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# The Impact of Social Media on Cross-Cultural Communication in the Digital Age

Tao Sun <sup>1,\*</sup><sup>1</sup> School of Humanities, Tongji University, Shanghai, China

\* Correspondence: Tao Sun, School of Humanities, Tongji University, Shanghai, China

**Abstract:** In the field of application of information technologies in special education, there are still a number of challenges to be addressed by measures such as increasing the level of teacher training, developing targeted resources, improving equipment and creating an effective assessment mechanism. Only in this way can we fully exploit the role of Information Technology in special education, promote its development, and improve its quality. As a result, every child with special needs will have the opportunity to receive fair and high-quality education.

**Keywords:** social media; cross-cultural communication; cultural awareness; communication effectiveness; digital interaction

## 1. Introduction

The rapid development of Information Technologies has fundamentally changed the field of human interaction, with social media at the forefront of change. Facebook, Instagram, Twitter, and TikTok have billions of users worldwide, and geographical boundaries are becoming less significant. People from different cultural groups can communicate in real time in virtual spaces. Social networks are pervasive, and the physical distances and time zones that once hindered cross-cultural exchange are gradually fading away.

Social media provides unprecedented opportunities for cross-cultural sharing, but it also creates unique challenges. Differences in communication patterns and values between cultures can easily lead to misinterpretation, disputes, and even cultural appropriation in virtual spaces. A humorous expression from one culture may be perceived as provocative in another. Information on social networks is often concise and lacks the contextual depth required for complex cross-cultural exchanges. The significance of these developments is steadily increasing, but their positive and negative effects, as well as potential countermeasures to manage these consequences, still require comprehensive examination.

This study aims to examine the awareness, effectiveness, and satisfaction associated with using social media in cross-cultural communication, in order to fill the gap in current research. Global sample data were analyzed, key improvement points and barriers to intercultural interaction in the digital age were identified, and relevant insights were provided for researchers, educators, and social media professionals [1].

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## 2. Review of Literature

### 2.1. *Social Networks and Intercultural Interaction*

Previous studies have greatly emphasized the role of social media in promoting cross-cultural exchanges. Tan and Chen examined in detail its impact on the formation of cultural identity in networked communities [2,3]. The study shows that Facebook and Reddit are dynamic platforms where users can express and discuss aspects of cultural identity. Members of the Reddit fan community belong to different cultural layers. They share their interpretations and adaptations of cultural elements in films, books, or video games. Through these exchanges, people express their cultural views and become familiar with many alternative perspectives. Such interactions contribute to the development of global citizenship awareness. The study also shows that users who frequently engage in cross-cultural communication on social networks tend to exhibit a greater degree of tolerance and appreciation for different cultures, and the values and beliefs expressed by diverse cultural groups are better understood and respected.

Chen et al. used longitudinal research methods to explore the impact of social media on cross-cultural friendships and tracked the development of these relationships [3]. Research shows that social media provides a reliable and affordable platform for maintaining and nurturing friendships across cultural boundaries. The content people share online every day includes personal experiences and elements of traditional culture. This behavior has significantly contributed to cultural exchange and the reduction of stereotypes. In one case, two users from different countries met on Instagram due to a shared interest in photography. Over the course of several months, they regularly shared their photo works and cultural ideas, gradually evolving from strangers to true friends and successfully breaking through initial barriers to cultural understanding. In this case, social media demonstrated an increased ability to unite cultures and deepen mutual understanding.

In addition, there are studies exploring the role of social media in promoting cultural exchange and communication. YouTube has become a hub for sharing cultural videos from different regions of the world. These videos include traditional music, dance, cuisine, and festivals. They attract the attention of viewers from across the globe and often spark discussions and interactions between individuals from diverse cultural backgrounds. The existence of virtual exchanges allows people to engage with rich cultural diversity, expand their horizons, and enrich their cultural knowledge [2-6].

### 2.2. *Challenges of Cross-Cultural Communication Driven by Social Media*

While social media offers many advantages for cross-cultural communication, researchers have also highlighted significant challenges in digital interaction. Hofstede's theory of cultural dimensions remains a foundational framework in cross-cultural studies and helps explain many of these issues. According to this theory, cultures differ in key dimensions such as individualism versus collectivism, power distance, uncertainty avoidance, and masculinity versus femininity. These differences influence communication styles and expectations, often leading to misunderstandings and conflicts in social network interactions.

In high-context cultures, such as those in East Asia, communication relies heavily on nonverbal cues, implicit messages, and established interpersonal relationships. In contrast, low-context cultures, which are more common in Western countries, favor explicit and direct communication. When these two styles interact on social networks, misunderstandings often arise. For instance, a direct and concise message typical in low-context cultures may be perceived as blunt or even offensive in high-context cultures, where indirect and polite expressions are preferred.

