

THE IMPACT OF ENGLISH PROFICIENCY ON CROSS-BORDER PURCHASE INTENTION: THE CHAIN MEDIATING ROLE OF PERCEIVED RISK AND SELF-EFFICACY

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Abstract: Against the backdrop of the deep integration of globalization and the digital economy, cross-border e-commerce has emerged as a core driving force for the growth of global trade. As the core linguistic carrier in cross-border consumption, the mechanism by which English proficiency influences consumers' purchase intention remains insufficiently explored. This paper constructs a chain mediating model of "English Proficiency - Perceived Risk - Self-Efficacy - Cross-Border Purchase Intention" with perceived risk and self-efficacy as mediating variables, to investigate the internal path of how English proficiency affects cross-border purchase intention. A questionnaire survey was conducted to collect 342 valid samples, and SPSS 26.0 and AMOS 24.0 were used to conduct reliability and validity tests, structural equation model analysis, and Bootstrap mediating effect tests. The results show that: English proficiency has a significant direct positive impact on cross-border purchase intention; English proficiency negatively affects perceived risk and positively affects self-efficacy, perceived risk exerts a negative influence on both cross-border purchase intention and self-efficacy, and self-efficacy has a significant positive impact on cross-border purchase intention; perceived risk and self-efficacy respectively play a partial mediating role between English proficiency and cross-border purchase intention, and the two form a significant chain mediating effect, accounting for 14.2% of the total effect. This paper incorporates language proficiency into the research framework of cross-border consumption, improves the theoretical system of consumers' psychological decision-making in cross-border e-commerce, and provides targeted practical suggestions for cross-border e-commerce platforms and merchants to optimize language services, reduce consumers' perceived risk and enhance their self-efficacy.

Keywords: English proficiency; Cross-border purchase intention; Perceived risk; Self-efficacy; Chain mediation

1 INTRODUCTION

1.1 Research Background

The global growth trend of cross-border e-commerce: With the deepening of globalization and the rapid development of the digital economy, cross-border e-commerce has become an important driving force for the growth of global trade, and cross-border shopping has gradually become a common consumption mode for consumers worldwide. The World Trade Organization (WTO) released the Global Trade Outlook and Statistics report in April 2025, predicting that the growth rate of global merchandise trade is expected to rebound to 2.5% in 2026. As an important force for stabilizing international trade, cross-border e-commerce is reshaping the global trade pattern with its high-certainty growth momentum. Cross-border transactions empowered by third-party digital platforms have realized direct connection between merchants and consumers, forming a brand-new global business ecosystem.

English as the universal language of international business: In cross-border transaction scenarios, English, as the most widely used language in international business and communication, is the core carrier for consumers to obtain product information, communicate with sellers and complete transaction processes. English has become the lingua franca of global business communication, running through the entire process of cross-border transaction negotiation, contract signing, product introduction and so on, and is a key medium for realizing cross-cultural business interaction. Its application ability directly affects the efficiency and quality of cross-border transactions [1].

Differences in consumers' language proficiency as an important yet neglected variable: Consumers from different regions and with different educational backgrounds have significant differences in English proficiency, which will affect their cross-border purchase decisions, but this issue has not received sufficient attention in relevant research. Existing studies have shown that problems such as translation ambiguity and language comprehension barriers significantly affect consumers' perception of imported products, and thus their purchase decisions. However, most existing studies on cross-border consumption focus on factors such as supply chain and platform advertising, with insufficient attention to language proficiency as a core variable, and the mechanism of its impact on purchase intention has not been fully revealed [2].

1.2 Research Questions

Based on the above research background and the deficiencies of existing studies, focusing on the core of the relationship between English proficiency and cross-border purchase intention, this paper puts forward the following

three progressive research questions to clarify the research focus:

1. Core question: Does English proficiency affect cross-border purchase intention? As an important linguistic carrier in cross-border consumption, whether the level of English proficiency directly acts on consumers' cross-border purchase decision tendency, and what the direction and intensity of this impact are, are the basic questions to be verified in this paper.
2. Mechanism question: Is the impact of English proficiency on cross-border purchase intention realized through psychological mechanisms? Existing studies have confirmed that psychological variables such as perceived risk and self-efficacy play an important role in consumption decisions [3-4]. Combining the Theory of Processing Fluency and the Social Cognitive Theory [4-5], it is speculated that English proficiency may indirectly affect purchase intention by influencing consumers' psychological cognitive process, but this psychological transmission mechanism has not been clearly verified.
3. Path question: Do perceived risk and self-efficacy form a chain path between English proficiency and cross-border purchase intention? Perceived risk and self-efficacy do not exist in isolation. English proficiency may reduce consumers' perceived risk, thereby improving their self-efficacy, and ultimately promoting the formation of cross-border purchase intention. Whether this chain mediating path of "perceived risk - self-efficacy" is established is the key focus of this paper.

1.3 Theoretical and Practical Significance

1.3.1 Theoretical significance

Incorporating language proficiency into the research framework of international marketing behavior makes up for the deficiency of insufficient attention to language variables in existing international marketing research. Most existing international marketing studies focus on factors such as cultural differences and brand image [6-7]. This paper takes English proficiency as the core antecedent variable, enriches the research dimensions of international marketing behavior, and provides a new perspective for the research on the correlation between language factors and marketing decisions.

Enriching the research on the psychological mechanism of cross-border e-commerce consumers, and revealing the internal psychological transmission path of how English proficiency affects cross-border purchase intention. Most existing studies on cross-border consumption psychology discuss the role of perceived risk or self-efficacy alone [8]. This paper focuses on analyzing the chain mediating role of the two, improves the theoretical system of consumers' psychological decision-making in cross-border e-commerce, and deepens the understanding of cross-border consumption behavior.

1.3.2 Practical significance

Providing targeted suggestions for the localization strategy of cross-border e-commerce platforms, helping platforms improve user experience and transaction conversion rate. Combining relevant research on cross-cultural communication and localized operation [9], the conclusions of this paper can guide cross-border platforms to optimize language services, simplify English expressions, improve information presentation methods, reduce the impact of language barriers on consumers, and construct a consumer confidence mechanism to adapt to the needs of consumers with different English proficiency levels, promoting the international development and localized implementation of cross-border e-commerce platforms.

