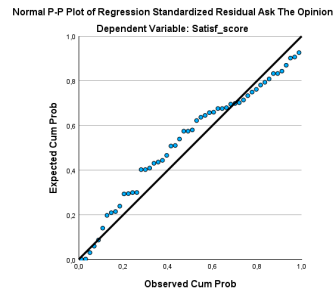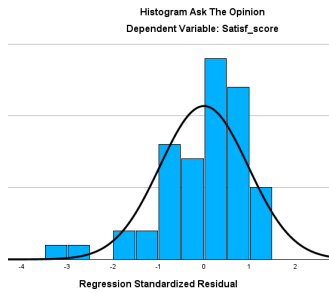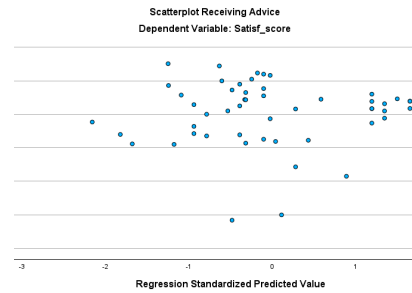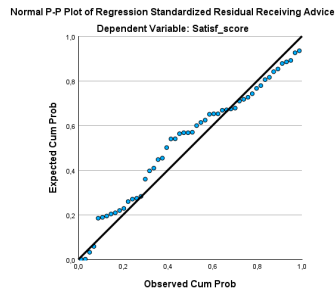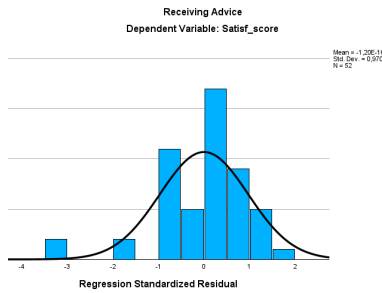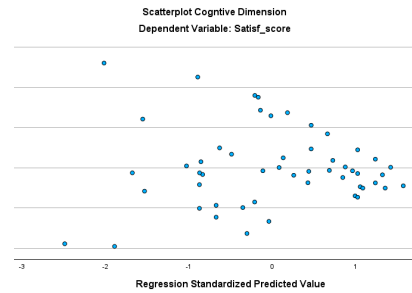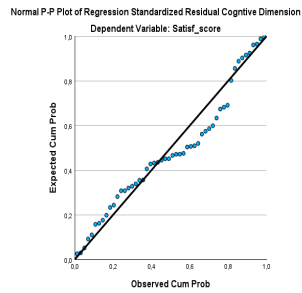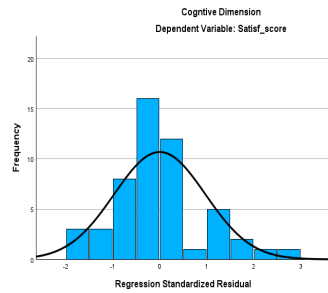
Hierarchical Regression:

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,749[a]	,562	,544	,83986	
2	,750[b]	,562	,535	,84770	1,386

a. Predictors: (Constant), Expertise_c, Cognitive_c
b. Predictors: (Constant), Expertise_c, Cognitive_c, Cog_x_Exp
c. Dependent Variable: Satisf_score

Coefficients[a]

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Statistics Tolerance	VIF
1	(Constant)	5,668	,116		48,669	<,001		
	Cognitive_c	1,080	,154	,699	7,024	<,001	,903	1,107
	Expertise_c	-,109	,084	-,129	-1,298	,200	,903	1,107
2	(Constant)	5,655	,125		45,308	<,001		
	Cognitive_c	1,070	,159	,692	6,739	<,001	,863	1,158
	Expertise_c	-,116	,088	-,138	-1,323	,192	,840	1,190
	Cog_x_Exp	-,036	,116	-,031	-,312	,757	,915	1,093

a. Dependent Variable: Satisf_score

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,411[a]	,169	,135	1,15630	
2	,430[b]	,184	,134	1,15737	2,209

a. Predictors: (Constant), Social_Item1_c, Expertise_c
b. Predictors: (Constant), Social_Item1_c, Expertise_c, Advice_x_Exp
c. Dependent Variable: Satisf_score

Coefficients[a]

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Statistics Tolerance	VIF
1	(Constant)	5,668	,160		35,349	<,001		
	Expertise_c	-,319	,111	-,379	-2,880	,006	,979	1,021
	Social_Item1_c	,571	,337	,223	1,697	,096	,979	1,021
2	(Constant)	5,690	,162		35,095	<,001		
	Expertise_c	-,327	,111	-,389	-2,944	,005	,973	1,028
	Social_Item1_c	,549	,338	,215	1,627	,110	,975	1,026
	Advice_x_Exp	-,215	,226	-,125	-,954	,345	,987	1,013

a. Dependent Variable: Satisf_score

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,424[a]	,180	,147	1,14853	
2	,445[b]	,198	,147	1,14802	2,185

a. Predictors: (Constant), Social_Item2_c, Expertise_c
b. Predictors: (Constant), Social_Item2_c, Expertise_c, Asked_x_Exp
c. Dependent Variable: Satisf_score