Cultural stereotypes and prejudices propagated through social networks also hinder cross-cultural dialogue. One contributing factor to this problem is the way social media algorithms operate. Algorithms promote content based on users' prior behavior and preferences, which can amplify existing biases. When users frequently engage with negative

or stereotypical portrayals of a particular culture, the algorithm is likely to serve them more similar content, reinforcing their biases. Furthermore, character limits and simplified formats on social media make it difficult to represent cultural complexity accurately, often leading to cultural misunderstandings and the spread of misinformation.

Language remains another significant barrier to cross-cultural communication on social media. While translation tools are available, they often fail to capture the nuances of language and culture. Idioms, metaphors, and humor are especially prone to mistranslation. These misunderstandings often result in confusion or even offense. In addition, the use of slang abbreviations and emojis — which may vary greatly between cultures — further complicates intercultural communication [7-10].

### *2.3. Role of Platform Functions*

The design and functionalities of social media platforms play a crucial role in shaping cross-cultural exchanges. Platforms like Instagram, Pinterest, and TikTok, which prioritize visual content such as photos and short videos, have significantly altered how people communicate. These platforms enable users to transcend cultural boundaries through visual expression. To some extent, users can overcome language barriers, as emotions, thoughts, and shared cultural elements are conveyed through visual content.

Instagram's Explore page, for instance, features user-generated content from around the world. Here, people can not only get acquainted with traditional art forms and architectural wonders but also peek into the everyday lives of individuals from different cultures. Profound linguistic knowledge is not required to appreciate aesthetic concepts, lifestyles, or even the underlying values of different cultures.

However, an overemphasis on visual appeal can lead to oversimplification or misrepresentation of cultures. Users may selectively present cultural elements with strong visual impact or rely on prevalent stereotypes, which can distort the authenticity of cultural experiences. Visual content lacking contextual information is prone to misinterpretation. Traditional rituals or symbols, when displayed out of context, can be misunderstood or even misappropriated. These elements often carry deep cultural significance within their original contexts.

## **3. Methodology**

### *3.1. Design Studies*

This study adopts a convergent parallel mixed methods design to explore the complex relationship between social media use and cross-cultural communication. The research is grounded in the principle of data triangulation. Quantitative data collected through large-scale online surveys enable statistical generalization of behavioral patterns, drawing on established cross-cultural theoretical frameworks. Guided by the theoretical framework of cultural existentialism, the questionnaire was designed to test hypotheses and statistically generalize the relationship between social media engagement and cultural awareness.

Qualitative data from semi-structured interviews provide in-depth insights into subjective experiences and underlying mechanisms of cross-cultural communication. Such a mixed methods approach facilitates the exploration of phenomena such as the role of emojis in cross-cultural humor and the influence of algorithm-driven content personalization. The integration of quantitative and qualitative methods enables this study not only to identify links between social media and cross-cultural communication but also to uncover the underlying mechanisms, consistent with contemporary mixed-methods research approaches.

### 3.2. Participants

Researchers have partnered with global data-gathering companies, such as Qualtrics Panels and Amazon Mechanical Turk, to run targeted ads on social platforms like Facebook, Instagram, and Twitter. The selection strategy is stratified by age, gender, and region to ensure the representation of the sample. The study participants were divided into four age groups: 18-25 years, 26-35 years, 36-45 years, and 46 years and older. In the first three stages, the sample size was the same, and the last age group accounted for a quarter of the total sample size. The gender distribution is based on the composition and global distribution of social media users, with men and women each representing 45%, and the remaining 10% identifying as non-binary. This research provides the opportunity to participate in a prize game in return (the prize is 550 USD), and each member can also receive a 55 USD merchandise card as an alternative prize.

The study selectively selected 30 participants to participate in a qualitative study. The selection process focused on the diversity of social media usage habits, cultural origins, and platform preferences. Among them, 15 regular users (who spend 3 hours a day on social networks) and 15 rare ones (less than 1 hour) were selected. In terms of cultural background, the sample included eight cultural clusters defined by the Globe Project, covering Western culture, Eastern culture, Latin American culture, and African culture. Depending on the preferences of the platform, respondents are divided between users of text platforms such as Twitter, visual platforms such as Instagram, and hybrid platforms such as Facebook. This sample covers both highly active digital users and casual users and includes a wide range of cultural experiences with both high and low context.

