



**A STUDY OF THE INFLUENCE OF ONLINE INTERACTION ON
CONSUMER BEHAVIORAL INTENTION IN ONLINE
SHOPPING**

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**AN INDEPENDENT STUDY SUBMITTED IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR
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This Independent Study has been Approved as a Partial Fulfillment of the
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ABSTRACT

Nowadays, people's online shopping has gradually shifted from PC to mobile. Mobile shopping mode makes shopping anytime, anywhere a reality, but due to the virtual nature of the Internet itself, information asymmetry has always been an obstacle to the development of online shopping. Buyers and sellers have uneven information, and online merchants are in an absolute advantageous position in terms of information possession. Consumers are unable to accurately screen the quality of products through the information delivered by merchants, thus creating more uncertainty. Various uncertainties in the online shopping environment are still the key factors influencing consumers' purchasing decisions, and in order to improve the conversion rate of consumers' purchases, online merchants should be committed to weakening the asymmetry of the transaction process between buyers and sellers. As a kind of quality signal, online interaction conveys product quality information to consumers through various forms of expression, which makes up for the shortcomings caused by the information asymmetry problem and influences consumers' perception and behavior. Therefore, this study takes online interaction as a research focus in order to explore the mechanism of its effect on consumers' behavioral intention. This study aims to examine the influence of controllability, richness, responsiveness and mutuality on consumers' behavioral intention.

This study adopted the quantitative research method, using a questionnaire survey. A total of 517 questionnaires were recovered, and the total number of valid questionnaires was 439, accounting for 84.9% of the total recovered questionnaires. Based on the data from the returned questionnaires, data analysis was carried out using SPSS and AMOS. The final conclusion is that controllability, richness, responsiveness,

and mutuality of online interaction have significant positive effects on consumer behavioral intention respectively.

Keywords: online shopping, online interaction, behavioral intention



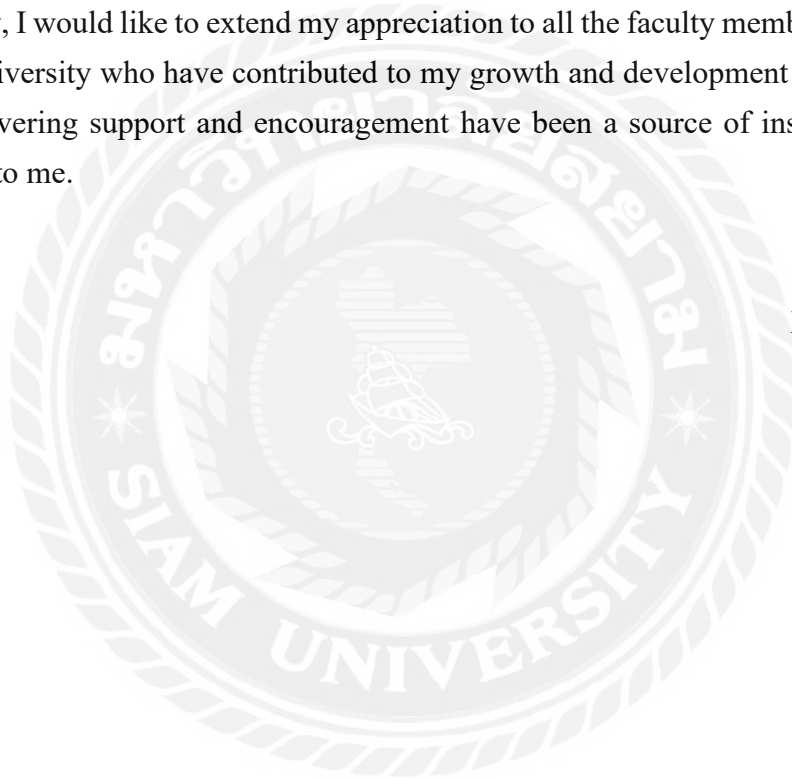
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XUE KAIYI



DECLARATION

I, XUE KAIYI, hereby certify that the work embodied in this independent study entitled “A STUDY OF THE INFLUENCE OF ONLINE INTERACTION ON CONSUMER BEHAVIORAL INTENTION IN ONLINE SHOPPING” is result of original research and has not been submitted for a higher degree to any other university or institution.



(XUE KAIYI)

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Chapter 1 Introduction

1.1 Background of the Study

Online shopping has gradually integrated into people's lives, becoming an indispensable part of daily routines. The form of online shopping has shifted from desktop PCs to mobile devices, allowing consumers to shop anytime and anywhere without being confined to a computer. With just a mobile device, consumers can complete the entire shopping process, making the mobile platform the primary arena for e-commerce transactions. According to research by iResearch Consulting Group, in 2017, mobile transactions accounted for 72.8% of China's total online shopping transactions, marking a 4.6 percentage point increase from the previous year. Since surpassing PCs in 2015, the dominance of mobile in online shopping has continued to expand. The concerted efforts of businesses to strengthen their presence on mobile platforms and changes in consumer habits are pivotal in this transformation.

Compared to traditional shopping modes, online shopping presents several new characteristics, with the most prominent being the virtual nature of transactions. This exacerbates the issue of information asymmetry between transaction parties. When shopping online, consumers cannot physically sense products or communicate face-to-face with sales personnel; all actions occur within a virtual environment. Consequently, their experiences are less tangible, and it's challenging to select the most satisfactory products amidst the complexity solely based on information provided by merchants. Thus, consumers are at a distinct disadvantage in online transactions, struggling to accurately assess product quality and susceptible to misleading information from sellers, potentially leading to unsatisfactory shopping experiences.

To mitigate the impact of information asymmetry in virtual environments, major online shopping platforms and retailers are jointly striving to enhance consumers' online shopping experiences and foster purchase conversions. In this endeavor, new functionalities are being developed, and interactive tools are continuously enriched. In recent years, rapid advancements in video technology, particularly the widespread adoption of live streaming on the internet, have provided new impetus. Many online merchants have capitalized on this technological wave, leveraging video streaming to engage in interactive marketing efforts aimed at creating a conducive shopping atmosphere for consumers. Furthermore, some mobile shopping apps have introduced modules for question-and-answer interactions. Users can freely pose questions, which are randomly assigned to consumers who have previously purchased the product, allowing them to provide independent responses based on their usage experiences. This

model diversifies forms of consumer interaction, promoting communication and sharing among consumers.

In summary, despite the existence of information asymmetry in online shopping environments, effective forms of interaction can effectively mitigate its drawbacks. Robust interactive formats enable consumers to quickly and comprehensively acquire product information, aiding them in making informed purchasing decisions. Therefore, studying the mechanisms through which online interactions influence consumer behaviors is essential.

1.2 Problems of the Study

In the academic research domain, numerous scholars have investigated the effects of online interaction on customer satisfaction, purchase intentions, consumer trust, and loyalty (Yoo et al., 2010; Chu and Yuan, 2013; Zhao et al., 2015). While existing literature has extensively studied the direct effects of online interactions, research on their moderating effects remains relatively sparse. Zhang (2016) highlighted the absence of moderating effects in existing studies on website perceived interactivity. Similarly, Guo (2012) proposed that subsequent research should consider the moderating effects of consumer contexts and product types on online interactions. Product category is a crucial variable influencing consumers' online shopping decision-making behavior. Consumers exhibit distinct information search behaviors and purchase intentions when shopping for different types of products, thereby influencing their online shopping decision-making processes (Zhang, 2006).

