



Influence Mechanism of Sellers Responses on Potential Customers Purchase Intentions on Taobao—A Combined SOR and ELM Model

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ABSTRACT: With the rapid development of online shopping, the significance of merchant responses has become increasingly prominent. Focusing on the Taobao e-commerce platform, this study investigates the mechanism through which merchant responses influence the purchase intention of potential customers by integrating SOR and ELM model. Additionally, it explores the moderating role of review types in this mechanism. Empirical analysis was conducted using SPSS 23.0 and AMOS 24.0 on 310 valid questionnaires. The findings reveal that the quality of central route responses and the attitude of peripheral route responses significantly affect the purchase intention of potential customers through rational cognition and emotional resonance, respectively; perceived value partially mediates the relationships between response quality, response attitude, and purchase intention; and review types moderate the path from response attitude to purchase intention. Based on these results, three practical implications are proposed. This study innovatively validates the theoretical applicability of the SOR-ELM integrated model in the context of merchant responses, enriching theoretical research on the influencing factors and mechanisms of potential consumers' purchase intention.

KEYWORDS: Merchant Response; Perceived Value; Purchase Intention; SOR-ELM Integrated Model

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I. INTRODUCTION

1.1 Research Background

According to the latest 55th Statistical Report on China's Internet Development, as of December 2024, the number of internet users in China had reached 1.108 billion, with an internet penetration rate of 78.6%, and the number of online shoppers had grown to 974 million [1]. The rapid development of the internet and the vigorous rise of e-commerce have integrated online shopping into people's daily lives, making it a common consumption habit [2]. Consumers' online shopping behaviors are gradually becoming more rational; when choosing products, they often refer to the experiences and feedback of those who have already purchased the product [3]. However, given the uneven quality of online reviews, customers usually find it difficult to identify valuable information, and in some cases, even false reviews interfere with their judgment of product quality, thereby affecting merchants' and platforms' transaction rates. To address this issue, most e-commerce platforms have established merchant feedback mechanisms to enhance interactions between buyers and sellers [4]. Customers can thus access more effective information, while merchants are required to make good use of this communication channel to fully highlight their products' advantages and build a favorable online reputation.

Currently, Taobao holds a relatively high market share among China's e-commerce enterprises and is also one of the earliest platforms to launch the merchant reply function, which has been widely adopted by online sellers [5]. In addition to the product information displayed by merchants, Taobao customers can also consult other customers' reviews and the corresponding merchant responses to obtain further product information. Since Taobao only allows customers to leave reviews after completing an order, merchants can provide targeted responses based on these reviews, while potential customers often regard the information in the review section as an important channel for obtaining product-related knowledge [6]. Therefore, merchants' replies to reviews have gradually become a crucial reference for potential customers in their purchase decisions. Faced with a large number of consumer reviews, if merchants adopt a passive or indifferent attitude, they risk

losing the trust of dissatisfied customers, while simultaneously influencing potential customers' purchase decisions and behaviors [7].

In the field of online reviews, consumers tend to simplify the information they process during the purchasing decision process. An initially positive attitude and a final positive attitude exert a significant positive effect on purchase intention, whereas a final negative attitude significantly reduces purchase intention [8]. Psychological research has suggested that positive feedback from enterprises plays an important role in motivating consumers [7]. Merchants may reply to positive reviews and, through such interactions, strengthen communication and connection with customers, thereby demonstrating their attentiveness [9][10]. In contrast, when facing negative evaluations, remedial measures offered by merchants through online services can not only encourage previously dissatisfied customers to repurchase but also demonstrate to potential customers the merchants' proactive recovery efforts, thereby enhancing their goodwill and reducing perceived shopping risks [11]. However, if merchants respond to both positive and negative reviews with perfunctory attitudes or use standardized, formulaic responses, this may trigger consumers' perception of imbalance, damage their direct impression of the product, and ultimately reduce satisfaction [12].

Among the various topics, the study of merchant replies has long attracted scholarly attention. Most researchers have approached the issue from the perspective of responses to negative reviews and feedback, constructing frameworks around dimensions such as service recovery, trust foundations, risk perception, social contagion, and visibility, and conducting extensive research at the interactional, psychological, and perceptual levels [12]. In contrast, fewer studies have comprehensively examined both positive and negative review replies by focusing on their informational attributes and representational dimensions.

1.2 Research Objectives and Significance

1.2.1 Research Objectives

Against the current research background, this study seeks to examine merchant replies from the dual dimensions of informational content and expressive form, primarily based on the SOR and ELM models. By means of a questionnaire survey, it investigates how potential customers on Taobao perceive merchants' replies in the context of positive and negative online reviews, focusing on two core questions: Does the merchant's reply influence potential customers' purchase intentions? If so, through what specific mechanisms does such influence occur? The specific objectives are as follows:

First, to explore how characteristics such as reply quality, reply timeliness, and reply attitude influence potential consumers' purchase intentions, and to identify which features of merchant replies generate higher perceived value for customers. At the same time, a theoretical model is constructed to enrich academic research on potential consumers' purchase intentions.

Second, to investigate whether the type of online review serves as a moderating factor in the effect of merchant replies on potential consumers' purchase intentions on the Taobao platform, and if so, how this moderating role manifests. This expands the theoretical depth regarding perceived value and purchase intention and provides practical guidance for Taobao merchants to efficiently tailor their replies to different review scenarios.

1.2.2. Research Significance

This study enriches research on the applicability of merchant replies in the specific context of online reviews. Previous research has primarily focused on how merchant responses to negative reviews affect consumer decision-making, with relatively limited comprehensive investigations comparing both positive and negative reviews to examine their joint impact on potential consumers' purchase intentions. By focusing on reply characteristics, this study highlights the influence of reply quality, timeliness, and attitude on consumers' purchase intentions, thereby carrying theoretical significance. From a practical standpoint, this study provides guidance for Taobao merchants in crafting effective replies to online reviews in order to enhance potential consumers' purchase intentions. Efficient replies not only demonstrate merchants' genuine concern for customers but also highlight product value, safeguard product image, and assist potential customers in attribution judgments. Since different types of online reviews require differentiated response strategies, this research offers practical insights into refining merchant reply practices.

1.3 Research Methods

1.3.1 Literature Review Method

This study first employs a literature review to systematically identify the specific factors through which merchant replies affect potential consumers' purchase intentions. It analyzes the relationships and mechanisms involved, identifies appropriate theoretical models, and summarizes the influence patterns of merchant replies, thereby laying a theoretical and empirical foundation for the research.

1.3.2 Scenario Design Method

Scenarios are constructed based on different review types (positive and negative). Respondents are required to review these scenarios of merchant replies before making purchasing decisions and, through a questionnaire survey, provide ratings on perceived value and purchase intention.

1.3.3 Questionnaire Survey Method

In strict adherence to the principles of questionnaire design, this study adopts established scales from prior research, refined through literature review, and evaluates their reliability and validity after data collection. Details of the scale design are elaborated in the research design section.

1.3.4 Statistical Analysis Method

Using SPSS 23.0 and AMOS 24.0, this study validates the theoretical model through statistical methods such as path analysis and bootstrapping. It performs descriptive statistics, reliability and validity testing, model verification, and hypothesis testing to ensure the accuracy and credibility of the data while providing further interpretation.

