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An Empirical Test of the Impact of eWOM Information on Chinese Consumers' Online Healthcare Service Purchase Intention: Mediating Role of Trust

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### Abstract

Due to the distinctive nature of the medical and health industries, the accuracy and veracity of medical information is directly related to the health of consumers and can even be fatal. Consequently, there are stringent requirements for precision and veracity. When searching for online health services, it is crucial to identify credible and useful information.

In China, eHealth research primarily focuses on macroscopic issues, such as the development of eHealth, how to protect patients' privacy during the eHealth process, legal issues associated with eHealth, and the medical concept and medical model. Extremely rare are eHealth studies on online word-of-mouth (eWOM). This study examines the characteristics of eWOM and eWOM receivers, analysing their impact on consumer trust and, ultimately, how they influence consumers' purchase intentions, using communication process theory.

The study explores the mechanism of eWOM on consumers' purchase intention in eHealth. A model is build based on the characteristics of eWOM (qunantiy, quality and timeliness), receiver's eWOM usage experience, Trust (cognitive dimension and affective dimension trust) and Purchase intention in the Chinese context. The findings suggest that: (1) In the online medical environment, the quantity and timeliness of eWOM information have a positive effect on the purchase intent of eWOM recipients. However, the quality of eWOM information has no significant effect on the purchase intention. (2) The e-word-of-mouth information usage experience of eWOM information recipients has a positive influence on customer's purchase intention. (3) Cognitive trust and affective trust of eWOM information recipients have a positive effect on the purchase intention recipients have a positive effect on the purchase intention of customers. In addition, results of this paper indicate that the influence of affective trust on the purchase intent of word-of-mouth recipients is a little superior to cognitive trust. (4) The quantity and timeliness of eWOM information has a substantial impact on the cognitive and emotional trust of eWOM recipients. However, the recipients' eWOM usage experience has no significant impact on their cognitive and emotional trust. This thesis found that eWOM information usage experience has a positive impact on users' purchase intention. A discussion of the managerial implications and limitations of this study comes to a close.

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At this point, I am aware that the end of my academic career is near.

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I appreciate my husband's assistance with my studies. Last, I am grateful to myself for maintaining my original intention and utilising the knowledge I have gained to remain vigilant in society, be a good person, and avoid being deceived by bad people. I am confident that the future will be brighter.

Table	of	Contents
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Contents	
Abstract	3
Acknowledgements	4
List of Tables	7
List of Figures	8
List of Appendices	8
List of Abbreviation	8
1 Introduction	9
1.1 Research background	9
1.2 Summary	10
2 Literature review	12
2.1 Online health service	12
2.2 eWord-Of-Mouth (eWOM)	13
2.2.1 Definiton of eWOM	13
2.2.2 Charateristic of eWOM	13
2.2.3 Determinant of eWOM	14
2.3 Trust	16
2.3.1 Definition of trust	16
2.3.2 Online trust	16
2.3.3 Dimension of trust	17
2.3.4 eWOM and trust	17
2.4 Purchase intention	18
2.4.1 Definition of purchase intention	18
2.4.2 The relationship between eWOM and purchase Intention	18
2.4.3 The relationship between trust and purchase intention	19
2.4.4 The relationship between eWOM and purchase intention: trust as a mediator	19
2.5 Summary	20
3 Methodology	21
3.1 Development of research model	21
3.1.1 Introduction	21
3.2 Research Hypothesis	21

3.2.1 Characteristic of eWOM	
3.2.2 Characteristic of eWOM users	24
3.2.3 Trust	25
3.2.4 Mediating role of trust	25
3.3 Summary	
4 Research design and data collection	
4.1 Measurement of variables	
4.2 Questionnaire design	
4.3 Summary	
5 Findings	
5.1 Descriptive analysis	
5.2 Reliability and Validity Analysis	
5.2.1 Reliability analysis	
5.2.2 Validity Analysis	
5.3 Correlation analysis	35
5.4 Regression analysis	
5.5 Analysis findings	46
6 Conclusion and recommendation	49
6.1 Discussion and conclusion	49
6.2 Managerial implication	
6.3 Limitation and recommendation	51
References	51
Appendices	57

## List of Tables

- Table 3.1 Summary of research hypothesis (p 29)
- Table 4.1 Variable Measurement Scale (p 32)
- Table 5.1 Descriptive analysis (p 35)
- Table 5.2 Reliability Analysis (p 36)
- Table 5.3 eWOM characteristics KMO and Bartlett test (p 37)
- Table 5.4 eWOM characteristics rotation component matrix (p 37)
- Table 5.5 Trust KMO and Bartlett test (p 38)
- Table 5.6 Trust Rotation Component Matrix (p 38)
- Table 5.7 Correlation between Purchase intention and eWOM characteristics (p 39)
- Table 5.8 Correlation purchase intention and eWOM usage experience (p 39)
- Table 5.9 Correlation purchase intention and trust (p 40)
- Table 5.10 Correlation trust and eWOM characteristics (p 40)
- Table 5.11 Correlation trust and eWOM usage experience (p 41)
- Table 5.12 eWOM characteristics regression analysis (p 41)
- Table 5.13 eWOM usage experience regression analysis (p 42)
- Table 5.14 Regression analysis of eWOM characteristics on cognitive trust (p 43)
- Table 5.15 Regression analysis of eWOM characteristics on affective trust (p 44)
- Table 5.16 Regression analysis of eWOM usage experience on cognitive trust (p 46)
- Table 5.17 Regression analysis of eWOM usage experience on affective trust (p 46)
- Table 5.18 Regression analysis of trust on purchase intention (p 46)
- Table 5.19 The mediating role of cognitive trust (p 48)
- Table 5.20 The mediating role of affective trust (p 49)
- Table 5.21 Hypothesis test result (p 51)

# List of Figures

Figure 3.1 Research model (p 23)

Figure 5.1 Modified model of the research (p 53)

# List of Appendices

Appendix 1: Questionnaire Survey (in Chinese)

## List of Abbreviation

eWOM: electronic word-of-mouth

#### **1** Introduction

#### 1.1 Research background

The most fundamental explanation for problems such as "trouble in seeing a doctor, difficulty in registration, and difficulty in queuing" in China is a scarcity and unequal distribution of high-quality medical resources (Tang et al., 2008; Sun et al., 2021). To some extent, internet medical care helps ease the imbalanced distribution of medical resources by offering patients options such as online appointment registration, graphic consultation, and video consultation (Lee and Yoon, 2021). With the rise of the Internet, many residents began to collect medical information and publish content about their health concerns on the Internet. Patients communicate with one another in online communities via various social media platforms. The Internet and social media are providing new avenues for locating medical information. Because the medical and health industry is unique in that the correctness and authenticity of medical information is tied to consumer health and can be life-threatening, there are high standards for information accuracy and authenticity. At the same time, misleading medical information will cause significant harm and may even endanger people's lives (Mamak, 2021; Lavorgna, 2018; Wang et al., 2019). As a result, when looking for online medical services, knowing how to recognise valuable and authentic material becomes critical.

In China, research on online medical care focuses primarily on the macro direction, such as considering the current state of online medical development, how to protect patients' privacy during online medical treatment, legal issues in online medical care, and the impact on medical models and medical concepts, among other things (Sun et al., 2021) However, there have been few studies on the legitimacy of information used in online medical care, and no research on eWOM in online medical care has been conducted. Analyse the features of eWOM information and eWOM receivers, and then examine their impact on consumer trust and purchase intentions, which is of significant in research and in practice. Based on the research background of online medical care, and how eWOM in online medical care affects consumers' willingness to purchase. By doing this, it not only adds to beliefs regarding trust and purchasing intention in online medical care, but it also broadens the eWOM research field.

This paper investigates the impact of eWOM in online medical care on consumers' trust through empirical research on medical information seekers, which in turn affects consumers' online medical products (services) related purchase intention because the accuracy of information in online medical care is closely related to consumers' health. The empirical research results from this work support the growth and development of online medical services in China and offer recommendations for online medical service providers to help them maximise the technique and content aspects of eWOM reviews. So that people looking for medical information can more effectively analyse, adopt, and use eWOM data and make better medical decisions.

The following three features primarily reflect the contributions of this paper:

- (1) It not only broadens the eWOM research area but also contributes to the theory of trust and purchasing intention in online medical care. eWOM is used as the research entry point in this study, which examines consumer trust in eWOM in online medical care as well as how eWOM influences consumers' purchase intentions. In light of the research's findings, online medical service providers are given recommendations for enhancing their review processes and review content features in order to make it simpler for customers to find reliable online eWOM information.
- (2) To develop the theoretical model and empirical discussion, this work divides the trust component into two dimensions: cognitive trust and emotional trust, which is rarely done in earlier research on eWOM in Chinese context.
- (3) In order to represent the demands for information update speed in the digital age, this study uses "timeliness," an index that originally gauges the quality of eWOM information, as an eWOM information characteristic. In order to determine whether the use of other types of eWOM information influences the association between eWOM and trust and purchase intention in online medical care, "eWOM information use experience" is added to the characteristics of eWOM recipients.

#### 1.2 Summary

This thesis begins by analysing the significance of online healthcare service in the digital economy in the Chinese context. By identifying the research gap there have been few studies on the legitimacy of information used in online medical care, and no research on eWOM in online medical care has been conducted, this research will investigate this question empirically. This study will conduct a critical review of previous research about the features of eWOM information and eWOM receivers, and trust, purchase intention as listed in Chapter 2. Then, in the chapter 3, the methodology will be introduced, along with the research design, specific research tools, and research questions. In chapter 4, a detailed research design and data collection process of this study will be provided. Chapter 5 is the findings of this thesis. In chapter 6, the discussion of research findings and limitations will be provided, with suggestions for further study.

#### 2 Literature review

#### 2.1 Online health service

The term "online health service" describes the delivery of medical services over the Internet. Online medical care includes services like appointment scheduling, graphic and video diagnosis and treatment, as well as the matching of drugs or medical devices with patients; social and professional knowledge given to doctors (such as clinical experience, case databases, medical academic resources, etc.); communication and online consultation and diagnosis platforms; and other services and tools (Daraz et al., 2019).

With the growth of the Internet and communication technology, people started looking for medical information or scheduling appointments on social media platforms, online medical communities, and websites. The Internet has since emerged as a vital resource for patients looking for medical information and scheduling appointments (Chaudhr et al., 2006). The emergence of online medical care is not a replacement for traditional medical care, but rather a network-based transformation of certain of the diagnosis and consulting activities in traditional medical care (Huang et al., 2021).

Patients can better share medical information and treatment experiences through the Internet, and online medical services can be an effective and valuable source of social support for patients (Nettleton et al., 2005). The online medical community, which differs from the conventional medical model in that it is characterised by information objectivity and non-face-to-face communication, necessitates that patients and doctors continuously exchange information in order to achieve mutual benefit and a win-win situation for both parties.

Scholars are increasingly focusing on online medical treatment. Researchers have focused on three primary areas while studying internet medical services: Research on the reliability of medical information online. For instance, Chen et al. (2018) observed that although patients want to seek for medical information and advice through patient communication websites, their trust in such information is poor, which is one of the reasons for the limited adoption of online medical information. Research on the usage of online medical services. For example, the empirical research of Claggett et al. (2022) shows that subjects with good educational background are more inclined to accept online medical services, and people with certain diseases have a higher proportion of online medical services than those without

diseases. Research on user adoption behaviours. Alam et al., (2020) conducted a study on the adoption of online healthcare services in the developing country from the perspective of network resources and types.