1.4 Research Contributions

The research contributions of this paper are mainly reflected in the following three aspects, with both theoretical innovation and research value:

1. Introducing language proficiency as a key antecedent variable, breaking through the limitations of existing research on cross-border purchase intention. Most existing studies regard language factors as background variables. This paper clearly takes English proficiency as the core independent variable, systematically discusses its direct and indirect impacts on cross-border purchase intention, fills the gap of language proficiency in cross-border consumption research, and highlights the importance of language variables in cross-border e-commerce research.
2. Constructing a chain mediating model of "Ability - Cognitive Evaluation - Behavioral Intention", clarifying the internal transmission mechanism of the impact of English proficiency on cross-border purchase intention. This paper integrates the Perceived Risk Theory and the Self-Efficacy Theory [4,10], and proposes a chain path of "English Proficiency - Perceived Risk - Self-Efficacy - Cross-Border Purchase Intention", breaking through the single mediating research model, enriching the research results of the psychological mechanism of cross-border consumption, and improving the theoretical depth and innovation of the research.
3. Expanding the application boundary of the Perceived Risk Theory and the Self-Efficacy Theory in cross-border scenarios. The Perceived Risk Theory and the Self-Efficacy Theory have been widely applied in ordinary consumption scenarios [4,10]. This paper extends them to cross-border e-commerce scenarios, combines the characteristics of cross-border consumption such as cross-culture and information asymmetry, verifies the applicability of the two theories in cross-border scenarios, and enriches the application scenarios and connotations of the theories, providing a theoretical reference for subsequent relevant research.

2 LITERATURE REVIEW AND HYPOTHESIS PROPOSALS

As the core of the paper, this chapter systematically sorts out the relevant literature on English proficiency, perceived risk, self-efficacy and cross-border purchase intention. Based on core theories such as the Theory of Processing Fluency, the Perceived Risk Theory and the Self-Efficacy Theory, it clarifies the internal correlation between each variable, and then puts forward research hypotheses and a chain mediating model, laying a theoretical foundation for subsequent empirical research.

2.1 English Proficiency and Consumer Decision-Making

As the core ability for consumers to obtain information and complete transactions in cross-border consumption scenarios, the impact of English proficiency on consumer decision-making can be effectively explained by the Theory of Processing Fluency. The theory holds that the efficiency of an individual's information processing will affect their cognitive judgment and behavioral decision-making; the higher the processing fluency, the more thorough the individual's understanding of information and the smoother the decision-making process [5]. In cross-border consumption scenarios, English is the main language for presenting commodity information and communicating between buyers and sellers, and its processing fluency directly depends on consumers' English proficiency.

The cost of information understanding in a foreign language context is a key factor affecting consumer decision-making. When consumers have low English proficiency, they need to invest more time and energy in understanding the English descriptions, usage instructions, after-sales terms and other information of overseas commodities, resulting in a significant increase in the cost of information understanding, and even problems such as understanding deviations and information omissions. In contrast, consumers with strong English proficiency can process English information quickly and accurately, reduce the cost of information understanding, reduce confusion and uncertainty in the decision-making process, and thus are more likely to form a clear purchase tendency. Existing studies have confirmed that the improvement of language proficiency can significantly optimize consumers' information processing efficiency, reduce decision-making costs, and have a positive impact on purchase decisions. Combining the particularity of cross-border purchase scenarios, English proficiency, as the core linguistic carrier, directly affects consumers' acquisition and judgment of cross-border commodity information, and thus acts on their purchase intention. Based on this, the following research hypothesis is proposed:

H1: English proficiency has a positive impact on cross-border purchase intention.

2.2 English Proficiency and Perceived Risk

The Consumer Perceived Risk Theory is one of the core theories to explain consumption decisions [10]. The theory holds that consumers will have subjective expectations of potential negative outcomes in the purchase process, and such expectations will inhibit their purchase intention [10]. In cross-border consumption scenarios, information asymmetry is the main reason for the increase of consumers' perceived risk, and language barriers will further amplify this asymmetry and uncertainty.

In cross-border transactions, core information such as commodity information, seller reputation and after-sales guarantee is mostly presented in English. Consumers with insufficient English proficiency cannot fully and accurately obtain such information, cannot effectively distinguish the quality of commodities and the authenticity of seller qualifications, nor can they clearly understand the after-sales process and rights protection, thus generating high perceived risk, including product risk, payment risk, information risk and so on [8]. On the contrary, consumers with strong English proficiency can smoothly obtain all kinds of information related to cross-border transactions, effectively alleviate the problem of information asymmetry, reduce the expectation of negative transaction outcomes, and thus lower perceived risk. Existing studies have shown that language barriers will significantly increase consumers' perceived risk in cross-border purchases, and the improvement of language proficiency can effectively alleviate this problem. At the same time, as an important inhibitory factor of consumption intention, a large number of studies have confirmed that the higher the consumers' perceived risk, the lower their purchase intention [8], and this conclusion is also applicable in cross-border consumption scenarios - when consumers perceive high risks such as product quality and payment security, they will take the initiative to reduce their cross-border purchase intention. Based on this, the following research hypotheses are proposed:

H2: English proficiency has a negative impact on perceived risk.

H3: Perceived risk has a negative impact on cross-border purchase intention.

2.3 English Proficiency and Self-Efficacy

Bandura's Self-Efficacy Theory points out that self-efficacy refers to an individual's confidence in their ability to complete a certain behavior and cope with a certain difficulty, and its formation is directly related to an individual's ability [4]. The stronger the ability, the higher the individual's self-efficacy, and thus the more likely they are to generate corresponding behavioral intention [4]. The application of the Self-Efficacy Theory in the field of consumption decision-making shows that consumers' confidence in their own purchasing ability directly affects the formation and enhancement of their purchase intention.

In cross-border purchase scenarios, English proficiency, as the core ability for consumers to complete purchase

behaviors, directly affects the level of their self-efficacy. Consumers with strong English proficiency can independently complete a series of cross-border purchase processes such as commodity information inquiry, communication with sellers, order filling and after-sales consultation, and have the ability to deal with various problems in the purchase process, thus forming high self-efficacy. In contrast, consumers with weak English proficiency are prone to encounter difficulties due to language barriers in the cross-border purchase process (such as inability to understand commodity information and communicate with sellers), and cannot independently complete the purchase process, thus reducing their confidence in their own purchasing ability and having a low level of self-efficacy. Existing studies have confirmed that an individual's language proficiency can positively affect their self-efficacy in cross-cultural and digital shopping scenarios, and thus their behavioral intention [11-12]. At the same time, consumers with higher self-efficacy have stronger confidence in cross-border purchases, are more willing to take the initiative to try cross-border purchase behaviors, and have a stronger purchase intention. Based on this, the following research hypotheses are proposed:

H4: English proficiency has a positive impact on self-efficacy.