1.4 Research Innovations

Building on prior studies, this research positions merchant reply characteristics as critical factors influencing potential consumers' purchase intentions, with particular emphasis on their application in Taobao's shopping scenarios. It extends the perspective of merchant reply research by focusing on changes in potential consumers' emotional and cognitive dimensions, especially the mediating role of perceived value.

Furthermore, by constructing a combined SOR-ELM model, this study innovatively validates the theoretical applicability of the integrated model within the domain of merchant replies. By introducing the moderating role of review type and concentrating on both negative and positive review contexts, it re-examines merchant reply practices from the perspective of online reviews.

II. LITERATURE REVIEW

2.1 Research Status Abroad

In the field of merchant replies and feedback, foreign scholars have adopted diverse theoretical frameworks and core variables, with one of the most direct strategies being to respond to consumers' negative evaluations. Smith argued that when merchants' products and services fail to meet consumers' expected standards, dissatisfaction is triggered and spreads through negative word-of-mouth in interpersonal communication [13]. Under such circumstances, enterprises should promptly implement effective response strategies to negative reviews in order to find opportunities to alter dissatisfied customers' perceptions and rebuild their trust [14]. Beverley pointed out that the source, efficiency, style, and behavioral state of merchant replies influence potential consumers' judgments of product value and purchase behavior [15]. Karatepe, in examining the impact of merchant response measures on perceived fairness, highlighted that prompt replies, convenient reply channels, apologies, explanations, and compensations all affect consumer satisfaction and loyalty [16]. Overall, foreign scholars have concentrated their research on remediation in response to negative evaluations, focusing on its influence on consumers' emotions, trust, and value judgments.

2.2 Research Status in China

Domestic research on merchant replies tends to focus on the information, type, and strategic aspects of replies. Some scholars have investigated from the perspectives of product attributes, online reviews, and merchant replies, finding that from the information perspective, both merchants' reply rate and reply length significantly and positively influence online sales of tourism products [17]. Wu Decheng argued that the dimensions of merchant replies include quantity, content, and length, noting that the lower the textual similarity, the higher the reply quality, which in turn enhances consumers' perception of information usefulness [18]. Yuan Wenjuan and others studied hotel feedback and proposed that reply quality, timeliness, and reply length collectively influence other users' satisfaction and thereby their purchase intentions [19]. Some scholars, drawing on fairness theory and attribution theory, categorized merchant responses as conciliatory or defensive, exploring their effects on potential customers' purchase decisions from both simulated scenarios and objective perspectives [20]. Others examined review type, analyzing both positive and negative feedback, and found that in online clothing purchase scenarios, the manner and effectiveness of merchant feedback significantly and positively affected consumer loyalty [21].

Synthesizing the existing research on merchant replies and feedback, the following characteristics can be summarized: First, in terms of theoretical models, the selection is relatively free, with diverse references and modeling approaches. Second, regarding core variables, multiple research perspectives have led to fragmented choices of variables and relatively single research contexts. Third, in research methodology, most studies on

merchant feedback have focused on examining its mechanisms and pathways of influence, frequently combining scenario hypotheses with structural equation modeling and quantitative analysis.

This study intends to draw on the insights of prior research while seeking breakthroughs along the above dimensions to enrich and refine related research. Specifically, it approaches merchant replies from the perspective of informational attributes, using SOR theory as the foundation and integrating ELM theory to construct a model. Merchant replies are categorized into three dimensions—reply quality, reply timeliness, and reply attitude—to explore their influence mechanisms on potential consumers' perceived value and purchase intentions. On this basis, a questionnaire survey is conducted in which respondents evaluate merchant replies under both positive and negative online review scenarios, thereby examining the impact of merchant replies on the purchase intentions of potential Taobao consumers.

2.3 SOR Theory and ELM Theory

Mehrabian and Russell proposed the SOR (Stimulus–Organism–Response) model, which posits that external environmental stimuli affect individuals' perceptions and emotional states, thereby influencing behavior [22]. Initially, the SOR model was applied to explain environmental impacts on individual behavior, but it was later widely adopted in consumer behavior research [23]. Eroglu and Machleit argued that environmental stimuli can trigger individual perceptions, thereby shape internal states and prompt consumers to exhibit approach or avoidance behaviors during shopping [24]. In online retail environments, “stimuli” attract consumers' attention and alter their psychological experiences, often consisting of marketing strategies or other external factors [25]. Some scholars have introduced experiential value into the SOR model to examine the relationship between new retail marketing and purchase intention, highlighting its mediating role [26]. Others have applied the model to investigate how merchants' strategies for responding to negative online reviews influence potential consumers' purchase intentions [27].

Petty developed the Elaboration Likelihood Model (ELM) to explain persuasion effectiveness and attitude change [28]. In the ELM framework, two paths drive attitude formation: the central route and the peripheral route. Central route factors are associated with message content, typically involving rational information based on logical reasoning and factual evidence, corresponding to a deliberate, analytical mode of thinking [29]. Peripheral route factors, by contrast, pay less attention to content and instead rely on message credibility, environmental cues, recommendations, or social influence, reflecting an intuitive and affective mode of thinking [28]. Zheng Yaqin and colleagues integrated the SOR and ELM models to examine how influencer live-streaming affects consumer purchase intentions, successfully building a dual-path mediation model involving perceived trust and perceived value [30]. Other scholars, drawing upon media richness theory in combination with ELM and SOR, confirmed that the quality of electronic word-of-mouth (eWOM), valence, and interactivity as informational features exerted significant positive effects on purchase intention [31]. These studies indicate that combining the SOR and ELM models is suitable for analyzing how merchant replies in e-commerce environments affect customers' purchase intentions, as they help explain how replies—perceived as information by potential consumers—shape purchase intention and decision-making processes.

In the context of online shopping, information quality is generally considered a key factor within the central route, influencing consumers' cognitive attitudes. Information quality reflects attributes such as accuracy, reliability, relevance, and completeness, all of which directly affect rational evaluations of products or services [32]. On Taobao, consumers reviewing product information engage in careful cognitive processing of its content, form, and utility, ultimately shaping behavioral judgments [33]. In this study, merchant replies are conceptualized as a form of product-related information; their quality thus exhibits the essential characteristics of information quality, and accordingly reply quality is treated as the central route variable. Regarding the peripheral route, external stimuli may include thematic aspects of replies, others' opinions, online word-of-mouth, contextual cues, or technological features [34]. Many studies categorize environmental and emotional factors as peripheral cues that influence immediate judgments of merchant replies. Therefore, this research extends the SOR framework by integrating ELM, selecting reply quality as the central route variable, and reply timeliness and reply attitude as the peripheral route variables. This combined model is then used to test the feasibility of applying SOR–ELM integration in the domain of merchant replies, to investigate the influence of replies on Taobao consumers' purchase intentions, and to explore the mediating role of perceived value, with the aim of providing insights for future studies on merchant replies.