The development of Internet technology has continuously enriched and updated the interactive forms of mobile shopping, providing new dimensions to online interactions in the e-commerce environment. Therefore, this study integrates previous research and real-world online shopping contexts to refine the factors involved in online interaction. It aims to analyze how online interaction influences consumer behavioral intention.

1.3 Objectives of the Study

Online interaction is best represented in the online shopping environment. Consumers, as the center of the interactive relationship, interact with websites, online merchants, and other consumers to varying degrees. The degree of interaction influences consumers' perceptions as well as behavioral intentions. Therefore, this study proposes the following research objectives:

1. To examine the influence of controllability on consumers' behavioral intention.

2. To examine the influence of richness on consumers' behavioral intention.
3. To examine the influence of responsiveness on consumers' behavioral intention.
4. To examine the influence of mutuality on consumers' behavioral intention.

1.4 Scope of the Study

The study focused on e-commerce platforms where consumers engage in online shopping activities. It examined how various aspects of interactivity—controllability, richness, responsiveness, and mutuality—affect consumer behavior within this specific context. The study primarily explored these dimensions of online interactivity from the perspective of consumers. It aimed to understand how consumers perceive and interact with product information and customer service on e-commerce websites. While the study focused on specific demographics of online shoppers, efforts were made to ensure the findings have broader implications. However, the generalizability of the results may be limited to similar online shopping contexts and consumer demographics.

1.5 Significance of the Study

Theoretical Significance: With the continuous development of internet technology, the online shopping environment is constantly evolving. Major e-commerce platforms and online merchants are continuously improving their services to create a positive shopping atmosphere for consumers. At the same time, interaction forms have become richer and more diverse. Due to different research purposes, previous scholars have classified the dimensions of online interactivity differently. Some scholars have summarized online interactivity into three dimensions: controllability, bidirectional communication, and synchronicity (Liu & Shrum, 2002; Li & Cai, 2015). Other scholars, based on the different objects of consumer interaction, have divided online interactivity into consumer-to-website interaction, consumer-to-merchant interaction, and consumer-to-consumer interaction (Tang, 2006; Zhao et al., 2015). Moreover, some scholars have distilled online interactivity into the factors of bidirectionality and controllability (Guo & Li, 2012; Jiang et al., 2010). Based on the classification of interactivity dimensions by previous scholars and combined with the current online shopping context, this study introduces richness as a new factor of online interactivity, making some theoretical contributions to the study of online interactivity.

Practical Significance: This study establishes a theoretical model of online interactivity and consumer behavioral intentions. The research conclusions based on this model provide marketing guidance for online merchants. The conclusions of this study help online merchants to deepen their understanding of consumer shopping

behavior, enabling precise marketing. When interacting with consumers online, merchants are guided to adopt more effective interactive methods (such as improving page layout to facilitate information retrieval for consumers; using rich images, texts, and technologies such as videos and live streaming to enrich the display of product information; enhancing the quality of online customer service; and improving modules for effective communication among consumers). These actions can reduce consumers' perceived uncertainty, improve their shopping experience and satisfaction, and promote their purchase intentions and willingness to recommend to others.

Regarding different product types, consumers may have different psychological perceptions of various factors of online interactivity when shopping online. The research conclusions help online merchants understand the focus of consumers' information search for different types of products, judge the behavioral tendencies of consumers when purchasing a certain type of product, and provide reasonable suggestions for resource allocation on interactive elements to achieve low-cost, high-reward marketing effects.

1.6 Definition of Key Terms

Controllability. This study considers controllability as the degree of ease of access to information, the degree of control over the order in which information about products is accessed, and the content perceived by consumers when shopping online.

Richness. This study defines richness as the extent to which consumers perceive the richness of interactive forms of product information presented during mobile shopping.

Responsiveness. This study defines responsiveness as the degree to which consumers perceive the timeliness of customer service responses and the relevance of the question asked by the consumer in the process of communicating with customer service.

Mutuality. This study defines mutuality as the degree to which consumers perceive that other consumers share information and experiences to help them in the process of online shopping.

Behavioral intention. This study provides a conceptual definition of behavioral intention, which refers to a consumer's intention to purchase a product and to recommend it to others through a series of product information searches in online shopping.

Chapter 2 Literature Review

2.1 Mobile Shopping

Mobile commerce has emerged, driven by the development of mobile technology and e-commerce. Mobile commerce offers a variety of services, including online banking, shopping, ticket booking, and entertainment. Among these, mobile shopping is the most frequently encountered service by people. Scholars such as Chen Rong et al. (2016) believed that mobile shopping refers to shopping activities conducted by consumers through mobile devices like mobile phones, utilizing mobile communication networks. As consumer online shopping scenarios gradually shift from PC to mobile, mobile shopping has become the mainstream mode of online shopping. This study assumes mobile shopping as the broader context of online shopping for further research.

Mobile shopping has gradually become the main context for consumer online shopping, primarily due to its unique features compared to traditional online shopping. These are mainly reflected in the following four aspects: 1. Anytime, anywhere. Compared with traditional PC-based online shopping, mobile devices are easy to carry. Users can shop anytime, anywhere, using their fragmented time to select products and services they need. 2. Timeliness. Consumers can conveniently and promptly obtain the latest product information pushed by merchants and participate more easily in promotional activities such as flash sales. 3. Location relevance. Mobile phones and mobile networks can accurately locate the consumer's position, allowing service providers to offer location-based services. Websites recommend nearby merchants' information to users, increasing the likelihood of user consumption. 4. Personalization. Each mobile terminal has a unique identification code, making it easy for service providers to collect user information. Using data analysis and data mining tools, they can more accurately provide services that users need (Zhong, 2012). In other words, service providers can collect personalized user information, such as consumption habits and needs, to provide precise services to users.

2.2 Online Interaction

The term "interactivity" became popular in the 1970s and became more widespread in the 1980s and 1990s. It is used to describe the "conversation" ability of new media like computers, which is the ability to respond to user input. Over the years, scholars have had varied interpretations of online interactivity, and these views rarely align. Liu and Shrum (2002) believed there are two reasons for this inconsistency: 1. Online interactivity is a general term that has adopted a technical definition. 2. Online

interactivity is a multidimensional complex variable, and the different perspectives from which scholars discuss interactivity have led to inconsistent definitions.

Early research on interactivity mainly focused on human-computer interaction, reflecting the degree to which computer systems respond to user behavior. Interactivity refers to the extent to which a communication system (usually including a computer as a component) can converse with users, much like a person participates in a conversation. Steuer's (1992) definition of interactivity has been widely adopted by scholars. He believes that interactivity is the degree to which users can participate in real-time adjustments to the form and content of the media environment. Alba et al. (1997) defined interactivity as the speed of response of a computer interface and the degree of relevance between the response and the requested information.

