

-RESEARCH ARTICLE-

## UNVEILING THE COGNITIVE AND AFFECTIVE DRIVERS OF PURCHASE INTENTIONS IN MOBILE AR: A MULTI-GROUP SEM ANALYSIS OF CHINESE CONSUMERS

Ludan Yu<sup>1</sup>

KMITL Business School, King Mongkut's Institute of Technology  
Ladkrabang (KMITL), Ladkrabang, Bangkok, 10520, Thailand.

ORCID: <https://orcid.org/0009-0008-4693-4884>

Email: [63611121@kmitl.ac.th](mailto:63611121@kmitl.ac.th)

Chatchai Chatpunyakul<sup>2\*</sup>

KMITL Business School, King Mongkut's Institute of Technology  
Ladkrabang (KMITL), Ladkrabang, Bangkok, 10520, Thailand.

ORCID: <https://orcid.org/0000-0002-9757-622X>

Email: [chatchai.ch@kmitl.ac.th](mailto:chatchai.ch@kmitl.ac.th)

### —Abstract—

This study explores the impact of augmented reality (AR) attributes on the purchasing intentions of Chinese consumers, utilising the stimulus-organism-response (S-O-R) theoretical framework. A posttest-only, between-group experimental design was implemented, employing a multi-group structural equation modelling (SEM) approach to analyse data collected from a sample of 802 respondents. The results indicate that both perceived augmented realism and perceived technological fluidity significantly enhance consumers' cognitive responses—such as attitudes and perceived information quality—as well as affective responses, including immersion and enjoyment. These strengthened cognitive and affective responses subsequently exert a positive influence on consumers' intention to purchase. Moreover, the cognitive and affective responses serve as mediators in the relationship between perceived augmented realism, perceived technological fluidity, and purchase intention. These findings underscore the critical

Citation (APA): Yu, L., Chatpunyakul, C. (2024). Unveiling the Cognitive and Affective Drivers of Purchase Intentions in Mobile AR: A Multi-Group SEM Analysis of Chinese Consumers. *International Journal of eBusiness and eGovernment Studies*, 16(3), 427-450. doi:10.34109/ijebeg.2024160320

role of perceived augmented realism and technological fluidity in mobile AR shopping, contributing to the enrichment of the S-O-R theoretical model by providing meaningful insights into AR's influence on consumer behaviour within the Chinese e-commerce context.

**Keywords:** Augmented Realism, Technology Fluidity, Purchase Intention, Behavioural Economics, Attitudes, Perceived Information Quality, Immersion, Enjoyment.

## INTRODUCTION

E-commerce is widely acknowledged for offering substantial advantages over traditional brick-and-mortar retail, notably in terms of convenience, cost-effectiveness, and time efficiency (Riar et al., 2022). Consequently, consumers have increasingly embraced and relied upon online shopping platforms (Riar et al., 2022). Nonetheless, e-commerce continues to face notable limitations, particularly regarding product representation, trial opportunities, information depth, and the capacity to deliver a multi-dimensional shopping experience (Riar et al., 2022). These constraints hinder its ability to replicate the emotional gratification and sensory enjoyment associated with physical retail environments (Heim & Gierlich-Joas, 2022). Specifically, the absence of virtual try-on functionalities, akin to those in physical stores, amplifies perceived risk among consumers—especially when purchasing apparel and footwear—resulting in higher return rates (Smink et al., 2020).

In response, industry professionals are actively seeking technological solutions to overcome these challenges. Augmented Reality (AR), spurred by the proliferation of mobile devices, has emerged as a viable tool in this regard. AR enhances consumer engagement by fostering interactivity (de Amorim et al., 2022), enriching informational content and visual appeal (Vellanki et al., 2022), and offering personalised user experiences (Smink et al., 2020). It facilitates the overlay of virtual objects onto the physical world, enabling users to visualise products within their own environments (Tan et al., 2022). By integrating various media—such as visual interfaces (smartphones, tablets, smart glasses) and sensory elements (audio, olfactory, and tactile inputs)—AR refines the consumer purchasing process (Heim & Gierlich-Joas, 2022). This advancement significantly enhances product comprehension and influences purchasing decisions, often surpassing the effectiveness of conventional Virtual Reality (VR) solutions, such as image interactivity technologies (Huo & Li, 2022).

As AR becomes increasingly integral to mobile marketing strategies, it is imperative to

examine its influence on online consumer experiences (Boukabiya & Outtaj, 2021). Existing research predominantly focuses on AR's technical dimensions—such as interactivity, augmentation, informativeness, vividness, novelty, and aesthetics—and their psychological and emotional outcomes (e.g., perceived utility, hedonic engagement, and immersion), as well as behavioural intentions (e.g., purchase intent, reuse behaviour, and word-of-mouth) (Kowalczyk et al., 2021; Riar et al., 2022). However, research remains scarce on the influence of AR attributes—particularly perceived augmented realism and technology fluidity—on purchase intention, despite their critical role in enhancing AR by improving visual fidelity and environmental realism (Pessot et al., 2025).

Moreover, while some studies have assessed the immediate effects of AR on user attitudes and immersion (Vellanki et al., 2022), their extended impact on purchasing behaviour has yet to be fully explored. Specifically, the process through which AR features shape online purchase intentions among Chinese consumers—via cognitive and affective responses—remains insufficiently examined (Kowalczyk et al., 2021). Given the growing relevance of AR in e-commerce, particularly through virtual try-on applications within the apparel and footwear sectors, and considering China's distinct market characteristics, it is essential to investigate the underlying mechanisms through which AR influences consumer behaviour. The identified research gaps highlight the imperative for a more comprehensive investigation into the mechanisms through which AR features influence consumer cognitive and affective responses, purchase intentions, and broader behavioural patterns. In response to these gaps, the present study centres on the core research question: how do perceived augmented realism and technological fluidity influence online purchase intention among Chinese consumers, mediated by cognitive and affective responses, as framed by the stimulus–organism–response (S-O-R) theory? This study is guided by three primary objectives:

1. To assess the impact of perceived augmented realism and perceived technological fluidity on consumers' cognitive responses—specifically, attitudes and perceived information quality—and affective responses, namely immersion and enjoyment, within an AR-enhanced online shopping environment in China.
2. To analyse the extent to which these cognitive (attitudes and perceived information quality) and affective responses (immersion and enjoyment) shape consumers' purchase intentions.
3. To examine the mediating roles of cognitive and affective responses in the relationships between perceived augmented realism, technological fluidity, and

purchase intention.

## LITERATURE REVIEW

The S-O-R theory examines how external stimuli (S) influence internal states (O), leading to behavioural responses (R). In AR online shopping, stimuli include perceived augmented realism (Y. Chen & C. A. Lin, 2022) and technology fluidity (Zhou & Liu, 2022). The organism encompasses cognitive and affective responses like AR attitudes (Wilis & Nurwulandari, 2020), information quality (Jou et al., 2022), and immersion (Kowalczyk et al., 2021). Positive responses enhance purchase intention (R).