2.4 Merchant Replies

Merchant replies, also referred to as online management feedback, are defined as merchants' responses and management actions directed at positive or negative online reviews [35]. In addition to obtaining information from other consumers' reviews, potential customers can also directly gather product-related information from merchants' replies [4]. Hocutt et al. found that timely and polite replies by merchants significantly affect consumers' cognition and are highly likely to increase potential customers' recognition of

the merchant [36]. Replying to reviews not only demonstrates merchants' genuine concern for consumers but also provides additional guidance to potential customers who lack product-related knowledge, thereby reducing information asymmetry in purchasing decisions [37]. Conversely, neglecting online reviews may damage a merchant's brand image. This study focuses on the impact of merchant replies on potential consumers' purchase intentions on the Taobao platform, specifically examining three dimensions: reply quality, reply timeliness, and reply attitude.

2.5 Reply Quality

Online reviews, by providing positive or negative information, reflect whether products or services are well received by consumers [38]. The length and detail of a merchant's reply determine how much explanation and value-related information potential customers can obtain regarding a product or service [39]. Research has confirmed that high-quality merchant replies can significantly enhance consumers' perceived value and purchase intentions, as well as strengthen their willingness to engage in positive word-of-mouth communication [40]. Zhang Yunlai and others investigated the influence of reply quality on purchase intention, showing that potential consumers' trust in merchants increases along with perceived emotional and service value [41]. Based on this, the following hypotheses are proposed:

H1a: Reply quality has a positive effect on enhancing potential customers' perceived value.

H1b: Reply quality has a positive effect on enhancing potential customers' purchase intentions.

2.6 Reply Timeliness

Research indicates that the timelier a merchant's reply, the more significant its effect on potential customers' behaviors [19][42]. This is manifested in two aspects: first, because information itself has a time-sensitive nature, consumers often expect prompt replies from merchants after posting reviews, as a response to their expectations of the product and merchant [40]. Second, the speed of replies reflects the degree of importance merchants attach to customers' consumption experiences [43]. Accordingly, the following hypotheses are proposed:

H2a: Reply timeliness has a positive effect on enhancing potential customers' perceived value.

H2b: Reply timeliness has a positive effect on enhancing potential customers' purchase intentions.

2.7 Reply Attitude

When responding to consumer reviews, merchants should pay close attention to their attitude in order to strengthen positive outcomes. Hocutt et al. demonstrated that reply attitude significantly influences potential customers; if replies are enthusiastic and friendly, both consumers' and potential customers' perceived value will correspondingly increase [36]. When merchants address negative reviews with targeted explanations and compensations, both existing and potential customers perceive the merchant as responsible [41]. Therefore, the following hypotheses are proposed:

H3a: Reply attitude has a positive effect on enhancing potential customers' perceived value.

H3b: Reply attitude has a positive effect on enhancing potential customers' purchase intentions.

2.8 Perceived Value

A considerable body of research has examined perceived value and purchase intention, and scholars have already proposed models of perceived value specifically tailored to online shopping environments [43]. Studies on factors influencing consumer purchase behavior have shown that while customer satisfaction affects purchasing decisions, the most direct and critical factor driving purchase behavior is perceived value [44]. Jones further investigated the relationship between perceived value and satisfaction, finding that perceived value exerts a stronger influence on purchase intention than satisfaction itself [45]. Accordingly, the following hypothesis is proposed:

H4: Perceived value has a positive effect on enhancing potential customers' purchase intentions.

2.9 Online Reviews

During online shopping, product reviews serve as a key reference point for consumers to judge product quality, making online reviews one of the most important attributes valued by merchants [46]. For Taobao sellers, the online review system not only facilitates online marketing but also helps build a reputation system on the platform [4]. Scholars generally define online reviews as consumer-generated feedback or opinions regarding products, services, or companies posted on shopping websites. These reviews may take the form of text, star ratings, images, or videos, and they carry either positive or negative sentiment [47].

In this study, online reviews are defined as the exchange of product- or service-related information between reviewers and potential consumers through online platforms. Online reviews are characterized by two features: first, reviewers are consumers who have engaged in online shopping (in this study, specifically on

Taobao); second, review content concerns information related to products or services [48]. Based on review types, this research distinguishes between positive and negative online reviews, and corresponding scenarios are designed to examine whether review type moderates the relationship between merchant replies and potential consumers' purchase intentions. The following hypotheses are proposed:

- H5a: Negative reviews enhance the effect of reply quality on potential customers' perceived value.**
- H5b: Negative reviews enhance the effect of reply timeliness on potential customers' perceived value.**
- H5c: Negative reviews enhance the effect of reply attitude on potential customers' perceived value.**
- H5d: Negative reviews enhance the effect of reply quality on potential customers' purchase intentions.**
- H5e: Negative reviews enhance the effect of reply timeliness on potential customers' purchase intentions.**
- H5f: Negative reviews enhance the effect of reply attitude on potential customers' purchase intentions.**

Based on the above research synthesis and hypotheses, this study employs the SOR theoretical model as the main framework, integrating the ELM model. According to the degree of elaboration in information processing, the three independent variables representing merchant replies are categorized into the central and peripheral routes: reply quality is treated as the central route variable, while reply timeliness and reply attitude are treated as peripheral route variables.

When potential customers view merchant replies to online reviews, these replies influence their perceived value, which in turn affects their purchase intentions. Moreover, the two types of online reviews (positive and negative) serve as moderating variables, shaping the pathways through which merchant replies affect perceived value and purchase intention. Based on these research variables and related theoretical foundations, a conceptual model is proposed to illustrate the effect of merchant replies on Taobao consumers' purchase intentions, as shown in Figure 1.

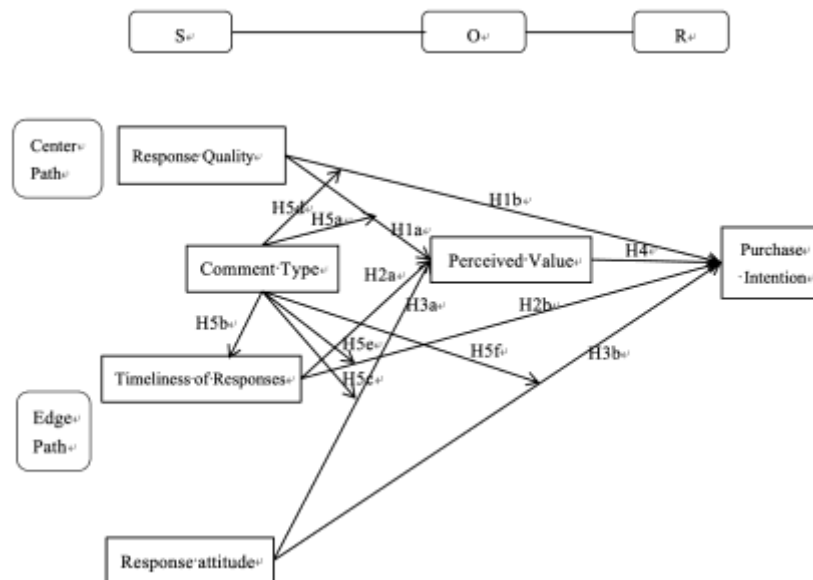


Figure 1. Conceptual Research Model

III. RESEARCH DESIGN

3.1 Questionnaire Design

This study measures five variables: reply quality, reply timeliness, reply attitude, perceived value, and potential customers' purchase intention, all of which are based on established scales from previous studies. Each item is measured using a five-point Likert scale (strongly disagree, disagree, neutral, agree, strongly agree), with values assigned from 1 to 5 according to respondents' level of agreement. The measurement of reply quality draws upon Hsu [49] and Zhu Yi [28], consisting of three items. Reply timeliness is measured with reference to Hocutt [36] and Li Ziru [50], also with three items. Reply attitude is measured based on Smith [51] and Lou Hexin [37], with three items. Perceived value follows Zeithaml [52], simplified to three items. Purchase intention is measured with reference to Kim [53] and Wang Yang [54], comprising three items. The detailed measurement items are presented in Table 1.