With the emergence and development of the internet and more advanced technologies, human-computer interaction alone is insufficient to encompass the full meaning of interactivity. Scholars have included user-to-user interaction and user-to-information interaction in their research. Blattberg and Deighton (1991) defined interactivity as the ability for individuals and organizations to communicate directly with each other, regardless of distance and time. Liu and Shrum (2002) viewed interactivity as the degree of mutual influence between two or more individuals involved in communication, the communication medium, and the information, as well as the synchronicity of these mutual influences.

Scholars often define and conduct research on online interactivity from a perceptual perspective (Mann & Sahni, 2011; Kim et al., 2012; Chu & Yuan, 2013). The main reason for this is that online interactivity from a perceptual perspective focuses on consumers' subjective experiences, making it easier to measure and better predict consumer behavior (Van et al., 2012; Sohn & Choi, 2013). Before making behavioral decisions, consumers engage in a series of product information searches. Generally, consumers' information acquisition channels mainly include product detail pages, online customer service, and communication with other consumers. All these channels reflect the presence of interactivity. This study also adopts a perceptual perspective, drawing on Wu's (2006) definition of online interactivity and combining it with consumers' information acquisition channels. It considers online interactivity as a psychological state perceived by consumers during the process of searching for information, such as browsing product details and communicating with customer service and other consumers.

With the continuous advancement of interactivity research, scholars are increasingly focusing on the content structure of interactivity, enriching and refining its

dimensions. Depending on their research objectives, scholars have categorized the dimensions of interactivity differently. Steuer (1992) interpreted interactivity from three dimensions: 1. Speed: the rate at which user input can be assimilated into the media environment; 2. Range: the number of attributes that can be manipulated in a media environment; 3. Mapping: the system's ability to map its controls to changes in the media environment.

Liu and Shrum (2002) summarized online interactivity into three dimensions: active control, two-way communication, and synchronicity. Active control refers to the user's proactive and spontaneous control over the internet, performing online behaviors according to their purposes and preferences, mainly manifested in the user's ability to control their experience based on their preferences and will. Two-way communication refers to the ability of enterprises and users, as well as users themselves, to engage in two-way communication. Traditional media effectively transmit information from enterprises to consumers but find it challenging to facilitate the reverse flow of information. The internet has changed traditional marketing communication methods, enabling essential activities in a transaction, including product display, ordering, and payment, to be conducted online, making instant feedback possible. Synchronicity refers to the degree to which the input and responses in communication are synchronized. Traditional media provide limited channels for user participation, and even if users participate through letters or phone calls, the feedback process takes a long time. In contrast, the internet allows for synchronous communication, where the time between inputting information and receiving a response is only a few seconds. Building on the dimensions proposed by Liu and Shrum (2002), McMillan and Hwang (2002) pointed out that online interactivity comprises three factors: direction of communication, user control, and time of response, corresponding to Liu and Shrum's (2002) three dimensions. Li and Cai (2015) similarly adopted Liu and Shrum's (2002) dimensional categorization in their subsequent research, classifying online interactivity into controllability, two-way communication, and synchronicity.

Some scholars have categorized online interactivity dimensions based on the different objects of consumer interaction. Tang (2006) and Zhao et al. (2015) divided online interactivity into consumer-website interaction, consumer-merchant interaction, and consumer-consumer interaction. Tang (2006) proposed five corresponding interactivity factors: perceived ease of use and perceived usefulness correspond to consumer-website interaction, bidirectionality and responsiveness correspond to consumer-merchant interaction, and mutual aid corresponds to consumer-consumer interaction. Mutual aid, first proposed by Tang (2006), refers to the extent to which

consumers perceive the help from other consumers regarding purchasing knowledge and experience during online shopping. Zhao (2015) used perceived ease of use to measure consumer-website interaction, responsiveness to reflect consumer-merchant interaction, and mutual aid to measure consumer-consumer interaction. Scholars such as Jiang et al. (2010) and Guo and Li (2012) refined the factors of online interactivity based on previous research, forming a two-dimensional categorization of online interactivity: bidirectionality and controllability. Bidirectionality refers to the extent to which shopping websites facilitate two-way communication between consumers and the system, online merchants, and other consumers. Controllability refers to the degree to which consumers perceive control and influence over the communication process and content. Controllability, responsiveness, and mutual aid are generally recognized and frequently applied interactivity factors. Therefore, this study includes these three factors and introduces a new online interactivity factor—richness—given the current situation where mobile shopping has become the mainstream mode of online shopping.

Richness is a factor proposed in this study to measure online interactivity. Although richness has not yet been separately examined in empirical studies, discussions about richness have existed for a long time. Previous websites were mostly text-based, but technological advancements have enriched interaction forms, allowing merchants to incorporate colors, images, audio, video, and other elements into their websites. In the context of mobile shopping, merchants' display formats have become even richer, with technologies such as short videos and live streaming being widely used. Websites with good interactivity often have clear page layouts, displaying products in rich and concrete forms, even using advanced virtual technology to simulate real shopping scenarios, all of which promote active consumer participation in interactions.

There is a close connection between rich interaction forms and consumers' perceptions and purchasing behaviors. Park et al. (2005) categorized online product presentation forms into large images, dynamic and static displays. Online displays are meant to meet consumers' information needs, and increasing the richness and quality of product information and display images can better satisfy consumers' needs and promote purchases. Kim et al. (2010) found that the image zoom function creates a sense of pleasure for consumers, which positively affects perceived information, and perceived information, product quality, and various online purchasing risks are negatively correlated.

The morphological interactivity discussed in previous studies has similarities with richness. Oh and Sundar (2015) introduced the term morphological interactivity,

referring to the various tools or forms available on the interface for obtaining information, such as sliders, drag-and-drop features, and zoom functions on websites. With these elements, users can control the media or interface. Compared to merely browsing static images, the former has higher interactivity. Studies have found that morphological interactivity can positively influence users' attitudes and behavioral intentions. Daugherty et al. (2008) showed that a website with morphological interactivity (e.g., image zoom, animation) is more likely to generate positive brand attitudes and stronger purchase intentions among consumers. Sensory richness is closely related to media richness theory, which is frequently cited in interactive environments. Information richness initially aimed to reduce uncertainty in organizational communication, referring to "the ability of information to change understanding within a time interval." Therefore, morphological interactivity is believed to facilitate user engagement with content by expanding the sensory breadth and depth related to the interactive process. Breadth refers to the number of senses that the media can stimulate; depth refers to the quality and resolution of information presented by the media (Steuer, 1992). Based on the above analysis, it can be found that morphological interactivity is characterized by merchants using various interactive forms to display products, which aligns with the richness of product display forms defined in this study.

Chen (2007) proposed the factor of "perceived vividness" in the study of interactivity, meaning the perceived richness of the shopping environment by consumers. Yang (2008) and Coursaris (2012) similarly mentioned that content richness helps consumers more actively engage with the content, thus perceiving stronger interactivity when analyzing factors influencing perceived interactivity. It can be seen that richness can influence users' perceived interactivity. In other words, richness can, to some extent, explain the connotation of online interactivity.

