

# Virtual Anchors in Action: Navigating Regional Consumer Behavioral Responses and Cultural Dynamics in Chinese E-Commerce

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## ABSTRACT

This study explores the interplay between northern and southern regional consumer traits and their behavioral responses to virtual anchors' product promotions within China's dynamic e-commerce environment, with particular attention to ethnocentrism and cosmopolitanism. Employing a mixed-method approach, it integrates quantitative data from 202 consumers in northern and southern China with qualitative insights from interviews with seven respondents. Guided by the technology acceptance model (TAM), the research reveals notable differences between northern and southern consumers. Southern consumers consistently reported significantly higher scores in perceived usefulness, perceived ease of use, and perceived enjoyment. Their behavioral responses were also more positive. Interestingly, consumer ethnocentrism and cosmopolitanism did not exhibit significant regional variation. Qualitative findings further indicate that regional trust, cultural contact, and enjoyment derived from virtual anchors influence consumer intentions, with southern consumers showing greater responsiveness to product promotions. These results highlight the complex interaction between technology adoption and cultural dynamics in China's online commerce industry, offering implications for tailoring virtual anchor strategies to specialized regional niches.

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## Introduction and Significance of Research

In China's recent e-commerce industry, human live anchors or influencers have played a crucial role in live streaming. However, their performance can be highly disorderly and may cause damage to the brand due to unacceptable remarks or behavior. Controversies caused by inappropriate words and deeds of some anchors directly cause damage to the brand image and have a long-term negative impact on the brand (Cao et al., 2024; Tu & Wang, 2024; Wongkitrungrueng & Assarut, 2020 as cited in Shan, 2024). Due to

these incidents, virtual anchors have gradually become an alternative as they can effectively avoid these risks and have higher stability in brand image control. Virtual anchors--AI-created digital influencers who interact with consumers via live-streaming platforms to promote products--have become a significant and rapidly growing force in China's marketing industry (He, 2023; iiMedia Research, 2024). These virtual personalities connect with consumers through live streaming and social media, showcasing products, building

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brand relationships, and heavily influencing buying decisions, especially among younger audiences (Zhang et al., 2025).

The effectiveness of virtual anchors' product promotions can change significantly between regions due to established differences in consumer attitudes, cultural values, and the pace of technological adoption. Understanding these regional nuances is crucial for developing effective and targeted marketing strategies that resonate with local consumers and maximize return on investment (e.g., Jinhuil & Tarofderb, 2024; McKinsey & Company, 2023).

Understanding the profound impact of regional differences on consumer behavior is vital for marketers operating in China. Consumer ethnocentrism (CET) and cosmopolitanism (COS) are critical factors influencing purchasing decisions. Ethnocentric consumers prefer local products due to national pride and perceived economic benefits. China's massive geographical and cultural diversity necessitates a nuanced approach to influence Chinese consumers in the North and the South, as the northern and southern regions of China have distinct cultural, economic, and social characteristics that contribute to consumer behavior. For example, in Northern cities like Beijing and Shenyang, consumers exhibit higher ethnocentric beliefs compared to those in southern Chinese cities like Guangzhou and Shenzhen (Ding, 2017). Northern China tends to have a more traditional and conservative consumer base. In contrast, southern China, with cities like Guangzhou, Shenzhen, and Hong Kong, is known for its openness to foreign cultures and products, driven by curiosity and enjoyment of cultural diversity (Elverskog, 2013). Northern China has collectivism and traditional values, often indicating a stronger preference for domestic brands. Southern China, at the forefront of China's engagement with the global economy, fosters a consumer base that shows a powerful desire for international goods (e.g., Elverskog, 2013; Hossain et al., 2024). Therefore, marketing strategies that emphasize national pride and economic benefits may resonate more with consumers in northern cities, while those highlighting cultural diversity and international appeal may be more effective in southern cities.

From examining previous academic research, this study found that there have not been academic studies tailored to the role of virtual anchors' product promotions in different Chinese regions. This study addresses a critical gap in literature by examining regional differences in consumer responses to virtual anchors through the technology acceptance model (TAM). Despite growing interest in live streaming e-commerce in China, which examines consumer engagement

with live streamers and virtual influencers (e.g., He, 2023; Yu et al., 2024; Zhang et al., 2025), research on how regional consumer characteristics (like ethnocentrism and cosmopolitanism) influence acceptance and behavioral responses to virtual anchors within the TAM framework is still lacking. Thus, the significance of this research lies in its potential to inform marketing strategies that accommodate specific regional preferences, thereby enhancing consumer engagement, satisfaction, and marketing success. By examining the differences and comparing consumer ethnocentrism and cosmopolitanism between northern and southern China, this study provides valuable insights for marketers aiming to optimize their communication and promotional efforts and gain a competitive edge in this dynamic market (Prince et al., 2020).

### **Research Objectives**

1. To compare the levels of consumer ethnocentrism between northern and southern China.
2. To compare the levels of consumer cosmopolitanism between northern and southern China.
3. To compare the perceived usefulness, ease of use, enjoyment, and consumer behavioral responses of virtual anchors' product promotions in northern and southern China.
4. To explore and integrate qualitative insights with quantitative data to provide a comprehensive understanding of consumer behavior toward virtual anchors in different regions of China.

## **Literature Review**

This section provides a detailed literature review of the core theoretical constructs central to this study: consumer ethnocentrism (CET), consumer cosmopolitanism (COS), and the Technology Acceptance Model (TAM). Based on this comprehensive review, specific hypotheses are developed to examine regional consumer behavior in the context of virtual anchors in China.

