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ARTICLE How Social Media as a Digital Marketing Strategy Influences Chinese Students' Decision to Study Abroad in the United States: A Model Analysis Approach

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ABSTRACT

The rise of social media has significantly transformed global education marketing. This study examines the influence of social media as a digital marketing tool on Chinese students' decisions to study in the United States. By using a model analysis approach, the research offers insights to help educational institutions develop effective digital marketing strategies tailored to the Chinese student market. Key influential factors are identified through the Unified Theory of Acceptance and Use of Technology (UTAUT) model. The findings underscore social media's crucial role in shaping Chinese students' perceptions, expectations, and decision-making processes regarding studying abroad. The paper concludes with practical implications and suggestions for future research.

1. Introduction

The internationalization of higher education has been a significant trend over the past few decades. The United States, in particular, has emerged as a top destination for international students, hosting over 1 million foreign students in 2019 (De Wit & Altbach, 2021).^[9] Among these, Chinese students have consistently represented the largest group, with over 370,000 enrolled in American colleges and universities in the 2018/19 academic year, accounting for 33.7% of the total international student population in the U.S. (de Wit & Deca, 2020).^[10]

The decision to study abroad is complex and influenced

by numerous factors, including academic reputation, career prospects, cultural experiences, and financial considerations (Fakunle, 2021).^[13] Recently, the explosive growth of social media has transformed how educational institutions connect with and influence prospective students (Shin Fujita et al., 2017).^[16] Additionally, economic factors play a crucial role in decisions regarding study abroad. Some emerging markets have made significant progress in financial deepening and economic growth (Qiu, 2017, 2019).^{[31][32]} Their economic policies and financial environments directly impact the affordability and future career prospects of studying abroad. As digital natives, today's Chinese students increasingly turn to social me-

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dia for information, peer reviews, and decision-making related to their international education opportunities (Xue Gong & Twan Huybers, 2015).^[19] Additionally, the pandemic highlighted the need for students to adapt to new environments and technologies during the shift from in-person to remote learning. Understanding these adaptation challenges can improve social media marketing strategies and aid students in making more informed study-abroad decisions (Milord, Yu, Orton, Flores, & Marra, 2021;^[28] F. Yu, Milord, Orton, Flores, & Marra, 2021;^[46] F. Yu, Milord, Orton, Flores, & Marra, 2021;^[47]

Despite the growing importance of social media in recruiting Chinese Students, limited research examines how social media marketing specifically impacts their decision to study in the United States. This study aims to fill this gap by exploring the key mechanisms and influential factors through which social media marketing shapes Chinese students' intentions and behaviors in choosing the U.S. as their study abroad destination.

The Unified Theory of Acceptance and Use of Technology (UTAUT) model (Venkatesh, Morris, Davis, & Davis, 2003)^[43] serves as the theoretical foundation for this study. The UTAUT synthesizes eight prominent user acceptance models and has been widely applied to understand technology adoption in various contexts, including international higher education (Li, Singh, Riedel, Yu, & Jahnke, 2022;^[26] Rienties & Toetenel, 2016).^[33] This study extends the UTAUT to the context of Chinese students' study abroad decision-making influenced by social media marketing.

The remainder of the paper is structured as follows. Section 2 provides a comprehensive literature review. Section 3 presents the research model and hypotheses. Section 4 outlines the methodology employed in this study. Section 5 reports the results of the study. Section 6 offers a comprehensive discussion of the findings. Section 7 concludes the paper by summarizing the key findings and their significance. The paper concludes with implications for international education marketing practices and directions for future research.

2.Literature Review

2.1 International Student Mobility and Study Abroad Decision Making

The motivations behind students' decision to study overseas have been extensively investigated in the literature. The push-pull model (Mazzarol & Soutar, 2002)^[27] suggests that students are "pushed" by unfavorable conditions in their home country and "pulled" by attractive

features of the host country in their choice of study abroad destination. Push factors typically include lack of access to quality education, limited career prospects, and socio-political environments at home, while pull factors consist of the academic reputation of the institution, quality of the program, career opportunities, and global cultural experiences (Azmat et al., 2013).^[3]

For Chinese students specifically, key push factors driving their overseas education pursuit include intense domestic competition, the desire to gain a competitive edge in the job market with international credentials, and avoiding the stressful National College Entrance Examination (Gaokao) (Xue Gong & Twan Huybers, 2015).^[18] On the other hand, pull factors such as the prestige of American universities, quality and breadth of academic offerings, exposure to an English-speaking environment, and the opportunity to experience American culture and lifestyle are especially appealing to Chinese students (Jouppi et al., 2017).^[23]

Existing research also points to the important influence of family, peers, and social networks on Chinese students' international education decisions (Bodycott, 2009).^[5] Confucian philosophy emphasizes the hierarchical concepts of respecting superiority and inferiority, as well as the order of seniority, requiring the younger generation to respect their elders and students to respect their teachers. This hierarchical concept influences educational decision-making within the family, with parents typically exerting significant influence over their children's educational direction and choices. Chinese traditional culture places great importance on interpersonal relationships and human sentiments, which is also reflected in the family's influence on students' educational decisions. The family's interpersonal network and social status can impact students' educational opportunities and development. Therefore, when it comes to social media marketing targeted at Chinese students, it is essential to capture the attention and engagement of the entire family. Chinese family members are usually deeply involved in their children's educational decision-making process, so the marketing content should resonate with the whole family.(Bodycott & Lai, 2012).^[6] Besides family, friends (including alumni) around students also have a certain influence on their ideas about studying abroad. As students become more independent, the influence of friends is gradually increasing. Through the social media sharing of friends (alumni), students can gain more industry information, networking resources, and career advice, which helps them better plan their study abroad path and thus influences their decision to study abroad (Xue Gong & Twan Huybers, 2015).^[18]