Coefficients[a]

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Statistics Tolerance	VIF
1	(Constant)	5,668	,159		35,589	<,001		
	Expertise_c	-,226	,114	-,269	-1,978	,054	,908	1,102
	Social_Item2_c	,271	,143	,257	1,893	,064	,908	1,102
2	(Constant)	5,608	,170		33,035	<,001		
	Expertise_c	-,207	,116	-,246	-1,787	,080	,884	1,132
	Social_Item2_c	,357	,166	,339	2,150	,037	,672	1,488
	Asked_x_Exp	-,116	,113	-,154	-1,021	,312	,740	1,351

a. Dependent Variable: Satisf_score

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,436[a]	,190	,157	1,14174	
2	,437[b]	,191	,140	1,15278	2,077

a. Predictors: (Constant), Social_Item3_c, Expertise_c
b. Predictors: (Constant), Social_Item3_c, Expertise_c, Shared_x_Exp
c. Dependent Variable: Satisf_score

Coefficients[a]

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Statistics Tolerance	VIF
1	(Constant)	5,668	,158		35,800	<,001		
	Expertise_c	-,389	,118	-,463	-3,294	,002	,838	1,193
	Social_Item3_c	,283	,138	,288	2,052	,046	,838	1,193
2	(Constant)	5,648	,179		31,551	<,001		
	Expertise_c	-,402	,129	-,478	-3,118	,003	,718	1,392
	Social_Item3_c	,291	,143	,297	2,038	,047	,796	1,256
	Shared_x_Exp	,028	,109	,036	,257	,798	,854	1,172

a. Dependent Variable: Satisf_score

Mann-Whitney U test for the Value of the Topics:

Test Statistics[a]

	Value of the topic - Technical specifications and performance features	Value of the topic - Product fit and sizing guidance	Value of the topic - Care and maintenance instructions	Value of the topic - Product comparisons between brands/models	Value of the topic - Material composition and durability information	Value of the topic - Performance advice for extreme/challenging conditions	Value of the topic - Advice tailored to my skill/involvement level	Value of the topic - Current sports trends and innovations	Value of the topic - Historical information about brands and products
Mann-Whitney U	36,000	65,500	8,000	101,000	33,000	4,000	41,000	1,000	1,000
Wilcoxon W	91,000	561,500	11,000	479,000	54,000	19,000	419,000	7,000	2,000
Z	-2,916	-1,219	,000	-,290	-1,562	-1,119	-,802	-2,037	,000
Asymp. Sig. (2-tailed)	,004	,223	1,000	,771	,118	,263	,422	,042	1,000
Exact Sig. [2*(1-tailed Sig.)]	,004[b]	,265[b]	1,000[b]	,802[b]	,138[b]	,393[b]	,476[b]	,071[b]	1,000[b]

a. Grouping Variable: Expertise Level Group
b. Not corrected for ties.

Ranks

	Expertise Level Group	N	Mean Rank	Sum of Ranks
Value of the topic - Technical specifications and performance features	1,00	20	18,70	374,00
	2,00	10	9,10	91,00
	Total	30		
Value of the topic - Product fit and sizing guidance	1,00	31	18,11	561,50
	2,00	6	23,58	141,50
	Total	37		
Value of the topic - Care and maintenance instructions	1,00	8	5,50	44,00
	2,00	2	5,50	11,00
	Total	10		
Value of the topic - Product comparisons between brands/models	1,00	27	17,74	479,00
	2,00	8	18,88	151,00
	Total	35		
Value of the topic - Material composition and durability information	1,00	19	14,26	271,00
	2,00	6	9,00	54,00
	Total	25		
Value of the topic - Performance advice for extreme/challenging conditions	1,00	3	5,67	17,00
	2,00	5	3,80	19,00
	Total	8		
Value of the topic - Advice tailored to my skill/involvement level	1,00	27	15,52	419,00
	2,00	4	19,25	77,00
	Total	31		
Value of the topic - Current sports trends and innovations	1,00	5	5,80	29,00
	2,00	3	2,33	7,00
	Total	8		
Value of the topic - Historical information about brands and products	1,00	2	2,00	4,00
	2,00	1	2,00	2,00
	Total	3		
Value of the topic - Information about local sports clubs, groups, or events	1,00	13	7,00	91,00
	2,00	0[a]	,00	,00
	Total	13		

a. Mann-Whitney Test cannot be performed on empty groups.