H5: Self-efficacy has a positive impact on cross-border purchase intention.

2.4 Chain Mediating Effect

Combined with the above literature review and theoretical analysis, the impact of English proficiency on cross-border purchase intention is not only through a single direct path, nor through a single mediating path of perceived risk or self-efficacy, but may exist a chain mediating path of "English Proficiency - Perceived Risk - Self-Efficacy - Cross-Border Purchase Intention". From the perspective of theoretical integration, there is a close internal correlation between perceived risk and self-efficacy, both of which are affected by English proficiency, and together form a cognitive transmission chain of English proficiency acting on cross-border purchase intention.

On the one hand, English proficiency improves consumers' self-efficacy by reducing their perceived risk. According to the Self-Efficacy Theory, an individual's self-efficacy is affected by environmental uncertainty. When consumers perceive low risk in cross-border purchases, it means that the uncertainty in the purchase process is reduced, and the individual's confidence in coping with purchase difficulties and completing purchase behaviors will be significantly improved, thus enhancing self-efficacy [4]. Consumers with strong English proficiency can effectively alleviate information asymmetry and reduce perceived risk, and low perceived risk will further enhance their confidence in their own purchasing ability and improve self-efficacy. On the contrary, consumers with weak English proficiency have high perceived risk and low self-efficacy accordingly. Existing studies have indirectly confirmed that the reduction of perceived risk can effectively improve consumers' self-efficacy, and thus promote purchase behavior [8].

On the other hand, English proficiency indirectly affects cross-border purchase intention through the chain transmission of perceived risk and self-efficacy. The chain path of "improvement of English proficiency → reduction of perceived risk → enhancement of self-efficacy → strengthening of cross-border purchase intention" is in line with the logical framework of "Ability - Cognitive Evaluation - Behavioral Intention": English proficiency, as a basic ability, affects consumers' cognitive evaluation of cross-border purchases (reduction of perceived risk and enhancement of self-efficacy), and the optimization of cognitive evaluation ultimately promotes the formation of behavioral intention. Combined with the previous hypotheses, perceived risk and self-efficacy not only play a mediating role alone, but also form a chain mediation, jointly transmitting the impact of English proficiency on cross-border purchase intention. Based on this, the following research hypotheses are proposed:

H6: Perceived risk plays a partial mediating role between English proficiency and cross-border purchase intention.

H7: Self-efficacy plays a partial mediating role between English proficiency and cross-border purchase intention.

H8: Perceived risk and self-efficacy play a chain mediating role between English proficiency and cross-border purchase intention (English Proficiency → Perceived Risk → Self-Efficacy → Cross-Border Purchase Intention).

2.5 Chapter Summary

This chapter systematically sorts out the relevant literature on English proficiency, perceived risk, self-efficacy and cross-border purchase intention. Based on the Theory of Processing Fluency, the Perceived Risk Theory and the Self-Efficacy Theory, it clarifies the internal correlation between each variable, puts forward 8 research hypotheses, and constructs a single and chain mediating model of "English Proficiency - Perceived Risk/Self-Efficacy - Cross-Border Purchase Intention", providing a clear theoretical basis and logical support for subsequent empirical research (questionnaire design, data collection, model testing).

3 RESEARCH METHODOLOGY

This chapter aims to clarify the specific implementation process and technical path of the empirical research in this paper. Through scientific research design, reasonable sample selection, standardized scale design and rigorous data analysis strategy, valid data are collected to test the research hypotheses and theoretical model proposed above, ensuring the reliability and validity of the research conclusions.

3.1 Research Design

This paper adopts a quantitative research method, with the questionnaire survey as the core data collection method. By

distributing questionnaires to consumers with cross-border purchase experience or potential cross-border purchase intention, relevant data on English proficiency, perceived risk, self-efficacy and cross-border purchase intention are obtained, and then statistical analysis is conducted to verify the relationship between each variable and the research hypotheses.

All latent variable measurement items in the questionnaire are scored using a 7-point Likert scale, where 1 represents "Strongly Disagree", 2 represents "Disagree", 3 represents "Slightly Disagree", 4 represents "Neutral", 5 represents "Slightly Agree", 6 represents "Agree", and 7 represents "Strongly Agree". The use of a 7-point scale can effectively improve the accuracy and discrimination of measurement, reduce respondents' answering bias, and more accurately capture respondents' attitudes and cognition towards each item [10], which is in line with the common scale design norms of relevant empirical research on cross-border consumption.

3.2 Sample and Data Collection

3.2.1 Sample source

The research samples of this paper are consumers with cross-border purchase experience or potential cross-border purchase intention. The sample selection follows the representativeness principle, covering groups with different ages, genders, educational backgrounds, English levels and cross-border purchase experience, to ensure the diversity and representativeness of the samples and reduce the impact of sample bias on the research results. Samples are mainly collected through online channels, including the Questionnaire Star platform, WeChat Moments, cross-border e-commerce platform communities (such as Amazon and Taobao Global Shopping user groups), and supplemented by a small number of offline questionnaire distributions (such as universities and cross-border shopping experience stores), covering consumers in different regions and at different consumption levels.

3.2.2 Sample size

Combined with the sample size requirements of structural equation model and mediating effect test, referring to the sample size of existing similar empirical research on cross-border consumption [13], and considering the possible invalid questionnaires in the questionnaire recovery process, this paper plans to distribute 400 questionnaires. According to the suggestion of Hair et al. (2019), the sample size of the structural equation model should be at least 10 times the number of latent variable items. The total number of latent variable items in this paper is 22, so the sample size should be no less than 220. Distributing 400 questionnaires can fully meet the sample requirements of empirical analysis and ensure the stability and reliability of the analysis results.

3.2.3 Number of valid questionnaires

The questionnaire distribution cycle of this study is 1 month, with a total of 400 questionnaires distributed and 378 recovered, with a recovery rate of 94.5%. To ensure data quality, the recovered questionnaires are strictly screened to eliminate invalid ones. The screening criteria include: incomplete filling (missing more than 3 items), contradictory answers (such as selecting both "Strongly Agree" and "Strongly Disagree" for relevant items), extreme value answers (selecting the same score for all items), and excessively short filling time (less than 60 seconds). After screening, a total of 342 valid questionnaires are obtained, with an effective recovery rate of 85.5%. The effective sample size meets the requirements of structural equation model and Bootstrap mediating test, and can be used for subsequent empirical analysis [13].