2.2 Social Media in International Higher Education Marketing

Social media has become an integral part of university marketing practices worldwide (Shigeru Fujita & Moscarini, 2017).^[17] Compared to traditional marketing channels, social media enables educational institutions to reach a wider audience at lower costs, provides real-time interactive engagement with target students, and allows highly targeted messaging based on student profiles and behaviors (Constantinides & Zinck Stagno, 2011).^[7] For instance, universities can reach potential students globally through a single social media post, avoiding the high expenses associated with TV commercials or print ads. Furthermore, platforms like Instagram or Facebook allow universities to host live Q&A sessions, facilitating immediate and interactive engagement with prospective students. Additionally, social media's sophisticated targeting options enable universities to create ads tailored to specific demographics, such as high school seniors interested in engineering, ensuring that their messages reach the most relevant audience. Additionally, universities can leverage social media to showcase their teaching innovations and success stories, thereby enhancing prospective students' confidence in the quality of education and effectively attracting those who prioritize educational excellence and instructional support (F. Yu, Milord, Flores, & Marra, 2022:^[48] F. Yu & Strobel, 2021).^[49] By leveraging these advantages, universities can effectively promote their programs, connect with potential students, and tailor their marketing strategies to meet the specific interests and needs of different student groups.

Scholars suggest that having an active social media presence is imperative for universities to stay competitive in the global education market (Vrontis & Christofi, 2021).^[44] This is especially crucial for attracting international students, as they heavily rely on online information for their study abroad decision-making (X Gong & T Huybers, 2015).^[18] Universities utilize various social media platforms, such as Facebook, Twitter, YouTube, and Instagram, to connect with prospective students worldwide, share information about programs and campus life, and showcase student testimonials (M. Fujita et al., 2019).^[15]

For recruiting Chinese Students, it is essential for universities to develop a strong presence on popular Chinese social media platforms such as WeChat and Weibo (Zhu, 2019).^[51] Leveraging Chinese social media channels allows universities to provide culturally relevant content, build connections with local influencers and education agents, and foster an online community for prospective and current Chinese students (Hu et al., 2015).^[21]

However, simply having a social media presence is not enough; the quality and style of social media engagement also matter (M. Fujita et al., 2019).^[15] Universities need to develop content strategies that cater to Chinese students' specific interests and preferences, such as featuring stories of successful Chinese alumni, providing information on scholarships and career development support, and showcasing the university's collaborations with Chinese institutions and corporations (Xue Gong & Twan Huybers, 2015).^[18] Similarly, distributed data-parallel GANs can enhance social media content quality for universities by providing more precise image and text analysis, thereby increasing student engagement (Xiong, Zhang, Wang, & Zhou, 2022).^[45]

While extant literature has highlighted the importance of social media in international student recruitment, there remains a lack of in-depth research examining how social media marketing specifically influences Chinese students' decision-making process and choice of study abroad destination. This study aims to fill this gap by focusing on Chinese students' perceptions and behaviors related to social media marketing by U.S. universities.

2.3 Unified Theory of Acceptance and Use of Technology (UTAUT)

To understand how social media marketing shapes Chinese students' study abroad decisions, this study draws upon the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003)^[43] as the theoretical foundation. The UTAUT integrates eight prominent models of technology acceptance and provides a comprehensive framework to explain user intentions and behaviors in adopting new technologies.

The UTAUT postulates four key determinants of user acceptance and usage: performance expectancy (the degree to which an individual believes that using the technology will enhance their performance), effort expectancy (the degree of ease associated with using the technology), social influence (the extent to which an individual perceives that important others believe they should use the technology), and facilitating conditions (the degree to which an individual believes that organizational and technical infrastructure exists to support the use of the technology) (Venkatesh et al., 2003).^[43] These core constructs are hypothesized to influence behavioral intention, which in turn predicts actual usage behavior.

The UTAUT has been widely applied and extended to various research contexts, demonstrating its robustness and explanatory power (Dwivedi, Rana, Jeyaraj, Clement, & Williams, 2019).^[12] In the realm of international higher education, a number of studies have adopted the UTAUT

to investigate international students' acceptance of university technologies such as e-learning systems (Dečman, 2015),^[11] library resources (Tibenderana, Ogao, Ikoja-Odongo, & Wokadala, 2010),^[40] and online student services (Koivumäki et al., 2017).^[24] These studies generally support the applicability of the UTAUT in explaining international students' intentions and usage of education-related technologies.

However, limited research has employed the UTAUT to examine how social media, as a university marketing technology, influences international students' study abroad decision-making. Integrating historical data and deep learning for decision optimization complements the UTAUT framework's technology acceptance analysis, showing how tech support improves decision accuracy. This study applies UTAUT to social media marketing to examine how technology and data analytics influence Chinese students' study-abroad decisions (Dai, 2021).^[8] Given the increasing importance of social media in student recruitment and its potential impact on international education decisions, this study extends the UTAUT to the context of Chinese students' study abroad choices as shaped by the social media marketing efforts of U.S. universities. By doing so, this research aims to provide new insights into the key technological, social, and facilitating factors that drive Chinese students' intentions and decisions in response to universities' social media marketing initiatives.