### **Consumer Ethnocentrism**

Consumer ethnocentrism (CET), as conceptualized by Shimp and Sharma (1987), describes the beliefs held by consumers about the appropriateness, indeed morality, of purchasing foreign-made products. Ethnocentric consumers typically perceive buying imported goods as wrong because it harms the domestic economy, leads to job losses, and is unpatriotic (Shimp & Sharma, 1987). This construction has been widely studied in various contexts to understand consumer

preferences for domestic versus foreign products (e.g., Balabanis & Diamantopoulos, 2016; Suh & Kwon, 2022). In the Chinese context, CET has been shown to influence purchase intentions and attitudes toward foreign brands (Zhou & Hui, 2003). For example, Ding (2017) found that northern consumers exhibit higher levels of ethnocentrism compared to southern consumers in China, suggesting a regional difference in nationalistic consumer tendencies.

### **Consumer Cosmopolitanism**

Consumer cosmopolitanism (COS) reflects an openness to foreign cultures, ideas, and products (Cleveland et al., 2009). Unlike ethnocentric consumers, cosmopolitans often view foreign products favorably and are less swayed by nationalistic appeals. While some studies suggest regional differences in cultural openness, Cleveland et al. (2009) found that cosmopolitan attitudes are more strongly influenced by individual-level factors such as cultural exposure and global orientation than by geographic location. Although their study did not focus specifically on regional differences within China, it highlights the complexity of regional consumer attitudes and the need for further localized research.

### **Technology Acceptance Model**

The technology acceptance model (TAM), developed by Davis (1989), is a widely recognized framework for understanding user acceptance of information systems. Perceived usefulness (PU) refers to the degree to which a person believes that using a particular system would enhance his or her job performance, while perceived ease of use (PEU) refers to the degree to which a person believes that using a particular system would be free of effort (Davis, 1989). Beyond these core constructs, perceived enjoyment (PE) has also been identified as a significant factor influencing user engagement and satisfaction with technology, particularly in contexts involving entertainment or hedonic value (Van der Heijden, 2004; Venkatesh, 2003).

Recent studies have specifically applied TAM to the acceptance of virtual anchors, demonstrating that perceived usefulness, ease of use, and enjoyment significantly influence consumer engagement and behavioral responses in live-streaming e-commerce (e.g., Zhang et al., 2025; Zhou et al., 2024). For instance, Zhang et al. (2025) found that virtual anchors driven by AI-human collaboration contribute to higher levels of perceived playfulness and customer engagement,

which aligns with the enjoyment dimension of TAM. Furthermore, Chan (2024) found that consumer ethnocentrism positively impacts perceived usefulness, perceived ease of use, and perceived enjoyment, which in turn shape consumer behavioral responses.

## **Conceptual Framework**

This study's conceptual framework illustrates the relationships between regional consumer characteristics, perceptions of virtual anchors, and behavioral responses. This framework suggests that regional differences (North vs. South) in consumer characteristics--specifically consumer ethnocentrism and cosmopolitanism, alongside demographic factors such as age, gender, education level, and regional cultural orientation--influence the perceived usefulness, ease of use, and enjoyment of virtual anchors' product promotions, ultimately affecting behavioral responses (see Figure 1). The framework also considers the moderating role of regional context on these relationships, suggesting that the cultural and economic environment of northern and southern China may differentially influence how consumers perceive and respond to virtual anchors.

### **Hypothesis Development**

Based on the literature review, this research proposes the following hypotheses:

H1: Northern Chinese consumers will exhibit higher levels of consumer ethnocentrism than southern Chinese consumers.

H2: There will be no significant difference in consumer cosmopolitanism between northern and southern Chinese consumers.

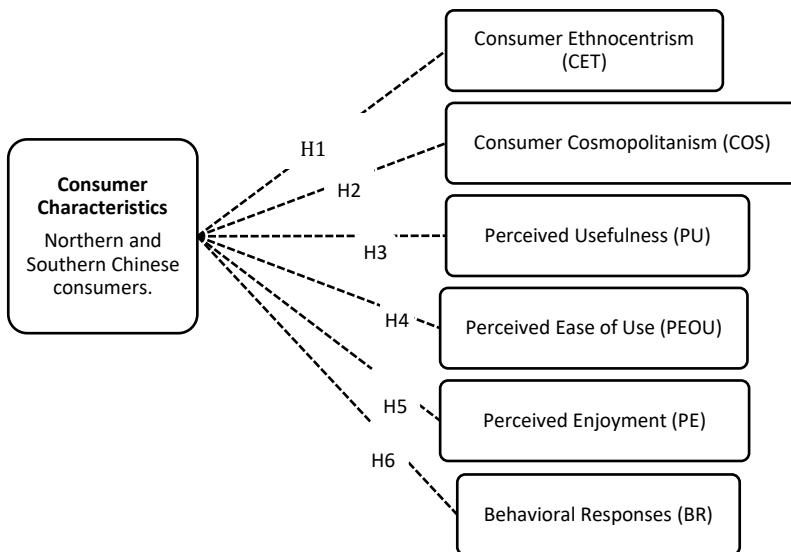
H3: Southern Chinese consumers will report higher perceived usefulness of virtual anchors' product promotions than northern Chinese consumers.

H4: Southern Chinese consumers will report higher perceived ease of use of virtual anchors' product promotions than northern Chinese consumers.

H5: Southern Chinese consumers will report higher perceived enjoyment of virtual anchors' product promotions than northern Chinese consumers.

H6: Southern Chinese consumers will exhibit stronger behavioral responses to virtual anchors' product promotions than northern Chinese consumers.

Figure 1: Conceptual Framework



## Methodology

This study employed a mixed-methods research design to comprehensively investigate consumer behavioral responses to virtual anchors' product promotions in China. The integration of both quantitative and qualitative approaches allowed for a strong exploration of the research questions, providing both extensive statistical insights and deep circumstantial understanding.