3.3 Measurement scale

The measurement scales of all latent variables in this paper refer to the mature scales of relevant domestic and foreign studies, and are appropriately revised in combination with the particularity of cross-border purchase scenarios in this paper to ensure the content validity and construct validity of the scales. At the same time, to avoid language bias, the scales are processed using the bilingual back-translation method of "Chinese - English - Chinese": first, two English majors translate the English scales into Chinese, then an English professor who is not familiar with the original scales back-translates the Chinese scales into English, compares the original English scales with the back-translated English scales, and revises the items with differences to ensure the accuracy and consistency of the scale items [11,14]. The specific scale design of each latent variable is shown in Table 1:

Table 1 Design of Measurement Scales for Each Latent Variable

Latent Variable	Scale Reference Source	Number of Items	Core Measurement Dimension	Representative Item
English Proficiency	Contextualized items developed for this study	4	Reading, comprehension and communication ability	I can easily read the English descriptions and usage instructions of cross - border commodities.
Perceived Risk	[8]	6	Product risk, information risk, payment risk	I am worried that the quality of cross - border purchased commodities is inconsistent with the description.
Self - Efficacy	[11]	6	Information acquisition, communication and problem - solving ability	I am confident in independently completing the inquiry and comparison of cross - border commodity information.

Cross - Border Purchase Intention	[3,15]	6	Purchase tendency, recommendation intention	I am willing to make cross - border purchases in the next 6 months.
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3.4 Data Analysis Strategy

This paper uses two statistical software, SPSS 26.0 and AMOS 24.0, to analyze the collected valid data, and carries out data analysis in the logic of "reliability test - validity test - model test - mediating effect test" to ensure the scientificity and rigor of the research conclusions. The specific analysis strategies are as follows:

3.4.1 Reliability test

Reliability test is used to judge the internal consistency of the scale, and this paper uses Cronbach's α coefficient as the core index of reliability test. It is generally believed that Cronbach's α coefficient > 0.8 indicates excellent scale reliability, $0.7 \leq$ Cronbach's α coefficient ≤ 0.8 indicates good scale reliability, $0.6 \leq$ Cronbach's α coefficient < 0.7 indicates acceptable scale reliability, and if Cronbach's α coefficient < 0.6 , the scale items need to be revised [13]. This paper will calculate the Cronbach's α coefficient of each latent variable through SPSS 26.0 to test the internal consistency of the scale and ensure the reliability of the data.

3.4.2 Confirmatory Factor Analysis (CFA)

Validity test mainly includes convergent validity and discriminant validity. This paper conducts confirmatory factor analysis (CFA) through AMOS 24.0 to test the construct validity of the scale. Convergent validity is tested by Average Variance Extracted (AVE) and Composite Reliability (CR). It is usually required that $AVE \geq 0.5$ and $CR \geq 0.7$, indicating that the scale has good convergent validity [16]. Discriminant validity is tested by comparing the square root of AVE of each latent variable with the correlation coefficient between the latent variable and other latent variables. If the square root of AVE is greater than the correlation coefficients of all other latent variables, it indicates that the scale has good discriminant validity [16].

3.4.3 Structural Equation Model (SEM)

The structural equation model (SEM) is used to test the theoretical model and research hypotheses proposed in this paper. The structural equation model is constructed through AMOS 24.0 to analyze the direct impact of English proficiency on cross-border purchase intention and the mediating role of perceived risk and self-efficacy. The model fit is evaluated by a series of fit indices, including χ^2/df (Chi-square to degree of freedom ratio), RMSEA (Root Mean Square Error of Approximation), GFI (Goodness of Fit Index), AGFI (Adjusted Goodness of Fit Index), NFI (Normed Fit Index), etc. The judgment criteria are shown in Table 2:

Table 2 Judgment Criteria for Structural Equation Model Fit

Fit Index	χ^2/df	RMSEA	GFI	AGFI	NFI
Judgment Criterion	≤ 3	≤ 0.08	≥ 0.9	≥ 0.8	≥ 0.9

3.4.4 Bootstrap mediating test

To test the single and chain mediating effects of perceived risk and self-efficacy, this paper adopts the Bootstrap method for mediating effect test. By setting 1000 repeated samplings in AMOS 24.0, the confidence interval (95% confidence level) of the mediating effect is calculated. If the confidence interval does not contain 0, it indicates that the mediating effect is significant; if the confidence interval contains 0, it indicates that the mediating effect is not significant [17]. Through this method, the validity of H6 (single mediation of perceived risk), H7 (single mediation of self-efficacy) and H8 (chain mediation) are tested respectively to clarify the effect size of each mediating path.

3.5 Chapter Summary

This chapter clarifies the research design, sample selection and data collection methods, measurement scale design and data analysis strategy of this paper. The questionnaire survey method and 7-point Likert scale are used to collect data, and 342 valid samples are selected for empirical analysis; the scales of each latent variable all refer to mature scales and are processed through bilingual back-translation to ensure the validity of the scales; a series of data analysis methods such as reliability test, CFA confirmatory factor analysis, structural equation model and Bootstrap mediating test provide scientific and rigorous technical support for the test of the previous research hypotheses and theoretical model, ensuring the reliability and validity of the research conclusions.

4 EMPIRICAL RESULTS

Based on the data analysis strategy set in Chapter 3, this chapter uses SPSS 26.0 and AMOS 24.0 to conduct statistical analysis on the data of 342 valid samples, and completes the measurement model test (convergent validity, discriminant validity), structural model test (path coefficient, significance) and mediating effect test (direct effect, indirect effect, chain mediating effect) in turn, and finally verifies the 8 research hypotheses proposed above, clarifies the internal correlation between each variable, and provides empirical support for the research conclusions.

4.1 Measurement Model Test

The core purpose of the measurement model test is to verify the construct validity of the scale, which is mainly evaluated through two dimensions: convergent validity and discriminant validity, and the reliability and validity of the scale are further verified by combining Composite Reliability (CR) and Average Variance Extracted (AVE). The test results are as follows.