Spearman Tests for the Cognitive Items

- Expertise group 1= Lower expertise

Correlations[a]

			Satisf_score	Cognitive - I learned interesting things about sports products from the store staff	Cognitive - I felt curious about sports or equipment when in conversation with staff	Cognitive - I discovered creative ideas for combining or adapting sports products through conversation with the staff	Cognitive - I discovered interesting ideas about sports through conversations with the staff	Cognitive - I was inspired to learn more about sports through conversations with staff.	Cognitive - I was interested during the conversation with the staff	Cognitive - I reflected on what best suits my athletic needs based on the conversation with the staff	Cognitive - I thought about how equipment affects performance during the conversation with the staff
Spearman's rho	Satisf_score	Correlation Coefficient	1,000	,562**	,610**	,320	,478**	,431**	,408*	,613**	,464**
		Sig. (2-tailed)	.	<,001	<,001	,053	,003	,008	,012	<,001	,004
		N	37	37	37	37	37	37	37	37	37
	Cognitive - I learned interesting things about sports products from the store staff	Correlation Coefficient	,562**	1,000	,820**	,393*	,885**	,534**	,641**	,698**	,604**
		Sig. (2-tailed)	<,001	.	<,001	,016	<,001	<,001	<,001	<,001	<,001
		N	37	37	37	37	37	37	37	37	37
	Cognitive - I felt curious about sports or equipment when in conversation with staff	Correlation Coefficient	,610**	,820**	1,000	,401*	,764**	,339*	,592**	,640**	,503**
		Sig. (2-tailed)	<,001	<,001	.	,014	<,001	,040	<,001	<,001	,002
		N	37	37	37	37	37	37	37	37	37
	Cognitive - I discovered creative ideas for combining or adapting sports products through conversation with the staff	Correlation Coefficient	,320	,393*	,401*	1,000	,250	,199	,064	,148	,384*
		Sig. (2-tailed)	,053	,016	,014	.	,135	,238	,707	,383	,019
		N	37	37	37	37	37	37	37	37	37
	Cognitive - I discovered interesting ideas about sports through conversations with the staff	Correlation Coefficient	,478**	,885**	,764**	,250	1,000	,512**	,751**	,729**	,516**
		Sig. (2-tailed)	,003	<,001	<,001	,135	.	,001	<,001	<,001	,001
		N	37	37	37	37	37	37	37	37	37
	Cognitive - I was inspired to learn more about sports through conversations with staff.	Correlation Coefficient	,431**	,534**	,339*	,199	,512**	1,000	,503**	,499**	,543**
		Sig. (2-tailed)	,008	<,001	,040	,238	,001	.	,002	,002	<,001
		N	37	37	37	37	37	37	37	37	37
	Cognitive - I was interested during the conversation with the staff	Correlation Coefficient	,408*	,641**	,592**	,064	,751**	,503**	1,000	,721**	,501**
		Sig. (2-tailed)	,012	<,001	<,001	,707	<,001	,002	.	<,001	,002
		N	37	37	37	37	37	37	37	37	37
	Cognitive - I reflected on what best suits my athletic needs based on the conversation with the staff	Correlation Coefficient	,613**	,698**	,640**	,148	,729**	,499**	,721**	1,000	,545**
		Sig. (2-tailed)	<,001	<,001	<,001	,383	<,001	,002	<,001	.	<,001
		N	37	37	37	37	37	37	37	37	37
	Cognitive - I thought about how equipment affects performance during the conversation with the staff	Correlation Coefficient	,464**	,604**	,503**	,384*	,516**	,543**	,501**	,545**	1,000
		Sig. (2-tailed)	,004	<,001	,002	,019	,001	<,001	,002	<,001	.
		N	37	37	37	37	37	37	37	37	37

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
a. Expertise Level Group = 1,00

Correlations[a]