Scholars have also extensively researched trust difficulties in online medical treatment due to the unique requirements for quality and veracity of the information. In an empirical study on people's online medical information search behaviour, Daraz et al. (2019) discovered that patients' frequency of searches for online medical information is unaffected by the effectiveness of their interactions with doctors. Instead, they discovered that the ease of network availability and trust in online medical information are key influences on patients' search for online medical information. In a survey of people looking for online medical information, Ventre and Kolbe (2020) discovered that the reliability of the sources, the professionalism of the sources, and the information seekers' perceptions of the reliability and risk all have an impact on the trust that information seekers have in the sources.

Numerous academics have studied online medical care from a macro perspective in the Chinese context, including considering the development model of online medical care in China, the impact of online medical care on traditional medical models, and legal concerns with online medical care (Sun et al., 2021). The majority of these research findings, however, can only be analysed theoretically and qualitatively due to a lack of scientific empirical examination, and their practical significance has to be increased.

#### 2.2 eWord-Of-Mouth (eWOM)

#### 2.2.1 Definiton of eWOM

According to Thomsen and Jeong (2020), eWord-Of-Mouth (eWOM) is the dissemination of information among users of interactive platforms like message boards and private chats. Hennig-Thurau (2004) described eWOM as comments made by current, potential, or former customers about goods or services and distributed to other customers and businesses online.

#### 2.2.2 Charateristic of eWOM

Because there are fewer simultaneous recipients in traditional word-of-mouth, the relationship between eWOM providers and the recipient affects how persuasive WOM is. However, in eWOM, the sender's comments are always present and can be sent to an unlimited number of recipients, whether they are known to the sender (Godes and Mayzlin, 2004).

Additionally, because they also receive contradictory or comparable information from other senders, people who receive eWOM content in online communities may not be able to comprehend or trust the communicator's motive. As a result, the manner in which eWOM information is disseminated and consumed in the network environment has a big impact on the function of eWOM. It is important to grasp the distinctions between eWOM and traditional WOM as well as their causes in order to fully comprehend eWOM. The following characteristics are where traditional eWOM and online eWOM diverge: (1) Increase in quantity (Lee et al., 2014), (2) Discreteness (Godes and Mayzlin, 2004), (3) Persistence and Observability (Hennig-Thurau et al., 2010), (4) Anonymous: Internet is a comparatively anonymous medium. (Suryadi and Kim, 2018), (5) Significance of potency (Ismagilova et al., 2020), (6) Community participation (Blazevic et al., 2013).

#### 2.2.3 Determinant of eWOM

The three main influencing components in the process of electronic word-of-mouth communication are word-of-mouth communicators, word-of-mouth information itself, and word-of-mouth recipients. In contrast, the quantity, quality, and timeliness of eWOM information as well as the characteristics of eWOM information users (eWOM information utilisation experience) will be the focus of this paper's research on the influencing factors of eWOM; the characteristics of eWOM communicators will not be examined at this time. This is because the background of this research is specifically focused on online medical research. They might not be very professional because eWOM communicators in online medical care are all patients who have used online medical services and are prepared to share their experiences. In online medical care, the relationship between the communicator and the recipient of word of mouth is weak, and when the relationship is strong, it is impossible to compare the influence of eWOM (Liu et al., 2021).

## 2.2.3.1 Characteristic of eWOM

#### (1) Quantity

Quantity describes the scope and volume of eWOM surrounding a certain good or service. The web's multidirectional nature has resulted in the unparalleled volume and scope of eWOM (Dellarocas, 2003; Garrett et al., 2018). eWOM talks are also asynchronous and have the ability to quickly assemble huge numbers of participants. In other words, while disseminating and using word of mouth information, communicators and consumers each have more options than in conventional word of mouth, which increases awareness (Kiecker and Cowles, 2002).

Kim (2019) discovered that the amount of online eWOM has a substantial impact on movie box office revenue. When compared to eWOM valence, the number of eWOM has a bigger impact on a movie's box office revenue, regardless of whether it is positive or negative eWOM. Godes and Mayzlin's (2004) study on new TV shows in 1999-2000 discovered that the number of daily reviews on the website has a beneficial effect on the ranking of TV shows. The study discovered that the spread of debate themes among different groups had a considerable impact on TV programme ratings. Because the more talks there are, the more likely it is that other consumers will become interested.

Previous research, however, indicates that the impact of eWOM quantity on customer purchase decisions is not linear. According to Roy and Basu (2017)'s research, the quantity of online eWOM has a large impact on product sales income; however, as product prices rise, the impact of eWOM quantity diminishes significantly, or even becomes negative. As a result, extra characteristics of eWOM information must be addressed while analysing the influence of eWOM amount.

(2) Quality

Quality is the embodiment of the credibility, objectivity, adequacy and comprehensibility of eWOM information. In the face of high-quality eWOM, consumers can obtain real and effective information about product or service descriptions; while low-quality information may not be able to obtain or only obtain less information due to vague and vague content.

It is generally believed that high-quality eWOM is more valuable than low-quality eWOM. Nabi and Hendriks (2006) research found that if consumers think the eWOM information is true, credible and accurate, they will think the eWOM information has a higher quality. Lee et al. (2008) found that high-quality eWOM has a greater impact on consumers' purchasing decisions than low-quality eWOM.

(3) Timeliness

When this paper studies eWOM, the timeliness factor of eWOM is added. Timeliness refers to the timeliness of reviews, whether they reflect the latest information on products or services. The timeliness of eWOM is reflected in the fact that eWOM should reflect the latest information about products or services, so as to meet consumers' information needs. Wang et al., (2017) proposed that timeliness refers to the timeliness of eWOM information updates and whether it contains the latest information about products.

The timeliness of information is originally an important indicator to measure the quality of eWOM information, although scholars pay less attention to the timeliness of information, and in the few existing

studies on the timeliness of eWOM, scholars have not reached a consistent conclusion. However, due to the increasing requirements for information updates in the digital era, this paper studies "timeliness" as a separate dimension to explore the influence of "timeliness" on purchase intention.

#### 2.2.3.2 eWOM usage experience

Rimmer and Weaver (1987) found that when people obtain information through media, they tend to trust the media they prefer. Johnson and Kaye's (2004) research shows that consumers' trust in media depends on the frequency of media use. Alraja's (2019) research shows that the degree of consumption experience significantly affects consumers' trust. According to McKnight et al. (2002), shopping experience has a significant influence on the development of online consumer trust. If an online consumer has a particular shopping knowledge and experience, these knowledge and experiences will likely replace the trustee's basic trust tendency to become a major factor. Giustini et al., (2018) believe that in e-commerce, people will predict their experience and feelings in the future shopping process based on their experience and feelings in the search process.

## 2.3 Trust

#### 2.3.1 Definition of trust

Many researchers have put forward different views on the connotation of trust. Doney and Cannon (1997) proposed that trust is the perception of trustworthiness of one party to another party out of good intentions. Gefen (2000) proposed that trust is an individual's deliberate and active dependence on others or organizations. McKnight (2002) believes that trust is a kind of belief, which is a psychological recognition of the trustee's goodwill, ability and honesty.

#### 2.3.2 Online trust

The information asymmetry, difference perception and transaction virtuality between buyers and sellers in the network environment make consumers have more uncertainty and perceived risk than traditional transaction environment. With the development of the Internet, online trust has become an important issue that consumers and scholars pay attention to. Lee and Turban (2001) pointed out that consumers' online trust is in online transactions, expecting the other party to act according to the agreement, regardless of the ability to supervise and control the online seller, and being able to accept the online seller's willingness to harm themselves. Gefen's (2000) research shows that consumers' trust in online shopping is affected by their familiarity with the website. The research of Shankar et al. (2002) shows that consumers' past website experience and online shopping experience affect trust. Lee et al., (2008) found that the credibility of positive online eWOM significantly positively affects consumers' trust in the reviewed merchants, and the credibility of negative eWOM negatively affects consumers' trust in merchants.

#### 2.3.3 Dimension of trust

By studying the dimensions of trust from different levels, it can guide the organization in which way to establish trust with consumers. Scholars have divided the dimensions of trust measurement factors into one-dimensional, two-dimensional and multi-dimensional changes.

The study of trust in this study makes use of McAllister's division of trust dimensions, namely cognitive trust and emotional trust. This division is based on Myrick's (2017) two needs of patients when receiving online medical care—cognitive needs and emotional needs. According to McAllister (1995), cognitive trust is a type of trust that is based on the trusting party's rational expectation of the trustee's competence, moral character, and sincerity. A dimension of trust called emotional trust is created based on the emotional bond between the two parties.

## 2.3.4 eWOM and trust

This paper studies the impact of eWOM information from the characteristics of eWOM information (quantity, quality, and timeliness), and receiver characteristics (experience in using eWOM information). By combing the previous research results, it is found that eWOM can affect consumers' trust.

When consumers come into contact with the eWOM information of a certain product or service, they may not adopt it immediately, but process it after obtaining other people's suggestions. Research by Sarwar et al., (2019) shows that eWOM is a major factor affecting online consumer trust. The more eWOM information about a product, the more likely it will bring high awareness. According to Liu (2006), the more eWOM there are, the more likely it is that consumers will be aware of the product, and high popularity will undoubtedly result in high sales. Additionally, eWOM conversations are asynchronous and can quickly assemble a large number of participants. In the online transaction environment, the more eWOM about a certain product, the greater the impact on enhancing customers' eWOM trust. Research by Von Helversen et al., (2018) shows that consumers' trust in merchants is significantly affected by the credibility of positive Internet word of mouth, but its impact on purchase intention is not significant, and purchase intention is significantly affected by merchant trust and affects consumption. purchase behavior of consumers. The credibility of negative eWOM also negatively affects consumers' trust in merchants and purchase intentions. Rose et al., (2011) found in their research on

online consumers that consumer experience affects consumer trust.

#### 2.4 Purchase intention

#### 2.4.1 Definition of purchase intention

Fishbein (1975) proposed the concept of purchasing willingness, which refers to the subjective probability or possibility of consumers buying a particular product. Fishbein believed that willingness is the subjective probability of an individual engaging in a particular behaviour. Some foreign academics have also offered their own interpretations and explanations of purchase intention. Dodds et al. (1991) held that consumers' cognition, or the likelihood of purchasing a particular good or service, determines purchase intention.

Purchase intention, according to Sinha and Desarbo (1998), is the arbitrary likelihood that a consumer will buy a particular good. Purchase intention, according to Schiffman and Kanuk (2000), is a gauge of consumers' propensity to buy a given good or service.

## 2.4.2 The relationship between eWOM and purchase Intention

Word of mouth has a greater impact on consumers' attitudes and behaviours than traditional advertising and media because consumers perceive it to be more authentic and reliable. The Internet allows weak ties to influence one another, in contrast to traditional eWOM which is restricted to small and constrained social networks. Internet word of mouth has a wider network of influence. The power of word-of-mouth marketing is expanding rapidly thanks to the development of social media and digital channels. With the aid of online discussions, eWOM enables customers to socially interact with others, exchange productrelated information, and make wise purchasing decisions (Blazevic et al., 2013).

According to Tien et al. (2019), consumer attitudes and subsequently purchase intentions are influenced by word of mouth. The depth of reviews will have a positive effect, according to Mudambi and Schuff's (2010) study of 1587 online eWOM comments on 6 products on Amazon.

Fileri et al., (2018) proved that eWOM has an impact on consumers' purchase decisions by analysing the interaction of users' online communications. Sarwar et al. (2019)'s research on eWOM has confirmed that it has a positive effect on purchase intentions, which in turn affects product sales. The research of Lee and Shin (2014) proved that the difference of eWOM type, eWOM valence and product involvement will have an impact on customers' purchase intention, and specifically explored how the differences of these factors can be reflected in eWOM information. customers' willingness to purchase.