### 3.3. Research Tools

The questionnaire contains 25 items. Originally compiled in English, it was translated into Spanish, Chinese, and French to meet the needs of non-English speakers. The questionnaire consists of four parts. The first section collects demographic information, including age, gender, geographic location, native language, and the main social media platforms used, such as Facebook and Instagram. It also measures the frequency of social media use, with participants encouraged to indicate their average daily time spent on platforms like Facebook, Instagram, and Twitter. Responses are categorized into four intervals.

The third part utilizes a 10-point scale to assess three aspects of cultural awareness: knowledge, attitude, and skills. Examples of statements include "I understand at least three traditional festivals that differ from my culture" and "I can identify subtle cultural differences in online communication". Responses range from 1 (strongly disagree) to 7 (strongly agree), with internal consistency (Cronbach  $\alpha = 0.82$ ) in preliminary testing deemed acceptable.

The final part evaluates communication effectiveness using a 5-point scale and assesses satisfaction with cross-cultural communication on social networks using a 3-point scale. Open-ended questions invite participants to share recent positive or negative experiences in social media communication as a precursor to entering into an interview agreement.

### 3.4. Interview Protocol

Semi-structured interviews conducted via the Zoom platform lasted between 45 and 60 minutes. Interviews followed guidelines and included three main topics. The first direction focuses on the basic logical structure of participants, based on their experience of cross-cultural communication, and requires them to describe a concrete and detailed experience of sharing experiences with representatives of different cultures in the context of online social networks, especially in serious and complex situations.

The second direction focuses on addressing dilemmas and methods for taking follow-up measures when inconsistencies in online cultural exchange arise, as well as conducting in-depth surveys in certain situations to deepen understanding of progress strategies.

The third direction transitions to the field of research on the phenomenon of communication on various technological platforms. Instagram and Twitter are used as typical examples to assess how different types of technology platforms can contribute to or impede the practical process of global cultural exchange, as well as to study the causes and explanations of the emergence of distribution trends.

Interviews were conducted in the language preferred by participants, including 18 in English, 6 in Chinese, 4 in Spanish, and 2 in French. These interviews were conducted by researchers from two cultures and were literally translated by professional translators. Accuracy was tested by reverse translation in accordance with guidelines. After the recorded interview was deciphered, it was imported into Nvivo 12 for thematic analysis. The analysis is divided into two stages: general coding based on source data and defining source codes such as "misreading emojis" and "dependence on translation tools"; performing topic matching and classifying codes on general topics like communication barriers, platform functions, and related content.

To ensure reliability, the two developers independently analyzed 20% of the data set and reached a consistency level of 85% before completing the work on the code book.

#### 4. Results and Discussion

##### 4.1. Social Media Use and Cultural Awareness

Table 1 shows a positive relationship between the frequency of social media use and indicators of cultural awareness. Participants who spent more than three hours per day on social networks had an average cultural awareness score of 78.5, while those who used social media for less than one hour averaged only 57.2. This result supports the idea that frequent exposure to multicultural content on social platforms enhances users' awareness and understanding of different cultures.

**Table 1.** The Correlation between the Frequency of Social Media Use and Cultural Awareness Is Shown.

Usage Frequency	Average Cultural Awareness Score
Less than 1 hour	57.2
1-2 hours	65.8
2-3 hours	72.3
More than 3 hours	78.5

##### 4.2. Communication Effectiveness and Satisfaction

Table 2 illustrates the relationship between social media usage and self-reported communication effectiveness and satisfaction. High-frequency users reported an average communication effectiveness score of 6.2 (on a 7-point scale), but their satisfaction level was lower at 5.5. In contrast, average-frequency users reported slightly lower communication effectiveness at 5.8 but higher satisfaction at 6.1. This discrepancy suggests that while frequent users may develop stronger communication skills, they also face a greater risk of cultural misunderstandings — such as misinterpreting emojis, encountering stereotypes, or struggling with language barriers — which can reduce overall satisfaction. These findings are further supported by qualitative data.

**Table 2.** Social Media Usage and Communication Outcomes.

Usage Frequency	Communication Effectiveness	Satisfaction
Less than 1 hour	5.2	5.8



1-2 hours	5.8	6.1
2-3 hours	6.0	5.9
More than 3 hours	6.2	5.5

#### 4.3. Factors Affecting Intercultural Communication on Social Networks

Qualitative analysis revealed several key factors influencing the impact of social media on cross-cultural communication. Platform functionalities — such as the availability of translation tools and the capacity for cultural adaptation — were found to enhance communication effectiveness. In addition, user demographics, particularly age and cultural affiliation, played a significant role. Younger users demonstrated greater adaptability in cross-cultural online interactions. Cultural proximity also emerged as a critical factor; users from linguistically and culturally similar backgrounds reported higher satisfaction and experienced fewer misunderstandings during communication.