			Satisf_score	Cognitive - I learned interesting things about sports products from the store staff	Cognitive - I felt curious about sports or equipment when in conversation with staff	Cognitive - I discovered creative ideas for combining or adapting sports products through conversation with the staff	Cognitive - I discovered interesting ideas about sports through conversations with the staff	Cognitive - I was inspired to learn more about sports through conversations with staff.	Cognitive - I was interested during the conversation with the staff	Cognitive - I reflected on what best suits my athletic needs based on the conversation with the staff	Cognitive - I thought about how equipment affects performance during the conversation with the staff
Spearman's rho	Satisf_score	Correlation Coefficient	1,000	,630*	,099	,071	,455	,831**	,662**	,449	,254
		Sig. (2-tailed)	.	,012	,725	,802	,088	<,001	,007	,093	,360
		N	15	15	15	15	15	15	15	15	15
	Cognitive - I learned interesting things about sports products from the store staff	Correlation Coefficient	,630*	1,000	,352	,203	,732**	,516*	,619*	,362	,331
		Sig. (2-tailed)	,012	.	,198	,467	,002	,049	,014	,185	,229
		N	15	15	15	15	15	15	15	15	15
	Cognitive - I felt curious about sports or equipment when in conversation with staff	Correlation Coefficient	,099	,352	1,000	,469	,698**	,181	,269	,189	,224
		Sig. (2-tailed)	,725	,198	.	,078	,004	,519	,333	,499	,423
		N	15	15	15	15	15	15	15	15	15
	Cognitive - I discovered creative ideas for combining or adapting sports products through conversation with the staff	Correlation Coefficient	,071	,203	,469	1,000	,384	,146	,364	,171	,349
		Sig. (2-tailed)	,802	,467	,078	.	,158	,603	,182	,541	,202
		N	15	15	15	15	15	15	15	15	15
	Cognitive - I discovered interesting ideas about sports through conversations with the staff	Correlation Coefficient	,455	,732**	,698**	,384	1,000	,374	,555*	,428	,445
		Sig. (2-tailed)	,088	,002	,004	,158	.	,170	,032	,112	,096
		N	15	15	15	15	15	15	15	15	15
	Cognitive - I was inspired to learn more about sports through conversations with staff.	Correlation Coefficient	,831**	,516*	,181	,146	,374	1,000	,579*	,438	,305
		Sig. (2-tailed)	<,001	,049	,519	,603	,170	.	,024	,103	,268
		N	15	15	15	15	15	15	15	15	15
	Cognitive - I was interested during the conversation with the staff	Correlation Coefficient	,662**	,619*	,269	,364	,555*	,579*	1,000	,511	,654**
		Sig. (2-tailed)	,007	,014	,333	,182	,032	,024	.	,052	,008
		N	15	15	15	15	15	15	15	15	15
	Cognitive - I reflected on what best suits my athletic needs based on the conversation with the staff	Correlation Coefficient	,449	,362	,189	,171	,428	,438	,511	1,000	,739**
		Sig. (2-tailed)	,093	,185	,499	,541	,112	,103	,052	.	,002
		N	15	15	15	15	15	15	15	15	15
	Cognitive - I thought about how equipment affects performance during the conversation with the staff	Correlation Coefficient	,254	,331	,224	,349	,445	,305	,654**	,739**	1,000
		Sig. (2-tailed)	,360	,229	,423	,202	,096	,268	,008	,002	.
		N	15	15	15	15	15	15	15	15	15

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).
a. Expertise Level Group = 2,00

Appendix F: Qualitative Study

F1   Interviews Script

I. Introduction & Context Setting (5 minutes)

As part of my thesis, I'm conducting research on the in-store customer experience in outdoor sports (running, trail running, trekking, cycling, etc) retail. I'm currently surveying customers to understand what they value most during their store visits.

The purpose of our conversation today is to get your expert perspective from the retailer's side. I want to understand what you see as the biggest challenges and opportunities in creating a great customer experience. This will help ensure my research is grounded in the realities of the industry and is genuinely valuable for businesses like yours.

The interview should take about 30-45 minutes. Just to be clear, this is for academic research, and all your answers can be kept confidential and anonymized in my final report. I'll record our conversation for note-taking purposes.

The following questions are roughly the topics that we're going to discuss.

I. High-Level Perspective (10 minutes)

1. Could you describe your role in the sports store, and for how long have you been doing it?

2. Could you describe what you believe makes for a truly excellent customer experience in your store? If a customer leaves feeling highly satisfied, what do you think made that happen?

3. In a competitive market where big brands have huge stores with different kinds of technologies and layouts, what do you see as your store's main advantage?

4. How do you currently measure customer satisfaction or the quality of the in-store experience? Do you use any specific metrics, customer feedback forms, or just informal observations?

III. Understanding the Customer Journey & Pain Points (5-10 minutes)

1. Think of a recent customer you spoke with. Why do you think they chose to come here instead of buying online or at a large brand store?

2. When customers interact with your staff, what kinds of questions or topics come up most frequently?

3. Can you give me significant conversations where staff interaction was particularly impactful or valuable for the customer?

4. Could you walk me through a significant example of a time when a customer interaction didn't go well? What do you think were the key factors that led to that customer's dissatisfaction?

5. If you could improve one aspect of your staff's communication with customers, what would it be and why?

IV. Deep Dive: Staff Interaction & Expertise (15 minutes)

1. From your perspective, what is the primary role of your sales associates when they interact with a customer?

2. Have there been any significant shifts in staff roles specifically related to improving the customer experience? If so, why?

3. How do you train your staff to understand and adapt to different customers' needs and levels of experience of the customer, (e.g. Beginner vs. expert)?

4. What are the key differences you've noticed in what these two types of customers need?

5. My customer survey showed a very clear pattern: novice customers, like someone just getting into running, are most satisfied when they receive advice that is specifically tailored to their beginner skill level. From your experience, how does your conversation or approach change to meet their specific needs?