This study did not require formal ethics approval because all participants were over the age of eighteen and the research involved minimal risk. According to the British Psychological Society (BPS, 2021), the content of the survey and interviews caused no psychological, emotional, or physical harm to participants, aligning with ethical guidelines for low-risk social research (BPS, 2021; Creswell & Poth, 2017).

### Quantitative Component

*Research Design and Survey Instrument Development:* The quantitative component utilized an online survey in Chinese to collect data. The survey instrument was adapted from established scales, ensuring content validity and reliability. For instance, scales for measuring perceived usefulness, ease of use, and enjoyment were adapted from Chan (2024) and other relevant literature. Participants were screened by initial questions to ensure they were within the target demographic and had prior experience with virtual anchor live streams before proceeding with the full questionnaire.

*Population and Sample:* The target population for the quantitative study included Chinese consumers, specifically focusing on

Generation Z (born 1997-2012) and Generation Y (born 1981-1996) due to their significant engagement with online platforms and virtual influencers. Data were collected from Chinese consumers residing in both northern (e.g., Beijing, Shenyang) and southern (e.g., Guangzhou, Shenzhen) regions of China to capture regional differences. A total sample size of 202 participants was determined using Cochran's formula to ensure statistical validity, assuming a 95% confidence level and a 7% margin of error. The data were collected through an online survey platform. Purposive sampling was employed to select participants who met the specific criteria of age group and live-streaming engagement, ensuring the relevance of the sample to the study's objectives and allowing for targeted representation across regions.

*Data Collection and Analysis Procedures:* Quantitative data were collected via a self-administered online questionnaire. Informed consent was obtained from all participants before their participation. The survey covered measures related to consumer ethnocentrism, consumer cosmopolitanism, perceived usefulness, perceived ease of use, perceived enjoyment, and behavioral responses to virtual anchors.

Data analysis was conducted using statistical software to test the hypotheses. Descriptive statistics were used to summarize participant demographics and variable distributions. Independent samples t-tests were employed to compare means between northern and southern consumer groups for relevant variables.

*Validity and Reliability:* The reliability of the measurement scales was assessed using Cronbach's Alpha. The Cronbach's Alpha values

for all scales of variables were found to be higher than 0.70, specifically ranging from .72 to .91. These values indicate that the scales are highly reliable and internally consistent for this study. Confirmatory Factor Analysis (CFA) was conducted to assess the construct validity of the scales.

### ***Qualitative Component***

***Research Design:*** In-depth interviews were conducted to collect qualitative consumer behavior and preferences data. The interviews aimed to provide deeper insights into the themes identified in the quantitative component.

***Population and Sample:*** The population for the qualitative component consisted of Chinese consumers. Only Chinese samples were selected to ensure cultural relevance and consistency in the findings.

Seven respondents were selected for in-depth interviews, aiming to achieve data saturation through the richness of their perspectives related to the research questions. This sample size was sufficient to achieve data saturation, allowing for a comprehensive examination of consumer behavior and preferences in China (Guest et al., 2006). The interviews focused on exploring participants' experiences and perceptions of virtual anchors, as well as their attitudes towards domestic versus foreign products and cultural interactions, allowing for a deeper understanding of underlying motivations and behaviors.

***Sampling Technique:*** Purposive sampling was used to select Chinese participants based on their generation (Gen Y or Gen Z). The seven interviewees included professionals and students from media, journalism, advertising, and marketing communication fields. Their roles ranged from strategic planners and marketing interns to students with experience in education and journalism, enhancing the credibility of the qualitative insights.

This technique ensured that the sample included diverse perspectives and experiences relevant to the research question (Patton, 2015). Purposive sampling is a deliberate process of selecting participants who share specific qualities that are relevant and have the potential to answer the inquiry about the phenomenon of interest (Creswell & Poth, 2017).

***Data Collection:*** Qualitative data were collected online. Interviews with open-ended questions. The guide included questions (see the question guideline in Appendix) like 'What factors influence your preference for domestic products over foreign ones?' and 'How do virtual anchors' promotions contribute to your enjoyment?' through in-depth interviews, which were analyzed thematically. The interviews were conducted in a

manner that allowed respondents to share their experiences and perspectives freely. The ethical principles of research were followed throughout the process, ensuring confidentiality and informed consent (QuestionPro, 2024). All in-depth interviews were conducted in English. Both the interviewer and participants were fluent in English, eliminating the need for translation or back-translation. This ensured direct communication and preserved the authenticity of responses.

***Research Instrument Development:*** The interview guide was developed based on key themes identified from Ongkrutraksa (2024, as cited in Chan, 2024), and questions were designed to explore the primary motivations, perceptions, and regional differences in consumer behavior toward virtual anchors in China. Each question aligns with the study's objectives to compare consumer ethnocentrism, cosmopolitanism, and technology acceptance across northern and southern regions. The guide included open-ended questions intended to provide detailed responses and encourage participants to share their experiences and perspectives.

***Analysis Procedures:*** Thematic analysis was employed to analyze the qualitative data. This method involves coding the data, searching for themes, reviewing themes, defining and naming themes, and producing the final report. Thematic analysis is flexible and provides a rich, detailed, and complex account of data (Braun & Clarke, 2006).

***Validity and Reliability:*** The qualitative component was validated through participants' confirmation of the data. Triangulation (refers to the use of multiple data sources to enhance the credibility and validity of research findings) was achieved by comparing and contrasting findings from the quantitative survey data and the qualitative interview data to enhance the credibility and strength of the study's conclusions.

## **Results**

This section presents the findings from both the quantitative survey and the qualitative in-depth interviews. It begins with the demographic characteristics of the survey participants, followed by descriptive statistics of the key variables. Subsequently, the results of the hypothesis tests are presented, and finally, the qualitative findings are detailed.