Table 1. Scale Design of Merchant Replies, Perceived Value, and Purchase Intention and Their References

Dimension	Item No.	Measurement Item	Reference Source
Reply Quality	RQ1	The information provided in merchant replies meets my shopping needs.	Hsu[49]
	RQ2	The information provided in merchant replies is always accurate.	Zhu Yi Error!
	RQ3	The information provided in merchant replies is comprehensive and complete.	Reference source not found.
Reply Timeliness	RT1	Merchant replies to reviews in a timely manner.	Hocutt[36]
	RT2	Merchant replies are faster than I expected.	Li Ziru Error!
	RT3	The timeliness of merchant replies has a significant impact on my final purchase decision.	Reference source not found.
Reply Attitude	RA1	Merchant replies are friendly and sincere in tone.	Smith Error!
	RA2	Merchant replies make communication with the merchant feel more effective.	Reference source not found.
	RA3	Merchant replies make me feel respected and valued by the merchant.	Lou Hexin Error!
Perceived Value	PV1	Merchant replies provide functional value by clearly resolving my questions and doubts.	Zeithaml Error!
	PV2	Merchant replies provide emotional value by giving me positive emotional experiences.	Reference source not found.
	PV3	Merchant replies provide social value by enhancing my social image or status.	Reference source not found.
Purchase Intention	PI1	If conditions permit, I would prefer to purchase this product/service and buy from this online store.	Kim[53]
	PI2	I am willing to recommend this product/service and this online store to my friends.	Wang Yang Error!
	PI3	Although I do not plan to purchase at present, I would buy this product/service from this online store when needed in the future.	Reference source not found.

3.2 Scenario Design

In studies examining the influence of merchant replies on consumers within the context of online reviews, scholars both in China and abroad predominantly employ scenario-based experiments; by specifying concrete experimental situations, complex manipulations become practically feasible. Accordingly, this study combines scenario design with a questionnaire survey to investigate how merchant replies affect the purchase intentions of potential Taobao customers. To align with the research purpose, we selected sneakers—an item commonly purchased on Taobao—as the experimental focal product, randomly sampling thirty positive and thirty negative reviews from sneaker stores on Taobao, as well as thirty corresponding merchant replies for each type; we then distilled their common features to construct experimental user-review and merchant-reply scenarios. In the materials, the length and affective tone of both online reviews and merchant replies were set at moderate levels, while extraneous factors such as seller reputation tier, brand, and baseline review quality were intentionally minimized, providing only the scenario information relevant to this study. Before the formal questionnaire, respondents were presented with the scenario described in Table 2: the experiment assumes that a consumer needs to purchase a pair of sneakers and, considering everyday habits, ultimately decides to buy a particular pair from a Taobao store; participants are instructed to read the background information carefully and then answer the corresponding questions.

Table 2. Scenario Design

Review Type	Research Scenario Description
	You intend to purchase a pair of sneakers on an e-commerce shopping website. After carefully comparing styles and prices, you finally choose a pair. In terms of appearance, color, and material, the sneakers fully meet your expectations.
Positive User Review	The current promotion is quite good, though the shoes are slightly heavy. They are convenient for daily commuting, the stability and support are excellent, and the rebound performance feels great. The quality of these running shoes is as good as

Review Type	Research Scenario Description
Merchant Reply to Positive Review	ever—I already own a pair from this brand! Thank you for choosing our product. Your support gives us great motivation. If you encounter any problems after receiving the shoes, please contact our online customer service team for assistance. We also look forward to your valuable feedback and future visits. Your suggestions are our direction for improvement, and we hope to provide you with peace of mind in every shopping experience!
Negative User Review	The price is not reasonable. These shoes are heavy and very stiff, causing blisters and great discomfort. The style is ordinary, and even if I accept the blisters, the quality is not worth purchasing!
Merchant Reply to Negative Review	Thank you for choosing our product. The fit between foot shape and shoe design varies by individual. Whether shoes cause blisters depends on the degree of adjustment, your foot shape, and wearing habits. For new shoes, we recommend wearing soft and thick socks. You may also contact our online customer service team for assistance. We hope to provide you with peace of mind in every shopping experience!
Time Distribution	User Review: Posted on January 10, XX year Merchant Reply: Posted on January 11, XX year

3.3 Questionnaire Design

The research questionnaire is designed for potential customers of the Taobao online shopping platform and consists of demographic characteristics along with the five research variables. The structure of the questionnaire is divided into three sections: First, screening questions are applied to identify the target respondents. These include questions such as “Do you currently have, or in the near future plan to have, the intention to shop on the Taobao platform?” and “When shopping on Taobao, do you browse other customers’ reviews and merchants’ replies?”. Only respondents who meet these criteria proceed with the main survey. Second, the main section of the questionnaire contains the five latent variables and their corresponding fifteen measurement items, as translated and designed in the previous section (see Table 1). Each item is measured on a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). Finally, the questionnaire collects demographic information from respondents, including gender, age, educational level, and average monthly income, in order to control for background factors and support sample analysis.

3.4 Questionnaire Distribution, Collection, and Screening

The target group of this study is potential consumers on the Taobao platform, a population that is broadly distributed and difficult to gather in one location. Therefore, the questionnaires were primarily collected online. They were distributed through WeChat Moments, Wenjuanxing (Questionnaire Star) mutual filling, social media platforms such as Xiaohongshu, and Taobao community Q&A forums. At the beginning of the questionnaire, respondents were provided with an introduction outlining the research purpose, the steps for completing the questionnaire, and assurances regarding privacy protection and data confidentiality to ensure authenticity and reliability. The distribution period lasted 15 days, from January 25, 2024, to February 10, 2025. Questionnaires were issued according to comment-type scenarios: 230 copies for the positive review scenario and 230 for the negative review scenario, totaling 460. After collection, invalid questionnaires were removed according to the following criteria: 1. Response time less than 35 seconds (given that reading and answering each question requires at least 2 seconds, and a serious completion should take no less than 60 seconds). 2. Failure on the attention-check question (e.g., “If you are answering carefully, please select ‘Strongly Agree’”—responses not selecting “Strongly Agree” were deemed invalid). 3. Identical answers throughout the questionnaire, indicating lack of differentiation. After screening, 143 valid questionnaires remained for the positive review scenario and 167 for the negative review scenario, yielding a total of 310 valid questionnaires. The effective response rate was 67.39%.

