Spanish Journal of Marketing - ESIC

The effect of consumer inspiration on experience extension in augmented reality marketing

Kazım Dağ
Hasan Kalyoncu University, Gaziantep, Türkiye

Sinan Çavuşoğlu
Bingol University, Bingol, Türkiye, and

Taner Akçacı
Gaziantep University, Gaziantep, Türkiye

Received 12 September 2024
Accepted 3 March 2025

Abstract

Purpose – This study aims to examine the impact of augmented reality (AR) expertise and augmentation quality on consumer inspiration and the subsequent effect of consumer inspiration on experience extension. This study sets out to investigate the mediating role of application/brand (app/brand) congruence between consumer inspiration and experience extension.

Design/methodology/approach – The research sample consisted of consumers who used the AR application of the "Atasun Optik" brand, which allowed them to experience products using AR technology. Data analysis was conducted using the Smart PLS (Partial Least Squares) statistical software.

Findings – According to the structural equation modeling analysis results, AR quality and AR expertise positively affected consumer inspiration. In addition, inspiration positively affected app/brand congruence. However, no effect of inspiration on direct experience extension was found. The results revealed that app/brand congruence had a full mediation effect between consumer inspiration and experience extension.

Originality/value – This study contributes to the growing body of AR marketing knowledge by revealing consumer inspiration's indirect role in the experience extension. Unlike previous studies that primarily associate inspiration with direct behavioral outcomes, the findings demonstrate that app/brand congruence fully mediates the relationship between inspiration and experience extension. Additionally, this study provides novel empirical evidence on the impact of AR expertise and augmentation quality on consumer inspiration, addressing a gap in the literature. By highlighting the mediating role of app/brand congruence, this research advances the understanding of how AR experiences shape consumer behavior beyond immediate purchase intentions.

Keywords Augmented reality marketing, Consumer inspiration, Experience extension

Paper type Research paper

Spanish Journal of Marketing - ESIC
Emerald Publishing Limited
e-ISSN: 2444-9709
p-ISSN: 2444-9709
DOI 10.1108/SJME-09-2024-0257

El efecto de la inspiración del consumidor en la extensión de la experiencia en el marketing de realidad aumentada

Resumen

Objetivo – Este estudio examina el impacto de la experiencia en realidad aumentada (AR) y la calidad de la aumentación en la inspiración del consumidor, así como el efecto posterior de la inspiración del consumidor en la extensión de la experiencia. Además, se investiga el papel mediador de la congruencia aplicación/marca (app/marca) entre la inspiración del consumidor y la extensión de la experiencia.

Diseño/metodología/enfoque – La muestra de investigación estuvo compuesta por consumidores que utilizaron la aplicación de realidad aumentada de la marca "Atasun Optik", la cual les permitía experimentar productos mediante tecnología AR. El análisis de datos se llevó a cabo utilizando el software estadístico Smart PLS (Partial Least Squares).

Resultados – Según los resultados del análisis de modelado de ecuaciones estructurales, la calidad de AR y la experiencia en AR afectaron positivamente la inspiración del consumidor. Además, la inspiración influyó positivamente en la congruencia app/marca. Sin embargo, no se encontró un efecto directo de la inspiración en la extensión de la experiencia. Los resultados revelaron que la congruencia app/marca tuvo un efecto de mediación total entre la inspiración del consumidor y la extensión de la experiencia.

Originalidad/valor – Este estudio contribuye al creciente cuerpo de conocimiento sobre el marketing de realidad aumentada al revelar el papel indirecto de la inspiración del consumidor en la extensión de la experiencia. A diferencia de estudios previos que principalmente asocian la inspiración con resultados conductuales directos, nuestros hallazgos demuestran que la congruencia app/marca media completamente la relación entre la inspiración y la extensión de la experiencia. Además, este estudio proporciona nueva evidencia empírica sobre el impacto de la experiencia en AR y la calidad de la aumentación en la inspiración del consumidor, abordando una brecha en la literatura. Al resaltar el papel mediador de la congruencia app/marca, esta investigación amplía la comprensión de cómo las experiencias de AR influyen en el comportamiento del consumidor más allá de las intenciones de compra inmediatas.

Palabras clave Marketing de Realidad Aumentada, Inspiración del Consumidor, Extensión de la Experiencia

Tipo de artículo Trabajo de investigación

消费者灵感对增强现实营销中体验延伸的影响

摘要

研究目的 – 本研究探讨了增强现实（AR）技术的熟练程度和增强质量对消费者启发的影响, 以及消费者启发对体验延展的作用。进一步分析了应用程序/品牌一致性在消费者启发与体验延展之间的中介作用。

研究设计/方法 – 研究样本来自使用"Atasun Optik"品牌增强现实应用程序的消费者, 该应用允许消费者通过 AR 技术体验产品。数据分析采用 Smart PLS（偏最小二乘法）统计软件进行结构方程模型(SEM)分析。

研究结果 – 结构方程模型分析结果表明, 增强现实的质量和熟练程度对消费者启发有显著的正向影响。此外, 消费者启发对应用程序/品牌一致性也产生了积极影响。然而, 消费者启发对体验延展并未直接产生显著影响。进一步分析表明, 应用程序/品牌一致性在消费者启发与体验延展之间起到了完全中介作用。

研究原创性/价值 – 本研究通过揭示消费者启发在体验延展中的间接作用, 丰富了增强现实营销领域的研究。与以往主要将消费者启发与直接行为结果关联的研究不同, 本研究发现, 应用程序/品牌一致性在消费者启发与体验延展之间发挥了完全中介的作 用。此外, 本研究提供了 关于增强现实技术熟练程度和增强质量如何影响消费者启发的实证 证据, 填补了现有文献的研究空白。通过强调应用程序/品牌一致性的中介作用, 本研究深化了对增强现实体验如何在即时购买意图之外塑造消费者行为的理解。

关键词 增强现实营销、消费者启发、体验延展

文章类型 研究型论文

Introduction

The impact of augmented reality (AR) applications on consumers' brand perception and evaluation, including how and why this impact occurs, is not well understood. Consumers increasingly interact with brands through applications, and the rate of interactions and sales conducted using applications is steadily rising worldwide. Global brands gain a competitive advantage by developing at least one application and subsequently increase their investments by leveraging this advantage (Van Noort and Van Reijmersdal, 2019). New technologies like AR, which provide interactive content, offer consumers satisfying experiences (Lai *et al.*, 2024). These experiences enable a deeper connection with a brand within virtual environments (Rauschnabel *et al.*, 2024). AR emerges as an experimental interface for digital marketing technologies by seamlessly blending interactive digital content with the user's physical surroundings (Porter and Heppelmann, 2017). Understanding the impacts of AR expertise and augmentation quality on consumer inspiration and the impact of app/brand congruence on experience extension is crucial in this context. AR facilitates enriched content experiences without disrupting consumers' connection to reality (Söderström *et al.*, 2024). Technological initiatives, such as AR, have the potential to expand customer service quality and firm output by reshaping consumers' influence on interactions and purchase decisions (Prados-Castillo *et al.*, 2024). Atasun Optik also leverages AR technology to offer consumers the opportunity to experience their products through these virtual insights. Established in 2007 under the global optical retail leader Grand Vision, which operates in over 7,000 locations across 44 countries with more than 37,000 employees, Atasun Optik serves the Turkish market. With 340 stores in 70 cities and an e-commerce platform, the company allows customers to access their services 24/7 via mobile applications (Atasun Optik, 2024). Through this mobile application, Atasun Optik increasingly engages with consumers. Brands are progressively adopting such technological innovations to facilitate brand-consumer interactions or interactions among customers (Gatter *et al.*, 2022). From this perspective, it is evaluated that trying to understand the impacts of inspiring AR applications on expanding the experience and discussing how brands, such as Atasun Optik, are affected by their service offerings in service marketing will provide practical and theoretical benefits.

It is also evaluated that being able to explain the impacts of these brands that offer service and AR technology together on consumer behavior will contribute to improving service offerings in the sector. Inspiration, by its nature, is focused on new possibilities and the realization of new ideas (Böttger *et al.*, 2017), and it has the capacity to influence many desirable outcomes, such as efficiency, productivity, engagement, satisfaction and customer loyalty (Thrash *et al.*, 2014). Similarly, it is stated that inspiration can be affected by virtual content because, in AR, virtual content is presented by integrating it into the user's real-world perception (Rauschnabel *et al.*, 2022). Therefore, Atasun Optik, which tries to be effective in the consumer's decision-making processes with virtual content, promises to offer inspiring experiences with AR technology. AR demonstrates the potential to entertain and educate customers with these inspiring experiences and assist in evaluating product suitability and enhancing post-purchase consumption experiences (Tan *et al.*, 2022). Atasun Optik offers consumers the ability to virtually try on glasses using AR technology to see how they would look on their faces. The AR application, activated by the "Try" button, allows for the selection and immediate virtual fitting of the desired glasses on the user's face (Figure 1 provides an overview of the application's usage).