3.Research Model and Hypotheses

Based on the UTAUT framework and relevant literature on international student mobility and social media marketing, a research model is proposed to investigate the impact of social media marketing on Chinese students' decision to study in the United States (Figure 1). The model posits that performance expectancy, effort expectancy, social influence, and facilitating conditions related to universities' social media marketing efforts influence Chinese students' intentions to study in the U.S., which in turn predict their actual study abroad decisions and behaviors.

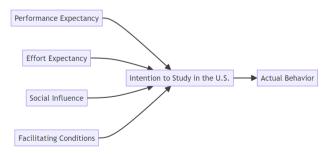


Figure 1. Proposed Research Model: Impact of Social Media Marketing on Chinese Students' Decision to Study in the U.S

3.1 Performance Expectancy

Performance expectancy, within the context of this study, refers to the extent to which Chinese students believe that engaging with U.S. universities' social media channels will enhance their decision-making capabilities and ultimately improve their study abroad outcomes. This construct is crucial in understanding the adoption of social media platforms by prospective international students. For instance, a Chinese student may expect that following a U.S. university's official WeChat account will provide them with timely information about application deadlines, scholarship opportunities, and campus events, thus improving their ability to make informed choices.

Social media marketing content can significantly influence performance expectancy by showcasing the unique value propositions of U.S. universities. For example, posts highlighting cutting-edge research facilities, internship partnerships with leading companies, or alumni success stories can increase Chinese students' expectations of positive outcomes associated with studying at a particular institution. Moreover, interactive content such as virtual campus tours or live Q&A sessions with current international students can further reinforce these expectations by providing immersive and authentic insights into the university experience.

Research by A. Tie indicates that performance expectancy is a strong predictor of social media adoption among prospective international students (Tie, 2021).^[41] Therefore, it is hypothesized that:

H1: Performance expectancy positively influences Chinese students' intention to study in the U.S.

3.2 Effort Expectancy

Effort expectancy, in the context of this study, refers to the degree to which Chinese students perceive the ease of use and accessibility of U.S. universities' social media marketing communications. This construct is crucial in understanding the adoption and continued use of these platforms for gathering information about studying abroad. Effort expectancy encompasses various aspects of user experience, including the intuitiveness of the interface, the clarity of the information presented, and the overall efficiency of information retrieval.

For instance, A university WeChat account that is user-friendly for Chinese students would feature intuitive navigation, succinct content, and prompt responsiveness, making it effortless to use. Conversely, a poorly organized Facebook page with inconsistent posting schedules and ambiguous content might be perceived as requiring high effort, potentially discouraging engagement. Cultural relevance plays a significant role in effort expectancy. Social media content that is tailored to Chinese cultural norms and preferences can significantly reduce the cognitive load for Chinese students. For example, using familiar idioms, addressing common concerns specific to Chinese students (such as visa processes or cultural adaptation), and presenting information in formats popular in China (like infographics or short videos) can enhance the perceived ease of use.

Research by A. KUSUMAWATI suggests that effort expectancy is a key determinant in the adoption of digital platforms for educational purposes among international students (KUSUMAWATI, 2018).^[25] Thus, it is hypothesized that:

H2: Effort expectancy positively influences Chinese students' intention to study in the U.S.

3.3 Social Influence

Social influence, within the context of this study, refers to the extent to which Chinese students' perceptions and behaviors regarding U.S. universities' social media channels are shaped by the opinions, attitudes, and actions of significant others in their social network. These influential individuals may include family members, peers, teachers, and respected figures within their academic or professional circles. The construct of social influence encompasses two primary dimensions: normative beliefs (the perceived social pressure to engage or not engage with these platforms) and informational influence (the tendency to accept information from others as evidence about reality). In the context of Chinese students considering studying in the U.S., social influence can manifest in various ways. For example:

- Peer influence: A Chinese student may be more inclined to follow and engage with a particular U.S. university's WeChat account if they observe their classmates actively participating in discussions on that platform.
- Family expectations: Parents who value international education might encourage their children to closely monitor the social media channels of prestigious U.S. universities, thereby influencing the students' engagement with these platforms.
- Alumni testimonials: Positive experiences shared by Chinese alumni on social media platforms can significantly influence prospective students' perceptions of a U.S. university and their intention to apply.
- Key opinion leaders (KOLs): Respected education consultants or influencers in China who recommend certain U.S. universities' social media channels as

valuable sources of information can shape students' behavior.

Research by H. Pang and J. Wang indicates that social influence plays a crucial role in the decision-making process of international students, particularly in collectivist cultures like China (Pang & Wang, 2020).^[29] The impact of social influence on technology adoption and educational choices has been well-documented in previous studies. Building on this theoretical foundation and empirical evidence, we propose the following hypothesis:

H3: Social influence positively influences Chinese students' intention to study in the U.S.

3.4 Facilitating Conditions

Facilitating conditions, in the context of this study, refer to the technical infrastructure, institutional support, and resources available to Chinese students that enable and encourage their effective use of U.S. universities' social media channels for study abroad planning. This construct encompasses various elements that can either enhance or impede students' ability to leverage these digital platforms in their decision-making process.

Key components of facilitating conditions include:

(1) Technical Infrastructure: This involves the availability and reliability of internet access, compatibility of social media platforms with commonly used devices in China, and the absence of technical barriers such as firewalls or geo-restrictions.

(2) Institutional Support: This refers to the resources provided by U.S. universities to facilitate Chinese students' engagement with their social media channels. For example:

- Multilingual content: Offering information in both English and Mandarin Chinese.
- Cultural adaptation: Tailoring content to address specific concerns and preferences of Chinese students.
- Platform diversity: Maintaining a presence on platforms popular in China (e.g., WeChat, Weibo) in addition to global platforms like Facebook and Instagram.