IV. RESULT

4.1 Descriptive Statistics of the Sample

The valid questionnaire data were analyzed in terms of gender, age, educational attainment, occupation, and monthly disposable income to describe the demographic characteristics and social attributes of the sample.

As shown in Table 3, the gender ratio in the sample is close to 1:1, with a higher proportion of females, accounting for 61%. In terms of age distribution, the majority of respondents fall within the 18–25 age group, representing 59.7% of the total sample. With respect to education level, 54.8% of respondents hold a bachelor’s degree. Regarding occupation, students make up the largest share (51%), followed by company employees (25.5%). For monthly disposable income, most respondents reported an average of less than 3,000 RMB. Overall, the distribution of demographic variables demonstrates reasonable representativeness, supporting the reliability and applicability of the sample for this study.

Table 3. Demographic and Social Attributes of the Sample

Variable	Category	Frequency	Percentage
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Variable	Category	Frequency	Percentage
Age	Under 18	3	1%
	18-25	185	59.7%
	26-35	67	21.6%
	36-45	45	14.5%
	Above 45	10	3.2%
Degree	Junior high school or below	13	4.2%
	High school / Technical secondary	31	10.0%
	Junior college	58	18.7%
	Bachelor's degree	170	54.8%
	Postgraduate and above	38	12.3%
Profession	Student	158	51%
	Company employee	79	25.5%
	Public institution staff	19	6.1%
	Freelancer	42	13.5%
	Other	12	3.9%
Monthly disposable income	Below 3,000 RMB	131	42.3%
	3,000–5,000 RMB	57	18.4%
	5,000–8,000 RMB	62	20.0%
	8,000–12,000 RMB	44	14.2%
	Above 12,000 RMB	16	5.2%
Gender	Male	121	39.0%
	Female	189	61.0%
Scenario type	Positive review scenario	143	46.1%
	Negative review scenario	167	53.9%

4.2 Reliability and Validity Analysis of the Scale

To ensure the validity of variable measurement, this study conducted exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) using SPSS 23.0 and AMOS 24.0. These procedures were employed to test the reliability and validity of the scale. As shown in Table 4, the Kaiser–Meyer–Olkin (KMO) value is 0.884, indicating a high level of sampling adequacy. The significance of Bartlett's test of sphericity is less than 0.05, with an approximate chi-square value of 1930.552 and 105 degrees of freedom, suggesting that the correlation matrix is not an identity matrix. Therefore, the data are deemed suitable for factor analysis.

Table 4. KMO and Bartlett's Test

KMO and Bartlett's Test		
KMO Measure of Sampling Adequacy	0.884	
Bartlett's Test of Sphericity	Approx. Chi-Square	1930.552
	df	105
	Sig.	0

From the results in Table 5, it can be seen that there are five components with eigenvalues greater than 1. The eigenvalues are 6.029, 1.370, 1.237, 1.074, and 1.001, with a cumulative variance explanation rate of 71.402%, which satisfies the requirement for the factor structure in this study.

Table 5. Total Variance Explained

Component	Initial Eigenvalue			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.029	40.191	40.191	6.029	40.191	40.191	2.218	14.789	14.789
2	1.370	9.132	49.323	1.370	9.132	49.323	2.180	14.530	29.319
3	1.237	8.244	57.567	1.237	8.244	57.567	2.152	14.349	43.668
4	1.074	7.159	64.726	1.074	7.159	64.726	2.134	14.228	57.897
5	1.001	6.676	71.402	1.001	6.676	71.402	2.026	13.505	71.402
6	0.616	4.110	75.512						
7	0.559	3.725	79.237						
8	0.521	3.470	82.707						
9	0.464	3.091	85.798						
10	0.422	2.815	88.613						
11	0.403	2.686	91.299						
12	0.371	2.476	93.775						
13	0.343	2.285	96.061						

14	0.319	2.124	98.184
15	0.272	1.816	100

From the results presented in Table 6, it can be seen that the 15 measurement items converge into five valid factors after rotation. Each of the five variables is evenly distributed across the factors, indicating that the factor structure is appropriately defined and the dimensions are well separated. This confirms that the extracted factors can adequately explain the relationships among the variables.

Table 6. Rotated Component Matrix

Item No.	Factor				
	1	2	3	4	5
RQ1	0.750				
RQ2	0.802				
RQ3	0.824				
RT1			0.790		
RT2			0.835		
RT3			0.729		
RA1				0.807	
RA2				0.665	
RA3				0.851	
PV1					0.683
PV2					0.740
PV3					0.804
PI1		0.736			
PI2		0.740			
PI3		0.834			

Subsequently, confirmatory factor analysis was conducted using AMOS 24.0. As shown in Table 7, the standardized factor loadings for each construct are as follows: reply quality = 0.818, reply timeliness = 0.782, reply attitude = 0.791, perceived value = 0.754, and purchase intention = 0.807.

In addition, the Cronbach's α values for all constructs exceed 0.70, indicating that the measurement scales demonstrate good internal consistency and reliability [55]. Therefore, it can be concluded that the measurement of each variable in this study has satisfactory reliability and validity.

Table 7. Reliability and Validity Analysis

Construct	Items	Standard Error	Z	Std.	P value	Cronbach's α	Composite Reliability	AVE
Reply Quality	RQ1	-	-	.758		.818	.819	.602
	RQ2	.085	12.474	.772	***			
	RQ3	.084	12.745	.797	***			
Reply Timeliness	RT1	-	-	.751		.782	.788	.554
	RT2	.094	11.669	.803	***			
	RT3	.089	10.497	.673	***			
Reply Attitude	RA1	-	-	.796		.791	.794	.563
	RA2	.081	11.651	.724	***			
	RA3	.081	11.715	.729	***			
Perceived Value	PV1	-	-	.699		.754	.761	.516
	PV2	.103	11.156	.793	***			
	PV3	.108	9.836	.657	***			
Purchase Intention	PI1	-	-	.798		.807	.808	.584
	PI2	.082	12.643	.751	***			
	PI3	.08	12.501	.742	***			

Discriminant validity refers to the extent to which different latent variables are distinct from one another. According to the AMOS output, the results in Table 8 demonstrate that the square root of the AVE (Average Variance Extracted) for each latent construct is greater than the correlations between constructs. This indicates that each latent variable possesses good discriminant validity, ensuring that the constructs are not only internally consistent but also empirically distinct from each other.

Table 8 Distinctive Validity Test for Latent Variables

Construct	Reply Quality	Reply Timeliness	Reply Attitude	Perceived Value	Purchase Intention
Reply Quality	0.776				
Reply Timeliness	0.482	0.744			
Reply Attitude	0.496	0.547	0.719		
Perceived Value	0.628	0.542	0.597	0.725	

Purchase Intention	0.614	0.522	0.678	0.595	0.764
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Note: Bold diagonal values represent the square roots of AVE; lower triangular values are Pearson correlation coefficients among the constructs.