Based on a review of previous literature, this study posits that online merchants convey product information to consumers through rich text descriptions, images, short videos, live streaming, and other diverse formats. The richer the format in which merchants provide product information, the higher the consumer engagement with the information content, and the stronger the perceived interactivity. Therefore, this study incorporates richness into the dimensions of online interactivity.

Given the varying classifications of online interactivity dimensions by scholars, the dimensional classifications based on consumer perceptions have a certain degree of commonality. This study considers that when consumers search for product information, they are more concerned about whether they can quickly search for product information,

whether the information display is comprehensive and rich, whether online customer service can quickly and effectively solve problems, and whether buyer reviews provide helpful information for purchase. Therefore, this study divides online interactivity into four dimensions: controllability, richness, responsiveness, and mutual aid.

2.3 Consumer Behavioral Intention

Behavioral intention refers to a consumer's intention to take a specific action in the future, often based on external environmental stimuli that prompt the consumer to take particular actions. Smith and Swinyard (1982) suggested that behavioral intention mainly refers to an individual's probability of performing a certain behavior towards something in the future. Behavioral intention can accurately explain consumer activities, occurring before the purchase behavior, and is generated through the perception of the shopping process, making it a crucial phase of consumer behavior (Ajzen & Drive, 1991).

Behavioral intention is a method to measure the likelihood of an individual undertaking a specific behavior. If an individual has a strong intention to use or purchase something, the likelihood of them engaging in the purchase behavior is high. Behavioral intention becomes the direct determinant of actual action. In other words, consumer behavioral intention plays an important predictive role in their behavior, a conclusion widely agreed upon by many scholars (Bauer et al., 2006; Li et al., 2008). Zeithaml (1996) asserted that behavioral intention can be either positive or negative. Positive behavioral intention is demonstrated by consumers' liking for a product, praising it, and purchasing it; negative behavioral intention is shown by consumers' aversion to a product, criticizing it, and refusing to purchase it. Many scholars interpret consumer behavioral intention from the aspects of purchase intention and recommendation intention (Haemoon, 2009; Van et al., 2012; Xu Longjie, 2015). Purchase intention reflects consumers' willingness to buy the product and to make repeat purchases from the same store, while recommendation intention indicates consumers' willingness to proactively share their product experiences and recommend the product to others.

Based on the above review of literature related to behavioral intention, this study defines the concept specifically as the intention to purchase products and recommend them to others, generated through a series of product information searches in the context of online shopping (Zhang, 2016).

2.4 Asymmetry of Information Theory

The theory of information asymmetry originated in the 1970s and refers to the situation where the parties involved in a transaction possess unequal market information, with one party typically having more information than the other (Wang & Wang, 2013). Those with ample information are often in a more advantageous position in the transaction, while those with relatively scarce information are at a disadvantage. The core of information asymmetry theory is that in a transaction market, sellers generally possess more information about the product than buyers. The party with more information benefits by transmitting reliable information to the less informed party, while the less informed party endeavors to obtain information from the other party. The existence of information asymmetry prevents consumers from distinguishing between low-quality and high-quality goods, potentially leading to adverse selection.

Information asymmetry is a common phenomenon, and the virtual nature of online shopping exacerbates this issue. When shopping on e-commerce websites, consumers cannot directly inspect products and must rely on images and textual information provided by online sellers to assess product quality. Businesses have more knowledge about their own credit status and product quality, possessing more unique information than consumers. This unique information results in information asymmetry between the parties involved in the transaction. Typically, consumers are at an informational disadvantage, which makes them more cautious when shopping online. Unpleasant shopping experiences may lead to a loss of trust in the website. Information asymmetry has been a hindrance to the development of online shopping (Zhang, 2008). For online merchants, improving the quality and richness of their websites and enhancing interaction with consumers is crucial. Since this information is generally more visible and accessible than product attributes, quality-related signals significantly influence customer perceptions in situations of information asymmetry (Wells et al., 2011).

2.5 Signal Theory

The signal theory, proposed by American economist Spence in the 1970s, is a crucial component of information economics theory that provides guidance to address adverse selection caused by information asymmetry. Fundamentally, signal theory focuses on reducing information asymmetry between the parties in a transaction (Spence, 2002). This theory primarily consists of two aspects: signaling and screening. Signaling refers to conveying accurate information about product quality through observable actions, while screening involves discerning true information through different contracts.

In her review of signal theory, Huang (2016) also summarized the framework of signal theory based on this timeline. Signal senders possess some potential information unique to insiders. Signals are the positive or negative internal information that insiders must decide whether to convey to outsiders. Signal receivers lack information about the organization but seek to obtain it. Additionally, there is a partial conflict of interest between signal senders and receivers; successful deception benefits the signal senders at the expense of the receivers.

In marketing research, scholars have found that in situations of information asymmetry, consumers will actively seek signals that help them effectively distinguish the quality of products or services. Signal theory is often used to explain how consumers use signals such as price and store environment to judge the quality of products or services in the context of information asymmetry. Sellers actively transmit product signals that influence consumer behavior, but sometimes they provide false signals to mislead consumers (Huang, 2016). Scholars like Yue et al. (2017) analyzed the sources from which consumers obtain information in the online shopping context, noting that online merchants send quality signals about products through these paths and examined how individual characteristics and online shopping experience affect consumers' trust in quality signals. Xu et al. (2017) studied the effect of quality signal transmission in online shopping, noting the prevalence of false information and counterfeit products on shopping websites, which creates difficulties in distinguishing quality. They concluded that the chaotic state of product quality information transmission impedes consumers' ability to identify genuine signals. Without a good mechanism for transmitting quality signals, it is impossible to effectively differentiate high-quality products from low-quality ones. Therefore, improving the efficiency of product quality signal transmission on online shopping platforms is crucial for reducing information asymmetry.

In the context of mobile shopping, there is severe information asymmetry between buyers and sellers, and signaling can mitigate this impact. Consumers cannot physically touch or sense the products, leading to significant uncertainty about product quality. They must rely on actively searching for signals online that indicate product quality. Therefore, it is crucial for sellers to provide high-quality signals that can convince consumers.

2.6 Conceptual Framework

This study is based on the information asymmetry theory and the signal theory, with online interaction as the independent variable, which is divided into four dimensions: controllability, richness, responsiveness, and mutuality. Behavioral

intention is the dependent variable. A theoretical model for this study is constructed accordingly, as shown in Figure 2.1.