### The Relationship Between AR Characteristics and Cognitive Responses

AR characteristics include perceived augmented realism and technology fluidity. Technology fluidity enables smooth interactions, enhancing system quality, utility, and authenticity (Huo & Li, 2022). Augmented vividness improves consumer attitudes, while fluidity speeds up information retrieval, increasing pleasure and information quality (Duxbury & Haynie, 2023). Seamless technology fosters trust and enjoyment, improving cognitive appraisals (Y. Chen & C. A. Lin, 2022). Cognitive states involve information processing, attitudes, and beliefs (Choi et al., 2024; Chong et al., 2021). AR's realism enhances product visualisation, reduces uncertainty, and boosts trust (Daassi & Debbabi, 2021; de Amorim et al., 2022). Higher realism also improves perceived information quality (Tsepapadakis & Gavalas, 2023). Thus, the following hypotheses are proposed:

**H1:** *In an AR condition, perceived augmented realism positively influences the cognitive responses (a. attitudes, b. perceived information quality) of consumers.*

**H2:** *In an AR condition, perceived technology fluidity positively influences the cognitive responses (a. attitudes, b. perceived information quality) of consumers.*

### The Relationship Between AR Characteristics and Affective Responses

Affective states encompass emotional dimensions such as arousal, pleasure, and dominance (Zhou & Liu, 2022). Within the context of vivid product presentations, immersion and enjoyment are regarded as principal affective constructs (Kowalczyk et al., 2021). In extended reality (XR) settings, consumers frequently report enhanced affective experiences, including heightened immersion and enjoyment (Margetis et al., 2019). (Rojas et al., 2025) demonstrated that increased realism within AR environments amplifies immersion, with consumers exhibiting greater engagement when virtual

elements are seamlessly embedded into the physical context. Moreover, authentic AR encounters and distinctive AR functionalities have been found to elevate consumer enjoyment (Tsepapadakis & Gavalas, 2023).

In addition, technological fluidity exerts a considerable influence on consumer immersion and enjoyment. According to (Sears, 2024), seamless technological interaction reduces cognitive load and enhances user engagement, thereby fostering deeper immersion. Elevated levels of technological fluidity contribute to a more enjoyable user experience (Chen et al., 2022). AR platforms characterised by high technological fluidity enable users to interact with virtual objects in a smoother, more intuitive, and more gratifying manner (Y. Chen & C. A. Lin, 2022). This fluidity has been shown to positively affect both affective responses, such as enjoyment, and cognitive evaluations (Eber et al., 2023). Furthermore, (Kowalczyk et al., 2021) identified that improvements in AR interactivity and system quality are strongly associated with increased levels of immersion and enjoyment. In light of these insights, the following hypotheses are proposed:

**H3:** *In an AR condition, perceived augmented realism positively influences the affective responses (a. immersion, b. enjoyment) of consumers.*

**H4:** *In an AR condition, perceived technology fluidity positively influences the affective responses (a. immersion, b. enjoyment) of consumers.*

### **The Relationship Between Cognitive, Affective Responses, and Behavioural Responses**

Purchase intention denotes the probability that a consumer will acquire a particular product, serving as an indicator of both purchasing inclination and a predictor of actual consumer behaviour (Boukabiya & Outtaj, 2021). (Y. Chen & C. A. Lin, 2022) identified a significant association between brand attitudes and purchase intention. In a similar vein, (Kowalczyk et al., 2021) observed that positive consumer attitudes towards AR technology lead to increased purchase intentions for the featured products. Furthermore, the quality of product-related information plays a pivotal role in shaping consumer trust and influencing purchasing decisions, as evidenced by (Pfeifer et al., 2023). Reliable information delivered through AR technologies mitigates perceived risk and enhances purchase intention (Daassi & Debbabi, 2021). Additionally, higher perceived information quality has been shown to strengthen purchase intention (de Amorim et al., 2022). Based on these findings, the following hypotheses are proposed:

**H5:** *In an AR condition, cognitive responses (a. attitudes, b. perceived information quality) positively influence purchase intentions.*

Deep engagement in AR may not trigger instant positive emotions, but post-experience enjoyment often follows (Riar et al., 2022). A vivid AR interface heightens immersion and enjoyment (Smink et al., 2020), with immersion directly boosting user pleasure (Kowalczyk et al., 2021). Enjoyment, in turn, shapes purchase intentions via attitudes (Oyman et al., 2022; Tsepapadakis & Gavalas, 2023). Hence, the following hypotheses are proposed:

**H6:** *In an AR condition, immersion positively influences enjoyment.*

**H7:** *In an AR condition, affective response (enjoyment) positively influences purchase intention.*

### **The Relationship Between Perceived Information Quality, Enjoyment, and Attitudes**

Research confirms that superior information quality enhances consumer attitudes (Pessot et al., 2025; Ridge, 2021). Similarly, perceived enjoyment significantly shapes attitudes, particularly in virtual try-on experiences (Tan et al., 2022). Enhanced media enjoyment during AR interactions further strengthens positive attitudes toward the technology (Vellanki et al., 2022). Thus, the following hypotheses are proposed:

**H8:** *Perceived information quality positively influences attitudes.*

**H9:** *Enjoyment positively influences attitudes.*

### **The Mediating Role of Cognitive and Affective Responses**

The S-O-R framework conceptualises the stimulus as a precursor, with the organism acting as an intermediary between the stimulus and behavioural outcomes (Pessot et al., 2025; Zhu et al., 2022). Within this theoretical model, the mediating processes include both cognitive and affective states of consumers. Specifically, cognitive responses—such as attitudes and perceived information quality—and affective responses—such as immersion and enjoyment—function as intermediaries linking AR characteristics to purchase intention. Perceived augmented realism and perceived technological fluidity enhance the AR interface experience by improving visual image quality and the authenticity of environmental representation (Eber et al., 2023). Enhanced AR visual fidelity has a favourable impact on consumer attitudes and perceptions of information accuracy, which subsequently shapes their purchase intentions (de Amorim et al., 2022).

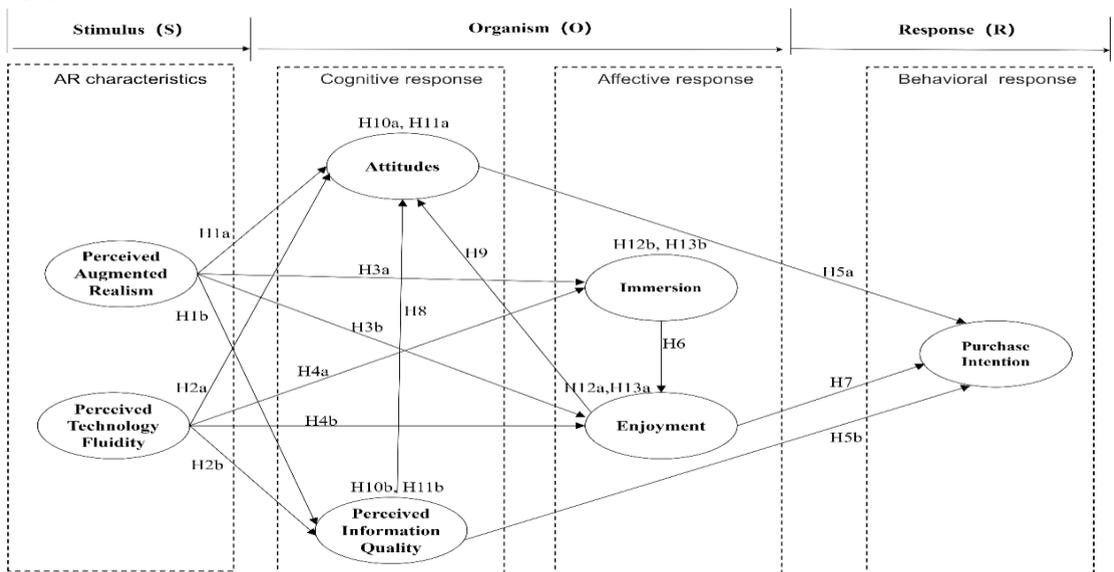
Moreover, engaging and lifelike AR interactions heighten feelings of immersion and enjoyment, which positively influence user satisfaction and intention to purchase (Kowalczyk et al., 2021). (Autsadee et al., 2023) further identified immersion as a mediating factor linking vividness and enjoyment with purchase intention. Accordingly, in the present conceptual model, perceived augmented realism and technological fluidity exert their influence on purchase intention through both cognitive and affective mechanisms, leading to the following proposed mediating effects:

**H10:** *In an AR condition, the relationship between perceived augmented realism and purchase intention is mediated by cognitive responses (a. attitudes, b. perceived information quality).*

**H11:** *In an AR condition, the relationship between perceived technology fluidity and purchase intention is mediated by cognitive responses (a. attitudes, b. perceived information quality).*

**H12:** *In an AR condition, the relationship between perceived augmented realism and purchase intention is mediated by affective responses (a. enjoyment, b. immersion and enjoyment).*

**H13:** *In an AR condition, the relationship between perceived technology fluidity and purchase intention is mediated by affective responses (a. enjoyment, b. immersion and enjoyment).*



**Figure 1: Conceptual Framework**

Accordingly, drawing upon the aforementioned literature, the following conceptual framework has been developed, as illustrated in [Figure 1](#).

## METHODOLOGY

To understand both the direct and indirect effects of AR technology characteristics on consumer perceptions and behaviour, a multi-group Structural Equation Model (SEM) was employed. This approach enabled the comparison of path coefficients between the experimental and control groups.

### Design of Experiments

A posttest-only between-group experimental design was adopted for this study. Participants were instructed to select shoes priced between 200 and 400 RMB via the Dewu App, a widely used Chinese mobile application that provides both AR and non-AR shopping functionalities. Participants in the AR group employed the virtual try-on feature to assess the appearance and fit of the shoes, including colour preference and overall satisfaction. In contrast, those in the non-AR group evaluated the products using textual descriptions, images, and videos. Footwear was selected as the treatment product given its prominence in online retail within China, as highlighted in the 2023 China E-commerce Development Report. The inability to physically try on shoes presents a significant barrier to online purchasing. Accordingly, it is anticipated that the integration of AR "Virtual Try-On" technology will assist the footwear and apparel sectors in overcoming these limitations.

### Sample Size and Data Collection

The target sample for this experiment consisted of college students, as they are typically seen as more technologically adept, confident, and likely to be early adopters of AR technology ([Duxbury & Haynie, 2023](#)). A total of 802 participants were recruited from four universities in China: the University of Science and Technology Beijing, Shanghai Jiao Tong University, Sichuan University, and Guangxi University. Participants were randomly assigned to either the AR virtual try-on group ( $n = 400$ ) or the non-AR group ( $n = 402$ ). Following the experiment, all participants completed a questionnaire via the Chinese online platform "Wen Juanxing." The 802 valid responses collected surpassed the minimum requirements for SEM analysis, with the total number of valid questionnaires being at least 10 times the number of questionnaire items ([Tan et al., 2022](#)).

## Measurements Scales

All constructs were measured using a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree). Perceived augmented realism employed 6 items (Baños et al., 2000), while technology fluidity used 8 items (Y. Chen & C. A. Lin, 2022). Attitudes (5 items), information quality (6 items), and purchase intention (5 items) were adapted from {Pantano, 2017 #19}. Enjoyment was measured with 6 items (Plotkina & Saurel, 2019), and immersion with 3 items (Yim et al., 2017). Bilingual experts conducted translation and back-translation to ensure linguistic validity.

## DATA ANALYSIS AND RESULTS

### Descriptive Statistics and Manipulation Check

To assess the significance of differences in sample characteristics between the AR and non-AR groups, a non-parametric Mann-Whitney U test was employed, following the Shapiro-Wilk test, which indicated a non-normal distribution of demographic variables. The findings presented in Table 1 reveal that the p-values for all demographic variables exceed 0.05, signifying no significant differences between the AR and non-AR groups concerning gender, age, educational level, prior AR shopping experience, and AR shopping frequency.

**Table 1: Results of the Mann–Whitney U Test.**

Variable	AR Group (n=400)	Non-AR Group (n=402)	Mann- Whitney U	P
Gender (Male/Female)	192 / 208	191 / 211	80008.0	0.892
Age (Mean ± SD)	2.93 ± 0.93	2.87 + 0.91	78300.0	0.491
Current level of education (Mean ± SD)	1.51 ± 0.67	1.49+ 0.66	79072.5	0.643
Have you ever had an AR shopping experience? (Mean ± SD)	1.18 ± 0.38	1.16 + 0.36	79130.0	0.556
AR shopping frequency (Mean ± SD)	2.05 ± 1.97	1.96 ±1.00	62127.0	0.127
Perceived Augmented Realism (Mean ± SD)	4.84 ± 1.26	4.16 + 1.19	56378.5	0.000
Perceived Technology Fluidity (Mean ± SD)	4.75 ± 1.30	4.18 + 1.15	60800.5	0.000
Attitudes (Mean ± SD)	4.78 ± 1.31	4.31 + 1.32	64503.0	0.000
Perceived Information Quality (Mean ± SD)	4.70 ± 1.29	4.14 + 1.23	61150.5	0.000
Immersion (Mean ± SD)	4.80 ± 1.37	4.36 + 1.34	66067.5	0.000
Enjoyment (Mean ± SD)	4.80 ± 1.25	4.27 + 1.33	65486.0	0.000
Purchase Intention (Mean ± SD)	4.76 ± 1.30	4.34 + 1.28	65871.5	0.000

**Note:** The aggregate scale values were employed to calculate the means.

This suggests that the random assignment process was successful. As a result, it can be concluded that demographic variables have a negligible effect on perceived augmented

realism (PAR), perceived technology fluidity (PTF), attitudes, perceived information quality, immersion, enjoyment, and purchase intention. Furthermore, the AR group demonstrated significantly higher average scores in both PAR and PTF compared to the non-AR group, which supports the initial hypothesis and validates the effectiveness of the experimental manipulation.

### Measurement Model Assessment

As presented in Table 2, the reliability assessment indicates that both the Composite Reliability (CR) and Cronbach's alpha ( $\alpha$ ) values lie within the acceptable range of 0.7 to 0.95, demonstrating strong reliability (Jou et al., 2022). Additionally, the Average Variance Extracted (AVE) value exceeds 0.5, and the factor loading coefficients surpass 0.7, confirming good convergent validity. These results substantiate that each construct within the research model meets the required standards for reliability and convergent validity (Smink et al., 2020).