6. Another significant finding from the survey was that novices highly value opportunities to connect with groups and clubs associated with the store. This was a much stronger factor for them than for expert customers. In what ways does your store facilitate this sense of community through groups or clubs? do you train them on how to invite customers to a group run or a workshop?"

7. My research explores specific topics like technical specs, materials, durability but also current trends.

a) What kind of training do you provide on these aspects?

b) Where are your staff strongest in their knowledge, and where do you see potential gaps?

c) How do you keep them updated on new trends and technologies?

F3 Mapping of Initial Codes and Final Themes

Initial codes	Themes
Staff are all active/expert users (e.g., ultra-runners)	Deep Expertise and Honest Service
"More honest" advice than single-brand stores	Deep Expertise and Honest Service
In-store services (e.g., physiotherapists)	Deep Expertise and Honest Service
Multi-brand offering allows for comparison, therefore seen as an advantage	Deep Expertise and Honest Service
Personal testing that leads to curation of products	Deep Expertise and Honest Service
Strategic use of niche/premium brands	Deep Expertise and Honest Service
Offering a "cluster of knowledge" with services	Deep Expertise and Honest Service
Adapting conversation to the customer level	Unstandardised Approach for Novice and Expert Customers
Identifying beginner vs. expert needs	Unstandardised Approach for Novice and Expert Customers
No standardised script for interaction	Unstandardised Approach for Novice and Expert Customers
Using initial questions to gauge expertise	Unstandardised Approach for Novice and Expert Customers
Recognising the "pseudo-expert"	Unstandardised Approach for Novice and Expert Customers
Different interaction goals (guidance vs. peer discussion)	Unstandardised Approach for Novice and Expert Customers
Recognising that most customers fall in the "middle"	Unstandardised Approach for Novice and Expert Customers
Hiring for passion in the sport	Passion-Driven and Informal Training
Absence of a formal training plan	Passion-Driven and Informal Training
Learning by observing senior staff	Passion-Driven and Informal Training
Using personal product experience as training	Passion-Driven and Informal Training
Knowledge sharing via group chats and webinars	Passion-Driven and Informal Training
Leveraging independent staff research (YouTube)	Passion-Driven and Informal Training
Matching staff to customers by interest	Passion-Driven and Informal Training
A solid community around the store is important, but hard to achieve	Unexploited Community Hub
Novice customers' interest in community	Unexploited Community Hub
Organising brand-sponsored events and runs	Unexploited Community Hub
Lack of a self-sustaining, deep community	Unexploited Community Hub
Referring customers to external clubs	Unexploited Community Hub
Reactive curation based on customer requests	Proactive vs. Reactive Trend Spotting and Curation
Monitoring sales data for trends	Proactive vs. Reactive Trend Spotting and Curation
Proactive monitoring of elite athletes	Proactive vs. Reactive Trend Spotting and Curation
Using social media to spot trends	Proactive vs. Reactive Trend Spotting and Curation
Stocking products to be a "trendsetter"	Proactive vs. Reactive Trend Spotting and Curation
Curation based on the owner's intuition or "feel"	Proactive vs. Reactive Trend Spotting and Curation
Positioning the store as a destination	Proactive vs. Reactive Trend Spotting and Curation
Reactive curation based on customer requests	Proactive vs. Reactive Trend Spotting and Curation
Ability to try on, touch, and feel products	Immediacy and Tactile Engagement
Value of taking the product home "right now"	Immediacy and Tactile Engagement
Scepticism of "old-school" tech (treadmill analysis)	Immediacy and Tactile Engagement
Interest in new in-store technology, like displays	Immediacy and Tactile Engagement
Assessing satisfaction by "feeling"	Less Measures and More Feeling
Observing repeat purchases and word-of-mouth referrals	Less Measures and More Feeling
Monitoring online reviews	Less Measures and More Feeling
Need for formal measurement	Less Measures and More Feeling
Long-term loyalty as a success metric	Less Measures and More Feeling
Sales are monitored better than satisfaction	Less Measures and More Feeling

Appendix G: Literature Maps
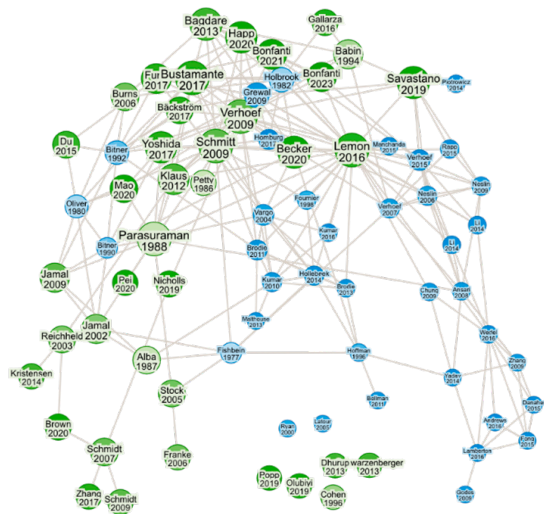
Map retrieved from Research Rabbit