#### 2.4.3 The relationship between trust and purchase intention

Due to the virtual nature of online shopping, it is impossible to provide consumers with physical experience. Compared with traditional shopping, online shopping is more likely to make consumers perceive greater risks and uncertainties. When such uncertainties cannot be passed through rules and practices When reduced, people rely on trust to reduce uncertainty and perceived risk. There is a lack of corresponding rules and practices in e-commerce, and it is impossible to immediately verify the products or services purchased online (Gefen, 2000). In addition, compared with traditional commerce, online transactions lack formal transaction procedures and credentials, and the interaction between merchants and consumers is also difficult. Less, so the importance of trust in the environment in e-commerce is higher than in traditional commerce. Lăzăroiu et al., (2020) research shows that consumers' initial trust and familiarity with online shopping significantly affect their purchase intentions.

In their study of virtual community members in China's C2C e-commerce, Lu et al. (2010) discovered that each virtual community member's tendency to trust is a significant factor influencing their trust. They also confirmed that trust has a significant impact on virtual community members' willingness to obtain information and purchase willingness.

#### 2.4.4 The relationship between eWOM and purchase intention: trust as a mediator

Trust is a crucial mediating variable in marketing because it helps build enduring relationships between businesses and customers and has a significant influence on their behaviour (Moorman and Zaltman, 1993). Organisations and consumers' willingness to make purchases benefit from trust.

Hong and Cha (2013) investigated the factors that influence trust and the connection between trust and the intention to make a purchase using online users as the survey subject. The findings demonstrate that customer trust significantly increases customer purchase intent and that it partially mediates the relationship between customer satisfaction, reputation, switching costs, and customer purchase intent. Friend recommendations and consumer trust have a significant positive impact on purchase intention, according to empirical research by Erkan and Evans (2018) from the perspective of eWOM recommendations, and consumer trust plays a mediating role in the relationship between friend recommendations and consumer purchase intention. According to research by Kevin (2015), word-of-mouth on the Internet significantly influences consumers' purchase intentions through the mediation of

trust, and word-of-mouth information influences consumers' purchase intentions by affecting word-ofmouth recipients' trust.

#### 2.5 Summary

By classifying the pertinent theories of online medical care, EWOM, trust, and consumer purchase intention, this chapter summarises the findings from earlier studies and offers theoretical support for the theoretical model building and hypotheses of this work.

(1) Introduce the meaning of online medical care, classify the pertinent online medical care research, and outline the key theoretical advancements and elements of online medical care research.

(2) The researchers separated the definitions of EWOM and trust, separated the characteristics of EWOM and the influencing variables of EWOM communication, and separated the research findings on the relationship between EWOM and trust.

(3) The key point of combing in this section is the influence relationship between EWOM, trust, and purchase intention, by sorting out the EWOM research results, how trust affects purchase intention, and the influence of EWOM on purchase intention under the mediating of trust, to provide theoretical support for this paper to explore how EWOM affects consumers' purchase intentions in online medical care under the mediating of trust.

With the growth of the Internet, a new study sector has emerged: online medical care. There have been few studies on online medical care in Chinese context, and nearly no empirical studies on trust difficulties in online medical care. EWOM, as a significant source of information for customers, necessitates research into EWOM in online healthcare. As a result, this article investigates the impact of EWOM on trust in online medical care, and then investigates the impact of EWOM on consumers' purchase intentions.

## **3** Methodology

#### 3.1 Development of research model

#### **3.1.1 Introduction**

The research of Kimery and Mccord (2002) shows that consumers' trust has a direct and indirect impact on purchase intention. Smith et al. (2002) conducted research on the relationship between the characteristics of eWOM recipients and consumer decision-making under the mediation of network trust. Lăzăroiu et al., (2020) research proved that under the mediation of trust, the strength of EWOM information significantly affects consumers' purchase intentions. In the e-commerce environment, trust can reduce consumers' uncertainty and perceived risk. Therefore, it is feasible to use trust as a mediating variable to explore the influence of EWOM in online medical care on consumers' purchase intentions. This paper intends to use EWOM information characteristics and eWOM users characteristics as independent variables, and consumer trust as an mediated variable in this study to explore the eWOM factors that affect consumers' purchase intentions. Among them, the characteristics of eWOM include three dimensions: quantity, quality, and timeliness; the characteristic of users is eWOM using ezperience; for trust, this paper draws on McAllister's (1995) analysis of trust dimensions divide it into two dimensions of cognitive trust and affective trust. Thus, the theoretical research model of this paper is proposed (Figure 3.1).



Figure 3.1 Research model

This study takes online medical care as the research background, and explores the influence of online eWOM on purchase intention in online medical care. The model is shown in Figure 3.1.

### 3.2 Research Hypothesis

According to the research model proposed above, the research hypothesis of this paper is put forward.

#### 3.2.1 Characteristic of eWOM

### (1) Quantity

The quantity of EWOM information refers to the size and quantity of EWOM related to a specific product or service. The quantity of EWOM information often reflects the popularity of a certain product or service. Dellarocas (2003) pointed out that the number of eWOM positively affects the credibility of eWOM, that is, the more the number of eWOM, the higher the credibility of the eWOM, and that the more eWOM, the more consumers will pay attention to the eWOM. The more likely the product or service is.

Liu (2006) researched the eWOM information of Yahoo movie website and found that the number of eWOM has a significant impact on movie box office revenue. Compared with eWOM valence, the number of eWOM has a greater impact on the box office of a movie, whether it is positive eWOM or negative eWOM will increase the box office revenue of a movie. The research of Chen et al. (2008) shows that the influence of eWOM will gradually increase as the number of people posting eWOM increases. Suryadi and Kim (2018) found that the number of eWOM significantly affects product sales. Luo and Zhong (2015) showed through empirical research that the greater the amount of eWOM information, the more obvious the impact on consumer online travel booking intention. Based on the empirical research of online book reviews, Lin et al. (2007) found that online consumer reviews have a significant impact on book sales. Among them, the number of reviews has a significant negative impact. Ngarmwongnoi et al. (2020) found that the number of word of mouth can have a significant positive impact.

To sum up, we can see that there is a positive relationship between the number of EWOM and consumer trust and purchase intention, so this paper puts forward the following hypothesis:

H1a: Quantity significantly affects the purchase intention of eWOM recipients.

H1b: Quantity significantly affects the cognitive trust of eWOM recipients.

H1c: Quantity significantly affects the emotional trust of eWOM recipients.

#### (2) Quality

The quality of eWOM information is the embodiment of the credibility, objectivity, adequacy and comprehensibility of eWOM information. In the face of high-quality eWOM, consumers can obtain real and effective information about product or service descriptions; while low-quality information may not be able to obtain or only obtain less information due to vague and vague content. It is generally believed

that high-quality eWOM is more valuable than low-quality eWOM. Nabi and Hendriks (2006) research found that if consumers think the eWOM information is true, credible and accurate, they will think the eWOM information has a higher quality.

Lee et al. (2008) found that high-quality online eWOM has a greater impact on consumers' purchase decisions than low-quality reviews. Subsequently, Lee et al. (2014) conducted further research on the quality of eWOM, and found that when the subjects read a whole positive eWOM, they would positively evaluate the product under high-quality eWOM, which in turn would affect consumers' purchase Intention.

In their research, Lee and Shin (2014) noted that the credibility of eWOM information refers to the accuracy, timeliness, and linguistic insight of the eWOM information itself. According to Ruiz-Mafe et al.'s research from 2020, determining the quality of eWOM information depends on its constituent dimensions. Argument quality and source reliability, two factors that together make up the quality of eWOM information, have been found to positively affect consumers' propensity to buy. The influence of review quantity and quality on consumers' purchase intentions was examined by Chakraborty (2019). The findings indicate that both the quantity of reviews and the review quality have a significant impact on consumers' purchase intentions.

In summary, there is a positive relationship between the quality of eWOM and consumer trust and purchase intention, so this paper puts forward the following hypothesis:

H2a: Quality significantly affects the purchase intention of eWOM recipients.

H2b: Quality significantly affects the cognitive trust of eWOM recipients.

H2c: Quality significantly affects the emotional trust of eWOM recipients.

(3) Timeliness

Timeliness refers to the timeliness of reviews, whether they reflect the latest information on products or services. The timeliness of eWOM is reflected in the fact that eWOM should reflect the latest information about products or services, so as to meet consumers' information needs.

Fuet al., (2011) believed that in the network environment, the closer the release time of eWOM is to the present, the greater its influence. The research of Albayrak and Ceylan (2021) confirmed that the timeliness of EWOM significantly affects consumers' willingness to book online, and the latest review information usually reflects the latest news of this product or service, which is more convincing. Tien et al., (2019) found in their research on eWOM that in a C2C environment, the timeliness of eWOM

information can improve consumers' trust, which in turn has an impact on consumers' purchase intentions. Fileri and Mcleay (2013) found that timeliness is an important factor affecting consumers' acceptance of eWOM.

In summary, there is a positive relationship between the timeliness of eWOM and consumer trust and purchase intention, so this paper puts forward the following hypothesis:

H3a: Timeliness significantly affects the purchase intention of eWOM recipients.

H3b: Timeliness significantly affects the cognitive trust of eWOM recipients.

H3c: Timeliness significantly affects the emotional trust of eWOM recipients.

#### 3.2.2 Characteristic of eWOM users

Experience in using eWOM information

Rimmer and Weaver (1987) found that when people obtain information through media, they tend to trust the media they prefer. Johnson and Kaye's (2004) research shows that consumers' trust in media depends on the frequency of media use. Ku et al. (2008) pointed out that, similar to traditional media, the higher the degree of utilization of new media, the higher the credibility of the information provided by the network. Ling et al., (2010) found in their research on the influence of consumer trust on the Internet that the personal characteristics of consumers are important factors affecting consumer trust. Online leisure and shopping experience. Chakraborty's (2019) research proves that consumers' past purchase experience has an important impact on consumers' trust. Park and Stoel (2005) found that past experience will affect consumers' cognition of things. When judging new things, if they lack sufficient experience, consumers may search for third-party information to help them make judgments.

Bilalet al., (2021) believed that a comparative study of the trust formation and function mechanism of consumers with and without online shopping experience found that there are significant differences in the trust formation and function mechanism of the two types of consumers. Wesley and Kamal (2011) mentioned in the social media and eWOM impact research that social media users perceive the credibility and usefulness of eWOM information better than non-users, and eWOM information with high credibility and usefulness Has more influence on receiver propagation.

It can be seen from the above that the utilization experience of eWOM information received by eWOM has a positive influence on trust and purchase intention, so this paper puts forward the following hypothesis:

H4a: eWOM information utilization experience significantly affects the purchase intention of eWOM

recipients.

H4b: eWOM information utilization experience significantly affects the cognitive trust of eWOM recipients.

H4c: eWOM information utilization experience significantly affects the emotional trust of eWOM recipients.

#### 3.2.3 Trust

Ventre and Kolbe (2020) believe that trust will have an effect on the audience's consumption intentions and behaviors, and propose that the main reason hindering consumers from conducting e-commerce transactions is the lack of trust in merchants in the network. Consumer trust can lower consumers' perceived risk, which in turn affects consumers' willingness to buy, according to Kimery and Mccord (2002). The research of Lăzăroiu et al., (2020) also shows that consumers' trust in online eWOM affects consumers' purchase intentions and behaviors. Ling et al. (2011) found that trust can significantly and positively affect consumers' purchase intention.

To sum up, it can be seen that there is a positive relationship between eWOM recipients' trust and purchase intention. Therefore, this paper puts the following hypothesis:

H5a: The cognitive trust of eWOM recipients significantly affects the purchase intention of eWOM recipients.

H5b: The emotional trust of eWOM recipients significantly affects the purchase intention of eWOM recipients.