**Table 2: Internal Reliability and Convergent Validity**

Variables	Items	Factor Loading		Cronbach's Alpha		CR		AVE	
		AR	non-AR	AR	non-AR	AR	non-AR	AR	non-AR
Perceived Augmented Realism	PAR1	0.779	0.772	0.899	0.891	0.898	0.898	0.597	0.576
	PAR2	0.773	0.717						
	PAR3	0.77	0.741						
	PAR4	0.776	0.754						
	PAR5	0.775	0.792						
	PAR6	0.764	0.778						
Perceived Technology Fluidity	PTF1	0.814	0.783	0.928	0.915	0.889	0.915	0.617	0.574
	PTF2	0.804	0.748						
	PTF3	0.771	0.747						
	PTF4	0.767	0.778						
	PTF5	0.81	0.707						
	PTF6	0.768	0.744						
	PTF7	0.783	0.756						
	PTF8	0.769	0.796						
Attitudes	A1	0.779	0.763	0.883	0.836	0.928	0.871	0.616	0.575
	A2	0.786	0.772						
	A3	0.824	0.763						
	A4	0.751	0.762						
	A5	0.783	0.732						
Perceived Information Quality	PIQ1	0.77	0.757	0.900	0.881	0.899	0.88	0.599	0.552
	PIQ2	0.79	0.786						
	PIQ3	0.777	0.713						
	PIQ4	0.792	0.757						
	PIQ5	0.756	0.731						
	PIQ6	0.759	0.713						

Variables	Items	Factor Loading		Cronbach's Alpha		CR		AVE	
		AR	non-AR	AR	non-AR	AR	non-AR	AR	non-AR
Immersion	I1	0.773	0.749	0.816	0.823	0.827	0.801	0.616	0.573
	I2	0.763	0.73						
	I3	0.818	0.792						
Enjoyment	E1	0.738	0.808	0.876	0.880	0.876	0.88	0.857	0.594
	E2	0.741	0.762						
	E3	0.775	0.799						
	E4	0.807	0.748						
	E5	0.769	0.737						
Purchase Intention	PI1	0.757	0.729	0.884	0.867	0.884	0.867	0.604	0.566
	PI2	0.759	0.766						
	PI3	0.784	0.755						
	PI4	0.809	0.755						
	PI5	0.777	0.758						

Discriminant validity was evaluated using the standard SEM approach (see Table 3). The purpose of this test is to avoid model errors by ensuring that the variables represent distinct constructs. The discriminant validity of the scale utilised in this study is robust, as demonstrated by the fact that the square root of the AVE for each construct exceeds the correlation coefficients between that construct and other constructs.

**Table 3. Fornell-Larcker**

Variables	PAR	PTF	A	PIQ	I	E	PI
PAR	<i>0.773/0.759</i>	0.401	0.506	0.357	0.363	0.387	0.418
PTF	0.298	<i>0.785/0.758</i>	0.458	0.435	0.323	0.384	0.432
A	0.358	0.296	<i>0.78/0.552</i>	0.420	0.409	0.405	0.445
PIQ	0.365	0.364	0.303	<i>0.774/0.743</i>	0.366	0.357	0.389
I	0.197	0.224	0.239	0.283	<i>0.785/0.757</i>	0.346	0.380
E	0.296	0.288	0.282	0.323	0.283	<i>0.766/0.771</i>	0.403
PI	0.308	0.293	0.298	0.276	0.203	0.34	<i>0.777/0.752</i>

**Note:** The diagonal displays the square root of the AVE in italics. Correlation values for AR (Non-AR) are displayed above (below) the diagonal,  $p < 0.01$ . PAR = perceived augmented realism, PTF = perceived technology fluidity, A = attitudes, PIQ = perceived information quality, I = immersion, E = enjoyment, PI = purchase intention.

### Structural Model Assessment

This study utilised multi-group SEM to test the hypotheses and evaluate the influence of constructs within the research model. The results presented in Table 4, Figure 2, and Figure 3 demonstrate that all hypotheses (H1-H9) are supported ( $P < 0.05$ ) in the AR group, with coefficients indicating significantly stronger effects compared to the non-AR group. This suggests that augmented realism and technology fluidity serve as

powerful drivers for enhancing cognitive responses—specifically attitudes (H1a, H2a) and perceived information quality (H1b, H2b)—as well as affective responses such as immersion (H3a, H4a) and enjoyment (H3b, H4b) within AR environments. Furthermore, in the AR group, cognitive responses related to attitudes (H5a) and perceived information quality (H5b), as well as affective responses like enjoyment (H7), have substantial positive effects on purchase intention. Moreover, perceived information quality (H8) and enjoyment (H9) significantly impact attitudes. The findings highlight that perceived augmented realism and technology fluidity not only enhance immediate consumer perceptions and emotional engagement but also translate these improvements into stronger purchase intentions.

**Table 4: Multi-Group SEM Analysis**

Hypothesis		AR Group			Non-AR Group		
		Coef. (SE, t-value)	P	Results	Coef. (SE, t-value)	p	Results
H1a	PAR→A	0.332 (0.054, 6.15)	***	Y	0.231 (0.068, 3.397)	***	Y
H1b	PAR→PIQ	0.243 (0.049, 4.96)	***	Y	0.22 (0.061, 3.606)	***	Y
H2a	PTF → A	0.236 (0.055, 4.29)	***	Y	0.156 (0.058, 2.690)	0.006	Y
H2b	PTF→PIQ	0.369 (0.053, 6.96)	***	Y	0.219 (0.054, 4.056)	***	Y
H3a	PAR→I	0.297 (0.056, 5.30)	***	Y	0.102 (0.066, 1.545)	0.092	N
H3b	PAR→E	0.239 (0.051, 4.69)	***	Y	0.201 (0.060, 3.350)	***	Y
H4a	PTF → I	0.232 (0.056, 4.14)	***	Y	0.147 (0.059, 2.492)	***	Y
H4b	PTF → E	0.253 (0.051, 4.96)	***	Y	0.108 (0.052, 2.077)	0.052	N
H5a	A → PI	0.273 (0.059, 4.63)	***	Y	0.208 (0.055, 3.782)	***	Y
H5b	PIQ → PI	0.201 (0.055, 3.65)	***	Y	0.124 (0.058, 2.138)	0.029	Y
H6	I → E	0.245 (0.056, 4.38)	0.002	Y	0.241 (0.057, 4.228)	***	Y
H7	E → PI	0.248 (0.058, 4.28)	***	Y	0.228 (0.059, 3.868)	***	Y
H8	PIQ → A	0.162 (0.057, 2.84)	0.004	Y	0.103 (0.064, 1.609)	0.078	N
H9	E → A	0.148 (0.059, 2.51)	0.008	Y	0.173 (0.062, 2.774)	0.002	Y

**Note:** “Y” represents the supported hypothesis, and “N” represents the unsupported hypothesis.

In contrast, several hypotheses (H3a, H4b, H8) were not supported in the non-AR group ( $P > 0.05$ ). These results indicate that, in the absence of AR technology, the relationships between perceived augmented realism, technology fluidity, and affective responses are either diminished or altered. Specifically, the influence of perceived augmented realism on immersion (H3a) and the effect of perceived technology fluidity on enjoyment (H4b) were found to be statistically insignificant ( $P > 0.05$ ) under non-AR conditions.

Additionally, the connection between perceived information quality and attitudes was also insignificant ( $P > 0.05$ ).