Rauschnabel *et al.* (2019) empirically tested the benefits of AR applications and the role of consumer inspiration in augmentation quality, revealing that inspiration acts as a mediating construct between the benefits derived from AR applications and changes in brand attitudes. Javornik *et al.* (2021) noted that luxury brands use AR to enhance specific luxury

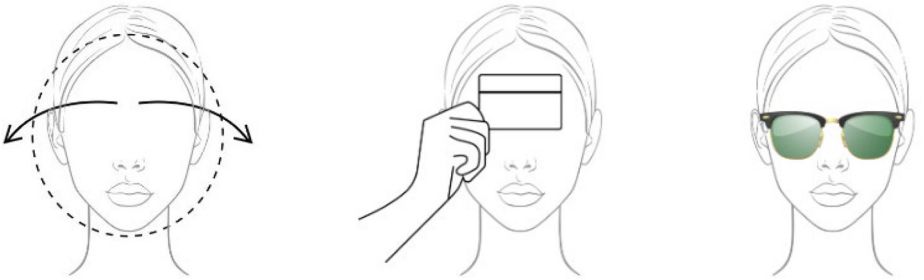

Figure 1. Atasun Optik AR app

attributes, such as authenticity and price. Customers who wish to redesign their living rooms can use an AR application like Marshall Visualizer to virtually experiment with different wall colors and visualize their preferences, thereby illustrating the benefits of this technology (Hilken *et al.*, 2020). Similarly, customers can use the Ikea Place application to project holograms of Ikea furniture into their living rooms using AR, allowing them to see how these pieces fit with the existing décor and thus accelerating their decision-making processes (Heller *et al.*, 2019). Atasun Optik also endeavors to influence consumers and assist in decision-making by offering the opportunity to experience their products through AR. AR marketing motivates customers to make more purchases and to be willing to pay more (Heller *et al.*, 2019). It is targeted that brands that offer an interactive experience with a realistic-looking application, which will improve their service offerings by triggering consumer inspiration. Our research will provide guidance to brands. Therefore, this research aims to determine the effects of AR marketing on consumer inspiration and the resulting experience extension. Additionally, the present study empirically tests the influence of app/brand congruence on consumer inspiration and experience extension and examines the presence of mediation effects. The research questions guiding this study are as follows:

RQ1. What makes the impacts of augmentation quality and AR expertise on consumer inspiration positive or negative when consumers use an AR app?

RQ2. What makes the experience extension positive or negative when consumers use an AR app?

RQ3. Does app/brand congruence have a greater impact on consumer inspiration and experience extension when consumers use an AR app?

Literature review

Augmented reality marketing

AR is defined as an environment where digital information is spatially and temporally registered with the physical world and overlaid interactively onto the physical world over time (Craig, 2013). "AR marketing is defined as a strategic concept that integrates digital information or objects into the subject's physical world perception, often in conjunction with other media, to reveal, express, or demonstrate consumer benefits for achieving corporate objectives" (Rauschnabel *et al.*, 2022).

AR can create an enhanced experience by addressing product knowledge gaps and facilitating product handling (Papagiannidis *et al.*, 2017). AR allows businesses to improve

marketing processes through virtual content, offering various advantages to themselves and their customers. The unique features specific to AR improve customers' perceived benefits, indicating that AR can influence consumer engagement and inspiration, leading to consumers sharing their experiences with such applications (Nikhashemi *et al.*, 2021). AR applications enhance the decision-making process, impacting consumers' purchase intentions, word-of-mouth communication and both hedonic and utilitarian satisfaction (Hilken *et al.*, 2017). AR marketing focuses on creating digital possibilities for customer experiences, and digital cues in a physical environment designed to support consumer actions and experiences (Chylinski *et al.*, 2020).

Augmentation quality

Augmentation quality refers to the output quality arising from the integration of virtual content with reality, encompassing aspects such as interaction with virtual content, the quality of information in both virtual and real content, correspondence quality and mapping quality (Poushneh, 2018). Rauschnabel *et al.* (2019) define augmentation quality as the extent to which an AR application provides consumers with an experience they perceive as real and relevant to their consumption goals and the degree to which this is separated from the perceived aesthetics of the AR application. Augmentation quality represents a new dimension of user experience captured through interaction with AR (Poushneh, 2018). As one of the global leaders in the optical retail sector, with over 7,000 locations and more than 37,000 employees, Atasun Optik aims to deliver high-quality virtual and real content experiences by offering customers the opportunity to experience their products through AR. Therefore, the provision of a consumption goal-relevant experience to consumers through the AR application and the interaction quality of digital content with high output quality reflect the concept of augmentation quality.

Augmented reality expertise

Consumer knowledge developed concerning AR is considered AR expertise. In general terms, consumer AR expertise is defined as "the ability to successfully perform product-related tasks" (Alba and Hutchinson, 1987). As AR experience develops, AR expertise is associated with higher levels of expertise, which, in turn, is linked to less cognitive effort, increased processing fluency and higher levels of creativity (Hinsch *et al.*, 2020), confirming that AR expertise enhances consumer satisfaction. The extent to which consumers are knowledgeable about and engaged with AR generally indicates AR expertise (Javornik, 2016; Hinsch *et al.*, 2020).

Customer inspiration

Böttger *et al.* (2017) define customer inspiration as "a temporary motivational state that facilitates the transition from the reception of a marketing-induced idea to the intrinsic pursuit of a consumption-related goal." In the context of marketing, inspiration encourages the spontaneous purchasing of products or services, the exploration of offerings and meaningful engagement with the brand (Böttger *et al.*, 2017; Pansari and Kumar, 2017). AR inspiration refers to the feeling of being encouraged, excited and willing to try new things or explore services for new purposes through the use of AR technologies (Olsson, 2013).

As a significant motivational factor, customer inspiration consists of two stages: inspired by and inspired to. The stage of "inspired by" corresponds to the acceptance of new ideas, while "inspired to" pertains to the urge to act upon newly discovered ideas (Thrash and Elliot, 2003). The "inspired by" stage is where consumers experience the drive to realize an idea (Thrash *et al.*, 2014). On the other hand, the "inspired to" stage is associated with the

sudden urge to pursue new ideas, such as further exploration and participation in activities (Campos *et al.*, 2019; Thrash and Elliot, 2003). Both "inspired by" and "inspired to" possess significant potential in shaping consumer emotions (e.g. pleasure) and eliciting subsequent behaviors (e.g. intention to revisit and recommend). The possible impacts of these two distinct inspirational states are largely overlooked in the marketing context, creating a gap in the comprehensive understanding of experiences that inspire consumers and their subsequent outcomes.

Experience extension

Experience extension refers to "the efforts of consumers to share the perceived emotional and cognitive benefits of an experience, often by narrating it to friends" (Dong and Siu, 2013). The external environment plays a significant role in the overall consumer experience. These experiences contribute more to positive consumer responses, reflected in favorable attitudes, intentions to revisit and word-of-mouth marketing (Bonn *et al.*, 2016). Extending the consumer experience benefits the consumers and plays a crucial role in promoting a brand (Dong and Siu, 2013). Barhorst *et al.* (2021) suggest that AR features like interactivity, vividness and novelty can trigger experiences. AR experiences lead to increased satisfaction, enhancing consumers' perceived informational benefits, learning and entertainment levels (Barhorst *et al.*, 2021). Atasun Optik, by using innovative AR technology, aims to contribute more to positive consumer responses by facilitating the sharing of perceived emotional and cognitive benefits of the experience. Through these innovative applications, businesses strive to create brand value by offering entertainment and informational content to potential and existing customers (Van Noort and Van Reijmersdal, 2019).

App/brand congruence

App/brand congruence demonstrates that an informative app, by enhancing emotional brand responses, leads to higher levels of elaboration and increases cognitive brand responses (Van Noort and Van Reijmersdal, 2019). The inspiration process is assumed to start with a psychological impact on the consumer's mind. Therefore, it is significant to design products and services (i.e. AR applications) with qualities that promote higher levels of psychological inspiration (Thrash *et al.*, 2010). Consequently, app/brand congruence provides significant outcomes for inspiration and experience extension. App/brand congruence is indicated when the app aligns with the brand's product range and supports the brand's products. The alignment of the application with the brand's values also reflects this harmony (Hinsch *et al.*, 2020). The unique features of these applications encourage users to spend time on them voluntarily. Consumers may be willing to adopt these applications because they find them beneficial. Thus, these applications have the potential to serve as persuasive marketing tools (Wang *et al.*, 2016).