### ***Quantitative Results***

The quantitative study included 202 Chinese consumers with an equal division between northern ( $n=101$ ) and southern ( $n=101$ ) regions. Participants were primarily from Generation Z

(53.47%) and Generation Y (46.53%) reflects the target demographic. The sample consisted of 56.44% females and 43.56% males, with the majority holding a bachelor's degree or higher.

#### ***Descriptive Statistics of Key Variables***

Table 1 summarizes the Mean (M) and Standard Deviation (SD) values for consumer ethnocentrism (CET), consumer cosmopolitanism (COS), perceived usefulness (PU), perceived ease of use (PEU), perceived enjoyment (PE), and behavioral responses (BR) for both northern and

southern Chinese consumers. The results indicate a significant difference in perceived usefulness (PU) between southern ( $M = 2.53, SD = 0.89$ ) and northern consumers ( $M = 2.12, SD = 0.72$ ), with southern consumers reporting higher perceived usefulness ( $t = 3.558, p < .001$ ). Southern Chinese consumers reported significantly higher scores in PU ( $M = 2.53$ ), PEU ( $M = 2.55$ ), PE ( $M = 2.67$ ), and BR ( $M = 2.85$ ) compared to northern counterparts. These results suggest stronger acceptance and engagement with virtual anchors in the South.

Table 1: Mean Scores, Standard Deviations, and Results of *t*-test

Items	South		North		<i>t</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
<b>Consumer Ethnocentrism (CET)</b>	<b>2.95</b>	<b>0.77</b>	<b>2.76</b>	<b>0.78</b>	<b>1.75</b>	<b>.08</b>
I feel discomfort when buying products not manufactured in his/her own country.	3.56	0.85	3.29	0.86	2.21*	.03
I prefer buying domestic products over foreign products.	2.68	0.97	2.47	1.10	1.44	.15
I feel confident in domestic products over foreign products.	2.62	0.99	2.52	0.97	0.73	.47
<b>Consumer Cosmopolitanism (COS)</b>	<b>2.15</b>	<b>0.81</b>	<b>2.02</b>	<b>0.73</b>	<b>1.20</b>	<b>.23</b>
I enjoy exchanging opinions with people from different cultures or foreigners.	2.28	0.84	2.18	0.83	0.88	.38
I have an interest in learning about people from foreign countries.	2.00	0.92	1.84	0.91	1.22	.22
I have a feeling of enjoyment when interacting with foreigners to learn about their perspectives.	2.18	0.89	2.05	0.84	1.08	.28
<b>Perceived Usefulness (PU)</b>	<b>2.54</b>	<b>0.89</b>	<b>2.13</b>	<b>0.73</b>	<b>3.56***</b>	<b>.00</b>
I think Virtual Anchors' product promotion provides useful product information.	2.75	0.91	2.25	0.82	4.06***	.00
I think Virtual Anchors' product promotion provides an opportunity to become acquainted with new and interesting products.	2.32	1.00	2.00	0.82	2.48***	.01
<b>Perceived Ease of Use (PEU)</b>	<b>2.56</b>	<b>0.78</b>	<b>2.13</b>	<b>0.71</b>	<b>4.03***</b>	<b>.00</b>
I think Virtual Anchors' product promotions are easily accessible.	2.55	0.81	2.15	0.75	3.67***	.00
I think Virtual Anchors' product promotion provides easily understandable information.	2.56	0.92	2.12	0.96	3.34***	.00
<b>Perceived Enjoyment (PE)</b>	<b>2.67</b>	<b>0.86</b>	<b>2.19</b>	<b>0.79</b>	<b>4.17***</b>	<b>.00</b>
I think Virtual Anchors' product promotion contributes to happiness.	2.88	0.95	2.33	0.86	4.30***	.00
I think Virtual Anchors' product promotion provides entertainment and amusement.	2.46	0.97	2.04	0.92	3.16	.00
<b>Behavioral Responses (BR)</b>	<b>2.85</b>	<b>0.78</b>	<b>2.49</b>	<b>0.67</b>	<b>3.49***</b>	<b>.00</b>
I search for additional information about various products when I watch the products recommended by the virtual anchors.	2.38	0.97	2.07	0.80	2.48***	.01
I will like or dislike watching the virtual anchor's live streaming.	2.88	1.14	2.75	1.09	0.86	.39
I comment or express opinions after watching the virtual anchor's live streaming.	3.20	1.10	2.59	1.07	4.01***	.00
I share the product videos introduced in the virtual anchors' live streaming to personal social platforms, such as WeChat, Weibo, or Douyin (Chinese TikTok).	3.22	1.12	3.07	1.22	0.92	.36
I save or download the product videos mentioned in the virtual anchors' live streaming.	2.56	1.09	1.99	0.94	4.27***	.00

Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

### ***Hypothesis Testing***

H1: Northern Chinese consumers have higher consumer ethnocentrism than southern Chinese consumers. The results indicate that northern consumers ( $M = 2.76$ ,  $SD = 0.78$ ) have a slightly lower mean score for consumer ethnocentrism compared to southern consumers ( $M = 2.95$ ,  $SD = 0.77$ ). The  $t$ -test result ( $t = 1.75$ ,  $p = .08$ ) shows no statistically significant difference between the  $p < .05$  level for overall items. However, a statistically significant difference was found in one item of the consumer ethnocentrism questions (e.g., I feel discomfort when buying products not manufactured in his/her own country ( $t = 2.21$ ,  $p = .03$ ). This indicates that southern Chinese consumers exhibit higher levels of ethnocentrism for only this item ( $M = 3.56$ ,  $SD = 0.85$ ) compared to their northern counterparts ( $M = 3.29$ ,  $SD = 0.86$ ). Therefore, H1 is not supported.