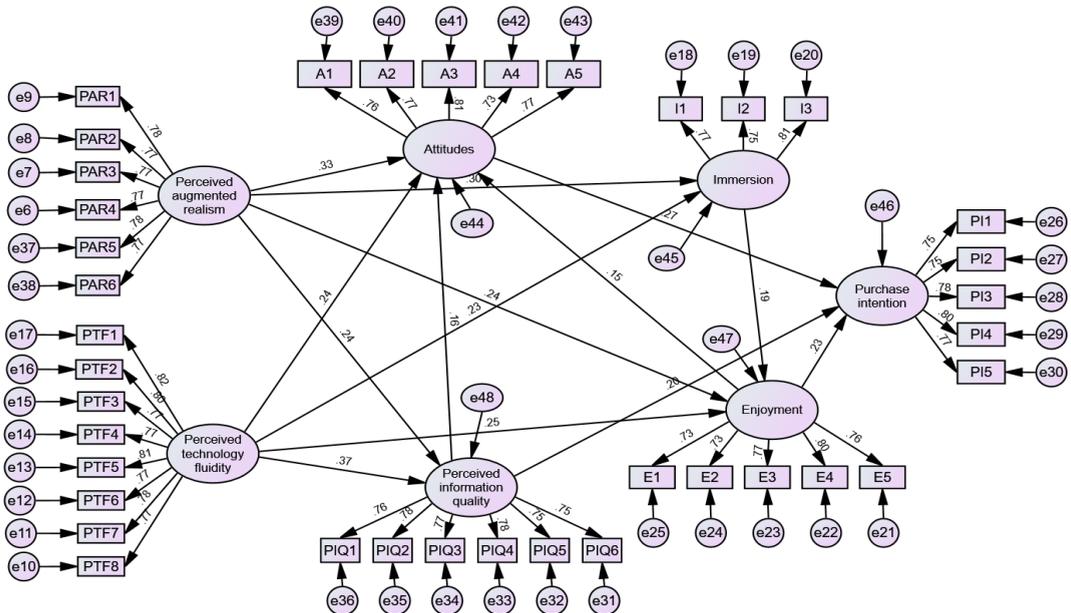


Figure 2: The Structural Model Assessment of the AR Group

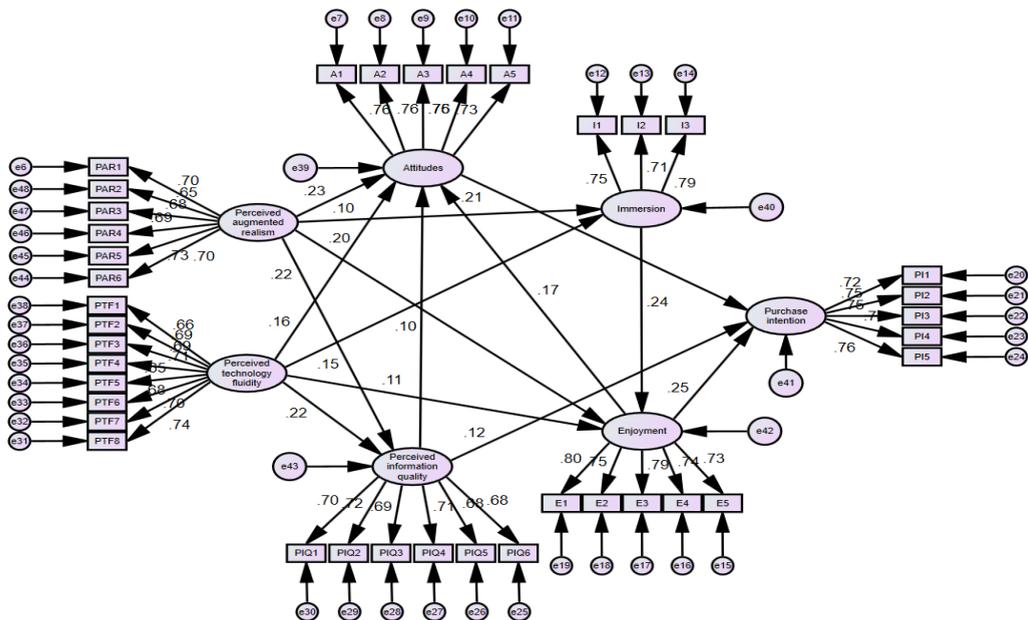


Figure 3: The Structural Model Assessment of the non-AR Group

## Mediating Effect Analysis

The mediation analysis results (see Table 5), conducted using bootstrapping with 5,000 resamples (Huo & Li, 2022), revealed that in both AR and non-AR groups, cognitive responses - specifically attitudes (H10a, H11a) and perceived information quality (H10b, H11b) - significantly mediated the relationships between both perceived augmented realism and purchase intention, and between technology fluidity and purchase intention. Table 5 shows these effects were notably stronger in the AR group. For affective responses, Table 5 demonstrates that the AR group showed significant mediation through enjoyment (H12a, H13a) for both paths, while the non-AR group's mediation through enjoyment (H13a) was non-significant ( $p > 0.05$ ). Similarly, Table 5 reveals the combined immersion-enjoyment mediation (H12b, H13b) was significant in the AR group but non-significant in the non-AR group for the augmented realism path (H12b;  $p > 0.05$ ), indicating AR environments amplify both cognitive and affective pathways to purchase intention.

**Table 5: Mediation Analysis**

Path		AR Group			Non-AR Group		
		Coef. (SE, t-value)	P	Results	Coef. (SE, t-value)	p	Results
H10a	PAR -> A -> PI	0.089 (0.027, 3.30)	0.000	Y	0.047 (0.013, 2.01)	0.032	Y
H10b	PAR -> PIQ -> PI	0.046 (0.023, 2.03)	0.028	Y	0.032 (0.015, 2.16)	0.021	Y
H11a	PTF -> A -> PI	0.070 (0.021, 3.32)	0.000	Y	0.031 (0.014, 2.14)	0.025	Y
H11b	PTF -> PIQ -> PI	0.072 (0.022, 3.34)	0.000	Y	0.031 (0.015, 2.00)	0.033	Y
H12a	PAR -> E -> PI	0.063 (0.019, 3.31)	0.000	Y	0.050 (0.020, 2.50)	0.011	Y
H12b	PAR -> I -> E -> PI	0.052 (0.020, 2.60)	0.020	Y	0.013 (0.012, 1.12)	0.099	N
H13a	PTF -> E -> PI	0.055 (0.027, 2.04)	0.027	Y	0.025 (0.019, 1.31)	0.082	N
H13b	PTF -> I -> E -> PI	0.025 (0.013, 1.99)	0.033	Y	0.023 (0.012, 1.98)	0.034	Y

**Note:** “Y” represents the supported hypothesis, and “N” represents the unsupported hypothesis.

## DISCUSSION

The key findings reveal that, among the AR characteristics affecting cognitive responses, perceived technology fluidity has the most substantial influence on perceived information quality, followed by perceived augmented realism's impact on attitudes. Regarding affective responses, perceived augmented realism has the strongest effect on immersion. The results highlight that, in AR environments, both perceived technology fluidity and augmented realism play a crucial role in shaping users' cognitive and affective responses. Specifically, attitudes and perceived information quality are central

to the decision-making process, with augmented realism being key to enhancing users' immersive experiences.