Theoretical framework

Augmentation quality and customer inspiration

Augmentation quality constitutes an aspect of the user experience created through interaction with AR (Poushneh, 2018) and it is expected to influence consumers' inspiration when they are presented with an experience related to their consumption goals (Rauschnabel *et al.*, 2019; Hinsch *et al.*, 2020). AR produces personalized outputs for the user (Poushneh, 2018), which is suggested to give rise to inspiration when these outputs lead to the intrinsic pursuit of consumption-related goals (Böttger *et al.*, 2017). AR applications generate new virtual experiences that enable users to create new ideas and attain higher levels of inspiration (Rauschnabel *et al.*, 2019). By blending the real and virtual worlds, AR captures consumer

interest, enhancing their inspiration by mixing types of information and services (Olsson, 2013). A realistic AR experience enhances consumers' ability to imagine and visualize possibilities and new ideas, fostering high levels of inspiration (Rauschnabel *et al.*, 2019). Hinsch *et al.* (2020) confirmed that augmentation quality positively affects both the stages of inspired by and inspired by Hinsch *et al.* (2020). Therefore, we hypothesize that perceived augmentation quality positively influences consumers' perceptions of both the stages of inspired by and inspired to. Based on this reasoning, the following hypotheses have been formulated:

H1a. Augmentation quality positively influences the source of inspired by.

H1b. Augmentation quality positively influences the source of inspired to.

Augmented reality expertise and customer inspiration

Olsson (2013) highlighted that AR is a process that enhances users' inspiration. Consumers' knowledge and experience with AR reflect their AR expertise (Javornik, 2016; Hinsch *et al.*, 2020). The digital content these innovative technologies provide can be associated with inspiration, which is considered a creative process (Thrash *et al.*, 2010). Consumers engaged with AR have reported that these external output stimuli trigger their inspiration (Thrash *et al.*, 2014). In other words, consumers' AR expertise, through the knowledge they develop about AR, acts as a trigger that influences their inspiration (Alba and Hutchinson, 1987). Expertise, defined as a necessary condition for creativity (Moneta and Csikszentmihalyi, 1996), has been confirmed to enhance consumer satisfaction in these technological applications where AR is used (Javornik, 2016; Hinsch *et al.*, 2020). By improving product presentation, AR technology enriches user experiences. As the AR experience evolves, expertise in AR may have an impact on consumer inspiration. Therefore, AR expertise is positively associated with inspiration, as higher levels of expertise are linked with reduced cognitive effort, increased processing fluency and higher levels of creativity (Hinsch *et al.*, 2020). Based on this reasoning, the following hypotheses have been formulated:

H2a. AR expertise positively influences the source of inspired by.

H2b. AR expertise positively influences the source of inspired to.

Customer inspiration and experience extension

Inspiration is a motivational state in which new possibilities emerge, potentially leading to the realization of new ideas (Böttger *et al.*, 2017; Oleynick *et al.*, 2014). Therefore, in environments where new technologies are used, consumers are likely to exhibit attitudinal changes through these interactive experiences (Böttger *et al.*, 2017). When consumers use an AR application, they may encounter new things and ideas that could trigger their inspiration, leading them to share their experiences (Hinsch *et al.*, 2020). Inspiration encourages consumers to exhibit positive attitudes toward brands (Rauschnabel *et al.*, 2019) because inspiration is closely related to users' emotions and motivations (Thrash and Elliot, 2004) and is often shaped in environments with an appropriate level of realism (Rauschnabel *et al.*, 2019). The realism provided by AR has positive effects on experience extension. Inspiration helps foster an interactional state that can enhance engagement levels with AR (Arghashi and Yuksel, 2022). Therefore, consumers influenced by this AR-supported inspiration are expected to share their experiences with others, thereby extending the experience because inspiration is a fundamental construct to increase consumer satisfaction (Hinsch *et al.*, 2020)

and enhance experience extension, maintaining user interest in services over time (Olsson, 2013). Inspiration fosters a willingness to share experiences by increasing the intention to continue using the AR application (Nikhashemi *et al.*, 2021). Hence, inspiration supports experience extension by encouraging meaningful interactions (Böttger *et al.*, 2017). Based on this reasoning, the following hypotheses have been formulated:

H3a. The source of inspired by positively influences experience extension.

H3b. The source of inspired to positively influences experience extension.

Customer inspiration and app/brand congruence

The supposed inspiration that starts with a psychological effect is used to prompt many brands to design AR applications (Thrash *et al.*, 2010). The branding of emotional responses is separately confirmed (Hinsch *et al.*, 2020; Van Noort and Van Reijmersdal, 2019). However, it is common for brand-inspired consumers to spend more time using the brand app voluntarily. Inspired consumers are more willing to adopt an app because it benefits them (Wang *et al.*, 2016). Inspiration and app/brand congruence are associated as mutually reinforcing concepts. Specifically, the quality of information provided by AR, system stability and speed and the excellence of visual interface design are linked to overall satisfaction with AR and inspiration (Xue *et al.*, 2019). The consumer attaches importance to application-brand fit, and the integration of the application with the brand and supporting each other provides positive effects (Roy *et al.*, 2017). It is stated that these positive impacts initiate the inspiration process in the consumer's mind (Thrash *et al.*, 2010). This inspiration positively affects the application/brand fit, and consumers share this experience as a natural process (Roy *et al.*, 2017). Therefore, it is hypothesized that positive consumer inspiration will support app/brand congruence by mitigating potential inconsistencies. Consequently, the following hypotheses are proposed:

H4a. The source of inspired by positively affects app/brand congruence.

H4b. The source of inspired to positively affects app/brand congruence.

App/brand congruence and experience extension

Van Berlo *et al.* (2021) argued that when consumers perceive offered products as appealing, virtual objects could lead to increased brand attitudes. AR allows users to interact with both virtual elements and objects in the real world. Brand applications used as brand communication tools improve the brand experience and help establish consumer relationships by expanding the brand experience (Ijaz *et al.*, 2024; Paul and Mas, 2020). By supporting its products with a well-aligned AR application, a brand can facilitate the extension of this experience to other consumers. The congruence between the brand and the application indicates the potential to influence experience based on positive consumer attitudes and the support the application provides to the brand's products. An effective AR application facilitates an immersive experience (Tsai, 2020), and alignment with the values conveyed by the brand's products encourages brand visits, positively affecting experience extension (Park and Yoo, 2020). It has been noted that an informative application leads to higher levels of elaboration, thereby enhancing cognitive brand responses (Van Noort and Van Reijmersdal, 2019). Brands try to create value for their brands among potential and existing customers by providing entertainment and information content through the applications they develop. Application/brand fit provides stronger relationships with

consumers and positively affects experience extension by leading consumers to share these experiences (Smith and Chen, 2018; Plotkina and Rabeson, 2022). Applications perform well in altering purchase intentions (Nikhashemi *et al.*, 2021) and are effective in positively influencing customer satisfaction, thereby enhancing the experience (Iyer *et al.*, 2018). Therefore, the following hypothesis is proposed:

H5. App/brand congruence positively affects experience extension.

The mediating role of app/brand congruence

AR, widely used in various fields, enables people to experience virtual product design in a real environment (Wang *et al.*, 2015). The occurrence of this experience through well-functioning applications and tools is likely to mediate consumer inspiration and experience extension. Technology-enhanced AR applications contribute to improving user experience (Cheng, 2021). It has been suggested that the experiences provided by technological applications lead to inspiration (Böttger *et al.*, 2017; Thrash *et al.*, 2010). The creation of immersive experiences through well-designed applications may lead to a mediating effect of app/brand congruence between inspiration and experience extension. Tsai (2020) emphasized that immersive experiences, characterized by vividness, naturalness, controllability and enjoyment within computer-mediated environments, contribute to experience extension. Spending more time with applications and experimenting with new things in new ways creates an immersive experience (Yim *et al.*, 2017). Consequently, this immersive experience is associated with consumer inspiration and app/brand congruence, which positively affects consumers' attitudes and leads to positive outcomes (Danaher *et al.*, 2015). Brand applications provide more relevant, acceptable and personalized opportunities to the target consumer (Çiçek *et al.*, 2018), encouraging the formation of a deep and long-term connection between brands and consumers (Ho and Chung, 2020). Given that these technological brand applications inspire consumers (Böttger *et al.*, 2017), it is evaluated that application/brand fit has a mediating effect by leading to experience expansion (Ijaz *et al.*, 2024). AR enhances users' perceptions and interactions with the real world, as AR displays information that users cannot directly perceive with their senses (Mota *et al.*, 2018). Thus, the interaction with AR applications provides an immersive experience, indicating that app/brand congruence can influence consumers' attitudes (Danaher *et al.*, 2015; Iyer *et al.*, 2018). Satisfaction with well-designed mobile applications has been shown to partially mediate the relationship between consumer repurchase intentions (Iyer *et al.*, 2018). Therefore, the positive impact of AR applications on consumer behavioral intention confirms that AR has the potential to increase behavioral intention (Park and Yoo, 2020). Furthermore, the functional and hedonic value of applications that ensure app/brand congruence has been validated to influence customer satisfaction positively (Iyer *et al.*, 2018). Consequently, the following hypothesis is proposed:

H6. App/brand congruence mediates the relationship between consumer inspiration and experience extension.