(3) User Guidance: This includes clear instructions on how to navigate and utilize the universities' social media channels effectively. For instance:

- Tutorial videos explaining how to access and use different features of the university's WeChat official account.
- FAQ sections addressing common queries about social media engagement.

(4) Responsive Communication: This involves timely and helpful responses from university representatives to student inquiries on social media platforms. For example:

- Dedicated social media teams to manage student interactions.
- Chatbots programmed to provide instant responses to common questions.

(5) Personalized Assistance: This refers to individualized support provided to students through social media channels. For instance:

- One-on-one virtual consultations with admissions officers.
- Tailored content recommendations based on a student's expressed interests or previous interactions.

Research by S. E. Beech suggests that robust facilitating conditions can significantly enhance users' confidence and willingness to adopt new technologies for educational purposes (Beech, 2015).^[4] Thus, it is hypothesized that:

H4: Facilitating conditions positively influence Chinese students' intention to study in the U.S.

3.5 Behavioral Intention and Actual Behavior

In accordance with the Unified Theory of Acceptance and Use of Technology (UTAUT), this study posits that behavioral intention serves as a critical predictor of actual behavior. Within the context of this research, we examine the relationship between Chinese students' intention to study in the United States, as influenced by universities' social media marketing efforts, and their subsequent actions to pursue education at U.S. institutions.

Behavioral intention, in this case, refers to the students' expressed plan or likelihood to study in the U.S. This intention may manifest in various ways, such as:

Actively engaging with U.S. universities' social media content (e.g., following accounts, participating in online discussions, sharing posts)

- Expressing interest in specific U.S. institu-tions or programs through social media channels
- Seeking additional information about the application process, visa requirements, or campus life via these platforms

Actual behavior, on the other hand, encompasses concrete actions taken towards studying in the U.S., including:

- Submitting applications to U.S. universities
- · Accepting admission offers
- Securing necessary documentation (e.g., student visas)
- Enrolling in courses and physically relocating to the U.S. to begin studies

The relationship between behavioral intention and actual behavior is well-established in technology adoption literature. Y. Su et al. found that behavioral intention significantly predicted Chinese students' decisions to study abroad (Su et al., 2021).^[37] Therefore, it is hypothesized that:

H5: Chinese students' intention to study in the U.S. positively influences their actual decision and behavior to study in the U.S.

4. Methodology

4.1 Research Design

To empirically test the proposed research model, a cross-sectional survey design was employed. The target population was Chinese students who were considering studying abroad in the United States. A questionnaire was developed based on validated scales from prior UTAUT studies (Venkatesh et al., 2003)[43] and adapted to the context of social media marketing in international higher education.

The questionnaire consisted of three sections. The first section collected demographic information such as age, gender, and education level. The second section measured the key constructs of the research model (performance expectancy, effort expectancy, social influence, facilitating conditions, behavioral intention, and actual behavior) using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The third section included open-ended questions to gather qualitative insights into students' perceptions and experiences with social media marketing by U.S. universities.

To ensure content validity, the questionnaire was reviewed by a panel of experts in international education and social media marketing. A pilot study was conducted with 30 Chinese students to assess the clarity and reliability of the questionnaire items. Minor revisions were made based on the feedback received.

4.2 Data Collection

The data for this study were collected through an online survey administered via popular Chinese social media platforms, including WeChat and Weibo. Snowball sampling was employed to reach a wide network of potential respondents (Vallejo et al., 2019).^[42] The survey link was initially distributed to Chinese students who had expressed interest in studying abroad, and they were encouraged to share the link with their peers.

To incentivize participation, respondents were offered the chance to enter a drawing for gift cards upon completing the survey. The survey remained open for one month, and periodic reminders were sent to maximize the response rate.

A total of 500 valid responses were obtained after data screening. The sample size met the recommended thresh-

old of 10 times the number of structural paths in the model (Hair Jr, Matthews, Matthews, & Sarstedt, 2017),^[20] ensuring sufficient statistical power for the analyses.

4.3 Data Analysis

The collected data were analyzed using the partial least squares structural equation modeling (PLS-SEM) approach via SmartPLS 3.0 software (Ringle, Da Silva, & Bido, 2015).^[34] PLS-SEM was chosen due to its ability to handle complex predictive models with both reflective and formative constructs, as well as its robustness against data non-normality (Hair Jr et al., 2017).^[20]

The analysis followed a two-step procedure. First, the measurement model was evaluated to assess the reliability and validity of the constructs. Reliability was examined using Cronbach's alpha and composite reliability, with values above 0.7 indicating acceptable internal consistency (Hair Jr et al., 2017).^[20] Convergent validity was assessed by checking the average variance extracted (AVE) values, with a threshold of 0.5 (Fornell & Larcker, 1981).^[14] Discriminant validity was evaluated using the Fornell-Larcker criterion, which requires the square root of each construct's AVE to be higher than its correlations with other constructs (Afthanorhan, Ghazali, & Rashid, 2021).^[1]

Second, the structural model was tested to examine the hypothesized relationships. The significance of the path coefficients was determined using a bootstrapping procedure with 5,000 resamples (Hair Jr et al., 2017).^[20] The model's explanatory power was assessed by the R² values of the endogenous constructs, while the predictive relevance was evaluated using the Stone-Geisser Q² test (Hair Jr et al., 2017).^[20] Additionally, the effect sizes (f²) and variance inflation factors (VIF) were checked to rule out multicollinearity issues.