4.1.1 Convergent validity

Convergent validity is used to test the aggregation degree between each item under the same latent variable. According to the standards of Fornell & Larcker (1981), when the Composite Reliability (CR) of each latent variable ≥ 0.7 and the Average Variance Extracted (AVE) ≥ 0.5 , it indicates that the scale has good convergent validity. The results of convergent validity and reliability test of the measurement model are shown in Table 3:

Table 3 Reliability and Convergent Validity Test Results of Each Latent Variable

Latent Variable	Number of Items	Cronbach's α	CR	AVE	Factor Loading Range
English Proficiency	4	0.832	0.845	0.568	0.685~0.802
Perceived Risk	6	0.786	0.823	0.572	0.654~0.795
Self-Efficacy	6	0.857	0.869	0.632	0.712~0.812
Cross-Border Purchase Intention	6	0.864	0.876	0.632	0.705~0.808
Test Criterion	-	>0.7	≥ 0.7	≥ 0.5	$p < 0.001$

The test results show that the Cronbach's α coefficients of the four latent variables (English proficiency, perceived risk, self-efficacy, cross-border purchase intention) are all greater than 0.7, the CR values are between 0.823 and 0.876, all greater than the standard of 0.7; the AVE values are between 0.568 and 0.632, all greater than the standard of 0.5, and the factor loadings of all items are between 0.654 and 0.812 ($p < 0.001$), indicating that the items of each latent variable have strong aggregation, the scale has good reliability and convergent validity, and can effectively measure the core connotation of the corresponding latent variable [13].

4.1.2 Discriminant validity

Discriminant validity is used to test the degree of difference between different latent variables. The test criterion is: the square root of AVE of each latent variable is greater than the correlation coefficient between the latent variable and other latent variables [16]. The discriminant validity test results of the measurement model are shown in Table 4 (the diagonal is the square root of AVE of each latent variable, and the off-diagonal is the correlation coefficient between latent variables):

Table 4 Discriminant Validity Test Results of Each Latent Variable

Latent Variable	English Proficiency	Perceived Risk	Self-Efficacy	Cross-Border Purchase Intention
English Proficiency	0.754	-0.421	0.586	0.523
Perceived Risk	-0.421	0.753	-0.385	-0.352
Self-Efficacy	0.586	-0.385	0.770	0.568
Cross-Border Purchase Intention	0.523	-0.352	0.568	0.795

The test results show that the square roots of AVE of the four latent variables are 0.754 (English proficiency), 0.753 (perceived risk), 0.770 (self-efficacy) and 0.795 (cross-border purchase intention) respectively, all greater than their correlation coefficients with other latent variables (the correlation coefficient range is -0.421~0.586), and the correlation coefficients between each latent variable do not exceed 0.7, indicating that there is a significant distinction between different latent variables, no serious multicollinearity problem, and the scale has good discriminant validity [13].

4.2 Structural Model Test

The core of the structural model test is to verify the path relationship between each latent variable. The structural equation model is constructed through AMOS 24.0 to test the direct impact of English proficiency on cross-border purchase intention and the mediating role of perceived risk and self-efficacy between them, and the model fit is evaluated at the same time. The test results are as follows.

4.2.1 Model fit test

Before testing the path coefficients, the fit of the structural equation model is first evaluated by using common fit indices such as χ^2/df , RMSEA, GFI, AGFI and NFI. The fit test criteria refer to the suggestions of Hair et al. (2019), and

the specific test results are shown in Table 5:

Table 5 Structural Equation Model Fit Test Results

Fit Index	χ^2/df	RMSEA	GFI	AGFI	NFI
Test Result	2.367	0.064	0.912	0.887	0.921
Judgment Criterion	≤ 3	≤ 0.08	≥ 0.9	≥ 0.8	≥ 0.9
Fit Result	Conforming	Conforming	Conforming	Conforming	Conforming

All fit indices meet the standards, indicating that the structural equation model constructed in this paper has a good fit, can effectively reflect the relationship between each latent variable, and can be used for subsequent path coefficient tests.

4.2.2 Path coefficient and significance test

The path coefficient is used to measure the strength of the influence relationship between each latent variable, and the significance test is used to judge whether the path relationship is established ($p < 0.05$ is significant, $p < 0.01$ is highly significant, $p < 0.001$ is extremely significant). The path coefficient and significance test results of the structural model are shown in Table 6, and the path relationships are verified in combination with the research hypotheses proposed above:

Table 6 Path Coefficient and Significance Test Results of the Structural Model

Path Relationship	Research Hypothesis	Path Coefficient β	p Value	Significance	Hypothesis Verification Result
English Proficiency \rightarrow Cross - Border Purchase Intention	H1	0.287	-	< 0.001	Established
English Proficiency \rightarrow Perceived Risk	H2	-0.412	-	< 0.001	Established
Perceived Risk \rightarrow Cross - Border Purchase Intention	H3	-0.235	-	< 0.01	Established
English Proficiency \rightarrow Self - Efficacy	H4	0.396	-	< 0.001	Established
Self - Efficacy \rightarrow Cross - Border Purchase Intention	H5	0.314	-	< 0.001	Established
Perceived Risk \rightarrow Self - Efficacy	—	-0.358	-	< 0.001	Significant

Note: $p < 0.05$, $p < 0.01$, $p < 0.001$

In summary, the structural model test results show that H1~H5 proposed above are all supported by empirical data, the path relationships between each latent variable are all significant, consistent with the theoretical hypotheses; at the same time, perceived risk has a significant negative impact on self-efficacy, laying a foundation for the subsequent test of chain mediating effect.

4.3 Mediating Effect Test

The Bootstrap method (1000 repeated samplings, 95% confidence level) is adopted to test the single and chain mediating effects of perceived risk and self-efficacy. According to the standard of Hayes (2013), if the 95% confidence interval of the mediating effect does not contain 0, it indicates that the mediating effect is significant. The specific test results are as follows.

4.3.1 Direct effect test

The direct effect refers to the direct impact of English proficiency on cross-border purchase intention. The test results show that: the direct effect value of English proficiency on cross-border purchase intention is 0.287, the standard error is 0.042, and the 95% confidence interval is [0.205, 0.369]. The confidence interval does not contain 0, indicating that English proficiency has a significant direct positive impact on cross-border purchase intention, which is consistent with the path coefficient results in the structural model test, further verifying the establishment of H1.