Map retrieved from Connected Papers

Appendix H: AI prompts

Prompts used for analysing paper related on the knowledge that might interest experts and novice customers:

"Explain with bullet points what was said in detail in the paper I have attached about being specific questions and specific details, asking about technical features, products, etc., what was said to be the optimal way to ask all this, but with fewer ques-

tions? Apply these suggestions to the following survey:"

"Based on the following information, define questions for a questionnaire. Each item has a 5 Likert scale (agree-disagree). Use the following quotes from studies and only the items I have attached from the ISCX scale, to define questions that help retailers to improve their training, focusing on giving better advice in regards of certain aspects of sports products, brands, history and trends. Also, use this website: https://www.ekinseai. com/ for the knowledge that needs to be shared. At the end, use the two example scales to define satisfaction with their experience at the store level and expertise level in regards of sports and sports-related topics as mentioned above, again with a 7-point scale"

Prompts used to provide suggestions and improvements to the thesis

"Evaluate the following text. it's the backbone for a master's thesis on in-store sports retail experience. what are the weaknesses? is the research question coherent? if not, could you provide alternatives? is there redundant text?"

"Is the following section coherent with the previous one I shared? Is it redundant?"

"Suggest improvements to the chapter order according to the two reports I shared. Is the content within the chapters in the correct one? If it is not under which chapter should it go?"

"These are remarks made by my supervisors. How can I implement them?"

Appendix I: Project Brief

TUDelft

IDE Master Graduation Project

Project team, procedural checks and Personal Project Brief

In this document the agreements made between student and supervisory team about the student's IDE Master Graduation Project are set out. This document may also include involvement of an external client, however does not cover any legal matters student and client (might) agree upon. Next to that, this document facilitates the required procedural checks:

- Student defines the team, what the student is going to do/deliver and how that will come about
- Chair of the supervisory team signs, to formally approve the project's setup / Project brief
- SSC E&SA (Shared Service Centre, Education & Student Affairs) report on the student's registration and study progress
- IDE's Board of Examiners confirms the proposed supervisory team on their eligibility, and whether the student is allowed to start the Graduation Project

STUDENT DATA & MASTER PROGRAMME
Complete all fields and indicate which master(s) you are in

Family name	Azzalin Gibson	IDE master(s)	IPD ☐	DfI ☐	SPD ✓
Initials	J.	2nd non-IDE master			
Given		ividual programme *(date of approval)*			
Student n		Medisign ☐			
		HPM ☐			

SUPERVIS...
Fill in he re... ...e, company mentor is added as 2nd mentor

Chair	
mentor	
2nd mentor	
client:	
city:	country:
optional comments	

! Ensure a heterogeneous team. In case you wish to include team members from the same section, explain why.

! Chair should request the IDE Board of Examiners for approval when a non-IDE mentor is proposed. Include CV and motivation letter.

! 2nd mentor only applies when a client is involved.

APPROVAL OF CHAIR on PROJECT PROPOSAL / PROJECT BRIEF -> to be filled in **by the Chair** of the supervisory team

Sign for approval (Chair)

Name

CHECK ON STUDY PROGRESS
To be filled in **by SSC E&SA** (Shared Service Centre, Education & Student Affairs), after approval of the project brief by the chair.
The study progress will be checked for a 2nd time just before the green light meeting.

Master electives no. of EC accumulated in total _____ EC

Of which, taking conditional requirements into account, can be part of the exam programme _____ EC

◯	YES	all 1st year master courses passed
	NO	missing 1st year courses

Comments:

Sign for approval (SSC E&SA)

Name

APPROVAL OF BOARD OF EXAMINERS IDE on SUPERVISORY TEAM -> to be checked and filled in by IDE's Board of Examiners

Does the composition of the Supervisory Team comply with regulations?

YES	V	Supervisory Team approved
NO		Supervisory Team not approved

Comments:

Based on study progress, students is …

V	**ALLOWED** to start the graduation project
	NOT allowed to start the graduation project

Comments:

Sign for approval (BoEx)

TUDelft

Personal Project Brief – IDE Master Graduation Project

Name student ████████████████████████████████████

PROJECT TITLE, INTRODUCTION, PROBLEM DEFINITION and ASSIGNMENT
Complete all fields, keep information clear, specific and concise

Project title Research on Sports Retail Training Programs: Effectiveness in Customer Experience and Job Satisfaction

Please state the title of your graduation project (above). Keep the title compact and simple. Do not use abbreviations. The remainder of this document allows you to define and clarify your graduation project.

Introduction

Describe the context of your project here; What is the domain in which your project takes place? Who are the main stakeholders and what interests are at stake? Describe the opportunities (and limitations) in this domain to better serve the stakeholder interests. (max 250 words)

The sports retail industry is undergoing a transformative shift, driven by the rise of e-commerce and changing consumer expectations. While digital platforms provide convenience, physical stores remain critical for fostering emotional connections, brand loyalty, and product testing (Laizet et al., 2024). However, the role of sales associates in delivering these experiences has been underutilized.