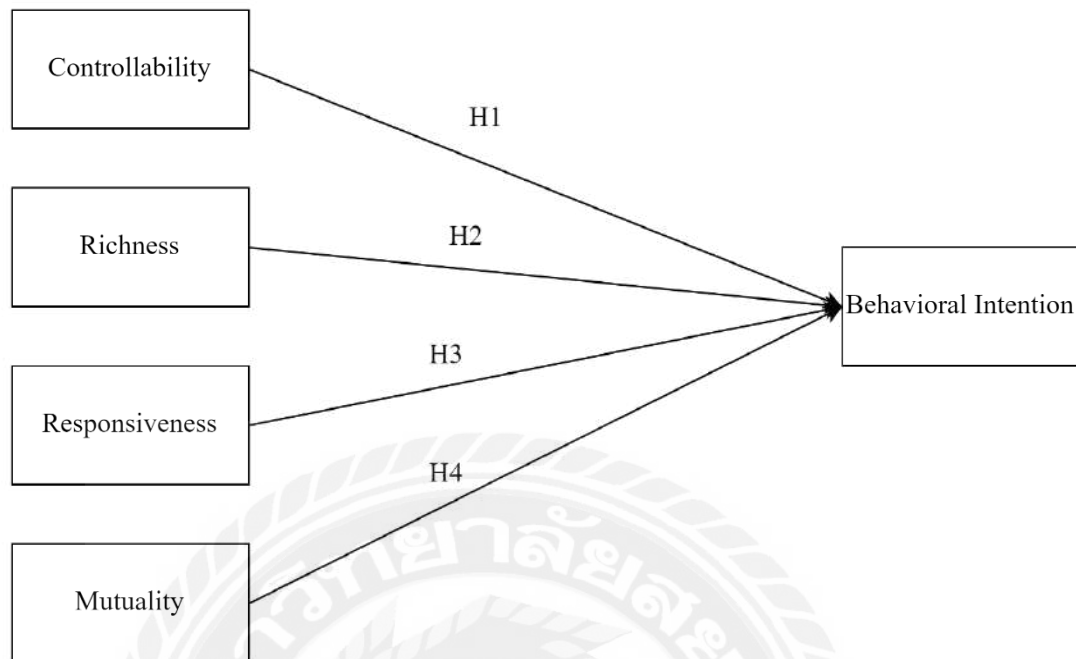


Figure 2.1 Conceptual Framework

Chapter 3 Research Methodology

3.1 Research Design

This study adopted the quantitative research method, and according to the purpose of the study, the research population was limited to those who had online shopping experience in the recent period of time.

Based on the review and analysis of literature on online interaction, this study interpreted online interaction through four dimensions: controllability, richness, responsiveness, and mutuality. Drawing on past research, measurement scales were developed for each dimension:

(1) Controllability Scale

Researchers such as Liu (2003) and McMillan (2002) extensively examined controllability in online interaction measurements. Jiang (2010) integrated items from Liu (2003) and McMillan (2002). Scholars like Li (2015) and Jiang (2014) also referenced Liu's (2003) research. This study adopted the established scales to formulate items for measuring controllability.

(2) Richness Scale

Richness is integrated into the measurement of interaction dimensions in this study. It primarily focuses on the diversity of forms used by online merchants when presenting products to consumers. Scholars such as Jiang (2010) and Li (2015) included items related to "evaluating products based on text, images, sound, animation," which this study also adopts, considering the current use of small videos, live streaming, and other interactive forms.

(3) Responsiveness Scale

Responsiveness, as a factor in online interaction, reflects the timely and relevant responses from online customer service to consumer inquiries during interaction. Yin (2002) provided a robust measurement of responsiveness, referenced by scholars like Zhang (2009), Jiang (2014), and Zhao (2015). This study similarly adopted Yin's (2002) scale to develop items for measuring responsiveness.

(4) Mutuality Scale

Tang (2006) introduced mutuality in the measurement of B2C interaction, focusing on how consumers help each other via online communities. Scholars adapted Tang's scale for C2C environments, as noted by Zhang (2009). This study modified Tang's (2006) scale to measure mutuality in the context of consumer reviews in online shopping platforms.

The measurement scales for consumer online behavioral intention are well-established. Li (2014) referenced Koo (2010) to develop items measuring online behavioral intention, focusing on whether consumers are willing to spend more time on the website, revisit it, and recommend it to others. This study adapted Li's (2014) scale to measure behavioral intention with a focus on purchase inclination and willingness to recommend products to others.

Table 3.1 Measurement Items of Variables

Variable	Item	Code
Controllability	I can choose the product information I want to see independently.	CO1
	I can control the sequence in which product information appears.	CO2
	I can always navigate to the pages I want to visit.	CO3
	My clicking behavior determines the experience I will get.	CO4
Richness	The merchant provides rich images and text to explain product features.	RI1
	The product detail page includes images from various angles, making it easy for me to observe product details.	RI2
	The merchant highlights product differentiation through detailed displays.	RI3
	The merchant uses diverse forms such as small videos, live broadcasts, etc., to showcase products.	RI4
Responsiveness	Customer service can respond promptly to my inquiries.	RE1
	The responses from customer service are closely related to my questions.	RE2
	I find communicating with customer service efficient.	RE3
	Customer service representatives are very willing to communicate with me.	RE4
Mutuality	Based on others' evaluations, I can further control the quality of the product.	MH1
	I can get many good suggestions from buyer reviews.	MH2
	Other consumers' reviews help me make decisions.	MH3
Behavioral Intention	I plan to make a purchase at this store.	BI1
	If I have similar needs in the future, I will prefer products from this store.	BI2

	I will actively recommend this product to family or friends.	BI3
	If someone asks for my recommendation, I am willing to introduce this product to them.	BI4

3.3 Hypothesis

H1: Controllability positively influences consumers' behavioral intention.

H2: Richness positively influences consumers' behavioral intention.

H3: Responsiveness positively influences consumers' behavioral intention.

H4: Mutuality positively influences consumers' behavioral intention.

3.4 Sampling and Data Collection

In order to ensure the quality level of the collected data, this study used a combination of online and offline channels to distribute the questionnaires.

A total of 517 questionnaires were recovered, of which the offline questionnaires were mainly distributed in the libraries of the universities around Hangzhou, such as Zhejiang University of Finance and Economics, Hangzhou Normal University, China University of Weights and Measures and the Rookie Stage, with a total of 200 questionnaires distributed and 194 questionnaires recovered. The online questionnaires were mainly distributed through QQ, WeChat and other online channels by means of online questionnaire platforms. The online sample covered a wide range of provinces and cities, such as Zhejiang, Shanghai, Henan, Shandong, Yunnan, Chongqing, etc. A total of 323 questionnaires were collected. The collected questionnaires were screened and excluded according to the criteria of incomplete completion, obvious contradiction of options, time spent on completing the questionnaire less than 60 seconds, and consecutive cases of choosing the same option. For offline data, 18 invalid questionnaires were excluded, leaving 176 valid questionnaires. For online data, 60 invalid samples were excluded, leaving 263 valid questionnaires. The total number of valid questionnaires was 439, accounting for 84.9% of the total number of questionnaires collected.

3.5 Data Analysis

Reliability reflects the reliability and consistency of the questionnaire measurements. The higher the consistency, the stronger the correlation between the measurement items, and the better it represents that each item reflects the same content. Cronbach's alpha coefficient is used to evaluate the internal consistency of the

measurement items of the questionnaire, and it is an important indicator of the internal reliability.

In this study, exploratory factor analysis was conducted on the questionnaire data with the help of SPSS to test the structural validity of the questionnaire. The larger the KMO value, the stronger the correlation between the variables. It is generally believed that when the KMO value is greater than 0.7 and the chi-square statistic value of Bartlett's test of sphericity reaches the significance level, it means that the questionnaire data is suitable for factor analysis. According to the output of exploratory factor analysis, if the factor loadings of each measurement question item of a variable are greater than 0.5, it means that the scale of that variable has a good level of validity.