Method

The research population in this study consisted of consumers who used the AR application of the Atasun Optik brand, which offers consumers the opportunity to experience its products using AR technology. Using AR technology, the brand allows consumers to examine better and experience its products. The AR application, which was launched with the Try On button, tried to recognize the consumer's face most accurately through any card, allowing the

desired glasses to be selected and instantly seen on the person's face with a virtual trial (Figure 1).

The data of this research were collected in the first quarter of 2024. because it was not possible to access all consumers using the AR application of the Atasun Optik brand, the convenience sampling technique was preferred. partial least squares-structural equation modeling (PLS-SEM) was used as the analysis method. Dijkstra and Henseler (2015) stated that consistent PLS algorithms (PLSc) are more appropriate in terms of empirical assumptions, and also PLS offers a better measure of reliability for users. In this study, data were collected over 384 limits (Ural and Kilic, 2006) in populations larger than 100,000. In this respect, 412 data samples were collected using the convenience sampling method.

The questionnaire consists of two parts. The first part includes questions to determine the demographic information of the participants, such as age, gender, marital status, education and perception of income. Section 2 includes six items to measure AR marketing (Hinsch *et al.*, 2020). Three items of AR marketing consist of augmentation quality, and the other three items consist of AR expertise. The consumer inspiration variable was created in Section 2 using ten items (Böttger *et al.*, 2017). The inspired by the dimension of this variable and the inspired to dimension consisted of five items each (see Figure 2).

Section 2 includes three items (Hinsch *et al.*, 2020) to measure another variable, app/brand congruence. The past variable in the questionnaire, experience extension, similarly consists of three items (Wei *et al.*, 2023). The scales in the second part of the questionnaire were graded on a five-point Likert scale with responses ranging from 1 (strongly disagree) to 5 (strongly agree).

Data analyses

In the data analysis, the PLS method in the SmartPLS program, which can process all data simultaneously, was used (Ali *et al.*, 2018). At this stage, the measurement model, structural model evaluation and SEM were analyzed. In the measurement model evaluation, Cronbach's alpha (α) and external model validity (rho_a, CR, average variance explained [AVE], external loadings, Fornell–Larcker Criterion, heterotrait-monotrait [HTMT]) were calculated. The internal model (InnerVIF, R^2, f^2) was analyzed in the structural model evaluation. Finally, SEM was used to test the hypotheses.

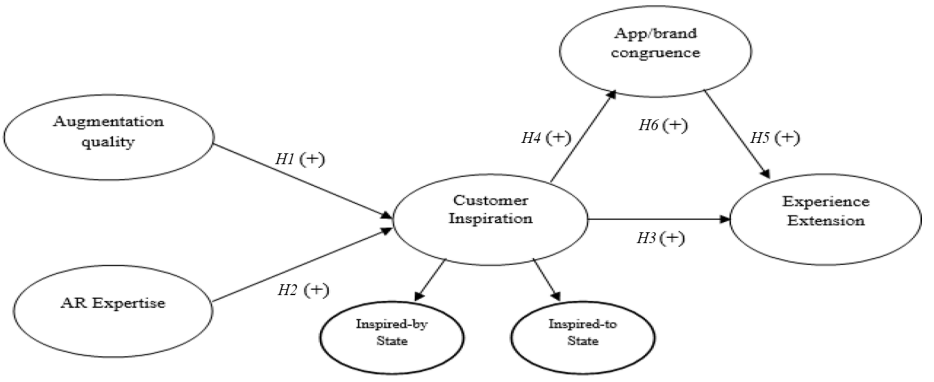

Figure 2. Proposed model

Results

In this study, the demographic characteristics of the participants who filled out the questionnaire form were first revealed. The results obtained in this context are given in detail in Table 1.

While 32.3% of the participants were between the ages of 25–34, 57.8% of the participants were female. Regarding the marital status of the participants in this study, 66% were married and 41.5% were undergraduate graduates. Finally, when the participants' perceptions regarding their income status were analyzed, it was determined that 37.9% of them had a medium-level income.

Measurement model assessment

Factor loadings, reliability coefficients, internal consistency, convergent validity, discriminant validity and model fit statistics of the scales used in the present study were examined in the measurement model analysis phase. To examine the factor loadings, the outer loading values were checked, and the outer loadings of all scales were above 0.50 (Kaiser, 1974). Second, Cronbach's alpha values were calculated to determine the reliability coefficients of the scales. It was found that the Cronbach's alpha values of all scales were above 0.70 (Hair *et al.*, 2019). In this context, it was determined that all scale statements met the reliability requirement. Factor loadings and reliability coefficients are shown in detail in Table 2.

Table 1. Demographics of the participants

Demographic characteristics	*n*	%
Age		
18–24	121	29.4
25–34	133	32.3
35–44	99	24.0
45–54	45	10.9
55–64	12	2.9
65≤	2	0.5
Gender		
Male	174	42.2
Female	238	57.8
Marital status		
Married	272	66.0
Singles	140	34.0
Education		
Primary education	20	4.9
High school	60	14.6
Associate degree	91	22.1
Bachelor's degree	171	41.5
Master's degree/PhD	70	17.0
Perception of income status		
Very low	89	21.6
Low	144	35.0
Average	156	37.9
High	19	4.6
Very high	4	1.0

Table 2. Reliability and validity (overall sample)

Items	Factor loading
Augmentation quality (AQU)	
Adapted from Hinsch *et al.* (2020) *α = 0.866; Rho_a = 0.877; CR = 0.877; AVE = 0.692*	
I felt that the virtual characters were really there	0.896
It felt like the shapes came from the tablet	0.854
The virtual elements looked very realistic	0.737
AR expertise (ARex)	
Adapted from Hinsch *et al.* (2020) *α = 0.950; Rho_a = 0.950; CR = 0.950; AVE = 0.863*	
I know what augmented reality is	0.935
I already had experience with augmented reality	0.943
I am interested in augmented reality in general	0.909
Inspired-by (Insby)	
Adapted from Böttger *et al.* (2017) *α = 0.884; Rho_a = 0.892; CR = 0.888; AVE = 0.614*	
This brand stimulated my imagination	0.808
I appreciate the new idea captured in this brand	0.812
I got new ideas unexpectedly and spontaneously by looking at this brand	0.819
I admire the new idea shared in this brand	0.818
I feel that I have discovered something new from this brand	0.646
Inspired-to (Insto)	
Adapted from Böttger *et al.* (2017) *α = 0.895; Rho_a = 0.898; CR = 0.895; AVE = 0.632*	
This brand has inspired me to do something	0.778
This brand has made me want to do something	0.834
This brand has increased my interest to do something	0.842
This brand has motivated me to do something	0.795
This brand has made me want to do more	0.719
App/brand congruence (Appbrand)	
Adapted from Hinsch *et al.* (2020) *α = 0.856; Rho_a = 0.857; CR = 0.857; AVE = 0.666*	
The app is suitable to support the brand's products	0.794
The app fits the brand's product range	0.835
The app matches the values that the brand conveys with its products	0.819
Experience extension (Experince)	
Adapted from Wei *et al.*, (2023) *α = 0.931; Rho_a = 0.931; CR = 0.931; AVE = 0.818*	
I would recommend this brand to someone who asks for my recommendation	0.902
I would encourage my friends and relatives to visit the brand	0.901
I would share this experience with my friends and relatives	0.911

Note(s): *α*, CR and AVE denote Cronbach's alpha, composite reliability and average variance extracted, respectively

Third, composite reliability measures (rho_a and CR) were tested to determine the internal consistency of the scale statements. First, the rho_a value of Dijkstra and Henseler (2015) was calculated, and it was concluded that all scale values were above 0.70 (Dijkstra and Henseler, 2015). Second, CR values were calculated, and it was determined that all scale values were above 0.60 (Bagozzi and Yi, 1988). Thus, it was determined that the scales had internal consistency. In the fourth stage, AVE values were calculated to calculate the convergent validity of all scales, and the loadings of all scales were above 0.50. Thus, it was concluded that there was convergent validity between the scales (Fornell and Larcker, 1981).