#### 3.2.4 Mediating role of trust

According to Smith et al. (2002), relationships, trust propensity, and professionalism of eWOM recipients all play a mediating role in the process of influencing consumer purchasing decisions. DAM (2020) examined how public welfare affected brand trust and purchase intent using empirical research techniques. The findings demonstrate how brand trust, a mediating variable, mediates the effect of consumer involvement in public service marketing activities on purchase intentions. In their study of virtual community members in China's C2C e-commerce, Lu et al. (2010) discovered that the willingness of community members to seek out information and make purchases is significantly influenced by trust, and that trust acts as a mediating factor between trust propensity and purchase intention. According to Matute et al.'s (2016) research, eWOM significantly affects purchase intention when trust is the mediating factor. By influencing the trust of eWOM recipients, eWOM information influences consumers' purchase intentions. According to an empirical study from the perspective of eWOM recommendations conducted by Tien et al. in 2019, consumers' purchase intentions are significantly and favourably influenced by friend recommendations and consumer trust. Purchase intentions contribute in part as a mediating factor.

To sum up, trust plays an important role in the dissemination of eWOM. This paper believes that trust plays a mediating role between eWOM and the willingness of purchase in eWOM recipients. Therefore, this paper puts the following hypothesis:

H6a: Cognitive trust plays a mediating role between quantity and purchase intention of eWOM recipients.H6b: Cognitive trust plays a mediating role between quality and purchase intention of eWOM recipients.H6c: Cognitive trust plays a mediating role between timeliness and purchase intention of eWOM recipients.

H6d: Cognitive trust plays a mediating role between eWOM information utilization experience and purchase intention.

H7a: Emotional trust plays a mediating role between quantity and purchase intention of eWOM recipients.

H7b: Emotional trust plays a mediating role between quality and purchase intention of eWOM recipients.

H7c: Emotional trust plays a mediating role between timeliness and purchase intention of eWOM recipients.

H7d: Emotional trust plays a mediating role between eWOM information utilization experience and purchase intention.

Therefore, the research hypothesis proposed is summarised in table 3.1 as follows:

	Hypothesis
H1	H1a: Quantity significantly affects the purchase intention of eWOM recipients.
	H1b: Quantity significantly affects the cognitive trust of eWOM recipients.
	H1c: Quantity significantly affects the emotional trust of eWOM recipients.
H2	H2a: Quality significantly affects the purchase intention of eWOM recipients.
	H2b: Quality significantly affects the cognitive trust of eWOM recipients.
	H2c: Quality significantly affects the emotional trust of eWOM recipients.
Н3	H3a: Timeliness significantly affects the purchase intention of eWOM recipients.

Tab	le	3.	1	Summary	of	researcl	1	hypot	hesi	İS
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	H3b: Timeliness significantly affects the cognitive trust of eWOM recipients.
	H3c: Timeliness significantly affects the emotional trust of eWOM recipients.
H4	H4a: eWOM usage experience significantly affects the purchase intention of eWOM
	recipients.
	H4b: eWOM usage experience significantly affects the cognitive trust of eWOM
	recipients.
	H4c: eWOM usage experience significantly affects the emotional trust of eWOM
	recipients.
Н5	H5a: The cognitive trust of eWOM recipients significantly affects the purchase intention
	of eWOM recipients.
	H5b: The emotional trust of eWOM recipients significantly affects the purchase
	intention of eWOM recipients.
Н6	H6a: Cognitive trust plays a mediating role between quantity and purchase intention of
	eWOM recipients.
	H6b: Cognitive trust plays a mediating role between quality and purchase intention of
	eWOM recipients.
	H6c: Cognitive trust plays a mediating role between timeliness and purchase intention
	of eWOM recipients.
	H6d: Cognitive trust plays a mediating role between eWOM usage experience and
	purchase intention.
H7	H7a: Emotional trust plays a mediating role between quantity and purchase intention of
	eWOM recipients.
	H7b: Emotional trust plays a mediating role between quality and purchase intention of
	eWOM recipients.
	H7c: Emotional trust plays a mediating role between timeliness and purchase intention
	of eWOM recipients.
	H7d: Emotional trust plays a mediating role between eWOM usage experience and
	purchase intention.

## 3.3 Summary

This chapter describes the research model investigated to address the research questions for this study. Drawing on the literature review, the rationale for the research hypothesis development is addressed as well.

#### 4 Research design and data collection

The literature review states that the empirical data from "Impact of eWOM Information on Chinese Consumers' Online Healthcare Service Purchase Intention: Mediating Role of Trust in China" will be supplemented by the findings of this dissertation. Research types can be categorised into qualitative and quantitative research based on the information being sought (Sukamolson, 2007). Sukamolson (2007) argues that quantitative research can be used to quantify views, attitudes, and behaviours to determine how the public feel about a topic because the research questions concern the causes of online purchase behaviours of users using e-health platforms. "Descriptive research" is the name given to this kind of study. To achieve this, research tools that are specifically created to convert phenomena that do not typically exist in quantitative form into quantitative data that can be statistically analysed have been developed (ibid). In order to measure patterns within a particular group, the author of this dissertation conducted a quantitative survey using a questionnaire.

An overview of the study's methodology and the data gathered for the analysis will be provided in this chapter. The author's strategy for designing the research to examine the study's target group will be covered in the first section. An explanation of the data collection procedure will then come next. The decisions made during the data analysis will then be explained.

#### 4.1 Measurement of variables

The scale and preliminary questionnaire are built based on past research results on eWOM, the mature scale in previous research, and the actual needs of this study.

#### 4.2 Questionnaire design

The questionnaire design process of this study is as follows:

(1) Examine the research findings and refer to the maturity scale. The scale and preliminary questionnaire are built based on past research results on eWOM, the mature scale in previous research, and the actual needs of this study.

The measurement items for eWOM, trust, and purchase intent are designed to reflect the purpose of this study and relevant research findings, and the Likert 5-level scale is used. In Table 4.1, the measurement scales for each variable are summarised.

### Table 4.1 Variable Measurement Scale

Variable	Item	Source		
eWOM quantity	The doctor is highly regarded	Park and Lee		
	Many people have commented on the doctor's medical treatment	(2008); Lin et		
	process	al. (2013)		
	The number of comments written by the same person on this doctor			
	is numerous			
	There are many reviews that think it is worth booking a doctor's			
	appointment			
	Highly recommended to book an appointment with many reviews			
eWOM quality	The online review is clear	Park et al.		
	The online review is understandable	(2007)		
	The online review is objective			
eWOM timeliness	Comments about important information about this doctor, posted	Fu et al.		
	very recently	(2011)		
_	I'm interested in comments published more recently			
	Comments posted more recently are important to me			
eWOM usage	I refer to the comments on the Internet	Park (2011)		
experience				
	I often refer to reviews on the Internet			
	I think reviews on the web are easier to get			
	I read about products and services from reviews on the web			
	I have referenced relevant information about products and services			
	while shopping			
Cognitive trust	I think the reviews posted can provide recommendations for a doctor	Lee (2002);		
	appointment booking service.	Mcknight		
	I think this review is accurate	(2002)		
	I think this review is true			
	I think this review is trustworthy			
Affective trust	I believe eWOM is an act of good faith by commenting to help others	McAllister		
	from harm	(1995);		
	I believe eWOM communicators don't comment for their own benefit	Chowdhury		
	I believe that eWOM communicators will not intentionally spread	(2005)		
	false information to deceive others			
	I believe eWOM communicators make comments for the benefit of			
	the recipients			
Purchase intention	Reviews on the Internet can provide me with new information and	Gilly et al.		
	have a great influence on my decision-making	(1998);		
	Reading reviews on the Internet can change my original attitude and	Pavlou and		
	opinion about making an appointment with this doctor	Fygenson		
	If there are no relevant comments, I will terminate the appointment	(2006)		
	with this doctor			
	Comments affect my appointment with this doctor			

(2) Formal questionnaire. Based on the pre-survey data analysis results, the questionnaire was updated, including items and sentences, to improve the questionnaire's reliability and validity. The formal questionnaire is divided into three sections: the introduction, basic personal information, and the major body of the questionnaire.

(4) Survey respondent: The study participants were patients who made appointments online in healthcare service platform.

The online technique is used to distribute questionnaires in the study using a professional questionnaire platform, such as 'Questionnaire Star,' and to request medical forum users to fill out the surveys by posting in medical forums (such as medical virtual community, et al.).

(5) Data collection and analysis

The questionnaire survey approach will be used to obtain data for this paper. First, the measurement scale and pre-investigation questionnaire are designed in accordance with the theoretical model and assumptions proposed in this paper; then, a small-scale pre-investigation is conducted, and the measurement scale is revised in accordance with the data results of the pre-investigation to establish a formal questionnaire; finally, select the research scope and objects, distribute and return questionnaires, and collect the required data.

The data will be processed using statistical analysis methods in this study. SPSS 25statistical software was used to analyse the sample descriptive statistics analysis, reliability and validity analysis, correlation analysis and regression analysis, and so on, in order to verify the hypothesis of this article and, finally, to modify the model based on the hypothesis test results.

#### 4.3 Summary

This chapter describes how the research questionnaire used in this study is development, followed by a detailed process of data collection for the further analysis.

## **5** Findings

This chapter focuses on using SPSS 25.0 to conduct statistical analysis on data gathered from formal questionnaires. The primary methods of analysis consist of descriptive statistical analysis, testing for reliability and validity, correlation analysis, and regression analysis.

## 5.1 Descriptive analysis

This study conducted a demographic analysis on the sample data obtained from the formal survey, and the results are shown in Figure 5.1:

Item		Frequency	Percent
Gender	Male	107	47.4
	Female	117	52.6
Age	19 age below	10	4.5
	20-29 age	111	49.6
	30-39 age	54	24.1
	40-49 age	40	17.9
	50 above	9	4.0
Vocation	Organisation workers	86	38.4
	Self-employed	18	8.0
	Government worker	34	15.2
	Medical institution	35	15.6
	Student	29	12.9
	Other	22	9.8
Education	High school	10	4.5
	College	52	23.2
	Bachelor	122	54.5
	Master	40	17.9
Income	3000 RMB	12	5.4
	3000-5000 RMB	63	28.1
	5001-7000 RMB	80	35.7
	7001-9000 RMB	45	20.1
	9000 RMB above	24	10.7
Internet usage time/day	30 minutes	7	3.1
	30 minutes -1 hour	50	22.3
	1-3 hour	78	34.8
	3-5 hour	46	20.5
	5-hour above	43	19.2

Table 5.1 Descriptive analysis

The above is the demographic details of the survey respondents, as shown in Table 5.1: In terms of gender, 117 female respondents made up 52.6% of the total number of respondents, compared to 107 male respondents who made up 47.4% of the total. There were roughly equal numbers of male and female respondents.

## 5.2 Reliability and Validity Analysis

## 5.2.1 Reliability analysis

When measuring a variety of variables, reliability analysis is used to determine whether the established measurement scale is stable and consistent. Cronbach's alpha, or just "Cronbach," is a technique for evaluating dependability. According to Devellis (1991), Cronbach's alpha is between 0.6 and 0.65 (needs modification or deletion), 0.6 and 0.70 (barely acceptable), 0.7 and 0.80 (acceptable), and 0.8 and 0.90 (good). This standard is used in this article. The Cronbach's alpha standard is used to test the scale's reliability, and SPSS 25.0 is used to conduct the reliability test in this article.

Variable	Dimension	Item	Cronbach α
eWOM	Qunatity	4	.801
	Quality	3	.774
	Timeliness	3	.847
eWOM user	eWOM usage	5	.787
	experience		
Trust Cognitive trust		4	.846
	Affective trust	4	.844
Purchase intention Purchase intention		4	.770

Table 5.2 Reliability Analysis

It can be seen from Table 5.2 that the Cronbach  $\alpha$  coefficients of each variable are above 0.70, indicating that each research variable has high reliability.