As an external stimulus, perceived augmented realism enhances the authenticity and credibility of AR experiences, thereby increasing consumer engagement and trust in the presented information (de Amorim et al., 2022). This fosters more favourable attitudes and improved perceptions of information quality (Jou et al., 2022). At the same time, perceived technology fluidity alleviates operational difficulty and reduces cognitive load (Huo & Li, 2022). As the user experience improves with greater technological fluidity, consumers' attitudes toward the product or service become more positive, and their evaluation of the information also improves. This aligns with previous research (Duxbury & Haynie, 2023). Both factors influence consumers' internal psychological states, ultimately leading to more positive behavioural responses.

The study found that perceived augmented realism and perceived technology fluidity positively influence consumers' immersion and enjoyment. This indicates that the stimulus of perceived augmented realism fosters greater immersion and enjoyment among consumers, enhancing their emotional involvement. As noted by (Chong et al., 2021), well-integrated AR features can effectively enhance users' immersion, making them feel more present and, in turn, leading to greater enjoyment. Similarly, perceived technology fluidity, as a key external stimulus, facilitates seamless and smooth interactions with the technology, reducing cognitive effort and allowing users to focus more on the content itself. This leads to improved immersion (Sears, 2024) and makes the interactions more engaging and enjoyable (Ridge, 2021).

Attitudes, perceived information quality, and enjoyment significantly influence consumer purchase intentions. This suggests that consumers' perceptions of AR technology—especially their attitudes and the quality of the information—along with their enjoyment during the AR experience, impact their purchase intentions. This aligns with (Heim & Gierlich-Joas, 2022), who found that favourable attitudes toward AR correlate with higher purchase intentions. Additionally, (Daassi & Debbabi, 2021) showed that accurate, reliable information reduces perceived risk, enhancing purchase likelihood. Perceived information quality strengthens cognitive responses, which in turn positively affect purchase intentions. Moreover, enjoyment, as an affective response, is influenced by AR immersion. (Kowalczyk et al., 2021) found that greater AR immersion boosts enjoyment, which in turn increases purchase intentions. However, in the non-AR group, perceived information quality had no significant impact on attitudes, likely due to the limited information presentation without AR technology, which may

have hindered the enhancement of consumers' perception of information quality, resulting in an insignificant effect on attitudes.

The study found that attitudes, perceived information quality, immersion, and enjoyment all play significant mediating roles in AR conditions. These results indicate that AR technology influences consumers' cognitive responses (attitudes and perceived information quality) and affective responses (enjoyment), which in turn impact their purchase intentions. When the AR interface is perceived as realistic and seamless, and provides high-quality, reliable information, it enhances consumers' attitudes towards the product or service. This, coupled with the enjoyment derived from the immersive AR experience, fosters a more favourable internal state, leading to increased purchase intentions. Thus, the interaction between cognitive and affective responses transforms the initial stimuli (perceived augmented realism and technology fluidity) into behavioural responses (purchase intentions). These findings align with previous research, suggesting that high-quality AR visualisations positively influence consumer attitudes and perceived information quality, thereby affecting purchase intentions (de Amorim et al., 2022). Additionally, the results support (Kowalczyk et al., 2021), who demonstrated that the effect of AR technology characteristics on behavioural intention is mediated by immersion and enjoyment. However, in the non-AR group, the mediating effect of immersion and enjoyment was not significant, likely due to the lack of interactivity and sensory stimulation, which resulted in lower levels of immersion and enjoyment.

## CONCLUSION

This study comprehensively explored the effects of perceived augmented realism and perceived technology fluidity on consumer purchase intentions in an AR environment in China, grounded in the S-O-R theory. The results indicate a strong positive influence of perceived augmented realism and perceived technology fluidity on consumers' attitudes, perceived information quality, immersion, and enjoyment. Our findings emphasize the important mediating roles of attitudes, perceived information quality, immersion, and enjoyment in the relationship between augmented realism, technology fluidity, and purchase intentions. The study suggests that improving these mediators through enhanced augmented realism and smoother technology interactions can significantly boost consumers' purchase intentions. These insights carry important implications for the design and application of AR technologies in consumer behaviour. By prioritising augmented realism and seamless technology experiences, businesses can effectively enhance perceived information quality, foster positive consumer attitudes,

and create immersive, enjoyable experiences. These factors are pivotal in influencing purchase intentions, providing a strategic edge in a competitive market.

## **IMPLICATIONS**

### **Theoretical Implications**

Previous research has inadequately explored the influence of perceived information quality on cognitive responses within AR purchasing environments. This study incorporates perceived information quality as a cognitive response variable, aiming to examine the impact of AR technology features on consumer cognition through the S-O-R theory. The results affirmed its significant mediating role, providing valuable insights for future research to investigate other variables within the S-O-R framework. Further exploration of the interactions between stimuli, consumer psychological responses, and behavioural outcomes in AR contexts is recommended. Moreover, limited research has addressed how perceived augmented realism and perceived technology fluidity affect consumer cognitive and affective responses, as well as behaviour in AR shopping environments. This study fills this gap by demonstrating that these factors positively influence cognitive responses (attitudes and perceived information quality) and affective responses (immersion and enjoyment), which in turn enhance purchase intention. These findings shed light on how perceived augmented realism and technology fluidity shape both cognitive and affective responses, ultimately impacting behavioural outcomes in AR settings, thus contributing to the growing body of knowledge on AR applications in marketing and consumer behaviour.

### **Managerial Implications**

The study's findings underscore the significance for mobile e-commerce retailers to invest in AR technology that prioritises high perceived realism and fluidity. By enhancing the realism of product displays with features such as multi-angle views, zoom capabilities, and lifelike visualisations in real-world contexts, retailers can substantially improve consumers' perceptions of product information quality. This, in turn, fosters positive attitudes towards products, leading to increased purchase intentions. Additionally, retailers should focus on creating immersive AR experiences that emotionally engage consumers. By incorporating interactive elements and rich sensory feedback, retailers can deepen immersion and enjoyment, which positively influences purchasing behaviour. These strategies will help build trust, reduce uncertainties, and enhance consumer satisfaction and loyalty in the mobile e-commerce sector.

For app developers, the study highlights the need to prioritise seamless integration of realism and technology fluidity in AR applications. Developers should focus on creating intuitive and responsive interfaces that allow users to interact with virtual objects effortlessly. Ensuring smooth interactions, prompt system responses, and easy navigation is essential for maintaining high levels of user satisfaction and engagement. Simplifying the user interface while retaining high-quality visual and interactive elements is crucial to prevent overwhelming users and enhance their overall experience. Furthermore, ongoing technological advancements in AR are vital to meet evolving user expectations, enabling retailers to offer immersive, satisfying, and effective AR experiences that drive consumer purchase intentions.

### **LIMITATIONS AND FUTURE RESEARCH DIRECTION**

This research, while significant, is not without its limitations. The sample, consisting of Chinese university students, may not be representative of the broader consumer population, which limits the generalisability of the findings across different cultures and demographics. The use of a posttest-only between-group design, while controlling for extraneous variables, does not account for pre-existing differences between groups. A pretest-posttest design could provide more robust insights by measuring initial attitudes and behaviours before the AR intervention. Longitudinal studies are also recommended to assess the effects of AR over time, as the current cross-sectional design limits the ability to track engagement and purchasing behaviours. Furthermore, this research predominantly focused on the positive aspects of AR, such as realism and technology fluidity, without considering potential negative impacts, such as mental distress or technology failures. Future research should explore both positive and negative consumer reactions to AR characteristics to develop more balanced, user-friendly applications.