Sales associates face hybrid responsibilities, such as managing online orders and in-store customer interactions, which have significantly increased their workload (Saunders, 2025; Sheehan, 2024.). At the same time, customers demand personalised service and seamless experiences across channels, especially in sports retail (Happ et al., 2020). Research shows that 73% of consumers prioritize experience when making purchasing decisions, yet only 38% feel their expectations are met by retail staff (PricewaterhouseCoopers, n.d.). This gap underscores the need for effective training programs that integrate technical expertise with interpersonal skills.

Brands like Nike have implemented initiatives such as the EKIN program to address these challenges. This program emphasises product knowledge and brand ethos to enhance customer interactions. However, high turnover rates among part-time staff hinder its effectiveness (CEDEFOP, 2024). Additionally, as e-commerce penetration in Europe grows, doubling from 7 -8% in 2015 to 14 -16% in 2023 (Laizet et al., 2024), physical stores must differentiate themselves by offering immersive experiences.

The *Model of Customer Shopping Experience (CSE) (Fig. 1)* proposed by Bonfanti and Yfantidou (2021) identifies four key dimensions, cognitive (knowledge transfer), affective (emotional engagement), social (interpersonal interactions), and physical (store environment) that are critical for creating memorable customer experiences, particularly in the sport store. This model was built on Bustamante and Rubio (2017) In-Store Customer Experience (ISCX) scale *(Fig. 2)* which is a comprehensive measurement tool to evaluate these dimensions. However, it is not yet clear from the current literature how the current training programs address these dimensions, their efficacy and whether they meet sales employee satisfaction.

➜ *space available for images / figures on next page*

65

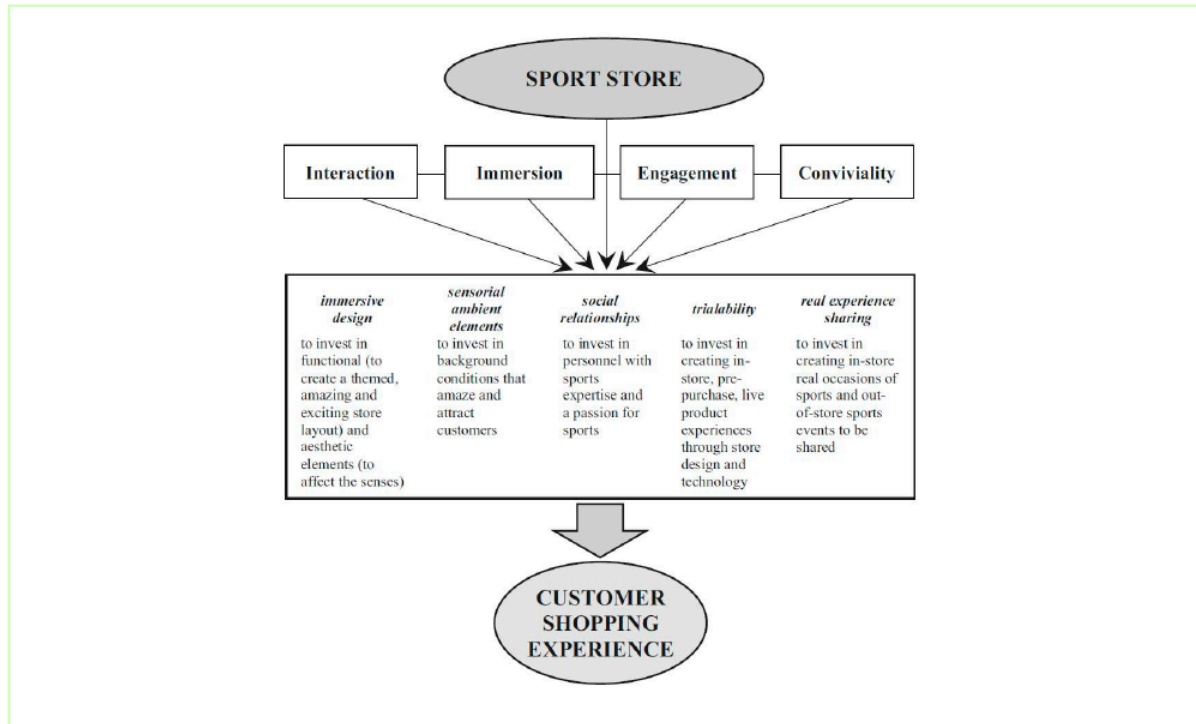image / figure 1   *Model of in-store CSE designing for sports stores from the retailer perspective (Bonfanti and Yfantidou , 2021)*

image / figure 2   *Components and Items of the ISCX Scale (Bustamante and Rubio, 2017)*

Problem Definition

What problem do you want to solve in the context described in the introduction, and within the available time frame of 100 working days? (= Master Graduation Project of 30 EC). What opportunities do you see to create added value for the described stakeholders? Substantiate your choice.
(max 200 words)

The problem I aim to solve is the potential disconnect between sports retail training programs and their effectiveness in equipping sales associates to meet both operational demands and customer experience expectations. Within the 100-day timeframe, I will address how current training is currently balancing technical product knowledge with essential soft skills and the correlation between associate satisfaction and customer experience outcomes.