H2: There is no significant difference in consumer cosmopolitanism between northern and southern Chinese consumers. The mean scores for consumer cosmopolitanism are similar between northern ( $M = 2.02$ ,  $SD = 0.73$ ) and southern consumers ( $M = 2.15$ ,  $SD = 0.81$ ). The  $t$ -test ( $t = 1.20$ ,  $p = .23$ ) confirms no statistically significant difference between the two groups. Therefore, H2 is supported.

H3: Southern Chinese consumers perceive virtual anchors' promotions as more useful compared to northern Chinese consumers. Southern Chinese consumers ( $M = 2.54$ ,  $SD = 0.89$ ) reported significantly higher perceived usefulness of virtual anchors' product promotions compared to northern consumers ( $M = 2.13$ ,  $SD = 0.73$ ). This difference is statistically significant ( $t = 3.56$ ,  $p < .001$ ). Therefore, H3 is supported.

H4: Southern Chinese consumers find virtual anchors' promotions easier to use compared to northern Chinese consumers. Southern consumers ( $M = 2.56$ ,  $SD = 0.78$ ) perceived virtual anchors' promotions to be significantly easier to use than northern consumers ( $M = 2.13$ ,  $SD = 0.71$ ). The  $t$ -test result ( $t = 4.03$ ,  $p < .001$ ) indicates a statistically significant difference. Therefore, H4 is supported.

H5: Southern Chinese consumers find virtual anchors' promotions more enjoyable compared to northern Chinese consumers. A statistically significant difference was found in perceived enjoyment, with southern consumers ( $M = 2.67$ ,  $SD = 0.86$ ) reporting higher enjoyment than northern consumers ( $M = 2.19$ ,  $SD = 0.79$ ). The  $t$ -test ( $t = 4.17$ ,  $p < .001$ ) confirms this significant difference. Therefore, H5 is supported.

H6: Southern Chinese consumers exhibit more positive behavioral responses to virtual anchors' promotions compared to northern Chinese consumers. Southern Chinese consumers

( $M = 2.85$ ,  $SD = 0.78$ ) demonstrated significantly stronger behavioral responses to virtual anchors' promotions compared to northern consumers ( $M = 2.49$ ,  $SD = 0.67$ ). This difference is statistically significant ( $t = 3.49$ ,  $p < .001$ ). Therefore, H6 is supported.

### ***Qualitative Results***

The sample included seven Chinese respondents (Gen Y or Gen Z) who participated in one of the following fields: media, journalism, advertising, or marketing communication.

Key qualitative findings indicate that respondents from South China expressed greater openness to virtual anchors, often citing clarity and entertainment value. In contrast, northern respondents were generally more skeptical, preferring human streamers for their emotional engagement and relatability. Furthermore, gender and generation differences also emerged, with Gen Z and female respondents showing higher engagement with virtual anchors. The following themes elaborate on these and other detailed findings.

#### ***Thematic Analysis Results***

The thematic analysis provides nuanced insights into consumer perceptions and behaviors concerning virtual anchors and product preferences.

**Theme 1: Perceptions of Virtual Anchors-Usefulness, Ease of Use, and Enjoyment**  
Respondents expressed varied perceptions of virtual anchors, particularly concerning their usefulness, ease of use, and enjoyment. Several participants, including Respondent #1, a media professional from South China, found virtual anchors useful for discovering fast-moving consumer goods (FMCG), citing their clarity and accessibility. Respondent #1 specifically articulated this: *"Virtual anchors do sometimes help me discover new products, but only in certain situations. I only consider fast-moving consumer goods (FMCG) items when watching a virtual anchor."*

Ease of use was a consistent theme among respondents. Respondents #1, #2, #4, and #7 noted that virtual anchors' promotions were straightforward to access and understand. Respondent #1 highlighted the clarity of communication: *"The language they use is clear and direct. The script quickly explains the product's features and unique selling points."* Respondent #2 also observed, *"It's easy to follow what they say. The visuals and speech are straightforward."* Similarly, Respondent #7 shared, *"I don't need to think too much. The information is presented clearly and concisely."*

However, enjoyment derived from virtual anchors was more divisive. While Respondents #4

and #7 described the experience as "*entertaining and interactive*," with Respondent #7 adding, "*It's fun to watch them. They make shopping feel like a game*," others expressed skepticism. Respondent #3 stated, "*I don't enjoy watching virtual anchors. They feel robotic and lack emotional connection*," and Respondent #6 agreed, asserting, "*I prefer human streamers. They're more relatable and trustworthy*." Respondent #1 critically observed the current limitations of virtual anchors in fostering emotional connections: "*In China's livestreaming world, many successful human streamers are great storytellers... This emotional connection is something that AI virtual anchors cannot deliver yet*."

**Theme 2: Drivers of Domestic Product Preference (Consumer Ethnocentrism).** Preferences for domestic products were influenced by a combination of factors, including regional trust, heritage branding, lifestyle alignment, and city brand image, as detailed by Respondent #1. This respondent elaborated: "*Whenever I choose domestic products, I tend to prefer those that are either Shanghai-based brands or manufactured in Shanghai. 'Made in Shanghai' represents mature technology, strict quality control, and well-established production standards*." Beyond these culturally rooted factors, practical considerations such as price and quality were consistently cited by Respondents #2 through #7 as key drivers in their product choices. Respondent #2, for instance, explained, "*Price and quality matter more than where the product is from*."