To control for potential common method bias, Harman's single-factor test was conducted (Podsakoff, Mac-Kenzie, Moorman, & Fetter, 1990).^[30] The qualitative data from the open-ended questions were analyzed using thematic analysis to provide additional insights and triangulate the quantitative findings.

5.Results

5.1 Measurement Model

Using the PLS-SEM approach described in Section 4.3, we analyzed the data collected from 500 valid responses. The measurement model was evaluated to assess the reliability and validity of the constructs: Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI),

Facilitating Conditions (FC), Intention to Study in the U.S. (INT), and Actual Behavior (BEH). Each construct was measured using three items to ensure comprehensive coverage of the construct's domain while maintaining parsimony

The assessment of the measurement model indicated good reliability and validity of the constructs. Tables 1 and 2 present the results of this analysis.

Table 1. Measurement Model Results

Construct	Items	Loading	Composite Reliability	AVE
Performance Expectancy	PE1	0.856		
	PE2	0.894	0.901	0.753
	PE3	0.851		
Effort Expectancy	EE1	0.836		
	EE2	0.877	0.887	0.724
	EE3	0.839		
Social Influence	SI1	0.848		
	SI2	0.908	0.915	0.782
	SI3	0.896		
Facilitating Conditions	FC1	0.812		
	FC2	0.867	0.881	0.713
	FC3	0.854		
Intention to Study in the U.S.	INT1	0.879		
	INT2	0.911	0.924	0.803
	INT3	0.899		
Actual Behavior	BEH1	0.874		
	BEH2	0.883	0.905	0.761
	BEH3	0.860		

The assessment of the measurement model indicated good reliability and validity of the constructs. All item loadings exceeded the recommended threshold of 0.7 (Hair Jr et al., 2017),^[20] ranging from 0.812 to 0.911. These high loadings indicate that each item is strongly related to its respective construct, providing evidence of indicator reliability and supporting the overall validity of the measurement model. The composite reliability scores were all above 0.7, and the AVE values were above 0.5 for all constructs (Table 1), demonstrating adequate convergent validity (Fornell & Larcker, 1981).^[14]

In the table, the diagonal elements represent the square roots of the AVEs for each construct. For example, the square root of the AVE for Performance Expectancy (PE) is 0.868. All off-diagonal elements are the correlations between the constructs. The results show that the square root of each construct's AVE is indeed higher than its correlations with other constructs, confirming the discriminant validity of the measurement model (Shamim, Ghazali, & Albinsson, 2017).^[36]

Table 2. Discriminant Validity								
	PE	EE	SI	FC	INT	BEH		
Performance Expectancy (PE)	0.868							
Effort Expectancy (EE)	0.625	0.851						
Social Influence (SI)	0.587	0.549	0.884					
Facilitating Conditions (FC)	0.533	0.611	0.542	0.844				
Intention to Study in the U.S. (INT)	0.697	0.598	0.639	0.582	0.896			
Actual Behavior (BEH)	0.462	0.395	0.423	0.386	0.439	0.872		

For instance, the square root of the AVE for PE (0.868) is higher than its correlations with other constructs: EE (0.625), SI (0.587), FC (0.533), INT (0.697), and BEH (0.462). This pattern holds true for all constructs in the model, demonstrating that each construct is distinct and captures unique aspects not represented by other constructs (Tay, 2017).^[39]

The establishment of discriminant validity, along with the previously mentioned reliability and convergent validity, provides strong evidence for the overall validity of the measurement model. This ensures that the constructs are properly measured and can be used to test the hypothesized relationships in the structural model (Podsakoff et al., 1990).^[30]

In the context of the full study, the discriminant validity results support the conceptual distinctiveness of the key constructs related to social media marketing and Chinese students' decision to study in the United States. The findings suggest that performance expectancy, effort expectancy, social influence, facilitating conditions, intention to study in the U.S., and actual behavior are all distinct factors that contribute to the overall model.

5.2 Structural Model

The structural model results supported all five hypothesized relationships (Figure 2). Performance expectancy ($\beta = 0.352$, p < 0.001), effort expectancy ($\beta = 0.186$, p < 0.01), social influence ($\beta = 0.284$, p < 0.001), and facilitating conditions ($\beta = 0.205$, p < 0.01) all had significant positive effects on Chinese students' intention to study in the U.S., supporting H1, H2, H3, and H4. Furthermore, intention to study in the U.S. significantly predicted actual behavior ($\beta = 0.439$, p < 0.001), supporting H5.

The model explained 59.7% of the variance in Chinese students' intention to study in the U.S. and 19.3% of the variance in their actual behavior. The Stone-Geisser Q² values for both endogenous constructs were above zero (intention: 0.473; behavior: 0.186), indicating the model's predictive relevance (Hair Jr et al., 2017).^[20]

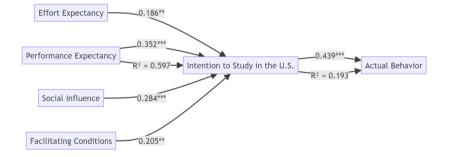


Figure 2. Structural Model Results: Impact of Social Media Marketing on Chinese Students' Decision to Study in the U.S