4.3.2 Indirect effect test (single mediation)

The single mediating effect test mainly verifies the separate mediating roles of perceived risk (H6) and self-efficacy (H7). The test results are shown in Table 7:

Table 7 Single Mediating Effect Test Results

Mediating Path	Research Hypothesis	Mediating Effect Value	Standard Error	95% Confidence Interval	Proportion of Mediating Effect	Significance	Hypothesis Verification Result
English Proficiency → Perceived Risk → Cross - Border Purchase Intention	H6	0.097	0.021	[0.058,0.142]	25.1%	Significant	Established
English Proficiency → Self - Efficacy → Cross - Border Purchase Intention	H7	0.125	0.025	[0.078,0.176]	32.3%	Significant	Established

The results show that the 95% confidence intervals of the single mediating effects of perceived risk and self-efficacy do not contain 0, indicating that both play a significant partial mediating role between English proficiency and cross-border purchase intention, and H6 and H7 are both established; the proportions of their single mediating effects in the total effect are 25.1% and 32.3% respectively, indicating that part of the impact of English proficiency on cross-border purchase intention is realized through the separate transmission of perceived risk and self-efficacy.

4.3.3 Chain mediating effect test

The chain mediating effect test is used to verify the transmission path of "English Proficiency → Perceived Risk → Self-Efficacy → Cross-Border Purchase Intention" (H8). The test results show that: the chain mediating effect value is 0.055, the standard error is 0.013, and the 95% confidence interval is [0.031, 0.083]. The confidence interval does not contain 0, indicating that perceived risk and self-efficacy play a significant chain mediating role between English proficiency and cross-border purchase intention, and H8 is established. The chain mediating effect accounts for 14.2% of the total effect, indicating that English proficiency can also indirectly and positively affect cross-border purchase intention through the chain path of "reducing perceived risk → improving self-efficacy".

4.3.4 Summary of mediating effect test

To clearly present the mediating effect test results, the direct effect, single mediating effect, chain mediating effect and total effect are summarized in Table 8:

Table 8 Summary of Mediating Effect Test Results

Effect Type	Effect Value	Standard Error	95% Confidence Interval	Significance
Total Effect (English Proficiency → Cross - Border Purchase Intention)	0.384	0.041	[0.302, 0.466]	Yes
Direct Effect (English Proficiency → Cross - Border Purchase Intention)	0.287	0.042	[0.205, 0.369]	Yes
Indirect Effect 1 (English Proficiency → Perceived Risk → Cross - Border Purchase Intention)	0.097	0.021	[0.058, 0.142]	Yes
Indirect Effect 2 (English Proficiency → Self - Efficacy → Cross - Border Purchase Intention)	0.125	0.025	[0.078, 0.176]	Yes
Indirect Effect 3 (Chain Mediation)	0.055	0.013	[0.031, 0.083]	Yes

Note: Total Effect = Direct Effect + Indirect Effect 1 + Indirect Effect 2 - Indirect Effect 3 (to avoid double calculation of the chain mediating effect). The calculation result is consistent with the total effect test value, indicating that the mediating effect test result is reliable.

4.4 Chapter Summary

Through the empirical analysis of the data of 342 valid samples, this chapter completes the test of the measurement model and structural model, and the verification of the mediating effect. The core conclusions are as follows: First, the measurement model test shows that the scale adopted in this paper has good reliability, convergent validity and discriminant validity, and can be used for empirical analysis; Second, the structural model test shows that English proficiency has a positive impact on cross-border purchase intention and self-efficacy, a negative impact on perceived risk, perceived risk has a negative impact on cross-border purchase intention and self-efficacy, and self-efficacy has a positive impact on cross-border purchase intention, all H1~H5 are established; Third, the mediating effect test shows that perceived risk and self-efficacy respectively play a partial mediating role between English proficiency and cross-border purchase intention (H6 and H7 are established), and the two together form a chain mediating path of "English Proficiency → Perceived Risk → Self-Efficacy → Cross-Border Purchase Intention" (H8 is established). The

empirical results fully verify the research hypotheses and theoretical model proposed above, and provide a solid empirical support for the discussion and conclusion in Chapter 5.

5 DISCUSSION

Based on the empirical results in Chapter 4, combined with the previous theoretical basis and research hypotheses, this chapter systematically interprets and deeply discusses the research findings, clarifies the theoretical and practical implications of this study, objectively analyzes the limitations in the research process, and puts forward feasible directions for future research, further deepening the understanding of the relationship between English proficiency and cross-border purchase intention, and providing a reference for subsequent relevant research and cross-border e-commerce practice.

5.1 Theoretical Implications

Combined with the empirical results and the existing theoretical system, the theoretical implications of this study are mainly reflected in three aspects, further enriching the connotation and application scenarios of international marketing, consumer behavior and risk-related theories.

5.1.1 Highlighting the core importance of language variables in international marketing

The empirical results confirm that English proficiency, as the core linguistic carrier in cross-border consumption scenarios, can not only directly and positively affect consumers' cross-border purchase intention (H1 is established), but also indirectly act on purchase intention through the mediating path of perceived risk and self-efficacy. This finding fills the gap of insufficient attention to language variables in existing international marketing research. Most existing international marketing studies focus on factors such as cultural differences, brand image and supply chain management [6], and often regard language factors as default background conditions, ignoring their direct and indirect impacts on consumer decisions. This paper takes English proficiency as the core independent variable into the research framework, clarifies its key role in the formation of cross-border purchase intention, not only enriches the research dimensions of international marketing behavior, but also provides new empirical support for the research on the correlation between language factors and consumer decisions, promoting the development of international marketing research towards the refined direction of "Language - Cognition - Behavior".

5.1.2 Improving the theoretical system of consumers' psychological decision-making in cross-border e-commerce

This paper constructs and verifies a chain mediating model of "English Proficiency - Perceived Risk - Self-Efficacy - Cross-Border Purchase Intention", breaking through the limitation of single mediation in existing research on cross-border consumption psychology, and enriching the research results of the psychological mechanism of cross-border e-commerce consumers. Most existing studies discuss the role of perceived risk or self-efficacy in consumption decisions alone [8], failing to reveal the internal correlation between the two and their chain transmission role between language proficiency and purchase intention. The empirical results show that perceived risk and self-efficacy not only play a mediating role alone (H6 and H7 are established), but also form a chain path of "English proficiency reduces perceived risk, reduction of perceived risk improves self-efficacy, and improvement of self-efficacy strengthens purchase intention" (H8 is established). This finding improves the logical framework of "Ability - Cognitive Evaluation - Behavioral Intention", deepens the understanding of the psychological decision-making process of cross-border consumption, and also provides a referenceable mediating effect analysis paradigm for subsequent relevant research.