## 5.2.2 Validity Analysis

#### 5.2.2.1 Content Validity Analysis

The content validity of the scale in this paper is regarded as meeting the requirements of this study because it was modified and designed based on the research of prior scholars and because the final questionnaire was discussed with scholars and experts in the field of eWOM.

### 5.2.2.2 Construct validity

The KMO value and Bartlett test are typically tested for validity using SPSS software. If the data pass

the test, factor analysis is conducted, and the factor analysis results are used to test the structural validity of the questionnaire design. It is generally accepted that a variable can be subjected to factor analysis when the KMO value is higher than 0.7 and the Bartlett sphericity is significant below 0.01. The cumulative variance explanation rate rises to above 50% when the factor loading value is above 0.5, demonstrating the research variable's strong structural validity.

(1) Structural validity of independent variable eWOM characteristics

The results of KMO test and Bartlett sphericity test of eWOM characteristics are shown in Table 5.3.

	КМО	0.850
Bartlett test	Chi-square	1081.723
	df	55
	Sig.	0.000

Table 5.3 eWOM characteristics KMO and Bartlett test

The KMO value is 0.850, the significance of the Bartlett test is 0.000, and factor analysis can be performed.

Variable	Item	Factor		
		1	2	3
Quntity	Item 1.	.554	.311	.064
	Item 2.	.813	.104	.155
	Item 3.	.731	.218	.053
	Item 4.	.590	.242	.419
	Item 5.	.719	.136	.344
Quality	Item 1.	.278	013	.807
	Item 2.	.142	.400	.778
	Item 3.	.108	.376	.696
Timeliness	Item 1.	.210	.815	.124
	Item 2.	.271	.271	.225
	Item 3.	.230	.759	.286
	Cumulative variance	66.616%		
	explained			

Table 5.4 eWOM characteristics rotation component matrix

The results of factor analysis are shown in Table 5.4. eWOM characteristics can be classified into three factors, the factor loading values are all greater than 0.5, and the cumulative variance explanation rate is 66.616%, indicating that the research variable has good validity.

## (1) Structural validity test of Trust

	КМО	0.878
Bartlett test	Chi-square	1006.486
	df	28
	Sig.	0.000

Table 5.5 Trust KMO and Bartlett test

Table 5.5 displays the results of the Bartlett and KMO tests on trust. For factor analysis, the KMO value

is 0.878, and the significance of the Bartlett test is 0.000.

Variable	Item	Factor		
		1	2	
Cognitive	Item 1	.347	.533	
trust				
	Item 2.	.199	.902	
	Item 3	.367	.822	
	Item 4	.412	.743	
Affective	Item 1	.702	.285	
trust	Item 2	.828	.342	
	Item 3.	.701	.404	
	Item 4	.811	.235	
Cumulative	variance	69.170%		
explained				

Table 5.6 Trust Rotation Component Matrix

Table 5.6 displays the factor analysis findings. Two factors can be attributed to trust, and the cumulative variance explanation rate is 69.170%, indicating that the research variable has good validity. The factor loading values are all greater than 0.5.

## 5.3 Correlation analysis

Analysing two or more variables that are correlated with one another in order to gauge how closely related they are is known as correlation analysis. The SPSS programme is primarily used in this paper's correlation analysis to examine the relationships between variables.

5.3.1 Correlation analysis between Purchase intention and eWOM characteristics

The results of the correlation analysis between purchase intention and eWOM characteristics are shown in Table 5.7. From the Pearson correlation coefficient given in the table, it can be seen that the quantity, quality and timeliness of eWOM have a significant correlation with purchase intention.

	Quantity	Quality	Timeliness	Purchase
				intention
Quantity	1			
Quality	.531**	1		
Timeliness	.549**	.539**	1	
Purchase intention	.479**	.425**	.525**	1

Table 5.7 Correlation between Purchase intention and eWOM characteristics

Note: \*\* indicates p=0.01

5.3.2 Correlation Analysis between purchase intention and eWOM usage experience

Table 5.8 displays the findings of the correlation analysis between purchase intention and eWOM usage experience. The characteristics of eWOM recipients' eWOM information usage experience and their purchase intention are significantly correlated, as shown by the Pearson correlation coefficient in the table.

Table 5.8 Correlation purchase intention and eWOM usage experience

	eWOM usage	purchase
	experience	intention
eWOM usage	1	
experience		
purchase intention	.580**	1

Note: \*\* indicates p=0.01

5.3.3 Correlation analysis between purchase intention and trust

From the Pearson correlation coefficient between purchase intention and trust given in Table 5.9, it can be seen that there is a significant correlation between cognitive trust and emotional trust and purchase intention.

	Cognitive trust	Affective trust	purchase
			intention
Cognitive trust	1		
Affective trust	.712**	1	
purchase intention	.662**	.681**	1

Table 5.9 Correlation purchase intention and trust

Note: \*\* indicates p=0.01

### 5.3.4 Correlation analysis between trust and eWOM characteristics

From the Pearson correlation coefficients of trust and eWOM characteristics given in Table 5.10, it reveals that there are significant correlations between cognitive trust and quantity, quality and timeliness, and there are also significant correlations between emotional trust and quantity, quality and timeliness. There is a significant correlation.

	Quantity	Quality	Timeliness	Cognitive	Affective trust				
				trust					
Quantity	1								
Quality	.531**	1							
Timeliness	.549**	.539**	1						
Cognitive	.461**	.434**	.519**	1					
trust									
Affective trust	.514**	.471**	.436**	.712**	1				

Table 5.10 Correlation trust and eWOM characteristics

Note: \*\* indicates p=0.01

5.3.5 Correlation analysis between trust and eWOM usage experience

From the Pearson correlation coefficients of trust and eWOM usage experience given in Table 5.11. It is clear that cognitive trust and eWOM information usage experience are significantly correlated and there is also a significant correlation between emotional trust and word-of-mouth information utilization experience. related relationship.

	eWOM usage	Cognitive	Affective trust
	experience	trust	
eWOM usage experience	1		
Cognitive trust	.469**	1	
Affective trust	.427**	.712**	1

Table 5.11 Correlation trust and eWOM usage experience

Note: \*\* indicates p=0.01

#### **5.4 Regression analysis**

This study's conclusion from its correlation analysis is that there is a positive correlation between the characteristics of eWOM, eWOM usage experience, trust (cognitive trust, affective trust), and purchase intention. Based on this, this section employs the SPSS 25.0 programme to perform multiple linear regression data analysis and stepwise regression analysis to examine the relationship between independent and dependent variables.

The DW value test is used to check whether the dependent variable and independent variable have a linear relationship and whether all observations are independent of one another in multiple linear regression. Additionally, the variance inflation factor (VIF), tolerance (T), and other indicators are used to test for the multicollinearity of the independent variables.

5.4.1 Regression analysis of eWOM characteristics on purchase intention

Taking eWOM characteristics as the independent variable and referring to the collinearity statistics, regression analysis was carried out on the dependent variable of purchase intention. The results are shown in Table 5.12:

IV	Adjust	DW	F	Std.	t	Sig.	VIF			
	R <sup>2</sup>			Beta			Est	VIF		
Quantity	0.328	1.786	37.263***	.231	3.316	.001	.620	1.613		
Quality				.123	1.785	.076	.630	1.587		
Timeliness				.331	4.724	.000	.613	1.631		
DV: purch	DV: purchase intention									

Table 5.12 eWOM characteristics regression analysis

## Note: \*\*\*p<0.001

It can be seen from Table 5.12 that the adjusted R<sup>2</sup> in the model is 0.328, the three dimensions of eWOM characteristics can explain 32.8% of the variance in purchase intentions, and the F value is 37.263, reaching a significant level; the DW value is 1.786, indicating that the sample error term There is no serial correlation among them; the tolerances in collinearity statistics are all above 0.6, and VIF<10, indicating that there is no multi-collinearity problem among these three dimensions, and these three explanatory variables can appear in this regression of purchase intention in the equation.

Both the regression of quantity to the dependent variable of purchase intention and the regression of timeliness to the dependent variable of purchase intention are statistically significant for the eWOM

characteristics at the level of 0.01 and 0.001, respectively. However, the results of the regression analysis of eWOM quality on the dependent variable of purchase intention are not significant, indicating that its impact on the purchase intention of word-of-mouth recipients is not significant. Furthermore, both the quantity and timeliness of eWOM positively affect the purchase intention of word-of-mouth recipients. In this paper, the hypothesis H1a and H3a are supported; the assumption H2a is not supported.

5.4.2 Regression analysis of eWOM usage experience on purchase intention

Taking eWOM usage experience as the independent variable, and referring to collinearity statistics, regression analysis was carried out on the dependent variable of purchase intention. The results are shown in Table 5.13:

IV	Adjust	DW	F	Std.	t	Sig.	VIF	
	R <sup>2</sup>			Beta			Est	VIF
eWOM usage experience	0.230	1.864	67.763 * **	.252	3.930	.000	.573	1.745
DV: purchase intention								

Table 5.13 eWOM usage experience regression analysis

### Note: \*\*\*p<0.001

Table 5.13 shows that the adjusted R2 in the model is 0.230, the F value is 67.763, reaching a significant level, and that eWOM usage experience can explain 23.0% of the variance in purchase intentions. The DW value is 1.864, indicating that there is no difference between the sample error items. In this regression equation of purchase intention, serial correlation, the explanatory variable eWOM usage experience, can be present. At the 0.001 level of significance, the regression of eWOM usage experience on the dependent variable of purchase intention shows that eWOM usage experience has a positive impact on word-of-mouth recipients' purchase intentions.

This paper assumes that H4a is supported.

- 5.4.3 Regression analysis of eWOM characteristics on trust
- (1) Regression analysis of eWOM characteristics on cognitive trust

Taking eWOM characteristics as the independent variable and referring to collinearity statistics,

regression analysis was carried out on the dependent variable of cognitive trust. The results are shown in Table 5.14:

IV	Adjust	DW	F	Std.	t	Sig.	VIF	
	R <sup>2</sup>			Beta			Est	VIF
Quantity	0.425	1.773	55.840***	.131	2.129	.034	.681	1.468
Quality				.322	5.254	.000	.685	1.459
Timeliness				.388	7.069	.000	.858	1.165
DV: Cogni	itive trust							

Table 5.14 Regression analysis of eWOM characteristics on cognitive trust

Note: \*\*\*p<0.001

It can be seen from Table 5.14 that the adjusted R<sup>2</sup> in the model is 0.432, and the three dimensions of eWOM characteristics can explain 42.5% of the difference in cognitive trust, and the F value is 55.840, reaching a significant level; the DW value is 1.773, indicating that the sample error term There is no serial correlation among them; the tolerances in the collinearity statistics are all above 0.6, and VIF<10, indicating that there is no multi-collinearity problem among these three dimensions, and these three explanatory variables can appear in cognitive trust. in the regression equation.

The quantity, quality, and timeliness of the eWOM characteristics all have a positive impact on the cognitive trust of word-of-mouth recipients, with the regression of the quantity on the dependent variable of cognitive trust being significant at the 0.05 level and the regression of the quality and timeliness on the dependent variable of cognitive trust being significant at the 0.001 level.

In this study, the hypotheses H1b, H2b, and H3b are supported.