### **ETHICS STATEMENT**

In accordance with the Declaration of Helsinki, the study adhered to its ethical protocols for collecting data, individuals, and samples in each research procedure. Statement of Informed Consent The researchers requested that the respondents carefully read the written informed consent prior to the experiment and questionnaire. They also introduced the purpose of the study and clarified that the data would be used solely for research purposes and that all information about the respondents would be kept confidential. All respondents, who were informed and voluntarily participated, completed the experiment and questionnaire.

## REFERENCE

- Autsadee, Y., Jeevan, J., Mohd Salleh, N. H. B., & Othman, M. R. B. (2023). Digital tools and challenges in human resource development and its potential within the maritime sector through bibliometric analysis. *Journal of International Maritime Safety, Environmental Affairs, and Shipping*, 7(4), 2286409. <https://doi.org/10.1080/25725084.2023.2286409>
- Baños, R. M., Botella, C., Garcia-Palacios, A., Villa, H., Perpiñá, C., & Alcaniz, M. (2000). Presence and reality judgment in virtual environments: a unitary construct? *CyberPsychology & Behavior*, 3(3), 327-335. <https://doi.org/10.1089/10949310050078760>
- Boukabiya, A., & Outtaj, B. (2021). The impact of e-servicescape on the flow and purchase intention of online consumers: quantitative analysis of B to C e-commerce stores in Morocco. *International Journal of Accounting, Finance, Auditing, Management and Economics*, 2(4), 200-219. <https://doi.org/10.5281/zenodo.5115131>
- Chen, Y., Li, M., Song, J., Ma, X., Jiang, Y., Wu, S., & Chen, G. L. (2022). A study of cross-border E-commerce research trends: Based on knowledge mapping and literature analysis. *Frontiers in Psychology*, 13, 1009216. <https://doi.org/10.3389/fpsyg.2022.1009216>
- Chen, y., & Lin, C. (2022). Consumer behavior in an augmented reality environment: Exploring the effects of flow via augmented realism and technology fluidity. *Telematics and Informatics*, 71, 101833. <https://doi.org/10.1016/j.tele.2022.101833>
- Chen, Y., & Lin, C. A. (2022). Consumer behavior in an augmented reality environment: Exploring the effects of flow via augmented realism and technology fluidity. *Telematics and Informatics*, 71, 101833. <https://doi.org/10.1016/j.tele.2022.101833>
- Choi, S., Jeong, K.-S., & Park, S. R. (2024). ESG activity recognition enhances organizational commitment and service-oriented organizational citizenship behavior among insurance call center staff. *Heliyon*, 10(11). <https://doi.org/10.1016/j.heliyon.2024.e31999>
- Chong, K. F., SABRI, M. F., Magli, A. S., Abd Rahim, H., Mokhtar, N., & Othman, M. A. (2021). The effects of financial literacy, self-efficacy and self-coping on financial behavior of emerging adults. *The Journal of Asian Finance, Economics and Business*, 8(3), 905-915. <https://doi.org/10.13106/jafeb.2021.vol8.no3.0905>
- Daassi, M., & Debbabi, S. (2021). Intention to reuse AR-based apps: The combined role

- of the sense of immersion, product presence and perceived realism. *Information & Management*, 58(4), 103453. <https://doi.org/10.1016/j.im.2021.103453>
- de Amorim, I. P., Guerreiro, J., Eloy, S., & Loureiro, S. M. C. (2022). How augmented reality media richness influences consumer behaviour. *International Journal of Consumer Studies*, 46(6), 2351-2366. <https://doi.org/10.1111/ijcs.12790>
- Duxbury, S. W., & Haynie, D. L. (2023). Network embeddedness in illegal online markets: Endogenous sources of prices and profit in anonymous criminal drug trade. *Socio-Economic Review*, 21(1), 25-50. <https://doi.org/10.1093/ser/mwab027>
- Eber, R., Kollmann, D., Aschenbrenner, D., Hentsch, M., Schwarzer, S., & Stricker, N. (2023). IIOT visualization applications based on augmented reality—practical approach for easy implementation. *Procedia CIRP*, 120, 964-967. <https://doi.org/10.1016/j.procir.2023.09.108>
- Heim, S., & Gierlich-Joas, M. (2022). The Mutual Interaction of Employee Empowerment and Digital Innovation. *Management Revue*, 33(3), 213-239. <https://doi.org/10.5771/0935-9915-2022-3-213>
- Huo, H., & Li, Q. (2022). Influencing factors of the continuous use of a knowledge payment platform—fuzzy-set qualitative comparative analysis based on triadic reciprocal determinism. *Sustainability*, 14(6), 3696. <https://doi.org/10.3390/su14063696>
- Jou, Y.-T., Saflor, C. S., Mariñas, K. A., Young, M. N., Prasetyo, Y. T., & Persada, S. F. (2022). Assessing service quality and customer satisfaction of electric utility provider's online payment system during the COVID-19 pandemic: A structural modeling approach. *Electronics*, 11(22), 3646. <https://doi.org/10.3390/electronics11223646>
- Kowalczyk, P., Siepmann, C., & Adler, J. (2021). Cognitive, affective, and behavioral consumer responses to augmented reality in e-commerce: A comparative study. *Journal of business research*, 124, 357-373. <https://doi.org/10.1016/j.jbusres.2020.10.050>
- Margetis, G., Ntoa, S., & Stephanidis, C. (2019). Smart omni-channel consumer engagement in malls. HCI International 2019-Posters: 21st International Conference, HCII 2019, Orlando, FL, USA, July 26–31, 2019, Proceedings, Part III 21, [https://doi.org/10.1007/978-3-030-23525-3\\_12](https://doi.org/10.1007/978-3-030-23525-3_12)
- Oyman, M., Bal, D., & Ozer, S. (2022). Extending the technology acceptance model to explain how perceived augmented reality affects consumers' perceptions. *Computers in Human Behavior*, 128, 107127. <https://doi.org/10.1016/j.chb.2021.107127>