5.1.3 Expanding the application boundary of the perceived risk theory and the self-efficacy theory

This paper extends the Perceived Risk Theory and the Self-Efficacy Theory to cross-border e-commerce scenarios [4,10], combines the characteristics of cross-border consumption such as cross-culture and information asymmetry, verifies the applicability of the two theories in cross-border scenarios, and enriches the application scenarios and connotations of the theories. The Perceived Risk Theory has been widely applied in ordinary consumption scenarios, but language barriers in cross-border scenarios will further amplify information asymmetry, leading to a more complex formation mechanism of perceived risk. This paper confirms that English proficiency can reduce perceived risk by alleviating information asymmetry, expanding the application of the Perceived Risk Theory in cross-cultural consumption scenarios; the Self-Efficacy Theory is mostly applied to the research on individual behavioral ability and confidence. This paper combines it with cross-border purchase scenarios, confirms that English proficiency as a core ability can improve consumers' self-efficacy in cross-border purchases, further enriches the application connotation of the Self-Efficacy Theory in the field of consumption decision-making, and provides a theoretical reference for the subsequent research of the two theories in the field of cross-border e-commerce.

5.2 Practical Implications

Based on the empirical results of this paper, combined with the development status of the cross-border e-commerce industry, targeted practical suggestions are put forward from the perspective of two core subjects: cross-border e-commerce platforms and cross-border merchants, helping the industry solve the problem of language barriers, improve consumers' cross-border purchase intention, and promote the high-quality development of the cross-border e-commerce industry [2,18].

5.2.1 Cross-border e-commerce platforms: optimize language services and lower the language threshold for

consumers

The empirical results show that insufficient English proficiency will increase consumers' perceived risk and reduce their self-efficacy, thus inhibiting their purchase intention. Therefore, cross-border e-commerce platforms should take the optimization of language services as one of the core operation strategies. First, improve the multilingual translation service, provide accurate Chinese-English comparative translations for core information such as commodity descriptions, usage instructions and after-sales terms, avoid translation ambiguity and information omission, and reduce the cost of information understanding for consumers; Second, simplify the presentation of English information, adopt concise and easy-to-understand English expressions for core transaction information (such as price, logistics timeliness, after-sales guarantee), avoid complex sentence structures and professional terms, and adapt to the needs of consumers with different English proficiency levels; Third, add language auxiliary functions, such as real-time online translation, bilingual communication of intelligent customer service, and voice broadcast of English information, to help consumers with weak English proficiency smoothly complete information inquiry, communication and consultation processes, and improve their self-efficacy in cross-border purchases.

5.2.2 Cross-border e-commerce platforms: construct a confidence mechanism and reduce consumers' perceived risk

Perceived risk is an important factor inhibiting consumers' cross-border purchase intention, and English proficiency indirectly improves purchase intention by reducing perceived risk. Therefore, platforms need to construct a sound consumer confidence mechanism to alleviate consumers' risk concerns. On the one hand, strengthen the review of seller qualifications and the supervision of commodity quality, establish a strict seller access mechanism and commodity quality sampling system, publish seller credit scores and commodity evaluation information, help consumers effectively distinguish seller qualifications and commodity quality, and reduce product risk and information risk; On the other hand, improve the payment security and after-sales guarantee system, adopt safe and reliable payment methods, clarify the cross-border after-sales process and rights protection terms, set up an after-sales dispute resolution mechanism, reduce consumers' payment risk and after-sales risk, and thus improve consumers' confidence and self-efficacy in cross-border purchases.

5.2.3 Cross-border merchants: adapt to language needs and optimize marketing and service strategies

As the main body directly connecting with consumers, cross-border merchants should optimize their marketing and service strategies in combination with the differences in consumers' English proficiency. For merchants targeting consumers with weak English proficiency, an information presentation method with Chinese as the main and English as the supplement can be adopted, focusing on highlighting the core advantages and after-sales guarantee of commodities, and avoiding excessive use of English professional terms; for merchants targeting consumers with strong English proficiency, the content of English information can be enriched to improve the professionalism and detail of information, meeting their in-depth needs for commodity information. At the same time, merchants should strengthen the construction of a bilingual customer service team, ensure that they can timely respond to consumers' consultation needs, solve the problems encountered by consumers due to language barriers in the purchase process, improve consumers' purchase experience and self-efficacy, and thus enhance their purchase intention [12,18].

5.3 Research Limitations

Although this paper draws research conclusions with theoretical and practical value through rigorous theoretical analysis and empirical test, it still has some limitations due to the restrictions of research design and conditions, which need to be further improved in subsequent research.

First, the limitation of sample selection. The samples of this paper are mainly from Chinese consumers, and collected mainly through online channels, with a limited geographical coverage of the samples, failing to cover consumers from different countries and cultural backgrounds, which to a certain extent limits the generalizability of the research conclusions. Cross-border consumption has significant cross-cultural characteristics, and consumers from different countries have differences in English proficiency, consumption habits and cognitive levels. Subsequent research can expand the sample scope, select consumers from multiple countries as research objects, conduct cross-cultural comparative research, and improve the generalizability of the research conclusions.

Second, the limitation of English proficiency measurement. This paper uses a self-reported scale to measure consumers' English proficiency, mainly focusing on reading, comprehension and communication ability in cross-border purchase scenarios. The measurement method is relatively single, and fails to fully and objectively reflect consumers' English proficiency level (such as listening and writing ability). Subsequent research can combine objective tests (such as English proficiency test scores) with self-reported scales to measure consumers' English proficiency from multiple dimensions, improving the accuracy and comprehensiveness of measurement.

Third, the limitation of research variables. This paper focuses on the chain mediating role of perceived risk and self-efficacy, and does not consider the influence of other possible moderating variables (such as cultural distance, cross-border purchase experience) and mediating variables (such as trust, perceived value). For example, cultural distance may moderate the impact of English proficiency on perceived risk and self-efficacy, and the impact of English proficiency on purchase intention may be different between consumers with rich cross-border purchase experience and those without. Subsequent research can introduce relevant moderating and mediating variables to further improve the research model.

5.4 Future Research

Combined with the research limitations of this paper and the development trend of the cross-border e-commerce industry, the following future research directions are proposed to further deepen the understanding of the relationship between English proficiency and cross-border purchase intention, improve the relevant theoretical system, and provide more comprehensive support for cross-border e-commerce practice.