(2) Regression analysis of eWOM characteristics on affective trust

Taking eWOM characteristics as the independent variable and referring to the collinearity statistics, regression analysis was carried out on the dependent variable of affective trust. The results are shown in Table 5.15:

IV	Adjust	DW	F	Std.	t	Sig.	VIF	
	R <sup>2</sup>			Beta			Est	VIF
Quantity	0.378	1.635	46.142***	.250	3.905	.000	.681	1.468
Quality				.181	2.842	.005	.685	1.459
Timeliness				.370	6.483	.000	.858	1.165

Table 5.15 Regression analysis of eWOM characteristics on affective trust

DV: Affective trust

#### Note: \*\*\*p<0.001

It can be seen from Table 5.15 that the adjusted R<sup>2</sup> in the model is 0.378, and the three dimensions of eWOM characteristics can explain 37.8% of the variance in emotional trust, and the F value is 46.142, reaching a significant level; the DW value is 1.635, indicating that the sample error term There is no serial correlation between them; the tolerances in the collinearity statistics are all above 0.6, and VIF<10, indicating that there is no multi-collinearity problem among these three dimensions, and these three explanatory variables can appear in the regression equation of emotional trust middle.

Quantity, quality, and timeliness of online word-of-mouth information all have a positive impact on how well affective trust is received. The regression of quality on the dependent variable of affective trust is significant at the level of 0.01 in eWOM characteristics, and the regression of quantity and timeliness on the dependent variable of affective trust is significant at the level of 0.001.

In this study, the hypotheses H1c, H2c, H3c are supported.

(4) Regression analysis of eWOM usage experience on trust

(1) Regression analysis of eWOM usage experience on cognitive trust

Taking eWOM usage experience as the independent variable, regression analysis was carried out on the dependent variable of cognitive trust. The results are shown in Table 5.16:

IV	Adjust	DW	F	Std.	t	Sig.	VIF	
	R <sup>2</sup>			Beta			Est	VIF
eWOM	0.118	1.734	48.820 * **	.079	1.524	.221	.483	1.229
usage								
experience								
DV: Cognit	ive trust							

Table 5.16 Regression analysis of eWOM usage experience on cognitive trust

Note: \*\*\*p<0.001

It can be seen from Table 5.16 that the adjusted  $R^2$  in the model is 0.118, which can explain 11.8% of the difference in cognitive trust, and the F value is 48.820, reaching a significant level; the DW value is 1.734, indicating that there is no serial correlation between the sample error items relationship; the tolerances in the collinear statistics are basically close to 1 (greater than 0.1), VIF<10, and the explanatory variable eWOM usage experience can appear in this regression of purchase intention. The

regression analysis results of eWOM usage experience on cognitive trust are not significant, indicating that it has no significant impact on the purchase intention of word-of-mouth recipients.

Thus, H4b is rejected.

(2) Regression analysis of eWOM usage experience on affective trust

Taking eWOM usage experience as the independent variable, and referring to collinearity statistics, regression analysis was performed on the dependent variable of affective trust. The results are shown in Table 5.17:

IV	Adjust	DW	F	Std.	t	Sig.	VIF		
	R <sup>2</sup>			Beta			Est	VIF	
eWOM	0.394	1.682	49.228* * *	.048	.701	.484	.573	1.745	
usage									
experience									
DV: Affective trust									

Table 5.17 Regression analysis of eWOM usage experience on affective trust

Note: \*\*\*p<0.001

Table 5.17 shows that the model's adjusted R2 is 0.394, the variable can account for 39.4% of the variance in affective trust, the F value is 49.228 and reaches a significant level; the DW value is 1.682, indicating that there is no serial correlation between the sample error items relationship; the tolerances in collinear statistics are essentially close to 1 (greater than 0.1); VIF10, and this explanatory variable can appear in this regression equation of The eWOM usage experience's regression analysis result on affective trust is not significant, indicating that it has no appreciable influence on the recipients' intention to make a purchase.

Thus, H4c is rejected.

(5) Regression analysis of trust on purchase intention

Conducting a regression analysis on the dependent variable of purchase intention while using trust as the independent variable and collinearity statistics (tolerance and VIF index). The outcomes are displayed in Table 5.18.

IV	Adjust	DW	F	Std.	t	Sig.	VIF	
	R <sup>2</sup>			Beta			Est	VIF
Cognitive	0.524	1.905	123.563* * *	.359	5.460	.000	.493	2.028
trust								

Table 5.18 Regression analysis of trust on purchase intention

Affective			.426	6.466	.000	.493	2.028
trust							
DV: purcha	se intentio	n					

Note: \*\*\*p<0.001

It can be seen from Table 5.18 that the adjusted R<sup>2</sup> in the model is 0.524, the two dimensions of trust can explain 52.4% of the difference in purchase intention, the F value is 123.563, reaching a significant level; the DW value is 1.905, indicating that the difference between the sample error items. The tolerances in the collinearity statistics are essentially close to 1 (greater than 0.1), VIF10, indicating that there is no multicollinearity issue between these two dimensions and that these two explanatory variables can appear in the purchase. There is no serial correlation. In this intention-based regression equation.

Both cognitive and emotional trust of word-of-mouth recipients have a positive impact on purchase intention, according to a regression of word-of-mouth recipients' cognitive trust and emotional trust on the dependent variable of purchase intention that is significant at the 0.001 level.

Thus, H5a、H5b are supported.

### (6) The Mediating Effect of Trust

The dependent variable is impacted by the independent variable via the mediating variable, which is the metered effect of the independent variable on the dependent variable. The mediation effect of perceived value is examined in this paper using the Barson and Kenny (1986) method for analysing mediation effects. The mediation effect test needs to satisfy the following four requirements: First, the independent variable significantly affects the mediator variable; second, the independent variable significantly affects the mediator significantly affects the dependent variable; third, the mediator significantly affects the dependent variable; and fourth, the significance of the independent variable alone affecting the dependent variable is lower than the significance of the independent variable and the mediator significantly affecting the dependent variable, as suggested.

(1) The mediating effect of cognitive trust

a. The mediating role of cognitive trust between eWOM characteristics and purchase intention
Purchase intention is significantly influenced by both the quantity and timeliness of eWOM
characteristics, but not by quality. Only the mediating role of cognitive trust between the quantity,

timeliness, and purchase intention of eWOM characteristics needs to be examined. The outcomes are displayed in Table 5.19:

Model	IV	Non Sto	d.	Std.	t	Sig.	VIF		Adjust		
									R <sup>2</sup>		
		В	SD	Beta			Est	VIF			
1	Quantity	.259	.069	.252	3.773	.000	.698	1.432	0.308		
	Timeliness	.315	.055	.381	5.715	.000	.698	1.432			
2	Quantity	.165	.066	.147	2.498	.013	.656	1.525	0.491		
	Timeliness	.166	.055	.185	3.020	.003	.608	1.644			
	Cognitive trust	.540	.063	.498	8.636	.000	.686	1.458			
DV: purchase intention											

Table 5.19 The mediating role of cognitive trust

#### Note: \*\*\*p<0.001

It can be seen from Table 5.19 that after adding the variable of cognitive trust, the adjusted R<sup>2</sup> rises from 0.308 to 0.491, and the degree of explanation for purchase intention is significantly improved. The regression coefficient of the quantity of IWOM information in model 1 is significant under the regression equation of purchase intention ( $\beta$ =0.252, p<0.01); after adding the variable of cognitive trust, the independent variable and quantity of cognitive trust in model 2 are significantly related to the purchase intention. The coefficient under the regression equation is significant, and the influence coefficient of IWOM information quantity in the second model is smaller than that in the first model (0.147<0.252). Therefore, cognitive trust plays an incomplete mediating role in the regression relationship between quantity and purchase intention.

In model 1, the eWOM information timeliness regression coefficient is significant under the regression equation of purchase intention ( $\beta$  =0.381, p0.01); in model 2, the independent variables of cognitive trust and timeliness are now significant under the regression equation of purchase intention. The influence coefficient of the timeliness of eWOM information in the second model is lower than that in the first model (0.185 < 0.381), and the coefficient under the purchase intention regression equation is significant.

Therefore, incomplete mediation in the regression relationship between intentions due to cognitive trust timeliness and purchase.

So H6a, H6care supported, while H6bis rejected.

b. eWOM usage experience has no significant effect on cognitive trust, so cognitive trust has no mediating effect between eWOM usage experience and purchase intention. This hypothesis that H6d is not supported.

(2) The mediating effect of affective trust

a. The mediating effect of affective trust between eWOM characteristics and purchase intention The quality of eWOM characteristics has no significant impact on purchase intention. Therefore, it is only necessary to test the mediating effect of affective trust between the quantity of eWOM characteristics, timeliness and purchase intention. The results are shown in Table 5.20:

Model	IV	Non St	d.	Std.	t	Sig.	VIF		Adjust		
									R <sup>2</sup>		
		В	SD	Beta			Est	VIF			
1	Quantity	.449	.077	.393	5.828	.000	.698	1.432	0.292		
	Timeliness	.202	.062	.221	3.271	.001	.698	1.432			
2	Quantity	.069	.060	.061	1.033	.303	.605	1.653	0.524		
	Timeliness	.229	.059	.256	4.526	.000		1.502			
	Affective trust	.526	.067	.538	9.753	.000		1.425			
DV: pu	DV: purchase intention										

Table 5.20 The mediating role of affective trust

#### Note: \*\*\*p<0.001

As seen in Table 5.20, adding the affective trust variable resulted in an increase in the adjusted R<sup>2</sup> from 0.292 to 0.524 and a significant improvement in the degree of purchase intention interpretation. After including the affective trust variable, the quantity of eWOM in model 2 is no longer significant under the regression equation of purchase intention, indicating that affective trust fully mediates the regression relationship between quantity and purchase intention. The regression coefficient of eWOM quantity in model 1 is significant under the regression equation of purchase intention of purchase intention.

The eWOM timeliness regression coefficient in model 1 is significant under the purchase intention regression equation ( $\beta$ =0.221, p<0.01); after adding the variable of affective trust, the affected trust independent variable and timeliness in model 2 are in the purchase intention regression equation. The coefficient below is significant, and the influence coefficient of eWOM timeliness in the second model is larger than that in the first model (0.256>0.221). The result of the Sobel test is significant. Therefore, the affective trust plays an incomplete mediating role in the regression relationship between timeliness and purchase intention.

Therefore, the H7a, H7c are supported, while H7b、H7d are not supported.

#### 5.5 Analysis findings

The majority of the hypotheses were confirmed by the data analysis results. As for the hypotheses H2a, H4b, H4c, H6b, H6d, H7b, and H7d that failed to pass the verification, this study combined the data recovered from the original questionnaire for detailed analysis, and found that the scores given by the respondents when answering the eWOM quality items were Not high, even the survey respondents with high eWOM usage experience gave low scores when answering the eWOM quality questions, which shows that eWOM recipients are faced with eWOM in online medical care due to medical professionalism. The lack of knowledge leads to a poor ability to judge the authenticity of eWOM in online medical care, even word-of-mouth recipients who often refer to other types of eWOM lack the corresponding ability to judge. At the same time, this paper also consulted some investigators who scored low in eWOM quality but high in word-of-mouth information utilization experience, and confirmed this reason.