6.Discussion

6.1 The Influence of Social Media on Chinese Students' Decision-Making: Insights from the UTAUT Framework

This study aimed to understand how social media as a digital marketing strategy influences Chinese Students' decisions to study in the United States. The findings highlight the pivotal role of social media in shaping students' perceptions and behaviors, consistent with trends observed in the broader landscape of international student mobility. The quantitative analysis of the research model provides valuable insights into the relative strength of the factors influencing Chinese students' intentions to study in the United States. By examining the path coefficients (β values) and significance levels (p values) reported in Section 5.2, we can establish a hierarchy of the key determinants. Performance expectancy emerged as the most influential factor ($\beta = 0.352$, p < 0.001), underscoring the crucial role of showcasing the academic strengths and career develoced of the strength of

opment opportunities of U.S. universities through social media. This finding suggests that Chinese students are primarily driven by the perceived benefits and outcomes of studying in the United States, and social media marketing efforts should prioritize highlighting these advantages. Social influence ranked as the second most important factor $(\beta = 0.284, p < 0.001)$, reflecting the collectivistic culture of China, where the opinions of family, friends, and peers heavily shape students' decision-making processes. U.S. universities should leverage the power of social influence by engaging alumni, current students, and other influential figures in their social media marketing strategies to attract Chinese students. Facilitating conditions ($\beta = 0.205$, p < 0.01) exhibited a slightly lower impact compared to social influence, emphasizing the need for U.S. universities to provide robust support systems and resources that enable Chinese students to effectively utilize social media for their study abroad planning. This includes offering clear guidance, responsive communication, and personalized assistance to facilitate students' decision-making journey. Effort expectancy ($\beta = 0.186$, p < 0.01) had the relatively lowest influence among the significant factors, yet its impact cannot be overlooked. The relatively lower influence of effort expectancy suggests that while ease of use is important, Chinese students place a greater emphasis on the results and social validation of their choices. This indicates that universities should focus more on content quality and relevance rather than just the usability of their social media platforms. However, ensuring that social media platforms are user-friendly should still be a priority, as it can enhance the overall user experience and engagement.

Furthermore, the study's findings highlight several practical implications for U.S. universities aiming to attract Chinese students. Firstly, universities should invest in creating high-quality, informative content that clearly communicates the academic and career benefits of studying in the U.S. This could include success stories, testimonials from alumni, and detailed information about academic programs and career services. Secondly, leveraging social influence can be achieved by actively involving alumni and current students in social media campaigns. These individuals can provide authentic insights and endorsements that resonate with prospective students.

Additionally, universities should consider the importance of facilitating conditions by providing comprehensive support through social media channels. This includes offering real-time responses to inquiries, virtual counseling sessions, and detailed guides on application processes and visa requirements. Such support can mitigate potential barriers and enhance the decision-making process for Chinese students. While the study provides significant insights, it also points to areas for future research. For instance, exploring the role of different social media platforms and their specific impact on decision-making could provide a more nuanced understanding. Additionally, qualitative research could complement the quantitative findings by providing deeper insights into the motivations and concerns of Chinese students.

6.2 Applying the UTAUT Model to Understand Social Media's Impact on Chinese Students' Study Abroad Decisions

The application of the UTAUT model in this study provides a robust theoretical framework for understanding the causal mechanisms through which social media marketing influences Chinese students' study abroad decisions. The positive relationship between performance expectancy and intention to study in the U.S. suggests that when students perceive that social media usage will enhance their academic and career prospects, their intention to study abroad increases (Q. Yu, Foroudi, & Gupta, 2019).^[50] This finding corroborates existing research which emphasizes the importance of perceived benefits in technology adoption (Huda, 2019).^[22]

Effort expectancy's positive impact on intention indicates that the ease of accessing and comprehending social media content significantly influences students' decision-making process. This aligns with the UTAUT proposition that lower perceived effort enhances user acceptance and engagement (Tamilmani, Rana, Wamba, & Dwivedi, 2021).^[38] Social influence's effect on intention underscores the role of social networks and cultural factors in shaping students' perceptions and decisions, a phenomenon well-documented in the literature on international education (Russell, 2020).^[35]

Facilitating conditions' influence on intention highlights the necessity of supportive infrastructures that aid students in navigating and utilizing social media effectively. This finding is in line with the UTAUT model, which posits that perceived support and resources are critical for technology adoption (Almaiah, Alamri, & Al-Rahmi, 2019).^[2] The strong link between behavioral intention and actual behavior reaffirms the predictive power of the UTAUT model, suggesting that students' intentions are reliable indicators of their actual decisions to study abroad.

6.3 The Role of Social Media Marketing in Influencing Chinese Students' Study Abroad Decisions: An Extension of the UTAUT Model

The empirical data collected in this study provide com-

pelling evidence that social media marketing significantly influences Chinese students' decisions to study in the United States. By integrating the observed phenomena with the theoretical constructs of the UTAUT model, this research elucidates the key determinants of social media's impact on student decision-making.

The findings reveal that Chinese students' perceptions of the benefits, ease of use, social influences, and supportive conditions associated with social media marketing are critical in shaping their intentions to study abroad. This study extends the UTAUT model by applying it to the context of international education marketing, demonstrating its applicability in explaining the adoption of social media as an influential tool in students' study abroad decisions.

7.Conclusion

In conclusion, this study reveals the significant influence of social media marketing on Chinese students' decision to study in the United States. Through the lens of the UTAUT framework, the research demonstrates that performance expectancy, effort expectancy, social influence, and facilitating conditions related to universities' social media efforts are key determinants of Chinese students' study abroad intentions and behaviors. The findings provide valuable insights for U.S. universities to optimize their social media marketing strategies to effectively attract and recruit Chinese students. By creating targeted, user-friendly, socially engaging, and supportive social media experiences, universities can enhance their competitiveness in the global education market and foster successful recruitment of Chinese students. As social media continues to evolve and shape the international higher education landscape, understanding and leveraging its impact on student decision-making will be crucial for universities to thrive in the digital age.