This research presents significant opportunities to create added value for key stakeholders: For sales associates, who struggle with expanded hybrid responsibilities, I would potentially develop a training framework that enhances both job satisfaction and experience capabilities.; For store managers, who face high turnover rates (particularly among part-time staff) I will provide actionable recommendations to improve training efficacy and staff retention.; For sports retail executives, who are investing in physical store expansion (CBRE, 2024) despite e-commerce growth, I will deliver strategic insights on how associate expertise can be improved to differentiate retail locations through experiences aligned with the CSE dimensions.

Assignment

This is the most important part of the project brief because it will give a clear direction of what you are heading for. Formulate an assignment to yourself regarding what you expect to deliver as result at the end of your project. (1 sentence) As you graduate as an industrial design engineer, your assignment will start with a verb (Design/Investigate/Validate/Create), and you may use the green text format:

Investigate the literature gap in measuring the effectiveness of retail training programs for sales associates in the sports sector in delivering experiential customer experiences and achieving job satisfaction

Then explain your project approach to carrying out your graduation project and what research and design methods you plan to use to generate your design solution (max 150 words)

To pursue my thesis, I will follow a double-diamond approach combined with mixed research methods. In the Discover phase, I'll conduct a literature review to refine my research question, I'll evaluate the suitability of the ISCX Framework, and I'll engage with store managers and retail executives to understand diverse perspectives on current training challenges. During the Define phase, I'll analyze this data to identify core problems and opportunities. For quantitative analysis, I'll use customer surveys using the refined ISCX scale to measure cognitive, affective, social, and physical dimensions of experience (target: 150+ customers post-interaction with trained associates). Simultaneously, I'll assess associate training satisfaction using validated scales (TSI, Likert, eNPS) and correlate results with customer ISCX scores to identify gaps. Qualitatively, I'll conduct semi-structured interviews with 15-20 sales associates to explore their perceptions of training efficacy. In the Develop and Deliver phases, I'll synthesize these insights to create and refine a training framework that addresses operational challenges, experiential retail goals and employee satisfaction, concluding in recommendations for sports retailers.

Project planning and key moments

*To make visible how you plan to spend your time, you must make a planning for the full project. You are advised to use a Gantt chart format to show the different phases of your project, deliverables you have in mind, meetings and in-between deadlines. Keep in mind that all activities should fit within the given run time of 100 working days. Your planning should include a **kick-off meeting**, **mid-term evaluation meeting**, **green light meeting** and **graduation ceremony**. Please indicate periods of part-time activities and/or periods of not spending time on your graduation project, if any (for instance because of holidays or parallel course activities).*

Make sure to attach the full plan to this project brief.
The four key moment dates must be filled in below

Kick off meeting	26 Mar 2025

Mid-term evaluation	11 Jun 2025

Green light meeting	20 Aug 2025

Graduation ceremony	1 Oct 2025

In exceptional cases (part of) the Graduation Project may need to be scheduled part-time. Indicate here if such applies to your project

Part of project scheduled part-time	✓
For how many project weeks	25
Number of project days per week	4,0

Comments:

Motivation and personal ambitions

Explain why you wish to start this project, what competencies you want to prove or develop (e.g. competencies acquired in your MSc programme, electives, extra-curricular activities or other).

Optionally, describe whether you have some personal learning ambitions which you explicitly want to address in this project, on top of the learning objectives of the Graduation Project itself. You might think of e.g. acquiring in depth knowledge on a specific subject, broadening your competencies or experimenting with a specific tool or methodology. Personal learning ambitions are limited to a maximum number of five.
(200 words max)

This thesis provides an opportunity to explore my lifelong passion for sports and deepen my interest in marketing and consumer research, sparked throughout my master's studies. My primary motivation is to develop expertise in mixed-methods research design, with a focus on enhancing my quantitative research techniques and analytical capabilities. This project will enable me to apply knowledge gained from the SPD Research course, integrating academic insights with real-world retail challenges and user experience perspectives.

On the side, my learning ambitions include:

· Gaining in-depth knowledge of experiential retail strategies specific to the sports industry

· Building expertise in customer research and sports marketing analytics

· Establishing a professional network with key stakeholders in the sports retail sector that could lead to potential   future employment opportunities

Master Thesis

Jack Azzalin Gibson
Strategic Product Design
October 2025