- Pantano, E., Rese, A., & Baier, D. (2017). Enhancing the online decision-making process by using augmented reality: A two country comparison of youth markets. *Journal of Retailing and Consumer Services*, 38, 81-95. <https://doi.org/10.1016/j.jretconser.2017.05.011>
- Pessot, E., Zangiacomi, A., & Sacco, M. (2025). Exploring SMEs innovation paths with augmented and virtual reality technologies. *European Journal of Innovation Management*, 28(3), 1181-1201. <https://doi.org/10.1108/EJIM-02-2023-0118>
- Pfeifer, P., Hilken, T., Heller, J., Alimamy, S., & Di Palma, R. (2023). More than meets the eye: In-store retail experiences with augmented reality smart glasses. *Computers in Human Behavior*, 146, 107816. <https://doi.org/10.1016/j.chb.2023.107816>
- Plotkina, D., & Saurel, H. (2019). Me or just like me? The role of virtual try-on and physical appearance in apparel M-retailing. *Journal of Retailing and Consumer Services*, 51, 362-377. <https://doi.org/10.1016/j.jretconser.2019.07.002>
- Riar, M., Xi, N., Korbel, J. J., Zarnekow, R., & Hamari, J. (2022). Using augmented reality for shopping: a framework for AR induced consumer behavior, literature review and future agenda. *Internet research*, 33(1), 242-279. <https://doi.org/10.1108/INTR-08-2021-0611>
- Ridge, M. (2021). Fun and (striving) games: Playfulness and agential fluidity. *Journal of the Philosophy of Sport*, 48(3), 403-413. <https://doi.org/10.1080/00948705.2021.1948338>
- Rojas, J. T., Menzemer, J., Rashid, M. S., Hayoz, A., Lädemann, A., & Zumstein, M. A. (2025). Navigated augmented reality through a head-mounted display leads to low deviation between planned, intra-and postoperative parameters during glenoid component placement of reverse shoulder arthroplasty: a proof-of-concept case series. *Journal of Shoulder and Elbow Surgery*, 34(2), 567-576. <https://doi.org/10.1016/j.jse.2024.05.006>
- Sears, D. (2024). Fracturing & fluidity, isolation & (dis) integration: mapping ecological islands & edges in painting & music. *International Journal of Cartography*, 10(2), 185-206. <https://doi.org/10.1080/23729333.2023.2225951>
- Smink, A. R., Van Reijmersdal, E. A., Van Noort, G., & Neijens, P. C. (2020). Shopping in augmented reality: The effects of spatial presence, personalization and intrusiveness on app and brand responses. *Journal of business research*, 118, 474-485. <https://doi.org/10.1016/j.jbusres.2020.07.018>
- Tan, Y.-C., Chandukala, S. R., & Reddy, S. K. (2022). Augmented reality in retail and its impact on sales. *Journal of marketing*, 86(1), 48-66. <https://doi.org/10.1177/0022242921995449>

- Tsepapadakis, M., & Gavalas, D. (2023). Are you talking to me? An Audio Augmented Reality conversational guide for cultural heritage. *Pervasive and Mobile Computing*, 92, 101797. <https://doi.org/10.1016/j.pmcj.2023.101797>
- Vellanki, S. S., Mond, S., Khan, Z. K., & Nair, L. G. (2022). Teachers' viewpoint of metacognitive strategy instruction in listening during remote teaching in Oman: Challenges and strategies. *International Journal of Learning, Teaching and Educational Research*, 21(7), 82-106. <https://doi.org/10.26803/ijlter.21.7.5>
- Wilis, R. A., & Nurwulandari, A. (2020). The effect of E-Service Quality, E-Trust, Price and Brand Image Towards E-Satisfaction and Its Impact on E-Loyalty of Traveloka's Customer. *Jurnal Ilmiah Manajemen, Ekonomi, & Akuntansi (MEA)*, 4(3), 1061-1099. <https://doi.org/10.31955/mea.v4i3.609>
- Yim, M. Y.-C., Chu, S.-C., & Sauer, P. L. (2017). Is augmented reality technology an effective tool for e-commerce? An interactivity and vividness perspective. *Journal of interactive marketing*, 39(1), 89-103. <https://doi.org/10.1016/j.intmar.2017.04.001>
- Zhou, F., & Liu, Y. (2022). Blockchain-enabled cross-border e-commerce supply chain management: A bibliometric systematic review. *Sustainability*, 14(23), 15918. <https://doi.org/10.3390/su142315918>
- Zhu, X., Cao, Y., Wu, J., Liu, H., & Bei, X. (2022). Optimum operational schedule and accounts receivable financing in a production supply chain considering hierarchical industrial status and uncertain yield. *European Journal of Operational Research*, 302(3), 1142-1154. <https://doi.org/10.1016/j.ejor.2022.02.008>

### APPENDIX: MEASUREMENT TABLE

Variable	Constructs	Measurement
Perceived Augmented Realism (PAR) (Baños et al., 2000)	PAR1: The virtual objects on the APP with the AR function (without the AR function) seem real to me. PAR2: The experience on the APP with the AR function (without the AR function) seems real to me. PAR3: The shoes on the APP with the AR function (without the AR function) are similar to reality. PAR4: My interactions with the virtual object on the APP with the AR function (without the AR function) seem natural to me, like those in the real world. PAR5: In my opinion, the quality of the images of the APP with AR function (without the AR function) objects is high. PAR6: My experience with the APP with AR function (without the AR function) is congruent to other experiences in the real world.	Likert scale 1: Strongly disagree 2: Disagree 3: Moderately disagree 4: Neutral 5: Moderately agree
Perceived Technology Fluidity (PTF) (y. Chen & C. Lin, 2022)	PTF1: The APP with AR function (without AR function) can surf across content features that provide tips, information, and fun. PTF2: I can get any new content features I need on the APP with AR function (without AR function). PTF3: I can get any information about the content features I need on the APP with AR function (without AR function). PTF4: On the APP with AR function (without AR function), I can get any fun content features I need. PTF5: On the APP with AR function (without AR function), I can access any items I need anytime. PTF6: I can review any items I need anytime on the APP with the AR function (without the AR function). PTF7: I can search for any archive items I need anytime on the APP with the AR function (without the AR function). PTF8: I can freely flow from one subject to the next on the APP with the AR function (without the AR function).	6. Agree 7. Strongly agree
Attitudes (A) (Pantano et al., 2017)	A1: I am positive about the APP with AR function (without AR function). A2: The use of the APP with an AR function (without an AR function) is a good idea. A3: It just makes sense to use the APP with the AR function (without the AR function). A4: The APP with AR function (without AR function) is so interesting that I just want to learn more about it. A5: I would recommend the APP with AR function (without AR function) to others.	
Perceived Information	PIQ1: The APP with AR function (without AR function) provided me with the information I expected. PIQ2: The APP with AR function (without AR function) provides trustworthy and reliable information about	

<p>Quality (PIQ) (Pantano et al., 2017)</p>	<p style="text-align: center;">shoes.</p> <p>PIQ3: The APP with AR function (without AR function) provides detailed information about shoes.                  PIQ4: The APP with AR function (without AR function) provides complete information about shoes.                  PIQ5: The APP with AR function (without AR function) provides personalized information about shoes.                  PIQ6: The APP with AR function (without AR function) provides information that helps me in my decision.</p>	
<p>Immersion (I) (Yim et al., 2017),</p>	<p>I1: Shopping on the APP with the AR function (without the AR function) made me deeply engrossed.                  I2: Shopping on the APP with AR function (without AR function) made me absorbed.                  I3: Shopping on the APP with AR function (without AR function) focused my attention.</p>	
<p>Enjoyment (E) (Plotkina &amp; Saurel, 2019)</p>	<p>E1: Shopping on the APP with AR function (without AR function) is enjoyable.                  E2: Shopping on the APP with AR function (without AR function) is pleasurable.                  E3: Shopping on the APP with an AR function (without an AR function) is fun for its own sake.                  E4: Shopping on the APP with AR function (without AR function) makes me happy.                  E5: Shopping on the APP with an AR function (without an AR function) makes me excited.</p>	
<p>Purchase Intention (PI)  (Pantano et al., 2017)</p>	<p>PI1: I intend to buy my shoes on the APP with the AR function (without the AR function).                  PI2: The probability that I would consider buying the shoes on the APP with the AR function (without the AR function) is very high.                  PI3: If I plan to buy shoes, I would very probably buy them on the APP with AR function (without AR function).                  PI4: I would consider buying the shoes on the APP with the AR function (without the AR function).                  PI5: My willingness to buy shoes on an APP with the AR function (without the AR function) is high.</p>	