4.3 Model Fit Test

Before conducting path analysis and hypothesis testing, it is necessary to examine the overall model fit. Using AMOS 24.0, structural equation modeling was applied to test the research model. The results are presented in Table 9, which summarizes the model fit indices. The fit statistics are as follows: $\chi^2/df = 1.475$, SRMR = 0.040, RMSEA = 0.039, GFI = 0.951, AGFI = 0.927, IFI = 0.980, and TLI = 0.973. Since all major indices exceed the recommended threshold of 0.90, the results indicate that the model demonstrates a good level of fit [56]. Therefore, the overall model fit is satisfactory, and the analysis can proceed to the next stage of path testing and hypothesis verification.

Table 9. Model Fit Indices

Fit Index	χ^2/df	SRMR	RMSEA	GFI	AGFI	IFI	CFI	TLI
Reference Value	<3.	<0.08	<0.08	>0.90	>0.90	>0.90	>0.90	>0.90
Test Value	1.475	0.040	0.039	0.951	0.927	0.980	0.980	0.973

4.4 Path Hypothesis Testing

According to the path coefficients among the variables shown in Figure 2, the relationships among the latent variables in this study can be identified. Reply quality has a significant effect on perceived value and on purchase intention, thus Hypotheses H1a and H1b are supported; reply timeliness has a significant effect on perceived value, confirming Hypothesis H2a, but reply timeliness has no significant effect on purchase intention, therefore Hypothesis H2b is not supported; reply attitude has a significant effect on perceived value and on purchase intention, supporting Hypotheses H3a and H3b.

Table 10. Path Relationship Test Results

Path Relationship	Unstd.	Standard Error	Z	P value	Std.	Result
Reply Quality → Perceived Value	0.337	0.07	0.383	4.818	***	Supported
Reply Timeliness → Perceived Value	0.176	0.07	0.201	2.505	0.012	Supported
Reply Attitude → Perceived Value	0.27	0.075	0.298	3.588	***	Supported
Reply Attitude → Perceived Value	0.401	0.116	0.34	3.461	***	Supported
Reply Quality → Purchase Intention	0.254	0.084	0.245	3.013	0.003	Supported
Reply Timeliness → Purchase Intention	0.104	0.079	0.1	1.307	0.191	Not Supported
Reply Attitude → Purchase Intention	0.232	0.088	0.217	2.639	0.008	Supported

4.5 Mediation Effect Test

The Bootstrap results for mediation testing show that in the path from Reply Quality → Purchase Intention and from Reply Attitude → Purchase Intention, the 95% confidence intervals do not include zero, indicating that the mediation effect is significant. By contrast, in the path from Reply Timeliness → Purchase Intention, both the direct effect confidence interval and the total effect confidence interval include zero, which indicates that the mediation effect is not significant.

Table 11 Bootstrap Mediated Effect Test Table

Path Relationship	Effect Type	Point estimate	Product of coefficient		Bootstrap 3000 times 95% CI Bias-corrected Percentile			
			SE	Z	Lower	Upper	Lower	Upper
Reply Quality → Perceived Value → Purchase Intention	Indirect Effect	0.125	0.059	2.119	0.038	0.286	0.031	0.264
	Direct Effect	0.236	0.098	2.408	0.063	0.449	0.055	0.432
	Total Effect	0.361	0.093	3.882	0.198	0.575	0.190	0.557
Reply Timeliness → Perceived Value → Purchase Intention	Indirect Effect	0.076	0.046	1.652	0.013	0.203	0.007	0.183
	Direct Effect	0.111	0.101	1.099	-0.086	0.304	-0.086	0.305
	Total Effect	0.187	0.099	1.889	-0.014	0.379	-0.011	0.384
Reply Attitude → Perceived Value → Purchase Intention	Indirect Effect	0.115	0.060	1.917	0.035	0.274	0.026	0.257

Path Relationship	Effect Type	Point estimate	Product of coefficient		Bootstrap 3000 times 95% CI Bias-corrected Percentile			
			SE	Z	Lower	Upper	Lower	Upper
Value → Purchase Intention	Direct Effect	0.245	0.130	1.885	0.014	0.519	0.001	0.511
	Total Effect	0.360	0.120	3.000	0.150	0.619	0.144	0.614

According to the mediation effect proportion analysis, perceived value plays a partial mediating role in the path from reply quality to purchase intention, with the mediation effect accounting for 34.626% of the total effect. Similarly, in the path from reply attitude to purchase intention, perceived value also serves as a partial mediator, with the mediation effect accounting for 31.944% of the total effect.

Table 12. Mediation Effect Test Results

Path Relationship	c	a*b	c'	Test Conclusion	Proportion Formula	Proportion
	Total Effect	Indirect Effect	Direct Effect			
Reply Quality → Perceived Value → Purchase Intention	0.361	0.125	0.236	Partial Mediation	a * b / c	34.626%
Reply Attitude → Perceived Value → Purchase Intention	0.360	0.115	0.245			31.944%

4.6 Moderation Effect Test

After verifying the research model, the next step was to examine whether the type of online review moderates the path relationships between the independent variables, perceived value, and purchase intention. As shown in Table 13, in the path from Reply Attitude → Purchase Intention, the interaction term between reply attitude and review type has an unstandardized coefficient of 0.303, a standard error of 0.113, a t-value of 2.679, and a p-value < 0.05, with a standardized coefficient of 0.134. This indicates that review type exerts a significant moderating effect on the relationship between reply attitude and purchase intention. Therefore, Hypothesis H5f is supported, and a simple slope plot was generated (see Figure 2).

In the path from Reply Attitude → Perceived Value, the interaction term between reply attitude and review type has an unstandardized coefficient of 0.089, a standard error of 0.106, a t-value of 0.842, and a p-value = 0.400, with a standardized coefficient of 0.043. These results suggest that review type does not have a significant moderating effect on the relationship between reply attitude and perceived value. Hence, Hypothesis H5c is not supported.

Table 13. Moderating Effect Analysis of Reply Attitude × Review Type

Model	Variable	Unstandardized Coefficient	Standard Error	t	p value	β
Model 1	Constant	3.804	0.42	9.063	0.000**	-
	Reply Attitude	0.514	0.055	9.273	0.000**	0.459
	Review Type	-0.299	0.108	-2.781	0.006**	-0.148
	Reply Attitude × Review Type	0.303	0.113	2.679	0.008**	0.134
	R ²	0.272				
	Adjusted R ²	0.253				
	Model 2	Constant	3.334	0.394	8.467	0.000**
Reply Attitude		0.469	0.052	9.011	0.000**	0.454
Review Type		0.096	0.101	0.947	0.345	0.051
Reply Attitude × Review Type		0.089	0.106	0.842	0.4	0.043
R ²		0.247				
Adjusted R ²		0.227				

Note: Model 1's dependent variable is Purchase Intention; Model 2's dependent variable is Perceived Value.

*p < 0.05, **p < 0.01. n.s. = not significant.