References

- [1] Afthanorhan, A., Ghazali, P. L., & Rashid, N. (2021). Discriminant validity: A comparison of CBSEM and consistent PLS using Fornell & Larcker and HTMT approaches. Paper presented at the Journal of Physics: Conference Series.
- [2] Almaiah, M. A., Alamri, M. M., & Al-Rahmi, W. (2019). Applying the UTAUT model to explain the students' acceptance of mobile learning system in higher education. *Ieee Access*, 7, 174673-174686.
- [3] Azmat, F., Osborne, A., Le Rossignol, K., Jogulu, U., Rentschler, R., Robottom, I., & Malathy, V. (2013). Understanding aspirations and expectations of inter-

national students in Australian higher education. *Asia Pacific Journal of Education, 33*(1), 97-111.

- [4] Beech, S. E. (2015). International student mobility: The role of social networks. *Social & Cultural Geography*, 16(3), 332-350.
- [5] Bodycott, P. (2009). Choosing a higher education study abroad destination: What mainland Chinese parents and students rate as important. *Journal of research in International education*, 8(3), 349-373.
- [6] Bodycott, P., & Lai, A. (2012). The influence and implications of Chinese culture in the decision to undertake cross-border higher education. *Journal of studies in International education*, 16(3), 252-270.
- [7] Constantinides, E., & Zinck Stagno, M. C. (2011). Potential of the social media as instruments of higher education marketing: A segmentation study. *Journal of marketing for higher education*, 21(1), 7-24.
- [8] Dai, W. (2021). Safety evaluation of traffic system with historical data based on Markov process and deep-reinforcement learning. *Journal of Computational Methods in Engineering Applications*, 1-14.
- [9] De Wit, H., & Altbach, P. G. (2021). Internationalization in higher education: Global trends and recommendations for its future. *Policy Reviews in Higher Education*, 5(1), 28-46.
- [10] de Wit, H., & Deca, L. (2020). Internationalization of higher education, challenges and opportunities for the next decade. *European higher education area: Challenges for a new decade*, 3-11.
- [11] Dečman, M. (2015). Modeling the acceptance of e-learning in mandatory environments of higher education: The influence of previous education and gender. *Computers in Human Behavior*, 49, 272-281.
- [12] Dwivedi, Y. K., Rana, N. P., Jeyaraj, A., Clement, M., & Williams, M. D. (2019). Re-examining the unified theory of acceptance and use of technology (UTAUT): Towards a revised theoretical model. *Information systems frontiers, 21*, 719-734.
- [13] Fakunle, O. (2021). Developing a framework for international students' rationales for studying abroad, beyond economic factors. *Policy Futures in Education, 19*(6), 671-690.
- [14] Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research, 18*(1), 39-50.
- [15] Fujita, M., Mizuta, R., Ishii, M., Endo, H., Sato, T., Okada, Y., ... Watanabe, S. (2019). Precipitation changes in a climate with 2–K surface warming from large ensemble simulations using 60–km global and 20–km regional atmospheric models. *Geophysical*

Research Letters, 46(1), 435-442.

- [16] Fujita, S., Mizusawa, J., Kanemitsu, Y., Ito, M., Kinugasa, Y., Komori, K., ... Shiozawa, M. (2017). Mesorectal excision with or without lateral lymph node dissection for clinical stage II/III lower rectal cancer (JCOG0212): a multicenter, randomized controlled, noninferiority trial. *Annals of surgery*, 266(2), 201-207.
- [17] Fujita, S., & Moscarini, G. (2017). Recall and unemployment. *American Economic Review*, 107(12), 3875-3916.
- [18] Gong, X., & Huybers, T. (2015). Chinese students and higher education destinations: Findings from a choice experiment. *Australian Journal of Education*, 59(2), 196-218.
- [19] Gong, X., & Huybers, T. (2015). What attracts Chinese students to Aussie universities. *The Conversation*.
- [20] Hair Jr, J. F., Matthews, L. M., Matthews, R. L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: updated guidelines on which method to use. *International Journal of Multivariate Data Analysis*, 1(2), 107-123.
- [21] Hu, W., Campuzano-Jost, P., Palm, B., Day, D., Ortega, A., Hayes, P., ... Liu, Y. (2015). Characterization of a real-time tracer for isoprene epoxydiols-derived secondary organic aerosol (IEPOX-SOA) from aerosol mass spectrometer measurements. *Atmospheric Chemistry and Physics*, 15(20), 11807-11833.
- [22] Huda, M. (2019). Empowering application strategy in the technology adoption: insights from professional and ethical engagement. *Journal of Science and Technology Policy Management*, 10(1), 172-192.
- [23] Jouppi, N. P., Young, C., Patil, N., Patterson, D., Agrawal, G., Bajwa, R., ... Borchers, A. (2017). *In-datacenter performance analysis of a tensor processing unit*. Paper presented at the Proceedings of the 44th annual international symposium on computer architecture.
- [24] Koivumäki, T., Pekkarinen, S., Lappi, M., Väisänen, J., Juntunen, J., & Pikkarainen, M. (2017). Consumer adoption of future MyData-based preventive eHealth services: an acceptance model and survey study. *Journal of medical Internet research*, 19(12), e429.
- [25] KUSUMAWATI, A. (2018). Influencing Students Decision-Making Process Of Higher Education Institution: The Digital Marketing Experience. *TURKISH ONLINE*, 222.
- [26] Li, S., Singh, K., Riedel, N., Yu, F., & Jahnke, I. (2022). Digital learning experience design and research of a self-paced online course for risk-based inspection of food imports. *Food Control, 135*, 108698.
- [27] Mazzarol, T., & Soutar, G. N. (2002). "Push-pull"

factors influencing international student destination choice. *International journal of educational management*, *16*(2), 82-90.