	Hypothesis	Outcome
H1	H1a: Quantity significantly affects the purchase intention of eWOM recipients.	Yes
	H1b: Quantity significantly affects the cognitive trust of eWOM recipients.	Yes
	H1c: Quantity significantly affects the emotional trust of eWOM recipients.	Yes
H2	H2a: Quality significantly affects the purchase intention of eWOM recipients.	No
	H2b: Quality significantly affects the cognitive trust of eWOM recipients.	Yes

Table 5.21 Hypothesis test result

	H2c: Quality significantly affects the emotional trust of eWOM recipients.	Yes
H3	H3a: Timeliness significantly affects the purchase intention of eWOM recipients.	Yes
	H3b: Timeliness significantly affects the cognitive trust of eWOM recipients.	Yes
	H3c: Timeliness significantly affects the emotional trust of eWOM recipients.	Yes
H4	H4a: eWOM usage experience significantly affects the purchase intention of eWOM	Yes
	recipients.	
	H4b: eWOM usage experience significantly affects the cognitive trust of eWOM	No
	recipients.	
	H4c: eWOM usage experience significantly affects the emotional trust of eWOM	No
	recipients.	
Н5	H5a: The cognitive trust of eWOM recipients significantly affects the purchase	Yes
	intention of eWOM recipients.	
	H5b: The emotional trust of eWOM recipients significantly affects the purchase	Yes
	intention of eWOM recipients.	
H6	H6a: Cognitive trust plays a mediating role between quantity and purchase intention	Yes
	of eWOM recipients.	
	H6b: Cognitive trust plays a mediating role between quality and purchase intention	No
	of eWOM recipients.	
	H6c: Cognitive trust plays a mediating role between timeliness and purchase	Yes
	intention of eWOM recipients.	
	H6d: Cognitive trust plays a mediating role between eWOM usage experience and	No
	purchase intention.	
H7	H7a: Emotional trust plays a mediating role between quantity and purchase intention	Yes
	of eWOM recipients.	
	H7b: Emotional trust plays a mediating role between quality and purchase intention	No
	of eWOM recipients.	
	H7c: Emotional trust plays a mediating role between timeliness and purchase	Yes
	intention of eWOM recipients.	
	H7d: Emotional trust plays a mediating role between eWOM usage experience and	No

purchase intention.	
L	

Modified model: According to the previous data analysis and final hypothesis results, the model originally proposed in this study was revised. After modification, the model is provided in Figure 5.1:



Figure 5.1 Modified model of the research

#### 6 Conclusion and recommendation

#### 6.1 Discussion and conclusion

This research is a theoretical model built on the basis of previous research results, puts forward corresponding research hypotheses, and tests the initial hypotheses with empirical methods. The research results basically show that in the case of trust as a mediator, eWOM significantly affects consumers' purchase intentions. The specific research conclusions of this paper are summarised as follows:

(1) The quantity and timeliness of eWOM information have a significant impact on the purchase intention of eWOM recipients.

This agrees with the findings of Fu et al. (2011) and Bulut and Karabulut (2018). However, contrary to Bulut and Karabulut's (2018) findings, the quality of eWOM has little to no effect on the recipients' intention to make a purchase. There is conflicting evidence supporting the assertion that eWOM quality significantly affects consumers' purchase intentions. The peculiarity of eWOM in online medical care may be the cause of this phenomenon. Consumers are less concerned about the quality of eWOM information reviews because they lack relevant professional knowledge and have no other options for finding similar comments about doctors. From the perspectives of accessibility and diagnostic power theory, Islam et al. (2020) investigated the variations in the impact of negative eWOM on changes in consumer brand attitudes. Their study's findings also demonstrate how consumers are impacted by information when it has varying diagnostic potency.

(2) eWOM recipients' usage experience has a significant impact on the purchase intention. This is confirmed Brarden et al. (2001), Gefen (2004) who proposed a significant effect of trust on purchase intention. This study considers eWOM usage experience as the dimension of eWOM receiver characteristics, confirming that it has a significant impact on eWOM receivers purchase intention. This is consistent with previous scholars' findings (McKnight, 2002; Zhang and Ghorbanl, 2004; Park and Stoel, 2005). This shows that the experience of using eWOM information for one product or service can affect the acceptance of another product or service by eWOM recipients. Therefore, researchers of eWOM should pay attention to the experience of eWOM usage experience recipients, especially the research related to the adoption of new products.

(3) Both cognitive trust and affective trust of eWOM recipients have a significant impact on

purchase intention. Purchase intention is significantly influenced by recipients' cognitive and affective trust, which is consistent with the findings of Jeong and Jang's (2011) study. Liu and Xue (2012) also studied group-buying users of services, and the findings revealed that perceived trust significantly affects users' intentions to make purchases on group-buying websites. In contrast, affective trust has a stronger influence on eWOM recipients' purchase intentions than cognitive trust, per the analysis results of this thesis. This conclusion may be the result of the fact that the influence of eWOM on purchase intention varies depending on the type of product.

(4) The quantity and timeliness of eWOM information significantly affect the cognitive trust and affective trust of eWOM recipients. This is consistent with previous conclusions in Bulut and Karabulut 's study (2018). However, the eWOM usage experience of customers has no significant impact on cognitive trust and affective trust, which is different from the study of Bulut and Karabulut (2018), who showed that consumer experience affects consumer trust. Additionally, this study discovered that eWOM recipients' usage experience had a significant impact on their purchase intention, suggesting that other factors may have a direct impact on how eWOM recipients' usage experience affected their purchase intention.

#### 6.2 Managerial implication

A significant global trend is the use of the Internet in the medical industry. Due to the unique nature of the medical and health sector, there are strict requirements for the accuracy and authenticity of information because it is vital to consumer health and may even be life-threatening. Therefore, on the basis of the research conclusions of this paper, some suggestions are provided for online medical service providers. The research of this paper finds that the quantity and timeliness of eWOM information significantly affect the purchase intention of recipients, coupled with the openness and anonymity of the Internet. It is difficult for eWOM recipients to discern the authenticity of eWOM information on medical websites. Online medical service providers should ensure the authenticity of the eWOM information presented, strictly control the entry of comments, only open comments to users who have real appointments and seek medical treatment, and eliminate false online medical eWOM information. Unlike other products or services for comparison. Therefore, online medical service providers can set some easy-to-understand reviews' indicators to measure the quality of online medical services, such as the

degree of detail in explaining symptoms.

#### 6.3 Limitation and recommendation

This research is mainly based on the collation of existing theories and literature, combined with the background of the digital era and the industry background of online medical care, to construct a research model, through the design of questionnaires, and empirical analysis of the collected samples to obtain the conclusion of the eWOM in online medical care. The relationship between information characteristics and eWOM receiver characteristics on purchase intention under the mediating of trust, and achieved certain innovations. However, due to the limitation of personal energy and ability, there are certain research limitations, and these limitations are also the direction of future improvement. All the conclusions of this study are based on the survey data of customers who have purchased online medical services. In the future, the scope of the research can be expanded to explore the factors that hinder the purchase of online medical services.

The eWOM of online medical services explored in this thesis has certain particularities, so some dimensions of eWOM's influence on purchase intention in the past may not be applicable to the research on eWOM in online medical services. For example, the research on eWOM in this paper does not involve characteristics of eWOM communicators. In the future, these characteristics can be explored, and other dimensions that affect online medical eWOM and purchase intention can also be attempted.

#### References

Alam, M.Z., Hoque, M.R., Hu, W. and Barua, Z., 2020. Factors influencing the adoption of mHealth services in a developing country: A patient-centric study. International journal of information management, 50, pp.128-143.

Albayrak, M. and Ceylan, C., 2021. Effect of eWom on purchase intention: meta-analysis. *Data Technologies and Applications*.

Alraja, M.N., Farooque, M.M.J. and Khashab, B., 2019. The effect of security, privacy, familiarity, and trust on users' attitudes toward the use of the IoT-based healthcare: the mediation role of risk perception. IEEE Access, 7, pp.111341-111354.

Bilal, M., Jianqiu, Z., Dukhaykh, S., Fan, M. and Trunk, A., 2021. Understanding the effects of eWOM antecedents on online purchase intention in China. *Information*, *12*(5), p.192.

Blazevic, V., Hammedi, W., Garnefeld, I., Rust, R.T., Keiningham, T., Andreassen, T.W., Donthu, N. and

Carl, W., 2013. Beyond traditional word-of-mouth: An expanded model of customer-driven influence. Journal of Service Management.

Chakraborty, U., 2019. The impact of source credible online reviews on purchase intention: The mediating roles of brand equity dimensions. Journal of Research in Interactive Marketing.

Chen, X., Hay, J.L., Waters, E.A., Kiviniemi, M.T., Biddle, C., Schofield, E., Li, Y., Kaphingst, K. and Orom, H., 2018. Health literacy and use and trust in health information. Journal of health communication, 23(8), pp.724-734.

Chen, Y. and Xie, J., 2008. Online consumer review: Word-of-mouth as a new element of marketing communication mix. Management science, 54(3), pp.477-491.

Claggett, J., Kitchens, B., Paino, M. and Levin, K.B., 2022. The Effects of Website Traits and Medical Skepticism on Patients' Willingness to Follow Web-Based Medical Advice: Web-Based Experiment. Journal of Medical Internet Research, 24(2), p.e29275.

DAM, T.C., 2020. Influence of brand trust, perceived value on brand preference and purchase intention. *The Journal of Asian Finance, Economics and Business*, 7(10), pp.939-947.

Daraz, L., Morrow, A.S., Ponce, O.J., Beuschel, B., Farah, M.H., Katabi, A., Alsawas, M., Majzoub, A.M., Benkhadra, R., Seisa, M.O. and Ding, J.F., 2019. Can patients trust online health information? A meta-narrative systematic review addressing the quality of health information on the internet. Journal of general internal medicine, 34(9), pp.1884-1891.

Dellarocas, C., 2003. The digitization of word of mouth: Promise and challenges of online feedback mechanisms. Management science, 49(10), pp.1407-1424.

Dodds, W.B., Monroe, K.B. and Grewal, D., 1991. Effects of price, brand, and store information on buyers' product evaluations. Journal of marketing research, 28(3), pp.307-319.

Doney, P.M. and Cannon, J.P., 1997. An examination of the nature of trust in buyer-seller relationships. Journal of marketing, 61(2), pp.35-51.

Erkan, I. and Evans, C., 2018. Social media or shopping websites? The influence of eWOM on consumers' online purchase intentions. Journal of Marketing Communications, 24(6), pp.617-632.

Garrett, B., Taverner, T., Gromala, D., Tao, G., Cordingley, E. and Sun, C., 2018. Virtual reality clinical research: promises and challenges. JMIR serious games, 6(4), p.e10839.

Giustini, D.M., Ali, S.M., Fraser, M. and Boulos, M.N.K., 2018. Effective uses of social media in public health and medicine: a systematic review of systematic reviews. Online journal of public health

informatics, 10(2).

Godes, D. and Mayzlin, D., 2004. Using online conversations to study word-of-mouth communication. Marketing science, 23(4), pp.545-560.

Hennig-Thurau, T., Gwinner, K.P., Walsh, G. and Gremler, D.D., 2004. Electronic word-of-mouth via consumer-opinion platforms: what motivates consumers to articulate themselves on the internet?. Journal of interactive marketing, 18(1), pp.38-52.

Hennig-Thurau, T., Malthouse, E.C., Friege, C., Gensler, S., Lobschat, L., Rangaswamy, A. and Skiera, B., 2010. The impact of new media on customer relationships. Journal of service research, 13(3), pp.311-330.

Hong, I.B. and Cha, H.S., 2013. The mediating role of consumer trust in an online merchant in predicting purchase intention. *International Journal of Information Management*, *33*(6), pp.927-939.

Huang, W., Cao, B., Yang, G., Luo, N. and Chao, N., 2021. Turn to the internet first? Using online medical behavioral data to forecast COVID-19 epidemic trend. Information Processing & Management, 58(3), p.102486.

Ismagilova, E., Slade, E.L., Rana, N.P. and Dwivedi, Y.K., 2020. The effect of electronic word of mouth communications on intention to buy: A meta-analysis. Information Systems Frontiers, 22(5), pp.1203-1226.

Johnson, T.J. and Kaye, B.K., 2004. Wag the blog: How reliance on traditional media and the Internet influence credibility perceptions of weblogs among blog users. Journalism & mass communication quarterly, 81(3), pp.622-642.

Kiecker, P. and Cowles, D., 2002. Interpersonal communication and personal influence on the Internet: A framework for examining online word-of-mouth. Journal of Euromarketing, 11(2), pp.71-88.

Kim, K., Yoon, S. and Choi, Y.K., 2019. The effects of eWOM volume and valence on product sales–an empirical examination of the movie industry. *International Journal of Advertising*, *38*(3), pp.471-488.