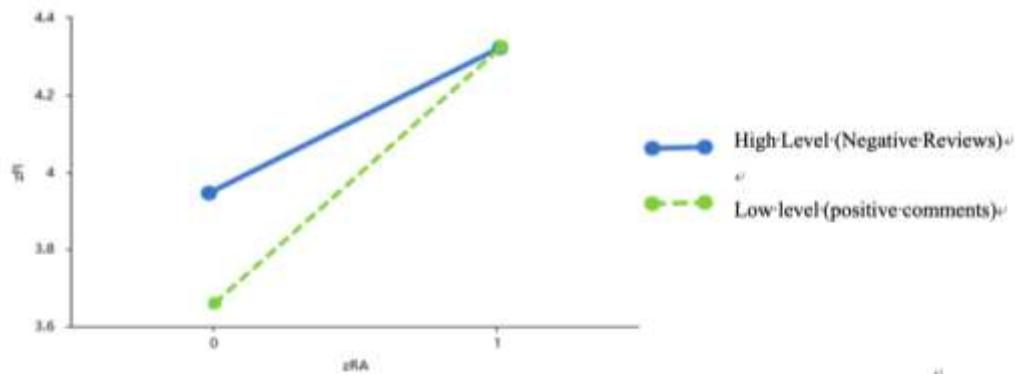


Figure 2. Simple Slope Plot of Review Type Moderating the Path Reply Attitude → Purchase Intention

According to Table 14, in the path from Reply Quality → Purchase Intention, the interaction term between reply quality and review type shows an unstandardized coefficient of 0.173, a standard error of 0.102, a t-value of 1.697, and a p-value of 0.091, with a standardized coefficient of 0.084. These results indicate that review type does not exert a significant moderating effect on the relationship between reply quality and purchase intention. Therefore, Hypothesis H5d is not supported.

In the path from Reply Quality → Perceived Value, the interaction term between reply quality and review type has an unstandardized coefficient of 0.022, a standard error of 0.098, a t-value of 0.229, and a p-value of 0.819, with a standardized coefficient of 0.012. This indicates that review type does not have a significant moderating effect on the relationship between reply quality and perceived value. Hence, Hypothesis H5a is not supported.

Table 14. Moderating Effect Analysis of Reply Quality × Review Type

Model	Variable	Unstandardized Coefficient	Standard Error	t	p value	β
Model 1	Constant	3.872	0.407	9.519	0.000**	-
	Reply Quality	0.522	0.051	10.334	0.000**	0.516
	Review Type	-0.384	0.105	-3.656	0.000**	-0.189
	Reply Quality × Review Type	0.173	0.102	1.697	0.091	0.084
	R ²	0.313				
	Adjusted R ²	0.295				
Model 2	Constant	3.459	0.389	8.904	0.000**	-
	Reply Quality	0.452	0.048	9.366	0.000**	0.484
	Review Type	0.023	0.100	0.229	0.819	0.012
	Reply Quality × Review Type	0.022	0.098	0.229	0.819	0.012
	R ²	0.263				
	Adjusted R ²	0.244				

Note: Model 1's dependent variable is Purchase Intention; Model 2's dependent variable is Perceived Value. *p < 0.05, **p < 0.01.

4.7 Hypothesis Testing Results

Based on the above data analysis, the hypothesis testing results of this study are summarized in Table 15.

Table 15. Summary of Hypothesis Testing Results

Hypothesis	Content	Result
H1a	Reply quality has a positive effect on enhancing potential customers' perceived value.	Supported
H1b	Reply quality has a positive effect on enhancing potential customers' purchase intention.	Supported
H2a	Reply timeliness has a positive effect on enhancing potential customers' perceived value.	Supported
H2b	Reply timeliness has a positive effect on enhancing potential customers' purchase intention.	Not Supported
H3a	Reply attitude has a positive effect on enhancing potential customers' perceived value.	Supported
H3b	Reply attitude has a positive effect on enhancing potential customers' purchase intention.	Supported
H4	Perceived value has a positive effect on enhancing potential customers' purchase intention.	Supported
H5a	Negative reviews strengthen the effect of reply quality on potential customers' perceived value.	Not Supported
H5b	Negative reviews strengthen the effect of reply timeliness on potential customers' perceived value.	Not Supported

H5c	Negative reviews strengthen the effect of reply attitude on potential customers' perceived value.	Not Supported
H5d	Negative reviews strengthen the effect of reply quality on potential customers' purchase intention.	Not Supported
H5e	Negative reviews strengthen the effect of reply timeliness on potential customers' purchase intention.	Not Supported
H5f	Negative reviews strengthen the effect of reply attitude on potential customers' purchase intention.	Supported

This study did not successfully verify the positive effect of reply timeliness on potential customers' purchase intention, which may be because, in the actual Taobao online shopping context, potential customers pay more attention to factors related to information quality in word-of-mouth content and the influence of attitude, thereby neglecting the effect of timeliness. Alternatively, with respect to whether merchant replies are timely, consumers may focus more on whether a reply exists at all rather than on the speed of the reply.

During data collection, differences existed in the proportion of valid samples by review type in the scenarios, so the data were divided into two groups by review type to test moderating effects. It is possible that the imbalance in sample proportions led to non-significant moderating effects. In addition, moderation by review type was not significant in the paths from reply quality to perceived value, from reply quality to purchase intention, or from reply attitude to perceived value. A likely explanation is that much prior research focused on the impact of interaction in social media contexts on individuals' emotional experiences, such as influencer live-streaming or product recommendation video scenarios. However, in the Taobao online shopping context, communication among potential customers, merchants, and other customers is anonymous; active participation is limited, and potential customers are primarily engaged in browsing product-related information. Moreover, the scenario design in this study was relatively simple and direct, constructed by combining common features of positive and negative reviews. Neutral reviews, whose sentiment orientation is less obvious, were not included in the design or discussion. With respect to merchant replies, more fine-grained aspects such as reply length and the degree of content relevance were also not differentiated or deeply analyzed. For these reasons, the final results did not fully align with the expected hypotheses.

V. CONCLUSIONS

5.1 Main research findings

This study examined the influencing factors and mechanisms of merchant replies on the purchase intentions of potential customers on Taobao. Reply quality and reply attitude were found to have positive effects on purchase intention: reply quality provides key information, while reply attitude narrows the distance with customers and enhances emotional experiences. Perceived value plays a partial mediating role in the mechanism through which reply quality and reply attitude affect purchase intention. Both reply quality and reply attitude directly influence potential customers' purchase intentions and indirectly influence them by enhancing perceived value. The applicability of the SOR-ELM combined model in the domain of merchant replies was confirmed, with reply quality influencing perceived value and purchase intention through the central route, and reply attitude influencing them through the peripheral route. In addition, this study investigated the moderating effect of review type and found that negative reviews strengthen the effect of reply attitude on potential customers' purchase intention.

5.1.1 Reply quality and reply attitude positively affect potential customers' purchase intentions

Reply quality and reply attitude play critical roles in the formation of purchase intention. In terms of reply quality, when merchant replies meet consumer needs by providing accurate, comprehensive, and complete information in Taobao shopping scenarios, other customers are better able to understand product features, usage, and after-sales support. In terms of reply attitude, friendly and sincere replies allow merchants to quickly build rapport, making customers feel respected and valued while enhancing emotional experiences.