**Theme 3: Cultural Exposure and Foreign Product Interest (Consumer Cosmopolitanism).** All participants indicated that cultural interactions, whether through media, education, or travel, significantly shaped their openness to foreign products and other cultures. Respondents uniformly conveyed that "exposure to diverse cultures and media" was a primary driver for developing an interest in international goods. Respondent #1 shared a personal example of this influence: "*Recently, I've been studying Thai more seriously and learning about Thai culture. As a result, when I travel back to China, I now consciously choose gifts that reflect Thai culture*."

**Theme 4: Behavioral Responses to Virtual Anchors.** Virtual anchors influenced consumer behavior for a segment of respondents, leading to an increased likelihood of purchasing and sharing products after viewing virtual anchor promotions. Respondents #1, #4, and #7 reported such influences. Respondent #1 explained, "*If the script is meaningful or the product presentation is visually appealing—and it looks like the product can genuinely solve a problem I have—I may decide to buy it. In such cases, I might even share the video with my friends if I find it interesting or*

*useful.*" Respondent #4 added, "*I often share their videos with friends. It's part of my shopping routine now*," and Respondent #7 noted, "*I save product videos to review later before buying*."

Conversely, Respondents #2, #3, and #6 stated they were not influenced by virtual anchors in their purchasing or sharing behaviors. Respondent #2 said, "*I watch them, but they don't really change what I buy*," and Respondent #3 commented, "*I don't trust them enough to make a purchase based on their recommendations*." This highlights the variability in consumer engagement and influence.

**Theme 5: Regional Attitudes toward Domestic and Foreign Products.** Respondents widely agreed that distinct regional differences exist in product preferences between northern and southern China, influenced by cultural, economic, and lifestyle factors.

**Southern China:** Respondent #1 highlighted the greater openness to foreign products in the South: "*People in South China, especially in major coastal cities like Shanghai, Guangzhou, and Shenzhen, have more exposure to international trade and global brands. Southern consumers are generally more open to foreign products and are used to comparing quality, design, and value across both domestic and international brands*." Respondent #4 also added, "*Foreign brands are seen as safer, especially for skincare and electronics*." Southern consumers were often described as practical and value-driven, opting for foreign products if they offered clear advantages.

**Northern China:** In contrast, Respondent #1 noted a stronger support for domestic brands in the North, sometimes tied to national pride: "*In the North, social perception and 'face' can play a bigger role in purchasing decisions. Consumers may show stronger support for domestic brands, particularly those tied to national pride*." Respondent #6 explained, "*We rely on local networks and word-of-mouth. That's why domestic products feel more trustworthy*."

Neutral views also emerged, suggesting a potential convergence. Respondent #2 suggested, "*The gap is closing. Now it's more about price and quality than where the product comes from*." Respondent #3 added, "*Living habits matter too. In the North, we need cold-proof products, so that affects what we buy*," indicating that practical considerations can transcend regional biases.

**Theme 6: Regional Perceptions of Virtual Anchor Promotions.** Clear regional differences also emerged in how virtual anchor promotions are perceived between northern and southern.

**Southern China:** Respondent #1 explained that consumers in southern China, being exposed to a wide range of information sources, tend to

develop independent thinking. This can lead to a critical assessment of AI-generated content: *"They may critically assess AI-generated content, finding purely AI-generated scripts less engaging due to a perceived lack of authenticity."* Respondent #2 agreed, *"They're efficient, but not always engaging."* Yet, Respondent #5 noted, *"In the South, people are more open to virtual anchors. They're trendy and accepted,"* particularly among younger consumers.

Northern China: Respondent #1 suggested a different perception for the North: *"In North China, access to diverse information can be more limited. People might be more influenced by mainstream narratives. In this context, AI-generated content can resonate more, with virtual anchors seen as efficient and authoritative information sources."* The general sentiment from the interviews indicates that northern consumers may be more receptive to virtual anchors due to their familiarity with a more standardized communication style, though caution may remain.

## Discussion

Discussion is divided into three parts: quantitative findings, qualitative findings, and mixed methods analysis, conducted based on the hypotheses developed from this study's objectives.

### ***Discussion for Quantitative Findings***

*Hypothesis 1: Northern Chinese consumers have higher consumer ethnocentrism than southern Chinese consumers.* No statistically significant regional differences were found for overall items of consumer ethnocentrism. However, a statistically significant difference was found in one item of the consumer ethnocentrism questions (e.g., I feel discomfort when buying products not manufactured in his/her own country). Southern Chinese consumers clearly demonstrate higher levels of ethnocentrism--at least regarding this specific item--when compared to their northern counterparts. These results do not correlate with the initial hypothesis, which posited that northern Chinese consumers would exhibit higher levels of ethnocentrism than southern Chinese consumers. The inconsistency may be attributed to the fact that economic development in southern China has led to a higher availability of domestic alternatives, which can enhance ethnocentric tendencies (China Economic Roundtable, 2024). This finding is complemented by qualitative insights, where Respondent #1's emphasis on 'Made in Shanghai' products due to regional trust and quality perceptions illustrates the nuanced nature of ethnocentrism in the South. This indicates that ethnocentrism continues to influence

consumer behavior, but its regional expression in China appears to be more complex or evolving than previously understood. Additionally, other factors may be playing an increasing role in domestic product preference.

*Hypothesis 2: There is no significant difference in consumer cosmopolitanism between northern and southern Chinese consumers.* The results of this study indicate no significant regional differences in consumer cosmopolitanism, suggesting that openness to foreign cultures and products is a relevant characteristic among Chinese consumers nationwide (e.g., Liu & Hong, 2020). This implies that while regional distinctions exist in other consumer attitudes and behaviors, a general appreciation for cultural diversity and international influences appears to be present across both northern and southern China.