HTMT and Fornell–Larcker criterion values were analyzed to determine the discriminant validity of the scales. HTMT results are given in detail in Table 3. As a result of the analysis, it

Table 3. Discriminant validity analysis results (HTMT)

Variables	1	2	3	4	5	6
Augmentation quality						
AR expertise	0.404					
Inspired-by	0.439	0.679				
Inspired-to	0.428	0.718	0.757			
App/brand congruence	0.458	0.966	0.725	0.776		
Experience extension	0.424	0.827	0.713	0.758	0.989	

was determined that the values for all hypotheses were below 1.00 (Henseler *et al.*, 2015). In addition to examining the HTMT values, it is necessary to test whether these values are significantly different from a threshold value below 1. This analysis requires the computation of bootstrap confidence intervals obtained through a bootstrapping procedure (Hair *et al.*, 2021). When the HTMT ratio bootstrap confidence interval results of this study were examined, it was observed that the confidence intervals did not include the value of 1. This indicates the presence of discriminant validity (Henseler *et al.*, 2015; Franke and Sarstedt, 2019). When the HTMT values were evaluated along with their significance, it was seen that the values were not 0 and the *T*-values exceeded 1.96. This allows for the conclusion that the weights are significant.

Second, the Fornell–Larcker criterion was calculated to ensure discriminant validity. For this purpose, the square root of the AVE values for each scale was taken and compared with the correlation loads between the scales. The results obtained are shown in detail in Table 4. As a result of the analysis, the AVE square root values of all scales were higher than the interscale correlation loadings (Fornell and Larcker, 1981). As a result of all these evaluations, it was concluded that the scales had discriminant validity.

The goodness-of-fit values of the model used in this study were examined. The square root of standardized mean errors (SRMR), normed fit index (NFI), d_G and d_ULS values were calculated to determine the goodness-of-fit. As a result of the analysis, it was determined that the SRMR value was below 0.080 (Hu and Bentler, 1999), and NFI values were above 0.080 (Bollen, 1986). In addition, d_G (0.870) and d_ULS (0.422) values were higher than 0.05 (Dijkstra and Henseler, 2015). Finally, the chi-square value was calculated as 1,544.461. As a result of all these evaluations, it was observed that the research model had a good fit. The model goodness-of-fit results is shown in detail in Table 5.

Structural model assessment

InnerVIF, coefficient of determination (R^2) and effect size (f^2) results were examined to evaluate the research model structurally. It was observed that the InnerVIF values of the

Table 4. Discriminant validity analysis results (Fornell–Larcker criterion)

Variables	1	2	3	4	5	6
Augmentation quality	*0.832*					
AR expertise	0.402	*0.929*				
Inspired-by	0.434	0.678	*0.784*			
Inspired-to	0.428	0.717	0.748	*0.795*		
App/brand congruence	0.456	0.871	0.711	0.680	*0.816*	
Experience extension	0.422	0.814	0.757	0.692	0.808	*0.905*

Table 5. Model goodness-of-fit results

Criteria	Results
SRMR	0.041
d_ULS	0.422
d_G	0.870
Ki-kare	1,544.461
NFI	0.837

scales used in this research were below 5.00 (Becker *et al.*, 2015). In this context, it was concluded that there was no multicollinearity problem between the scales. The results obtained are shown in detail in Table 6. Second, in the structural model analysis, the proportion of dependent variables explaining the independent variables was calculated. For this purpose, R^2 values were analyzed. Accordingly, the rate of explanation of the inspired by the dimension of consumer inspiration was 0.49, the rate of explanation of the inspired to dimension was 0.53, the rate of explanation of app/brand congruence was 0.64 and the rate of explanation of experience extension was 0.97. Because all these values were generally close to and above 0.50, they represented a high identification rate (Henseler *et al.*, 2009).

Third, effect size values were analyzed in the structural model analysis. An effect size coefficient of 0.02–0.15 is considered low, 0.15–0.35 is considered medium and above 0.35 is considered high (Cohen, 1988). When the results obtained were analyzed, it was seen that the effect sizes were generally at a medium level. The effect size results are given in Table 6.

After the measurement and structural model analysis results were completed, the hypotheses were tested using the structural equation model. The results obtained are given in detail in Table 6.

According to the results of the structural equation model analysis, augmentation quality and AR expertise positively affect the inspired by and inspired to source of consumer inspiration. In this context, *H1a*, *H1b*, *H2a* and *H2b* are accepted. Although the "inspiration by" and "inspiration to" source dimensions of consumer inspiration positively affected app/brand congruence, they had no effect on experience extension. Therefore, *H4a* and *H4b* were accepted and *H3a* and *H3b* were rejected. Finally, it was determined in this study that app/brand congruence positively affected the experience extension variable. In this context, *H5* is accepted.

Table 6. Structural properties (hypothesis testing)

Hypotheses		β	SM	SD	*T*-statistics	*P*-values	InnerVIF	f^2	Results
H1a	AQU → insby	0.193	0.194	0.054	3.350	0.000***	1.192	0.061	*Supported*
H1b	AQU → insto	0.167	0.168	0.045	3.704	0.000***	1.192	0.051	*Supported*
H2a	ARex → insby	0.601	0.598	0.060	9.935	0.000***	1.192	0.594	*Supported*
H2b	ARex → insto	0.650	0.648	0.052	12.557	0.000***	1.192	0.765	*Supported*
H3a	Insby → experince	0.008	0.005	0.065	0.125	0.901	2.555	0.021	*Not supported*
H3b	Insto → experince	−0.026	−0.032	0.069	0.383	0.702	3.081	0.031	*Not supported*
H4a	Insby → appbrand	0.319	0.320	0.087	3.655	0.000***	2.267	0.127	*Supported*
H4b	Insto → appbrand	0.537	0.535	0.084	6.388	0.000***	2.267	0.359	*Supported*
H5	Appbrand → experince	1.003	1.012	0.095	10.555	0.000***	2.828	1.268	*Supported*

Notes(s): $p = < 0.001$***; $p = < 0.01$; **$p = < 0.05$*

For the purpose of this study, the mediating role of app/brand congruence between the inspired by and inspired to dimensions of consumer inspiration and experience extension was examined. The details of all these evaluations are shown in Table 7.

The mediation analysis revealed that app/brand congruence positively mediated the relationship between consumer inspiration (inspiration by and inspiration to) and experience extension. Therefore, *H6a* and *H6b* were accepted. When all mediation effects were analyzed, it was found that the indirect effects were significant. The direct impact was insignificant and the mediation effect type was determined as "full mediation (only indirect effect)" (Zhao *et al.*, 2010).

Discussion

This study examines the impacts of consumers' AR expertise and augmentation quality on consumer inspiration and the impacts of consumer inspiration on experience extension. The mediating impact of app/brand congruence between consumer inspiration and experience extension is also examined to add originality to this research. According to the research results, the hypotheses were generally supported.

The results of this study supported the hypothesis that augmentation quality positively affects the source of inspired by and inspired to. This result is consistent with the studies in the literature (Rauschnabel *et al.*, 2019; Olsson, 2013; Hinsch *et al.*, 2020). In their study, Hinsch *et al.* (2020) confirmed that augmentation quality positively affects inspired by and inspired to states. Therefore, virtual characters make customers virtual elements look realistic and feel that they are really there. The shapes are perceived well as if they came from the tablet into the environment, confirming that augmentation quality affects consumer inspiration. It is considered important for the Atasun Optik brand, which also offers online services, to provide its customers with a realistic-looking application of its products to integrate with its application. Ball (2022) also draws attention to this issue. It states that the simultaneous experience of this three-dimensional virtual world with the continuity of data by interacting with an unlimited number of users creates limitations but emphasizes the importance of realistic applications (Ball, 2022).

As a result of the analysis, the assumption that "AR expertise positively affects the source of inspired by and inspired to" was also supported. This result is consistent with the literature (Olsson, 2013; Javornik, 2016; Hinsch *et al.*, 2020). Hinsch *et al.* (2020) confirmed that AR expertise is positively related to inspiration, stating that AR expertise is associated with less cognitive effort, increased processing fluency and higher levels of creativity. Therefore, as consumers' AR expertise improves, the benefits derived from AR applications increase and positively impact consumer inspiration.