Kimery, K.M. and McCord, M., 2002. Third party assurances: mapping the road to trust in eretailing. Journal of Information Technology Theory and Application (JITTA), 4(2), p.7.

Lavorgna, L.M.D.S., De Stefano, M., Sparaco, M., Moccia, M., Abbadessa, G., Montella, P., Buonanno, D., Esposito, S., Clerico, M., Cenci, C. and Trojsi, F., 2018. Fake news, influencers and health-related professional participation on the Web: A pilot study on a social-network of people with Multiple Sclerosis. Multiple sclerosis and related disorders, 25, pp.175-178.

Lăzăroiu, G., Neguriță, O., Grecu, I., Grecu, G. and Mitran, P.C., 2020. Consumers' decision-making process on social commerce platforms: online trust, perceived risk, and purchase intentions. Frontiers in Psychology, 11, p.890.

Lee, D. and Yoon, S.N., 2021. Application of artificial intelligence-based technologies in the healthcare industry: Opportunities and challenges. International Journal of Environmental Research and Public Health, 18(1), p.271.

Lee, E.J. and Shin, S.Y., 2014. When do consumers buy online product reviews? Effects of review quality, product type, and reviewer's photo. Computers in human behavior, 31, pp.356-366.

Lee, J., Park, D.H. and Han, I., 2008. The effect of negative online consumer reviews on product attitude: An information processing view. Electronic commerce research and applications, 7(3), pp.341-352.

Liu, Y., 2006. Word of mouth for movies: Its dynamics and impact on box office revenue. Journal of marketing, 70(3), pp.74-89.

Luo, Q. and Zhong, D., 2015. Using social network analysis to explain communication characteristics of travel-related electronic word-of-mouth on social networking sites. *Tourism Management*, *46*, pp.274-282.

Mamak, K., 2021. Do we need the criminalization of medical fake news?. Medicine, Health Care and Philosophy, 24(2), pp.235-245.

Matute, J., Polo-Redondo, Y. and Utrillas, A., 2016. The influence of EWOM characteristics on online repurchase intention: Mediating roles of trust and perceived usefulness. *Online Information Review*.

Mayer, R.C., Davis, J.H. and Schoorman, F.D., 1995. An integrative model of organizational trust. *Academy of management review*, 20(3), pp.709-734.

McKnight, D.H., Choudhury, V. and Kacmar, C., 2002. The impact of initial consumer trust on intentions to transact with a web site: a trust building model. The journal of strategic information systems, 11(3-4), pp.297-323.

Moorman, C., Deshpande, R. and Zaltman, G., 1993. Factors affecting trust in market research relationships. Journal of marketing, 57(1), pp.81-101.

Mudambi, S.M. and Schuff, D., 2010. Research note: What makes a helpful online review? A study of customer reviews on Amazon. com. MIS quarterly, pp.185-200.

Myrick, J.G., 2017. The role of emotions and social cognitive variables in online health information seeking processes and effects. *Computers in Human Behavior*, *68*, pp.422-433.

Nabi, R.L. and Hendriks, A., 2003. The persuasive effect of host and audience reaction shots in television talk shows. Journal of Communication, 53(3), pp.527-543.

Nettleton, S., Burrows, R. and O'Malley, L., 2005. The mundane realities of the everyday lay use of the internet for health, and their consequences for media convergence. Sociology of health & illness, 27(7), pp.972-992.

Ngarmwongnoi, C., Oliveira, J.S., AbedRabbo, M. and Mousavi, S., 2020. The implications of eWOM adoption on the customer journey. *Journal of Consumer Marketing*.

Pavlou, P.A., 2003. Consumer acceptance of electronic commerce: Integrating trust and risk with the technology acceptance model. International journal of electronic commerce, 7(3), pp.101-134.

Rimmer, T. and Weaver, D., 1987. Different questions, different answers? Media use and media credibility. Journalism quarterly, 64(1), pp.28-44.

Rose, S., Hair, N. and Clark, M., 2011. Online customer experience: A review of the business-toconsumer online purchase context. *International Journal of Management Reviews*, *13*(1), pp.24-39.

Roy, G., Datta, B. and Basu, R., 2017. Effect of eWOM valence on online retail sales. *Global Business Review*, *18*(1), pp.198-209.

Ruiz-Mafe, C., Bigné-Alcañiz, E. and Currás-Pérez, R., 2020. The effect of emotions, eWOM quality and online review sequence on consumer intention to follow advice obtained from digital services. *Journal of Service Management*, *31*(3), pp.465-487.

Sarwar, M.A., Awang, Z., Nasir, J., Sabiu, I.T., Usop, R. and Muhamad, S.F., 2019. Antecedents and Outcome of Electronic Word of Mouth (EWOM): Moderating Role of Product Involvement. Journal of Management and Operation Research, 1(2), pp.1-14.

Shankar, V., Urban, G.L. and Sultan, F., 2002. Online trust: a stakeholder perspective, concepts, implications, and future directions. The Journal of strategic information systems, 11(3-4), pp.325-344.

Sinha, I. and DeSarbo, W.S., 1998. An integrated approach toward the spatial modeling of perceived customer value. Journal of marketing research, 35(2), pp.236-249.

Smith, D.N., 2002. Trust me, would i steer you wrong? The influence of peer recommendations within virtual communities. University of Illinois at Chicago.

Sukamolson, S., 2007. Fundamentals of quantitative research. *Language Institute Chulalongkorn University*, *1*(3), pp.1-20.

Sun, S., Xie, Z., Yu, K., Jiang, B., Zheng, S. and Pan, X., 2021. COVID-19 and healthcare system in

China: challenges and progression for a sustainable future. Globalization and Health, 17(1), pp.1-8. Suryadi, D. and Kim, H., 2018. A systematic methodology based on word embedding for identifying the relation between online customer reviews and sales rank. Journal of Mechanical Design, 140(12), p.121403.

Tang, S., Meng, Q., Chen, L., Bekedam, H., Evans, T. and Whitehead, M., 2008. Tackling the challenges to health equity in China. The Lancet, 372(9648), pp.1493-1501.

Thomsen, C.R. and Jeong, M., 2020. An analysis of Airbnb online reviews: user experience in 16 US cities. Journal of Hospitality and Tourism Technology.

Tien, D.H., Rivas, A.A.A. and Liao, Y.K., 2019. Examining the influence of customer-to-customer electronic word-of-mouth on purchase intention in social networking sites. Asia Pacific Management Review, 24(3), pp.238-249.

Ventre, I. and Kolbe, D., 2020. The impact of perceived usefulness of online reviews, trust and perceived risk on online purchase intention in emerging markets: A Mexican perspective. Journal of International Consumer Marketing, 32(4), pp.287-299.

Von Helversen, B., Abramczuk, K., Kopeć, W. and Nielek, R., 2018. Influence of consumer reviews on online purchasing decisions in older and younger adults. *Decision Support Systems*, *113*, pp.1-10.

Wang, P., Zhang, X., Suomi, R. and Sun, C., 2017. Determinants of customers' eWOM behaviour—A system Success perspective. In *Information and communication technologies in tourism 2017* (pp. 401-415). Springer, Cham.

Wang, Y., McKee, M., Torbica, A. and Stuckler, D., 2019. Systematic literature review on the spread of health-related misinformation on social media. Social science & medicine, 240, p.112552.

Zhang, X., Liu, S., Chen, X., Wang, L., Gao, B. and Zhu, Q., 2018. Health information privacy concerns, antecedents, and information disclosure intention in online health communities. Information & Management, 55(4), pp.482-493.

## Appendices

Appendix 1: Questionnaire Survey (in Chinese)

在线医疗中网络口碑对购买意愿的影响研究

您好,我是 NCI 研究生,本次问卷是为了调查医疗网站上对医生的评论是否会影响您购买在线 医疗产品。所选的答案没有对错之分,请根据您的实际情况进行填写。本此调查是以匿名的形式 进行,问卷结果仅供研究使用。您自愿参与此项研究,同时您可以在任何适合退出该问卷,我们 衷心感谢您的参与!

## 第一部分 在线医疗中的网络口碑对消费者购买意愿的影响

假如您在在线医疗网站上寻找医生预约挂号时,请根据下面的叙述给出您的认同判断(在相应的 栏中打"√",其中,1表示非常不赞同,2表示较不赞同,3表示中立,4表示比较赞同,5表示非 常赞同。)

评论数量	非常	赞同	中立	不	非常
	赞同			赞同	不赞同
1. 该医生受到较高的关注	5	4	3	2	1
2. 很多人都对该医生的就医过程发表了评论	5	4	3	2	1
3. 同一人对该医生发表的评论字数较多	5	4	3	2	1
4. 认为值得预约就医的评论很多	5	4	3	2	1
5. 强烈推荐预约就医的评论很多	5	4	3	2	1
评论质量					
1. 关于该医生的评论基本都是客观的	5	4	3	2	1
2. 大部分评论都有足够的理由来证明其观点	5	4	3	2	1

3. 大部分评论都让人觉得可信	5	4	3	2	1
评论时效性					
1. 有关该医生的重要信息的评论,发布的时间离	5	4	3	2	1
现在非常近					
2. 我对发布时间离现在较近的评论感兴趣	5	4	3	2	1
3. 发布的时间离现在较近的评论对我起重要作用	5	4	3	2	1
评论利用经验					
1. 我参考过网络上的评论	5	4	3	2	1
2. 我常常参考网络上的评论	5	4	3	2	1
3. 我觉得网络上的评论比较容易获得	5	4	3	2	1
4. 我通过网络上的评论了解过产品和服务的相关	5	4	3	2	1
信息					
5. 我在购物时参考过有关产品和服务的评论	5	4	3	2	1
认知信任					
1. 我认为该网络口碑传播者发布的评论能够提供	5	4	3	2	1
医生预约挂号服务购买的建议					
2. 我认为此评论是准确的	5	4	3	2	1
3. 我认为此评论是真实的	5	4	3	2	1
4. 我认为此评论是值得信赖的	5	4	3	2	1

情感信任					
1. 我相信网络口碑传播者是为了帮助他人免受伤	5	4	3	2	1
害而进行评论的善意行为					
2. 我相信网络口碑传播者不是为了自身利益而发	5	4	3	2	1
表评论的					
3. 我相信网络口碑传播者不会故意传播虚假信息	5	4	3	2	1
蒙蔽他人					
4. 我相信网络口碑传播者是为了接收者的利益着	5	4	3	2	1
想而进行评论的					
购买意愿					
1. 网络上的评论能够给我提供新的信息,对我的	5	4	3	2	1
决策影响很大					
2. 阅读网络上的评论能改变我对预约该医生原有	5	4	3	2	1
的态度和看法					
3. 如果没有相关评论我会终止预约该医生	5	4	3	2	1
4. 评论影响我预约该医生	5	4	3	2	1

第二部分:您的基本资料

1. 您的性别:

A. 男 B. 女

2. 您的年龄:

A. 19 岁以下(含) B. 20-29 岁 C. 30-39 岁 D.40-49 岁 E. 50 岁以上

3. 您的职业:

A. 企业员工 B.个体经营者 C.公务员 D. 医疗、教育机构工作人员 E. 学生 F. 其他

4. 您的教育程度:

A. 高中(中专)及以下 B. 大专 C. 本科 D. 研究生及以上

5. 您的平均月收入:

A. 3000 元以下 B. 3000-5000 元 C. 5001-7000 元 D. 7001-9000 元 E. 9000 元以上

6. 您大概每天上网多久:

- A. 30 分钟以下 B. 30 分钟-1 小时 C. 1-3 小时 D. 3-5 小时 E. 5 小时以上
- 7. 您是否购买过在线医疗产品:

A: 是 B: 否

再次感谢您的参与!