*Hypothesis 3: Southern Chinese consumers perceive virtual anchors' promotions as more useful compared to northern Chinese consumers.* Southern consumers perceive virtual anchors' promotions as significantly more useful. This can be attributed to the higher levels of technological adoption and greater openness to digital platforms, including social media and live streaming, where virtual anchors thrive, in southern China (Statista, 2023). This aligns with the technology acceptance model (TAM), which posits that perceived usefulness is a key determinant of technology adoption and engagement (Davis, 1989). Greater familiarity and engagement with online platforms in the South contribute to consumers perceiving virtual anchors as valuable tools for product information and discovery.

*Hypothesis 4: Southern Chinese consumers find virtual anchors' promotions easier to use compared to northern Chinese consumers.* The results indicate that southern consumers find virtual anchors' promotions easier to use compared to northern consumers. This is consistent with the findings of Kim & Hall (2019), who highlighted the importance of ease of use in technology adoption. The higher PEU among southern consumers suggests that they are more comfortable and familiar with interacting with virtual anchors, which enhances their overall experience (Kim et al., 2019). This supports the TAM framework, which identifies perceived ease of use as a critical factor influencing user acceptance of technology (Venkatesh et al., 2003). The study also found that southern consumers perceived virtual anchors' promotions as easier to use and more enjoyable. This aligns with qualitative feedback indicating that southern consumers appreciate the clear and direct communication style of virtual anchors (Respondent #4, #7) and their ability to provide easy access to product information.

*Hypothesis 5: Southern Chinese consumers find virtual anchors' promotions more enjoyable compared to northern Chinese consumers.* Southern consumers also report higher levels of enjoyment when interacting with virtual anchors' promotions. This aligns with Tong (2010), who emphasized the role of enjoyment in user engagement and satisfaction. The higher PE among southern consumers indicates that they find virtual anchors' promotions more entertaining and engaging, which can lead to increased consumer engagement and purchase intentions (Tong, 2010). Enjoyment is a significant factor in the TAM framework, influencing user satisfaction and continued use of technology (Venkatesh et al., 2003). Zhou et al. (2024) also found that the design elements of virtual anchors, such as gestures and speech rate, significantly impact their persuasiveness and user enjoyment (Zhou et al., 2024).

*Hypothesis 6: Southern Chinese consumers exhibit more positive behavioral responses to virtual anchors' promotions compared to northern Chinese consumers.* Southern consumers are more likely to engage with virtual anchors' promotions, including searching for additional information, liking or disliking, commenting, sharing, saving, subscribing, visiting product pages, and making purchases. This aligns with findings suggesting the effectiveness of virtual anchors in engaging consumers (Zhang & Wang, 2024) and the role of AI-human collaboration in enhancing customer engagement (Zhang et al., 2025). The success of virtual anchors in China highlights the importance of image, technology, and fan psychology (He, 2023), suggesting a potential for stronger engagement in digitally active and trend-forward southern regions. While these studies demonstrate the general effectiveness of virtual anchors, they may not contain specific data directly comparing Northern and Southern consumer responses. The average scores for PU, PEU, and PE ranged from 2.0 to 2.6, indicating moderate to low perceptions. This may reflect limitations in virtual anchors' emotional engagement and interactivity. Qualitative responses suggest that while virtual anchors are informative, they lack the storytelling and human connection that drive enjoyment and trust. Stronger behavioral responses, including searching for additional information, commenting, sharing, and making purchases, indicate that virtual anchors are more effective in driving concrete consumer actions in the South. This aligns with TAM's premise that positive perceptions of technology lead to higher adoption and usage intentions.

### ***Discussion for Qualitative Findings***

*Consumer Ethnocentrism.* Consumer ethnocentrism was shaped by regional trust,

heritage brands, and lifestyle fit. Respondent #1 preferred domestic products from Shanghai, citing the city's reputation for quality and technology (Ding, 2017). Others emphasized price and quality, showing a pragmatic approach to domestic goods.

*Consumer Cosmopolitanism.* Cultural exposure influenced interest in foreign products. Respondent #1 shared that studying Thai culture led to choosing culturally relevant gifts, reflecting how personal experiences shape cosmopolitan preferences (Liu & Hong, 2020).

*Virtual Anchors' Perceived Usefulness.* Perceptions of virtual anchors varied. Respondents #1 and #4 found them useful for discovering FMCG products, while #2 and #3 preferred human streamers. This suggests virtual anchors need to improve content delivery to boost usefulness across consumer groups (Zhang et al., 2025).

*Perceived Ease of Use.* Most respondents found virtual anchor promotions easy to follow. Respondents #1 and #4 appreciated the clear language and quick explanation of product features. This aligns with the Technology Acceptance Model, where ease of use is key to technology adoption (He, 2023).

*Perceived Enjoyment.* Respondents showed mixed reactions to virtual anchor content. While some, like Respondents #4 and #7, found it fun and interactive, others, such as #3 and #6, felt it lacked emotional depth and authenticity. This highlights a key challenge: virtual anchors must improve their emotional and interactive capabilities to enhance engagement (Tong, 2010; Venkatesh et al., 2003; Zhou et al., 2024).

*Behavioral Responses.* Some respondents, like #1 and #4, were more likely to buy products and share videos after watching virtual anchor promotions, especially when the content was visually appealing or problem-solving. Others, such as #2 and #3, felt little impact. This variation highlights the need for more personalized and engaging content to drive consumer action (Zhang et al., 2025).

*Regional Comparison.* Qualitative insights revealed distinct regional differences in both attitudes toward products and perceptions of virtual anchor promotions.

### **Attitudes toward domestic and foreign products**

*Southern China:* Consumers in major southern cities like Shanghai and Guangzhou show greater openness to foreign products, driven by exposure to global brands and international trade. Respondents noted that foreign items--especially in skincare and electronics--are seen as more reliable and practical, consistent with cosmopolitan consumer traits identified by Cleveland et al. (2009).