As a result of the analysis, it was found that the hypothesis that "inspiration by and inspiration to positively affect experience extension" was not supported. This result is inconsistent with the related literature (Bottger *et al.*, 2017; Hinsch *et al.*, 2020; Rauschnabel

Table 7. Mediation effect analysis results

Hypotheses		β	*SM*	*SD*	*T*-statistics	*P*-values	Results
H6a	Insby → appbrand → experince	0.320	0.325	0.098	3.253	0.000***	*Supported*
H6b	Insto → appbrand → experince	0.538	0.541	0.100	5.371	0.000***	*Supported*

Note(s): $p = < 0.001$***; $p = < 0.01$ **; $p = < 0.05$*

et al., 2019). The dimension "inspiration by and inspiration to" does not positively affect experience extension, which may be due to several factors. First, the source of inspiration to and inspiration by may initially create motivation in individuals; however, the personal factors (e.g. self-regulation skills, access to information and practice opportunities) necessary for this motivation to be sustainable and translate into actual experience extension may be missing. In this case, the individual remains only inspired but is unable to translate this into active learning or practical experience.

Moreover, the nature of the source of inspiration can have different levels of influence on extending individuals' experiences. For example, if the inspiration is short-lived and superficial, it may limit individuals' ability to process it deeply and acquire new skills and knowledge. On the other hand, environmental factors, such as individuals' ability to transform inspiration into meaningful action, personal motivation and external support, also play a critical role in this process. Finally, the relationship between "inspiration by and inspiration to" and experience extension may have an interactive and complex nature. This relationship may be influenced by the presence of other mediating variables, for example, this study mentions that app/brand congruence may determine the effectiveness of this process, which was also identified as the mediating hypothesis. Given these factors, it can be expected that inspiration alone would not have a direct and strong effect on experience extension. According to the results of this study, the hypothesis that "inspiration to and inspiration by positively affect app/brand congruence" was supported. This result contributed to the literature by supporting the limited data in the literature (Hinsch *et al.*, 2020; Xue *et al.*, 2019; Van Noort and Van Reijmersdal, 2019). Another hypothesis, "app/brand congruence positively affects experience extension," was supported. This result is consistent with the literature (Park and Yoo, 2020; Van Noort and Van Reijmersdal, 2019; Iyer *et al.*, 2018; Nikhashemi *et al.*, 2021; Kumar *et al.*, 2023). In parallel with this result, VA Berlo *et al.* (2021) stated that virtual objects can lead to increases in brand attitude if consumers perceive the products offered as attractive. This suggests that the efficiency to be gained from app/brand congruence will positively affect experience extension.

Finally, the analysis revealed that app/brand congruence fully mediates between consumer inspiration and experience extension. This result contributed to the literature by supporting the limited data in the literature (Danaher *et al.*, 2015; Iyer *et al.*, 2018). Iyer *et al.* (2018) found that well-designed mobile apps partially mediate the relationship between satisfaction and consumers' repurchase intention. Therefore, it is confirmed that there is a positive effect between AR applications and consumer behavioral intention (Kumar *et al.*, 2023); AR has an effective potential to increase behavioral intention and broaden the experience (Park and Yoo, 2020). This result shows that consumers' reactions to inspiration are transformed into behavioral outcomes, such as experience extension through the alignment of this source with the brand and app. In other words, the extent to which the app or brand aligns with consumer expectations and perceptions plays a critical role in transforming inspiration into behavior. This finding suggests that consumer inspiration is more than just an intrinsic motivation or emotional response; it can lead to behavioral responses through certain mediating factors. It highlights the need for brands and app developers to optimize the app/brand congruence to enrich the user experience and translate inspiration into behavior more effectively. Therefore, this result can provide guidance on how brands can integrate user experience and brand positioning reinforcements into their marketing strategies.

Theoretical and practical implications

Theoretical implications

In addition to expanding AR marketing theory, this research suggests that consumer inspiration in service marketing should also be considered by marketers. The theoretical contribution of our research is threefold. First, we contribute to the emerging literature on AR marketing of inspiration achieved through the use of an AR app and make sense of its implications for experience extension by incorporating the behavioral components of inspiration into our model. We build on the existing literature on inspiration by incorporating augmentation quality and AR expertise into the discussion of inspiration. Second, we develop the limited literature on the impacts of consumer inspiration on app/brand congruence. Additionally, we are examining the impact of consumer inspiration on experience extension and argue that inspiration can activate experience extension through mediating effects. In other words, we demonstrate that inspiration can transform into behavioral responses (i.e. experience extension) as it evokes emotions in consumers and creates meaningful associations. Third, we show that app/brand congruence mediates the relationship between consumer inspiration and experience extension. In this sense, we improve the literature by making significant contributions to the limited data in the literature. Our results are, therefore, meaningful for several reasons. Our research supports the idea that information provided by AR technology enhances both consumer inspiration and experience extension. In our research, we observed that consumers using the AR application of the Atasun Optik brand contributed to experience extension through mediating effects (App/brand congruence) by being inspired. In addition, technology-enriched AR applications enhance the user experience and consumers who like the application/brand fit reward this with experience extension. We provide guidance on the impact of well-designed AR applications in services marketing to expand the experience by creating inspiring experiences. In this way, we explore the implications of AR marketing for understanding user behavior.

Practical implications

AR marketing can play the role of a tool to achieve the brand's goals and support new marketing approaches. The results of this study provide brands with insights into AR marketing and recommend AR for developing and using marketing strategies. In particular, we believe that marketers should evaluate AR applications according to their potential for inspiration and ensure that the results of these applications translate into behavior (e.g. experience extension). Because AR applications have an impact on consumers' purchasing processes, they can be used more effectively in consumers' decision-making processes. AR marketing can also be used to achieve various marketing and organizational goals. For example, leading brands, such as Gucci and Ikea, have invested in AR features in their applications to enhance the customer experience, demonstrating the significance of these applications for all sectors (Van Noort and Van Reijmersdal, 2019). In particular, it is stated that developing an inspirational marketing strategy without AR will not work (Rauschnabel *et al.*, 2019; Gatter *et al.*, 2022).

Compared to traditional marketing, AR can often improve the postpurchase consumption experience (such as experience extension) by personalizing content, educating customers by entertaining them and helping them assess product suitability. AR enhances users' inspiration by combining the real world with the virtual world, mixing types of information and services across applications and contexts. Thus, AR can create an experience by promoting a positive attitude and higher trust toward brands. Rauschnabel *et al.* (2019) also found that consumers' positive experience with AR significantly influences their brand

attitudes and increases inspiration. Likewise, Javornik (2016) stated that AR technologies create an experience that encourages positive attitudes toward brands and higher trust. With a well-designed application, brand compliance can positively affect customer satisfaction and expand the experience and developing service production strategies in this regard can provide significant benefits for brands. AR applications actively involve users in this immersive experience by allowing them to perceive products in a three-dimensional way. The innovation inherent in AR technology shapes users' experiences by offering them special, customized content. Therefore, brands should make continuous improvements by ensuring the quality of their applications. In particular, applications with low augmentation quality should be carefully evaluated as they may have negative consequences on consumers' intention to expand their experience. Prioritizing consumer privacy in application use and encouraging positive user reactions will also improve application/brand compatibility. Table 8 provides an overview of these implications.

Limitations and further research

The data for this study were collected from customers in Türkiye who used the AR application of the Atasun Optik brand, which offers consumers the opportunity to experience its products using AR technology. However, it should be noted that the selected sample consists of users who have already engaged with the AR application, which may not fully represent the broader population of potential consumers. This could introduce a self-selection bias, as individuals more inclined to use AR applications may differ in their attitudes and behaviors from those who do not engage with such technology. Therefore, the generalizability of the findings should be approached with caution. Further research should incorporate more diverse consumer groups, including those who have not previously interacted with AR applications, to enhance the sample's representativeness and improve the external validity of the results. In addition, the results of the data collected in other regions and countries may differ. Further studies with brands offering similar services in different countries will allow the results to be comparable.

Another limitation is that this study focuses only on content related to the service sector. Other sectors can be included in further studies and comparisons can be made. In addition, comparative research can be conducted with a diversified sample and in relation to different variables. It is also suggested that app/brand fit be investigated in relation to different variables. Further studies can investigate postpurchase consumer behavior, especially by

Table 8. Conclusion and theoretical and practical implications

Conclusions	Theoretical and practical implications
The findings suggest that AR quality and AR expertise positively influence consumer inspiration. Inspiration also positively influences app/brand congruence. However, no direct effect of inspiration on experience extension was found The results showed that app/brand congruence had a full mediating effect between consumer inspiration and experience extension	AR marketing can increase experience extension by encouraging consumer inspiration. This study contributes to the literature by examining the impacts of AR applications on consumer inspiration and app/brand congruence. We show that inspiration activates consumers' emotional responses, leading to behavioral outcomes and triggering experience extension. In practical terms, AR applications should be considered a strategic marketing tool for brands and should continuously improve quality, personalization and user experience. Considering the positive impact of AR on consumer trust, brand attitude and purchase decisions, successful implementations can increase customer satisfaction and brand loyalty

examining how the user experience associated with AR technology is affected by positive or negative effects. In this study, application/brand fit acts as a mediating variable. Further studies can investigate the mediating and moderating effects of different variables. Furthermore, by integrating qualitative and quantitative approaches, researchers can increase the validity and generalizability of their findings.