By contrast, reply timeliness did not significantly influence purchase intention, an unexpected result that may stem from the browsing habits of Taobao consumers. The time of merchant replies is displayed less prominently in the review section, and notifications mainly reach the original reviewers. Potential customers may therefore pay less attention to timeliness, focusing instead on whether a reply exists and on its quality and attitude. Prior studies have shown that the presence or absence of replies significantly influences purchase intention [57], suggesting that perceived reply timeliness is not a decisive factor.

5.1.2 Partial mediating role of perceived value

In the exploration of the mechanism through which reply quality and reply attitude influence the purchase intentions of potential Taobao customers, perceived value plays a partial mediating role. Reply quality and reply attitude not only have a direct positive effect on consumers' potential purchase intentions, but also

indirectly influence purchase intentions by affecting consumers' perceived value. This provides further support for the hypotheses proposed earlier.

When browsing the product review section, potential customers can directly perceive the professionalism and sincerity of the merchant through high-quality replies and positive attitudes, thereby enhancing their purchase intention. At the same time, such high-quality reply experiences lead potential customers to form higher perceived value regarding the product or service, believing that they can obtain more benefits from the purchase, such as functional satisfaction, emotional pleasure, and other benefits, which further strengthen purchase intention. This enriches the theoretical research on consumer behavior in e-commerce marketing, clarifying the key role of perceived value in the relationship between merchant replies and purchase intention. For Taobao merchants, improving reply quality and reply attitude is an important strategy to promote sales. It is not only necessary to emphasize the service itself, but also to shape the perceived value of potential customers through good service, so as to achieve a win-win situation in both sales conversion and reputation building.

5.1.3 Negative reviews strengthen the effect of reply attitude on potential consumers' purchase intentions.

With respect to the moderating effect of online review type, only the moderation of reply attitude on potential customers' purchase intention is the most significant. This indicates that potential customers perceive reply attitude differently depending on the type of review.

In negative review contexts, potential customers are more sensitive to merchants' reply attitudes, and the impact on their purchase intentions becomes greater. Therefore, the moderating effect of online review type on the relationship between merchant replies and potential customers' purchase intention on Taobao is the most significant.

5.1.4 Verification of the Combined SOR-ELM Model

Focusing on the field of merchant replies on the Taobao platform, this study finds that the dual-route influence logic traditionally emphasized in the Elaboration Likelihood Model (ELM) is equally applicable in this model. Reply quality, as the central route, influences both perceived value and purchase intention of potential Taobao customers; meanwhile, reply attitude, as part of the peripheral route, also affects perceived value and purchase intention. The SOR model test has already been explained in the preceding hypotheses. Overall, the combined SOR-ELM model, with SOR as the foundation, is also validated in the field of merchant replies.

5.2 Practical Implications

5.2.1 Emphasize reply quality and attitude, focus on product attributes

Taobao merchants should make improving reply quality and reply attitude a priority. Merchants need to have precise knowledge of product information to ensure that replies are accurate, comprehensive, and cover key aspects such as product features, usage, and after-sales service, which are important to customers. This helps potential customers clearly understand the product and boosts their purchase confidence. Specifically, merchants should segment user needs, provide targeted replies to comments, and respond from the customer's perspective. In addition, they should communicate with customers in a friendly and sincere manner, showing respect and attention to each customer, thereby giving them a positive emotional experience, strengthening the brand image, and enhancing trust and goodwill. In short, efficiently and effectively addressing customer concerns is the key to retaining these potential buyers.

5.2.2 Do not overly pursue reply timeliness

Given that reply timeliness does not significantly influence purchase intention, merchants need not invest excessive resources in chasing rapid replies. However, this does not mean replies can be ignored; it is still important to ensure responses to customer comments. Merchants should instead focus more on improving reply quality and optimizing reply attitude to satisfy potential customers' needs for information and emotional engagement. This will help attract customers and increase sales. Meanwhile, it is recommended that Taobao optimize the review display interface by highlighting summarized keywords, emphasizing the existence and quality of merchant replies (for example, by adding a filter for "merchant replied"), and downplaying the visibility of timeliness. This would allow merchants to supplement services more effectively while providing potential customers with a more convenient way to collect information.

5.2.3 Differentiate responses to negative and positive reviews, and leverage them for promotion

When dealing with negative reviews, merchants should pay greater attention to reply attitude. They need to respond more sincerely, patiently, and positively, demonstrating that customer feedback is valued and that problems will be addressed, thereby alleviating potential customers' concerns and preventing negative

reviews from reducing purchase intention. For example, some scholars have argued that in the case of negative reviews, merchants should adopt a combined strategy of apology, explanation, and compensation in their replies to reduce attribution to the merchant and enhance customer trust [56]. Therefore, when responding to negative reviews, merchants can also make commitments to future improvements and provide additional measures such as free returns, exchanges, or negotiated compensation, so that potential customers can see the merchant's problem-solving attitude and be encouraged to buy.

For positive reviews, merchants should also reply actively to strengthen goodwill, turn different types of reviews into sales-driving assets, improve store ratings, and make full use of reviews to boost store reputation and sales. Such active replies not only demonstrate a good merchant attitude but also maximize the perceived quality and sincerity of the response. In this way, the review section on Taobao can be used to shape potential customers' perceptions. Moreover, merchants can leverage positive reviews for new product or store promotions, express gratitude, spread positive word-of-mouth, and leave a stronger impression on potential customers. This in turn can influence their perceived value and assist in making purchase decisions.

5.3 Limitations

This study only selected potential Taobao customers as the research sample, which may lead to platform-specific results and limit the generalizability of the findings to other e-commerce platforms. Further research is needed with larger and more diverse samples to broaden applicability. The distribution of sample characteristics such as region, age, and consumption habits may not be sufficiently extensive, which could affect the universality of the conclusions.

The selection of dimensions for merchant replies is also subject to certain limitations. The survey was mainly conducted among students and young employees, while future research could expand to other groups and include rural online shoppers. With the continuous development of online shopping, reply strategies have become increasingly diverse, and the factors involved in merchant replies may evolve. Although this study considered three major dimensions of merchant replies, in real e-commerce contexts merchant replies may involve more complex factors such as reply channels or individual differences among customer service staff, which were not included here. In addition, the moderating variable considered in this study was limited to review type, while other potential factors that may influence the relationship between merchant replies and purchase intention—such as brand loyalty, product category differences, and consumer experience level—were not taken into account. Therefore, future research should further refine and expand these aspects.

5.4 Future Prospects

Expanding the research scope: Future studies could broaden the research sample to include different e-commerce platforms. Platforms such as JD.com and Pinduoduo may be incorporated for comparative analysis, examining how variations in platform rules and user characteristics affect the influence of different dimensions of merchant replies on potential customers' purchase intentions. This would help the e-commerce industry establish a more universal strategic framework. For instance, future work could consider factors such as the degree of personalization or the level of professionalism in replies, to achieve a more comprehensive understanding of the relationship between merchant replies and customer behavior.

Exploring emerging influencing factors: With the rise of artificial intelligence customer service, new elements such as the accuracy and user-friendliness of intelligent replies deserve closer attention. Research could explore how these emerging factors affect customers' perceived value and purchase intentions, thereby providing theoretical guidance for merchants in introducing AI-powered customer service systems.

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