Northern China: Northern consumers tend to favor domestic brands, influenced by national pride, social status, and trust built through local networks. "Face" and social perception play a stronger role in purchase decisions (Shimp & Sharma, 1987). While regional preferences persist, some respondents believe quality and price are becoming more decisive than product origin.

Perception of virtual anchor promotions varies regionally.

Southern China: Consumers in southern China tend to critically assess virtual anchor content due to broader access to diverse information and a preference for authenticity. Respondent #1 noted that purely AI-generated scripts may feel less engaging. While some view virtual anchors as efficient, younger consumers in the South are more accepting, seeing them as trendy and innovative (China Economic Roundtable, 2024).

Northern China: Respondent #1 noted that consumers in the North may be more influenced by mainstream narratives due to limited exposure to diverse information. In this context, AI-generated content is often seen as efficient and authoritative. Supported by Zhang et al. (2025), virtual anchors using AI-human collaboration can enhance engagement through standardized and professional communication, making them more appealing to Northern audiences.

### ***Mixed Methods Analysis***

Quantitatively, southern Chinese consumers showed significantly more positive views of virtual anchors and stronger engagement. Qualitatively, this was supported by southern respondents valuing anchors for "clarity and entertainment" and their openness to "new and efficient" methods. Conversely, northern respondents' qualitative comments about a "lack of enjoyment and trust" align with their lower quantitative scores.

Even though quantitative research identified no particular statistical regional variation on consumer ethnocentrism or cosmopolitanism, qualitative research indicated that southern consumers value quality and price above all, followed by northern consumers who value social consciousness and "face" most. The opposite is indicated in the University of Chicago study in 2018, which associated northern regions with independence and southern regions with interdependence. This suggests that contemporary consumer behavior is changing because of market forces. Additionally, qualitative findings revealed that acceptance ratings from quantitative findings for virtual anchors were moderate based on low emotional attachment compared to human streamers.

### ***Limitations and Directions for Future Research***

Firstly, the small number of respondents in the in-depth interview may not be able to comprehend most of the consumers' thoughts. Therefore, future research should include more respondents to address potential issues, such as a lack of generational diversity. Furthermore, in terms of quantitative analysis, future studies can add more analysis dimensions, such as the comparison of gender and age differences, to achieve more specific results.

### ***Research Implications***

**Theoretical Implications:** This study contributes to the literature on consumer ethnocentrism and cosmopolitanism by highlighting regional differences within a single country. It also extends the understanding of virtual anchors' impact on consumer behavior. The findings support the integration of CET and COS into the technology acceptance model (TAM), providing a theoretical basis for subsequent research to incorporate these factors as external variables (Chan, 2024).

**Implications for Marketers:** First, adapting marketing plans. It is important to know how regional variations in consumer behavior affect your business. Southern Chinese are more willing to accept the virtual anchor and consider it practical and fun, so they are more involved. Advertising in the South needs to stress efficiency and interactivity. Northern consumers, however, tend to be skeptical and are less willing to accept it, so strategies should be directed toward building trust and authenticity through designing a more humanlike virtual interface.

Second, improving virtual anchor design: The North's adoption level of virtual anchors means that there is potential for development. To be more enjoyable and useful, particularly in the North, designs need to emphasize emotional connection and involvement. Adding expressive behaviors, interactive narratives, or hybrid human collaborations can make experiences feel more authentic and engaging.

### **Conclusion**

This study demonstrates the power of a mixed-method approach in discovering the multiple factors that shape Chinese consumer behavior toward virtual anchors. By integrating quantitative data—which reveals patterns in engagement, perceived usefulness, and enjoyment—with qualitative insights—which explain the *why* behind those patterns through personal experiences and cultural context—we gain a more complete and actionable understanding.

Quantitative results indicate that virtual anchors interact more frequently with more southern Chinese consumers and score them as more helpful, convenient, and enjoyable in spite of having higher ethnocentric scores on one dimension. Qualitative data adds richness, presentation that southern consumers are concerned about product value and quality, and that northern consumers are concerned more with social awareness and "face." This is different from earlier cultural research (e.g., University of Chicago Booth School of Business, 2018), suggesting that traditional regional traits may be evolving under modern market influences.

Additionally, while virtual anchors are moderately accepted, their lack of emotional connection compared to human streamers limits their impact.

This emotional and cultural nuance is important to grasp to develop more effective, culturally responsive advertising campaigns in China's rapidly evolving digital environment.

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## Appendix

### Qualitative Interview Questions

These qualitative interview questions were designed to explore the underlying motivations, perceptions, and regional differences in consumer behavior toward virtual anchors in China. Each question aligns with the study's objectives to compare consumer ethnocentrism, cosmopolitanism, and technology acceptance across northern and southern regions.

1. Consumer Ethnocentrism (CET)
  - o What factors influence your preference for domestic products over foreign ones?
2. Consumer Cosmopolitanism (COS)
  - o How do cultural interactions shape your interest in foreign products and other cultures?

3. Virtual Anchors' Perceived Usefulness (PU)
  - o How do virtual anchors' promotions help you discover new products?
4. Perceived Ease of Use (PEU)
  - o Are virtual anchors' promotions easy to access and understand?
5. Perceived Enjoyment (PE)
  - o How do virtual anchors' promotions contribute to your enjoyment?
6. Behavioral Responses (BR)
  - o How do virtual anchors influence your decision-making, such as purchasing or sharing products?
7. Regional Comparison Questions
  - o How do attitudes toward domestic and foreign products differ between North and South China?
  - o Are virtual anchors' promotions perceived differently in North China versus South China?