References

Alba, J.W. and Hutchinson, J.W. (1987), "Dimensions of consumer expertise", *Journal of Consumer Research*, Vol. 13 No. 4, pp. 411-454.

Ali, F., Rasoolimanesh, S.M., Sarstedt, M., Ringle, C.M. and Ryu, K. (2018), "An assessment of the use of partial least squares structural equation modeling (PLS-SEM) in hospitality research", *International Journal of Contemporary Hospitality Management*, Vol. 30 No. 1, pp. 514-538.

Arghashi, V. and Yuksel, C.A. (2022), "Interactivity, inspiration, and perceived usefulness! how retailers' AR-apps improve consumer engagement through flow", *Journal of Retailing and Consumer Services*, Vol. 64, p. 102756.

Atasun Optik (2024), "Hakkımızda", available at: www.atasunoptik.com.tr/kurumsal/hakkimizda_1474 (accessed 28 February 2024).

Bagozzi, R.P. and Yi, Y. (1988), "On the evaluation of structural equation models", *Journal of the Academy of Marketing Science*, Vol. 16 No. 1, pp. 74-94.

Ball, M. (2022), *The Metaverse: And How İt Will Revolutionize Everything*, Liveright Publishing.

Barhorst, J.B., McLean, G., Shah, E. and Mack, R. (2021), "Blending the real world and the virtual world: exploring the role of flow in augmented reality experiences", *Journal of Business Research*, Vol. 122, pp. 423-436.

Becker, J.M., Ringle, C.M., Sarstedt, M. and Völckner, F. (2015), "How collinearity affects mixture regression results", *Marketing Letters*, Vol. 26 No. 4, pp. 643-659.

Bollen, K.A. (1986), "Sample size and Bentler and Bonett's nonnormed fit index", *Psychometrika*, Vol. 51 No. 3, pp. 375-377.

Bonn, M.A., Joseph-Mathews, S.M., Dai, M., Hayes, S. and Cave, J. (2016), "Heritage/cultural attraction atmospherics: creating the right environ ment for the heritage/cultural visitor", *Journal of Travel Research*, Vol. 45 No. 3, pp. 345-354.

Böttger, T., Rudolph, T., Evanschitzky, H. and Pfrang, T. (2017), "Customer inspiration: conceptualization, scale development, and validation", *Journal of Marketing*, Vol. 81 No. 6, pp. 116-131, doi: 10.1509/jm.15.0007.

Campos, A.C., Pinto, P. and Scott, N. (2019), "Bottom-up factors of attention during the tourist experience: an empirical study", *Current Issues in Tourism*, Vol. 23 No. 24, pp. 3111-3133.

Cheng, K.-H. (2021), "The structural relationships among spatial presence, situational interest and behavioral attitudes toward online virtual museum navigation: a PLS-SEM analysis", *Library Hi Tech*, Vol. 40 No. 5, pp. 1210-1225.

Chylinski, M., Heller, J., Hilken, T., Keeling, D.I., Mahr, D. and de Ruyter, K. (2020), "Augmented reality marketing: a technology-enabled approach to situated customer experience", *Australasian Marketing Journal*, Vol. 28 No. 4, pp. 374-384.

Cohen, J. (1988), *Statistical Power Analysis for the Behavioral Sciences*, 2nd ed., Lawrence Erlbaum Associates.

Craig, A.B. (2013), *Understanding Augmented Reality: Concepts and Applications*, Elsevier, Amsterdam, Netherlands.

Çiçek, M., Eren-Erdoğmuş, İ. and Daştan, İ. (2018), "How to increase the awareness of in-app mobile banner ads: exploring the roles of banner location, application type and orientation", *International Journal of Mobile Communications*, Vol. 16 No. 2, pp. 153-166.

Danaher, P.J., Smith, M.S., Ranasinghe, K. and Danaher, T.S. (2015), "Where, when, and how long: factors that influence the redemption of mobile phone coupons", *Journal of Marketing Research*, Vol. 52 No. 5, pp. 710-725.

Dijkstra, T.K. and Henseler, J. (2015), "Consistent and a symptotically normal PLS estimators for linear structural equations", *Computational Statistics and Data Analysis*, Vol. 81, pp. 10-23.

Dong, P. and Siu, N.Y.-M. (2013), "Servicescape elements, customer predis positions and service experience: the case of theme park visitors", *Tourism Management*, Vol. 36, pp. 541-551.

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

Franke, G. and Sarstedt, M. (2019), "Heuristics versus statistics in discriminant validity testing: a comparison of four procedures", *Internet Research*, Vol. 29 No. 3, pp. 430-447.

Gatter, S., Hüttl-Maack, V. and Rauschnabel, P.A. (2022), "Can augmented reality satisfy consumers' need for touch?", *Psychology and Marketing*, Vol. 39 No. 3, pp. 508-523.

Hair, J.F., Risher, J.J., Sarstedt, M. and Ringle, C.M. (2019), "When to use and how to report the results of PLS-SEM", *European Business Review*, Vol. 31 No. 1, pp. 2-24.

Hair, J.F., Jr, Hult, G.T.M., Ringle, C.M., Sarstedt, M., Danks, N.P. and Ray, S. (2021), "Partial least squares structural equation modeling (PLS-SEM) using R: a workbook (p. 197)", Springer Nature, available at: https://library.oapen.org/handle/20.500.12657/51463

Heller, J., Chylinski, M., de Ruyter, K., Mahr, D. and Keeling, D.I. (2019), "Let me imagine that for you: transforming the retail frontline through augmenting customer mental imagery ability", *Journal of Retailing*, Vol. 95 No. 2, pp. 94-114.

Henseler, J., Ringle, C.M. and Sarstedt, M. (2015), "A new criterion for assessing discriminant validity in variance-based structural equation modeling", *Journal of the Academy of Marketing Science*, Vol. 43 No. 1, pp. 115-135.

Henseler, J., Ringle, C.M. and Sinkovics, R.R. (2009), "The use of partial least squares path modeling in international marketing, new challenges to ınternational marketing", (*Advances in International Marketing)*, Vol. 20, pp. 277-319.

Hilken, T., de Ruyter, K., Chylinski, M., Mahr, D. and Keeling, D.I. (2017), "Augmenting the eye of the beholder: exploring the strategic potential of augmented reality to enhance online service experiences", *Journal of the Academy of Marketing Science*, Vol. 45 No. 6, pp. 884-905.

Hilken, T., Keeling, D.I., de Ruyter, K., Mahr, D. and Chylinski, M. (2020), "Seeing eye to eye: social augmented reality and shared decision making in the marketplace", *Journal of the Academy of Marketing Science*, Vol. 48 No. 2, pp. 143-164.

Hinsch, C., Felix, R. and Rauschnabel, P.A. (2020), "Nostalgia beats the wow-effect: inspiration, awe and meaningful associations in augmented reality marketing", *Journal of Retailing and Consumer Services*, Vol. 53, p. 101987.

Ho, M.H.W. and Chung, H.F. (2020), "Customer engagement, customer equity and repurchase intention in mobile apps", *Journal of Business Research*, Vol. 121, pp. 13-21.

Hu, L.T. and Bentler, P.M. (1999), "Cutoff criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives", *Structural Equation Modeling: A Multidisciplinary Journal*, Vol. 6 No. 1, pp. 1-55.

Ijaz, H., Ahmad, M. and Abdul-Wahid, S. (2024), "Comparison of web and app advertisement with brand ıdentification ımpact on purchase ıntention: study on Pakistan's personal care products ındustry", *Journal of Management Practices, Humanities and Social Sciences*, Vol. 8 No. 3, pp. 75-87.

Iyer, P., Davari, A. and Mukherjee, A. (2018), "Investigating the effectiveness of retailers' mobile applications in determining customer satisfaction and repatronage intentions? A congruency perspective", *Journal of Retailing and Consumer Services*, Vol. 44, pp. 235-243.

Javornik, A. (2016), "'It's an illusion, but it looks real!' Consumer affective, cognitive and behavioural responses to augmented reality applications", *Journal of Marketing Management*, Vol. 32 Nos 9/10, pp. 987-1011.

Javornik, A., Duffy, K., Rokka, J., Scholz, J., Nobbs, K., Motala, A. and Goldenberg, A. (2021), "Strategic approaches to augmented reality deployment by luxury brands", *Journal of Business Research*, Vol. 136, pp. 284-292.

Kaiser, H.F. (1974), "An index of factorial simplicity", *Psychometrika*, Vol. 39 No. 1, pp. 31-36, doi: 10.1007/BF02291575.