3.6 Reliability and Validity Analysis of the Scale

This study conducted reliability analysis of each variable scale using SPSS. As shown in Table 3.2, the Cronbach's Alpha values for the four variables of online interaction are all above 0.8. The Cronbach's Alpha coefficient for the behavior intention variables is 0.944, exceeding 0.9. Overall, the scales in this questionnaire demonstrate high consistency and reliability, indicating strong internal validity.

Table 3.2 Results of Reliability Analysis for Each Variable

Variable	Number of questions	Cronbach 's α
Controllability	4	0.821
Richness	4	0.851
Responsiveness	4	0.917
Mutuality	3	0.894
Behavioral Intention	4	0.944

From Table 3.3, it can be observed that the KMO value for the overall online interaction scale is 0.932, which exceeds 0.7. The Bartlett's test of sphericity has a significance probability of 0.000, which is less than the significance level of 0.05. These indicators suggest that the online interaction scale possesses a good level of validity and is suitable for factor analysis.

Table 3.3 Online Interaction KMO and Bartlett's Test^a

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.932
Bartlett's Test of Sphericity	Approx. Chi-Square	4200.189
	df	105
	Sig.	0.000

From the data in Table 3.4, it can be seen that the KMO value for the behavioral intention scale is 0.871, which exceeds 0.7. The Bartlett's test of sphericity reaches a significance level, indicating that the behavioral intention scale has a good level of validity and is suitable for further factor analysis.

Table 3.4 Behavioral Intention KMO and Bartlett's Test^a

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.871
Bartlett's Test of Sphericity	Approx. Chi-Square df Sig.	1649.934 6 0.000

3.6.1 Tests of Convergent and Distinctive Validity

The online interaction validation factor model fit metrics are shown in Table 5-11. From the data in the table, the absolute fitness index X^2/df , RMSEA, and GFI satisfy the fit criteria. The parameter values of value-added fitness indices NFI, TLI, and CFI are 0.965, 0.980, and 0.984, respectively, which are all greater than 0.9. Therefore, the online interaction achieves good fit.

Table 3.5 Online Interaction Validated Factor Model Fit Metrics

Statistical test quantity	Absolute fit index			Value-added fitness index		
	X^2/df	RMSEA	GFI	NFI	TLI	CFI
Criteria for fit	<3	<0.08	>0.9	>0.9	>0.9	>0.9
Test result data	1.792	0.043	0.957	0.965	0.980	0.984

Based on the results of the online interaction validated factor analysis, the standardized factor loading coefficients and residuals were obtained, and the combined reliability (CR) and average variance extracted (AVE) of each latent variable were also calculated, and the results are shown in Table 3.6 below:

Table 3.6 Factor Loadings, CR Values, and AVE Values for Online Interaction

Observed variables <- latent variables	Std	Estimate	S.E.	C.R.	P	CR	AVE
	Estimate						
CO1<---Controllability	0.821	1.000			***	0.824	0.542
CO2<---Controllability	0.641	0.956	0.072	13.295	***		
CO3<--Controllability	0.748	0.990	0.063	15.747	***		
CO4< - Controllability	0.723	0.975	0.064	15.181	***		
RI1< - Richness	0.784	1.000			***	0.853	0.592
RI2< - Richness	0.780	1.173	0.070	16.824	***		
RI3< - Richness	0.757	1.115	0.069	16.259	***		

RI4< - Richness	0.755	1.203	0.074	16.198	***	0.917	0.734
RE1< - Responsiveness	0.854	1.000			***		
RE2< - Responsiveness	0.887	0.967	0.040	24.319	***		
RE3< - Responsiveness	0.840	0.960	0.043	22.176	***		
RE4< - Responsiveness	0.846	0.959	0.043	22.457	***		
MH1<- Mutuality	0.843	1.000			***	0.895	0.739
MH2<- Mutuality	0.878	1.085	0.049	22.295	***		
MH3<- Mutuality	0.858	1.109	0.051	21.639	***		
Note: *** represents significant at the 0.001 level.							

As shown in Table 3.6, the standardized factor loadings of the four latent variable measurements of controllability, richness, responsiveness, and mutuality are all greater than 0.5 and reach the level of significance, and the combined reliability of the four latent variables meets the criterion of being greater than 0.7, and the mean variance of the extracted variables is greater than 0.5. The fact that the three tests meet the criterion at the same time suggests that the measurements of online interaction have a good level of reliability and aggregation validity. The three tests simultaneously meet the criteria, indicating that the measurement of online interaction has good reliability and convergent validity.

Table 3.7 Behavioral Intentions Validated Factor Model Fit Indicators

Statistical test quantity	Absolute fit index			Value-added fitness index		
	X2/df	RMSEA	GFI	NFI	TLI	CFI
Criteria for fit	<3	<0.08	>0.9	>0.9	>0.9	>0.9
Test result data	0.670	0.000	0.998	0.999	1.000	1.000

From the data in Table 3.7, the parameter values of absolute fitness index (X2/df, RMSEA, GFI) and value-added fitness index (NFI, TLI, CFI) satisfy the fitness criteria. Therefore, the measurement model of behavioral intention has a good fit.

Based on the results of the validated factor analysis of behavioral intention, the standardized factor loading coefficients and residuals of each measure were obtained, and the CR as well as AVE in behavioral intention were further calculated, and the corresponding data are shown in Table 3.8 below:

Table 3.8 Factor Loadings, CR Values, and AVE Values for Behavioral Intention

Observed variables <- latent variables	Std	Estimate	S.E.	C.R.	P	CR	AVE
	Estimate						
BI1< - Behavioral Intention	0.907	1.000			***	0.945	0.811
BI2< - Behavioral Intention	0.909	0.906	0.030	30.321	***		

BI3< - Behavioral Intention	0.877	0.922	0.033	27.738	***		
BI4< - Behavioral Intention	0.909	0.896	0.030	30.292	***		
Note: *** represents significant at the 0.001 level.							

As shown in Table 3.8, the standardized factor loadings of the measurement of behavioral intention are greater than 0.5 and reach the level of significance. The combined reliability meets the criterion of greater than 0.7, and the average variance extracted AVE is greater than 0.5. The standardized factor loading coefficients, combined reliability, and average variance extracted all meet the criterion, which indicates that the measurement of behavioral intention has good reliability and convergent validity.

Spearman's correlation coefficients between each latent variable were calculated using SPSS. The correlation coefficients between controllability, richness, responsiveness, mutuality, and behavioral intention are shown in Table 3.9. The following table also shows the square root values of each latent variable AVE, and the discriminant validity of the measurement model was examined by comparing the square root values of the latent variable AVE with the absolute values of the correlation coefficients between the latent variables.

Table 3.9 Spearman's Correlation Coefficients between Latent Variables

Latent variables	CO	RI	RE	MH	BI
CO	0.736				
RI	0.419**	0.769			
RE	0.460**	0.615**	0.857		
MH	0.391**	0.575**	0.560**	0.860	
BI	0.524**	0.659**	0.694**	0.657**	0.900
Note: ** represents significance at the 0.01 level; diagonally bolded numbers are square root values for each latent variable AVE.					