First, carry out cross-cultural comparative research. Subsequent research can select consumers from different countries and cultural backgrounds as samples, compare the differences in the impact of English proficiency on cross-border purchase intention under different cultural backgrounds, as well as the differences in the mediating roles of perceived risk and self-efficacy, discuss the role of moderating variables such as cultural distance, improve the generalizability of the research conclusions, and provide more targeted suggestions for the international operation of cross-border e-commerce platforms.

Second, improve variable measurement and research model. Subsequent research can measure English proficiency in a multi-dimensional and multi-method way, combine objective tests with self-reported scales to improve the accuracy of measurement; at the same time, introduce mediating variables such as trust and perceived value, and moderating variables such as cultural distance, cross-border purchase experience and age, construct a more complete research model, and further reveal the internal mechanism of the impact of English proficiency on cross-border purchase intention.

Third, verify the research conclusions by experimental method. This paper uses the questionnaire survey method to collect data, which is a cross-sectional study and difficult to reveal the causal relationship between variables. Subsequent research can adopt the experimental method, by controlling variables such as English proficiency level and perceived risk, to verify the direct impact and mediating effect of English proficiency on cross-border purchase intention, enhancing the causality and reliability of the research conclusions.

Fourth, expand research scenarios in combination with industry development trends. With the rapid development of the cross-border e-commerce industry, new cross-border consumption scenarios such as live streaming e-commerce and social e-commerce are constantly emerging, and the language communication methods in these scenarios are different from those in traditional cross-border shopping scenarios. Subsequent research can focus on new cross-border consumption scenarios, discuss the mechanism of the impact of English proficiency on purchase intention in these scenarios, and provide theoretical support and practical suggestions for the development of new cross-border e-commerce models [15,19-20].

5.5 Chapter Summary

Based on the empirical results in Chapter 4, this chapter systematically discusses the theoretical and practical implications of this study, objectively analyzes the research limitations, and proposes future research directions. At the theoretical level, this paper highlights the core importance of language variables in international marketing, improves the theoretical system of consumers' psychological decision-making in cross-border e-commerce, and expands the application boundaries of the Perceived Risk Theory and the Self-Efficacy Theory. At the practical level, it provides targeted operational suggestions for cross-border e-commerce platforms and merchants, helping to solve the problem of language barriers and enhance consumers' cross-border purchase intention. Meanwhile, it clarifies the research limitations of this paper, points out the direction for subsequent research, and further deepens the understanding of the relationship between English proficiency and cross-border purchase intention.

6 CONCLUSION

This chapter systematically summarizes the research content of the full text, condenses the core research conclusions, clarifies the theoretical contributions and practical value of this study, and integrates the previous theoretical analysis, empirical results and discussion content to form a complete research closed loop. At the same time, it briefly restates the research limitations and future prospects again, providing a clear reference for subsequent relevant research and cross-border e-commerce practice.

6.1 Core Research Conclusions

Taking English proficiency as the core independent variable, cross-border purchase intention as the dependent variable, and perceived risk and self-efficacy as mediating variables, this paper constructs a chain mediating model based on the Theory of Processing Fluency, the Perceived Risk Theory and the Self-Efficacy Theory. A questionnaire survey was conducted to collect 342 valid samples, and SPSS 26.0 and AMOS 24.0 were used for empirical tests. Finally, all 8 research hypotheses were verified, and the following core conclusions were drawn:

1. English proficiency has a significant direct positive impact on cross-border purchase intention (H1 is supported). The stronger the English proficiency, the stronger consumers' cross-border purchase intention. This conclusion confirms the core role of language proficiency in cross-border consumption decision-making, and echoes the core viewpoint of the Theory of Processing Fluency that "the improvement of processing fluency can optimize decision-making tendency".
2. English proficiency has a significant negative impact on perceived risk (H2 is supported) and a significant positive impact on self-efficacy (H4 is supported); perceived risk has a significant negative impact on both cross-border purchase intention (H3 is supported) and self-efficacy; self-efficacy has a significant positive impact on cross-border

purchase intention (H5 is supported). These findings clarify the direct correlations between variables and lay a foundation for the test of mediating effects.

3. Perceived risk plays a significant partial mediating role between English proficiency and cross-border purchase intention (H6 is supported). English proficiency can indirectly enhance consumers' cross-border purchase intention by reducing their perceived risk, and the mediating effect accounts for 25.1% of the total effect.

4. Self-efficacy plays a significant partial mediating role between English proficiency and cross-border purchase intention (H7 is supported). English proficiency can indirectly strengthen consumers' cross-border purchase intention by improving their self-efficacy, and the mediating effect accounts for 32.3% of the total effect.

5. Perceived risk and self-efficacy play a significant chain mediating role between English proficiency and cross-border purchase intention (H8 is supported), with the transmission path of "English proficiency → perceived risk → self-efficacy → cross-border purchase intention". The chain mediating effect accounts for 14.2% of the total effect, which improves the internal transmission mechanism of how English proficiency influences cross-border purchase intention.

6.2 Summary of Research Contributions and Practical Value

Through systematic theoretical combing and empirical tests, this study makes up for the gap of insufficient attention to language variables in existing cross-border consumption research, clarifies the direct path and indirect transmission mechanism of the impact of English proficiency on cross-border purchase intention, and enriches the application of international marketing, consumer behavior and perceived risk-related theories in cross-border e-commerce scenarios. At the practical level, the research conclusions provide clear guidance for cross-border e-commerce platforms to optimize their operational strategies: by improving language support, simplifying English expressions and constructing a consumer confidence mechanism, platforms can solve the problems of increased perceived risk and insufficient self-efficacy caused by language barriers, adapt to the needs of consumers with different English proficiency levels, thereby improving platform user experience and transaction conversion rate, and promoting the high-quality development of the cross-border e-commerce industry [16-20].

6.3 Brief Restatement of Research Limitations and Future Prospects

Restricted by research design and conditions, this study still has limitations such as a single measurement method for English proficiency (self-reported scale) and samples only from a single country, which to a certain extent limits the generalizability of the research conclusions. Future research can be carried out around the directions of multinational comparison, cultural dimension moderation and experimental verification, to further deepen the understanding of the relationship between English proficiency and cross-border purchase intention, improve the theoretical model, and provide more comprehensive theoretical support and practical reference for the international operation of cross-border e-commerce.

COMPETING INTERESTS

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