Kumar, H., Gupta, P. and Chauhan, S. (2023), "Meta-analysis of augmented reality marketing", *Marketing Intelligence and Planning*, Vol. 41 No. 1, pp. 110-123.

Lai, Z.J., Leong, M.K., Khoo, K.L. and Sidhu, S.K. (2024), "Integrating technology acceptance model and value-based adoption model to determine consumers' perception of value and intention to adopt AR in online shopping", *Asia Pacific Journal of Marketing and Logistics*, Vol. 37 No. 1.

Moneta, G.B. and Csikszentmihalyi, M. (1996), "The effect of perceived challenges and skills on the quality of subjective experience", *Journal of Personality*, Vol. 64 No. 2, pp. 275-310, doi: 10.1111/j.1467-6494.1996.tb00512.x.

Mota, J.M., Ruiz-Rube, I., Dodero, J.M. and Arnedillo-Sánchez, I. (2018), "Augmented reality mobile app development for all", *Computers and Electrical Engineering*, Vol. 65, pp. 250-260.

Nikhashemi, S.R., Knight, H.H., Nusair, K. and Liat, C.B. (2021), "Augmented reality in smart retailing: a (n) (A) symmetric approach to continuous intention to use retail brands' mobile AR apps", *Journal of Retailing and Consumer Services*, Vol. 60, p. 102464.

Oleynick, V.C., Thrash, T.M., LeFew, M.C., Moldovan, E.G. and Kieffaber, P.D. (2014), "The scientific study of ınspiration in the creative process: challenges and opportunities", *Frontiers in Human Neuroscience*, Vol. 8, pp. 1-8.

Olsson, T. (2013), "Concepts and subjective measures for evaluating user experience of mobile augmented reality services", in Huang, W., Alem, L. and Livingston, M. (Eds), *Human Factors in Augmented Reality Environments*, Springer, New York, NY.

Pansari, A. and Kumar, V. (2017), "Customer engagement: the construct, antecedents, and consequences", *Journal of the Academy of Marketing Science*, Vol. 45 No. 3, pp. 294-311.

Papagiannidis, S., Pantano, E., See-To, E.W., Dennis, C. and Bourlakis, M. (2017), "To immerse or not? Experimenting with two virtual retail environments", *Information Technology and People*, Vol. 30 No. 1, pp. 163-188.

Park, M. and Yoo, J. (2020), "Effects of perceived interactivity of augmented reality on consumer responses: a mental imagery perspective", *Journal of Retailing and Consumer Services*, Vol. 52, p. 101912.

Paul, J. and Mas, E. (2020), "Toward a 7-P framework for international marketing", *Journal of Strategic Marketing*, Vol. 28 No. 8, pp. 681-701.

Plotkina, D. and Rabeson, L. (2022), "The role of transactionality of mobile branded apps in brand experience and its impact on loyalty", *Journal of Brand Management*, Vol. 29 No. 5, pp. 470-483.

Porter, M.E. and Heppelmann, J.E. (2017), "A manager's guide to augmented reality", *Harvard Business Review*, Vol. 95 No. 6, pp. 45-57.

Poushneh, A. (2018), "Augmented reality in retail: a trade-off between user's control of access to personal information and augmentation quality", *Journal of Retailing and Consumer Services*, Vol. 41, pp. 169-176.

Prados-Castillo, J.F., Torrecilla-García, J.A., Guaita-Fernández, P. and De Castro-Pardo, M. (2024), "The impact of the metaverse on consumer behaviour and marketing strategies in tourism: a bibliometric review", *ESIC Market*, Vol. 55 No. 1, p. 29.

Rauschnabel, P.A., Babin, B.J., Tom Dieck, M.C., Krey, N. and Jung, T. (2022), "What is augmented reality marketing? Its definition, complexity, and future", *Journal of Business Research*, Vol. 142, pp. 1140-1150.

Rauschnabel, P.A., Felix, R. and Hinsch, C. (2019), "Augmented reality marketing: How mobile AR-apps can improve brands through inspiration", *Journal of Retailing and Consumer Services*, Vol. 49, pp. 43-53.

Rauschnabel, P.A., Hüttl-Maack, V., Ahuvia, A.C. and Schein, K.E. (2024), "Augmented reality marketing and consumer–brand relationships: How closeness drives brand love", *Psychology and Marketing*, Vol. 41 No. 4, pp. 819-837.

Roy, S., Ponnam, A. and Mandal, S. (2017), "Comprehending technology attachment in the case of smart phone-applications: an empirical study", *Journal of Electronic Commerce in Organizations*, Vol. 15 No. 1, pp. 23-43.

Smith, D.N. and Chen, X. (2018), "Brand experience, flow and brand app loyalty: examining consumer decision making within branded mobile apps", *Marketing Management Journal*, Vol. 28 No. 2, pp. 145-156.

Söderström, C., Mikalef, P., Landmark, A.D. and Gupta, S. (2024), "Augmented reality (AR) marketing and consumer responses: a study of cue-utilization and habituation", *Journal of Business Research*, Vol. 182, p. 114813.

Tan, Y.C., Chandukala, S.R. and Reddy, S.K. (2022), "Augmented reality in retail and its impact on sales", *Journal of Marketing*, Vol. 86 No. 1, pp. 48-66.

Thrash, T.M. and Elliot, A.J. (2003), "Inspiration as a psychological construct", *Journal of Personality and Social Psychology*, Vol. 84 No. 4, pp. 871-889.

Thrash, T.M. and Elliot, A.J. (2004), "Inspiration: core characteristics, component processes, antecedents, and function", *Journal of Personality and Social Psychology*, Vol. 87 No. 6, pp. 957-973.

Thrash, T.M., Moldovan, E.G., Oleynick, V.C. and Maruskin, L.A. (2014), "The psychology of inspiration", *Social and Personality Psychology Compass*, Vol. 8 No. 9, pp. 495-510.

Thrash, T.M., Maruskin, L.A., Cassidy, S.E., Fryer, J.W. and Ryan, R.M. (2010), "Mediating between the muse and the masses: inspiration and the actualization of creative ideas", *Journal of Personality and Social Psychology*, Vol. 98 No. 3, pp. 469-487.

Tsai, S.P. (2020), "Augmented reality enhancing place satisfaction for heritage tourism marketing", *Current Issues in Tourism*, Vol. 23 No. 9, pp. 1078-1083.

Ural, A. and Kilic, I. (2006), *Scientific Research Process and Data Analysis with SPSS*, Detay Publishing, Ankara, Türkiye.

Van Berlo, Z.M., van Reijmersdal, E.A., Smit, E.G. and van der Laan, L.N. (2021), "Brands in virtual reality games: affective processes within computer-mediated consumer experiences", *Journal of Business Research*, Vol. 122, pp. 458-465.

Van Noort, G. and Van Reijmersdal, E.A. (2019), "Branded apps: explaining effects of brands' mobile phone applications on brand responses", *Journal of Interactive Marketing*, Vol. 45 No. 1, pp. 16-26.

Wang, B., Kim, S. and Malthouse, E.C. (2016), "Branded apps and mobile platforms as new tools for advertising", *The New Advertising: Branding, Content, and Consumer Relationships in the Data-Driven Social Media Era*, in Brown, R.E., Jones, V.K. and Wang, M. (Eds), ABC-CLIO, Santa Barbara, CA, Vol. 2, pp. 123-156.

Wang, C.H., Chiang, Y.C. and Wang, M.J. (2015), "Evaluation of an augmented reality embedded on-line shopping system", *Procedia Manufacturing*, Vol. 3, pp. 5624-5630.

Wei, M., Liu, M., Peng, Y., Zhou, X. and Li, S. (2023), "Effects of creative atmosphere on tourists' post-experience behaviors in creative tourism: the mediation roles of tourist inspiration and place attachment", *International Journal of Tourism Research*, Vol. 25 No. 1, pp. 79-96.

Xue, H., Sharma, P. and Wild, F. (2019), "User satisfaction in augmented reality-based training using microsoft HoloLens", *Computers*, Vol. 8 No. 1, pp. 9-31.

Yim, M.Y.C., Chu, S.C. and Sauer, P.L. (2017), "Is augmented reality technology an effective tool for E-commerce? An interactivity and vividness perspective", *Journal of Interactive Marketing*, Vol. 39 No. 1, pp. 89-103.

Zhao, X., Lynch, J.G., Jr and Chen, Q. (2010), "Reconsidering baron and kenny: Myths and truths about mediation analysis", *Journal of Consumer Research*, Vol. 37 No. 2, pp. 197-206.

Corresponding author
Kazım Dağ can be contacted at: kzmdgnrhk@gmail.com