- [28] Milord, J., Yu, F., Orton, S., Flores, L., & Marra, R. (2021). Impact of COVID Transition to Remote Learning on Engineering Self-Efficacy and Outcome Expectations. Paper presented at the 2021 ASEE Virtual Annual Conference.
- [29] Pang, H., & Wang, J. (2020). Promoting or prohibiting: Understanding the influence of social media on international students' acculturation process, coping strategies, and psychological consequences. *Telematics and Informatics*, 54, 101454.
- [30] Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *The leadership quarterly*, 1(2), 107-142.
- [31] Qiu, Y. (2017). Financial Deepening and Economic Growth in Select Emerging Markets with Currency Board Systems: Theory and Evidence. Retrieved from
- [32] Qiu, Y. (2019). ESTIMATION OF TAIL RISK MEASURES IN FINANCE: APPROACHES TO EXTREME VALUE MIXTURE MODELING. Johns Hopkins University,
- [33] Rienties, B., & Toetenel, L. (2016). The impact of learning design on student behaviour, satisfaction and performance: A cross-institutional comparison across 151 modules. *Computers in Human Behavior*, 60, 333-341.
- [34] Ringle, C., Da Silva, D., & Bido, D. (2015). Structural equation modeling with the SmartPLS. *Bido, D., da Silva, D., & Ringle, C.(2014). Structural Equation Modeling with the Smartpls. Brazilian Journal Of Marketing, 13*(2).
- [35] Russell, S. A. (2020). Preparing Graduate Learners: A Narrative Study Investigating the Social Learning Environment of Online Education from the Perspective of South Florida Graduate Students Majoring in Education Who Have Immigrated to The United States from The Caribbean and are Enrolled in an Online Graduate Program. Northeastern University,
- [36] Shamim, A., Ghazali, Z., & Albinsson, P. A. (2017). Construction and validation of customer value co-creation attitude scale. *Journal of Consumer Marketing*, 34(7), 591-602.
- [37] Su, Y., Zhu, Z., Chen, J., Jin, Y., Wang, T., Lin, C.-L., & Xu, D. (2021). Factors influencing entrepreneurial intention of university students in China: integrating the perceived university support and theory of

planned behavior. Sustainability, 13(8), 4519.

- [38] Tamilmani, K., Rana, N. P., Wamba, S. F., & Dwivedi, R. (2021). The extended Unified Theory of Acceptance and Use of Technology (UTAUT2): A systematic literature review and theory evaluation. *International Journal of Information Management*, 57, 102269.
- [39] Tay, R. (2017). Correlation, variance inflation and multicollinearity in regression model. *Journal of the Eastern Asia Society for Transportation Studies*, 12, 2006-2015.
- [40] Tibenderana, P., Ogao, P., Ikoja-Odongo, J., & Wokadala, J. (2010). Measuring levels of end-users' acceptance and use of hybrid library services. *International Journal of Education and Development* using ICT, 6(2), 33-54.
- [41] Tie, A. (2021). The Potential of Visual, Creative Social Media Apps in the Higher Education Student Recrutiment Process.
- [42] Vallejo, R. L., Cheng, H., Fragomeni, B. O., Shewbridge, K. L., Gao, G., MacMillan, J. R., ... Palti, Y. (2019). Genome-wide association analysis and accuracy of genome-enabled breeding value predictions for resistance to infectious hematopoietic necrosis virus in a commercial rainbow trout breeding population. *Genetics Selection Evolution*, 51, 1-14.
- [43] Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS quarterly*, 425-478.
- [44] Vrontis, D., & Christofi, M. (2021). R&D internationalization and innovation: A systematic review, integrative framework and future research directions. *Journal of Business Research*, 128, 812-823.

- [45] Xiong, S., Zhang, H., Wang, M., & Zhou, N. (2022). Distributed Data Parallel Acceleration-Based Generative Adversarial Network for Fingerprint Generation. *Innovations in Applied Engineering and Technology*, 1-12.
- [46] Yu, F., Milord, J., Orton, S., Flores, L., & Marra, R.
 (2021). Students' Evaluation Toward Online Teaching Strategies for Engineering Courses during COVID.
 Paper presented at the 2021 ASEE Midwest Section Conference.
- [47] Yu, F., Milord, J., Orton, S. L., Flores, L., & Marra, R. (2022). The concerns and perceived challenges students faced when traditional in-person engineering courses suddenly transitioned to remote learning. Paper presented at the 2022 ASEE Annual Conference.
- [48] Yu, F., Milord, J. O., Flores, L. Y., & Marra, R. (2022). Work in Progress: Faculty choice and reflection on teaching strategies to improve engineering self-efficacy. Paper presented at the 2022 ASEE Annual Conference.
- [49] Yu, F., & Strobel, J. (2021). Work-in-Progress: Pre-college Teachers' Metaphorical Beliefs about Engineering. Paper presented at the 2021 IEEE Global Engineering Education Conference (EDUCON).
- [50] Yu, Q., Foroudi, P., & Gupta, S. (2019). Far apart yet close by: Social media and acculturation among international students in the UK. *Technological Forecasting and Social Change*, 145, 493-502.
- [51] Zhu, Y. (2019). Social media engagement and Chinese international student recruitment: understanding how UK HEIs use Weibo and WeChat. *Journal of Marketing for Higher Education*.