Combining the above test results, it can be seen that the measurement model of the impact of online interaction on consumers' behavioral intention has a good fit and the measurement model has good reliability and validity, and the path coefficients between each potential variable can be measured based on this model and the collected sample data, and the theoretical assumptions can be partially verified.

Chapter 4 Findings

4.1 Descriptive Statistical Analysis

The fourth module of the questionnaire of this study was mainly used to collect basic information of the respondents. This section mainly includes the following: gender (male and female), age (below 18 years old, 18-25 years old, 26-30 years old, 31-40 years old, above 40 years old), education (high school and below, junior college, bachelor's degree, master's degree and above), occupation (student, company employee, public employee, institution employee, freelance), monthly disposable income (below 1,000 yuan, 1,000-2,000 yuan, 2,000-3,000 yuan, and more than 3,000 yuan), number of online purchases per month (2 times or less, 3-5 times, 6-8 times, and more than 8 times), and years of online shopping (less than 1 year, 1-3 years, 3-5 years, and more than 5 years). Descriptive statistical analysis was conducted on the 439 valid questionnaires recovered to analyze the reasonableness of the sample structure, and the specific descriptive statistical analysis results are shown in Table 4.1.

Table 4.1 Descriptive Statistics of Sample

Variable Name	Category	Sample Size	Proportion (%)
Gender	Male	203	46.2
	Female	236	53.8
Age	18 years and under	5	1.1
	18-25 years	221	50.3
	26-30 years	153	34.9
	31-40 years	32	7.3
	Above 40 years	28	6.4
Education	High school and below	28	6.4
	College	66	15.0
	Bachelor's degree	241	54.9
	Master and above	104	23.7
Occupation	Student	152	34.6
	Company staff	171	39.0
	Government staff	20	4.6
	Organization staff	52	11.8
	Freelancer	44	10.0
	Less than 1000 Yuan	62	14.1
	1000-2000 Yuan	136	31.0

Monthly disposable amount	2000-3000 Yuan	84	19.1
	Above 3000 Yuan	157	35.8
Number of online purchases per month	2 times and below	112	25.5
	3-5 times	231	52.6
	6-8 times	43	9.8
	More than 8 times	53	12.1
Years of online shopping	Less than 1 year	60	13.7
	1-3 years	66	15.0
	3-5 years	120	27.3
	More than 5 years	193	44.0

(1) Regarding gender distribution, the sample shows a relatively balanced proportion. Among the 439 valid responses, there were 203 males, accounting for 46.2% of the total, while 236 females represented 53.8%. According to the 2017 Market Research Report on online shopping apps, female users constituted 55.3%, which is higher than male users. The gender distribution in this study aligns closely with the report, indicating good representation in terms of gender.

(2) In terms of age distribution, among the 439 valid samples, respondents mainly fell into the age groups of 18-25 years and 26-30 years, accounting for 50.3% and 34.9%, respectively. According to the 2017 Market Research Report, users aged 16-35 years comprised 85.4% of online shopping app users. In this study, individuals aged 18-30 years accounted for 85.2%, with 31-40 years accounting for 7.3%. The sample data are concentrated within the age range typical of online shoppers, indicating good representativeness in terms of age distribution.

(3) Regarding education, respondents primarily held a bachelor's degree, with 241 individuals, accounting for 54.9% of the sample. The next highest category was master's and above, with 104 individuals, constituting 23.7%. Those with college and below accounted for a total of 94 individuals, representing 21.4%.

(4) In terms of occupation, students and company employees were equally represented, at 34.6% and 39.0%, respectively. Government officials, public sector employees, and freelancers accounted for 4.6%, 11.8%, and 10.0%, respectively.

(5) Regarding monthly disposable income, the sample was distributed as follows: 62 individuals had disposable income below 1000 RMB, accounting for 14.1%; 136 individuals had incomes between 1000-2000 RMB, representing 31.0%; 84 individuals had incomes between 2000-3000 RMB, constituting 19.1%; and 157 individuals had incomes above 3000 RMB, making up 35.8%.

(6) Regarding monthly online shopping frequency, the majority of respondents 52.6% shopped online 3-5 times per month. Those shopping 2 times or less, 6-8 times, and more than 8 times per month represented 25.5%, 9.8%, and 12.1%, respectively.

(7) In terms of years of online shopping experience, 120 respondents 27.3% had 3-5 years of experience, while 193 respondents 44.0% had more than 5 years of experience. Those with less than 1 year and 1-3 years of experience totaled 126 respondents, accounting for 28.7%.

When performing descriptive statistical analysis, the skewness and kurtosis coefficients of the sample data can be used to determine whether the data are normally distributed. Table 4.2 presents the skewness and kurtosis values for each measurement provision of the questionnaire. The skewness and kurtosis of all measurement items of the questionnaire meet the standard of absolute value of skewness less than 3 and absolute value of kurtosis less than 10, which means that the data meets the requirements of normal distribution and can be analyzed in the next step.

Table 4.2 Normality Test Results for Each Measurement Item

Measurement	Skewness		Kurtosis	
Items	Standard Error	Statistic	Standard Error	Statistic
CO1	-.490	.117	.077	.233
CO2	-.217	.117	-.243	.233
CO3	-.325	.117	.005	.233
CO4	-.542	.117	.086	.233
RI1	-.789	.117	.891	.233
RI2	-.636	.117	.027	.233
RI3	-.534	.117	.074	.233
RI4	-.711	.117	.112	.233
RE1	-.708	.117	.010	.233
RE2	-.850	.117	.567	.233
RE3	-.709	.117	.332	.233
RE4	-.393	.117	-.059	.233
MH1	-.659	.117	.726	.233
MH2	-.700	.117	.815	.233
MH3	-.913	.117	1.177	.233
BI1	-1.004	.117	.320	.233
BI2	-.433	.117	-.278	.233
BI3	-.417	.117	-.391	.233
BI4	-.706	.117	.187	.233

4.2 Structural Equation Modeling

Table 4.3 Structural Model Fitness Parameters

Statistical tests	Absolute fit index			Value-added fitness index			Parsimony fitness index		
	X2/df	RMSEA	GFI	NFI	TLI	CFI	PNFI	PCFI	PGFI
Criteria for fit	<3	<0.08	>0.9	>0.9	>0.9	>0.9	>0.5	>0.5	>0.5
Test result data	1.537	0.035	0.935	0.958	0.982	0.985	0.822	0.846	0.739

As shown in Table 4.3, the absolute fitness indices X2/df, RMSEA, and GFI are 1.681, 0.039, and 0.928, respectively, which satisfy the fitness criteria. The parameter values of value-added fitness indexes NFI, TLI, and CFI are all greater than 0.9. The value of simple fitness index PNFI, TLI, and CFI are all greater than 0.9. PNFI, PCFI, PGFI all meet the criterion of greater than 0.5, indicating that the model fits well. This indicates that the model fits well.