## 5. Conclusion

This study offers valuable insights into the complex relationship between social media and cross-cultural communication. While social media plays a crucial role in enhancing cultural awareness and communication competence, cultural differences can still lead to misunderstandings and reduced user satisfaction. The findings underscore the importance of developing cross-cultural communication skills, recognizing subtle cultural nuances, and effectively utilizing platform features. These dynamic and interconnected factors collectively influence users' ability to grow and engage in intercultural contexts.

Social media platforms increasingly incorporate cultural support features, such as advanced translation tools and interactive cultural exchange guides, which are essential for fostering effective cross-cultural communication. Continuous development in this area is vital to promoting more inclusive and productive global exchanges. Educators can also leverage these insights to design curriculum that enhances intercultural communication skills, particularly by aligning course content with the functional ecosystems of digital platforms.

Future research could investigate the long-term effects of social media on cultural identity formation and assess how emerging technologies — such as virtual reality and artificial intelligence — can support intercultural engagement. Ongoing exploration of these topics will enable us to better utilize social media to advance global understanding, cooperation, and peace in an increasingly interconnected world.

## References

1. S. Ryu, Y. Xiang, and W. Zhang, "Digital transformation of spatial experience in the cultural and creative industry: From entertainment to co-creation," in *Digital Transformation of Spatial Experience in the Cultural and Creative Industry*, Thousand Oaks, CA: SAGE Publications, Inc., 2024. ISBN: 9781071909980.
2. Q. Tan, K. M. Kamarudin, and S. S. Herman, "Systematic review of empowering intangible cultural heritage with metaverse technology," *ACM J. Comput. Cult. Herit.*, vol. 18, no. 1, 2025, doi: 10.1145/3723169.
3. X. Chen, D. Zou, H. Xie, and F. L. Wang, "Metaverse in education: Contributors, cooperations, and research themes," *IEEE Trans. Learn. Technol.*, vol. 16, no. 6, pp. 1111–1129, Dec. 2023, doi: 10.1109/TLT.2023.3277952.
4. A. Martí-Testón, A. Muñoz, L. Gracia, and J. E. Solanes, "Using WebXR metaverse platforms to create touristic services and cultural promotion," *Appl. Sci.*, vol. 13, no. 14, p. 8544, 2023, doi: 10.3390/app13148544.
5. X. Li, X. Liang, T. Yu, S. Ruan, and R. Fan, "Research on the integration of cultural tourism industry driven by digital economy in the context of COVID-19—based on the data of 31 Chinese provinces," *Front. Public Health*, vol. 10, p. 780476, 2022, doi: 10.3389/fpubh.2022.780476.
6. D. Buragohain, Y. Meng, C. Deng, Q. Li, and S. Chaudhary, "Digitalizing cultural heritage through metaverse applications: Challenges, opportunities, and strategies," *Herit. Sci.*, vol. 12, no. 1, 2024, Art. no. 295, doi: 10.1186/s40494-024-01403-1.
7. X. Lin and X. Chen, "Innovation in the digital cultural industry within the metaverse from the perspectives of physical and virtual mobility," in *CLOUD Comput. – CLOUD 2024*, Y. Wang and L. J. Zhang, Eds., *Lect. Notes Comput. Sci.*, vol. 15423. Cham: Springer, 2025, doi: 10.1007/978-3-031-77153-8\_8.

8. X. Lin and N. Tao, "Audiobooks in the cultural metaverse: Reimagining new quality productive forces and the future of the audio culture industry," in *Metaverse – METAVERSE 2024*, C. Xing, J. Lai, and L. J. Zhang, Eds., *Lect. Notes Comput. Sci.*, vol. 15429. Cham: Springer, 2025, doi: 978-3-031-76977-1\_10.
9. B. Dayoub, P. Yang, S. Omran, Q. Zhang, and A. Dayoub, "Digital silk roads: Leveraging the metaverse for cultural tourism within the belt and road initiative framework," *Electronics*, vol. 13, no. 12, Art. no. 2306, 2024, doi: 10.3390/electronics13122306.
10. Ö. Özeren, B. Sultan Qurraie, and M. H. Eraslan, "Preserving cultural heritage with digital design and NFT technologies: Innovative approaches in architectural education," *DEPARCH J. Des. Plan. Aesthet. Res.*, vol. 3, no. 2, pp. 161–175, 2024, doi: 10.55755/DepArch.2024.32.

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