The individual path coefficients and significance test results for the structural equation modeling are shown in the table below:

Table 4.4 Path Coefficient Test Results for Structural Models

Path relationship	Std	Estimate	S.E.	C.R.	P
	Estimate				
Controllability ---> Behavioral Intention	.073	.106	.049	2.162	.031
Richness ---> Behavioral Intention	.211	.242	.059	4.112	***
Responsiveness ---> Behavioral Intention	.127	.144	.051	2.826	.005
Mutuality --> Behavioral Intention	.126	.156	.051	3.052	.002
Note: *** represents significant at the 0.001 level.					

From the analysis results of AMOS output, it can be seen that the standardized path coefficients of controllability, richness, responsiveness, and mutual aid on behavioral intention are 0.073, 0.211, 0.127, and 0.126, respectively, and the corresponding P-values are all less than 0.05, which have reached the level of significance, which indicates that controllability, richness, responsiveness, and mutuality have a significant positive impact on consumers' behavioral intention. Hypotheses H1, H2, H3 and H4 are all verified.

Chapter 5 Conclusion and Recommendation

5.1 Conclusion

(1) Controllability positively influences consumers' behavioral intention

The higher the degree of control consumers have over the order and content of website and product information, the stronger their intentions to purchase and recommend the products to others. Jiang et al. (2010) suggested that highly controllable websites tend to promote consumer purchase behaviors. The stronger the perceived controllability, the easier it is for consumers to obtain the information they need, thereby enhancing their purchase intentions.

(2) Richness positively influences consumers' behavioral intention

When online merchants use rich media such as detailed text descriptions, animations, short videos, or live streams to showcase products, it helps consumers gain a comprehensive understanding of the product information. This improves consumers' perceptions of product quality and increases their inclination to purchase. Park et al. (2005) similarly found that diverse product display methods positively influence consumer purchase behavior.

(3) Responsiveness positively influences consumers' behavioral intention

Timely responses from online customer service to consumer inquiries and targeted resolution of consumer doubts can meet consumers' information search needs. This responsiveness makes consumers feel that the online merchant values service quality and cares about their needs, fostering trust in the merchant and subsequently prompting purchase behaviors.

(4) Mutual assistance positively influences consumers' behavioral intention

Through buyer reviews and interactions with other buyers, consumers can obtain more third-party product information. Access to this information helps consumers deepen their understanding of the products, more accurately discern product quality levels, and increases the likelihood of purchase intentions.

5.2 Recommendation for Future Study

This study, through a review of existing literature, defines online interaction into four dimensions and explores the mechanism of its influence on consumers' behavioral intentions. It enriches the research on the effects of online interaction. However, there are inevitably limitations and shortcomings throughout the research process, which future research can further delve into and improve upon. The main limitations of this study are explained as follows:

(1) Limitations in questionnaire design. This study enriches the dimensions of online interaction and appropriately modifies existing measurement scales based on real-life contexts, striving to make the questionnaire design more relevant to actual mobile online shopping scenarios. However, due to limited capabilities, there may be some details in the questionnaire design that were not fully considered.

(2) Relatively single research method. The theoretical model of this study is validated using data collected through a questionnaire survey. Respondents were asked to recall their most recent online shopping experience, but recall inevitably differs from reality. Additionally, the context and emotions of respondents when filling out the questionnaire may affect the objectivity of the data to some extent. In contrast, experimental research can better control other influencing factors, providing more accurate validation of theoretical logic.

(3) Incomplete consideration of factors influencing consumer behavioral intentions. Consumer behavior is inherently a complex concept with many influencing factors. This study investigates the impact of online interaction but does not consider emotional factors such as consumer preferences, brand loyalty, and personal characteristics.

Based on the above limitations, future research can be improved in the following ways:

(1) Use experimental methods to validate the theoretical model. Compared to the questionnaire survey method, experiments can reduce subjectivity among respondents to some extent and control more factors influencing their behavior, thereby more effectively validating the relationships between variables. Therefore, when conditions permit, experimental research is an effective alternative.

(2) Further segmentation of product categories. Due to individual perception differences, some products in online shopping contexts cannot be clearly categorized. In such cases, further segmentation of product categories can help ensure the accuracy and applicability of the research results.

(3) Explore more comprehensive dimensions of online interaction. With the development and deepening of internet technology, the online shopping environment will inevitably undergo rapid changes. Interaction forms will become increasingly diverse, and consumers' shopping experiences will improve further. Therefore, keeping pace with the development of internet technology and exploring and refining the connotations and dimensions of online interaction have both theoretical and practical significance.

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Appendix

Part 1:

1. Please recall your most recent mobile shopping experience and answer the following questions based on your personal experience.

The product you focused on during your most recent mobile shopping experience:

- ☐ Book
- ☐ Mobile phone
- ☐ USB drive
- ☐ Mouse
- ☐ Clothing
- ☐ Skincare products
- ☐ Shoes
- ☐ Hat

Please select the option that best matches your true feelings during the shopping experience and check the corresponding box.

CO1 I can freely choose the product information I want to see.

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

CO2 I can control the order in which product information appears.

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

CO3 I can always navigate to the page I want to visit.

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

CO4 My clicking behavior determines the experience I will have.

- ☐ Strongly Disagree
- ☐ Disagree

- Neutral
- Agree
- Strongly Agree

RI1 The merchant provided abundant images and texts to explain product features.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

RI2 The details page includes images from all angles of the product, making it easy for me to observe product details.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

RI3 The merchant highlights product differentiation through detailed presentations.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

RI4 The merchant uses various formats like short videos and live streams to showcase the product.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

RE1 Customer service responds promptly to my inquiries.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

RE2 The responses from customer service are closely related to my questions.

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

RE3 I find communication with customer service efficient.

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

RE4 Customer service is very willing to communicate with me.

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

MH1 Based on others' reviews, I can better assess the product quality.

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

MH2 I get many good suggestions from buyer reviews.

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

MH3 Other consumers' reviews help me in making decisions.

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

BI1 I intend to purchase from this store.

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

BI2 If I have similar needs, I will first choose this store's products.

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

BI3 I will actively recommend this product to my family or friends.

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

BI4 If someone asks for a recommendation, I am willing to introduce this product to them.

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

Part 2: Basic Information

1. Your gender:
 - ☐ Male
 - ☐ Female
2. Your age group:
 - ☐ Under 18
 - ☐ 18-25
 - ☐ 26-30
 - ☐ 31-40
 - ☐ Over 40
3. Your education level:
 - ☐ High school or below
 - ☐ College diploma
 - ☐ Bachelor's degree
 - ☐ Master's degree or above
4. Your current occupation:
 - ☐ Student
 - ☐ Company employee
 - ☐ Government employee
 - ☐ Public institution employee
 - ☐ Freelancer
5. Your average monthly disposable income:
 - ☐ Below 1000 yuan
 - ☐ 1000-2000 yuan
 - ☐ 2000-3000 yuan
 - ☐ Above 3000 yuan
6. Your average monthly online shopping frequency:
 - ☐ 2 times or less
 - ☐ 3-5 times
 - ☐ 6-8 times
 - ☐ More than 8 times
7. How long have you been shopping online (online shopping age):
 - ☐ Less than 1 year
 - ☐ 1-3 years
 - ☐ 3-5 years
 - ☐ More than 5 years