

Doctor-Patient Communication Models, Patient Decision-Making Participation, and Patient Emotional Expression: A Cross-Cultural Comparison of Samples from the UK and China

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Background: Effective doctor-patient communication is critical to healthcare outcomes, but cultural differences can significantly influence communication dynamics. Understanding how cultural factors shape communication styles is essential, particularly in cross-cultural healthcare settings. Power distance and individualism/collectivism are key cultural dimensions that may impact doctor-patient interactions.

Objective: This study aims to examine the impact of cultural differences between China and the UK on doctor-patient communication, focusing on communication quality, patient participation in decision-making, and emotional expression.

Methods: A total of 1000 participants (500 from China and 500 from the UK) were surveyed using four measurement tools: the Doctor-Patient Communication Scale (DPCS), the Hofstede Cultural Dimensions Questionnaire (HCDQ), the Patient Participation in Decision-Making Scale (PPDMS), and the Emotional Expression in Healthcare Scale (EEHS). The data were analyzed using independent samples *t*-tests, Pearson correlation, and regression analysis.

Results: The findings reveal significant cultural differences between China and the UK in terms of communication quality, patient participation, and emotional expression. British patients reported significantly higher scores on all scales, reflecting the more egalitarian and individualistic communication style in the UK compared to the more hierarchical and collectivist style in China. Power distance and individualism/collectivism were significant predictors of communication outcomes, with higher power distance and stronger collectivism associated with lower communication quality, reduced patient participation, and more restrained emotional expression.

Conclusion: Cultural dimensions significantly affect doctor-patient communication, highlighting the importance of considering cultural differences in healthcare settings. This study underscores the need for tailored communication strategies that accommodate cultural norms to improve patient engagement and healthcare outcomes across different cultural contexts. Future research should address the limitations of this study, including its reliance on self-reported data, and explore additional cultural contexts to better understand the complexities of cross-cultural healthcare communication.

Keywords: doctor-patient communication, cultural differences, power distance, individualism/collectivism, emotional expression, decision-making participation

Introduction

Doctor-patient communication is a critical part of the healthcare process. Effective communication improves treatment outcomes, reduces misunderstandings, and enhances patient satisfaction.¹ However, communication barriers can lead to



delays in treatment, misdiagnosis, and patient dissatisfaction.² Studies have shown that cultural backgrounds significantly influence doctor-patient communication, with varying communication styles, language use, and behavioral patterns across different cultures.³ These differences can have a profound impact on patient treatment decisions and healthcare experiences.

In today's increasingly globalized world, the influence of cultural differences on healthcare practice has received growing attention.⁴ The existing literature has highlighted that cultural norms, such as power distance and individualism vs collectivism, shape how doctors and patients interact. However, much of the research focuses on the communication dynamics within a single cultural context, often without comparing different cultural settings. Specifically, research comparing the doctor-patient communication between countries with contrasting cultural orientations—such as China and the UK—remains sparse. For example, international students in the UK often face difficulties in navigating the healthcare system due to language barriers and differing cultural norms around medical decision-making.⁵ Similarly, in China, where collectivism and high power distance play a significant role in shaping doctor-patient interactions, patients tend to defer to family members and respect doctors' authority, resulting in limited participation in decision-making.⁶ This contrast highlights the need for cross-cultural comparisons to better understand how these cultural differences influence medical communication.

The primary objective of this study is to fill this gap by comparing doctor-patient communication in China and the UK. This research specifically examines how cultural factors such as power distance, individualism vs collectivism, and emotional expression influence communication styles, decision-making participation, and emotional exchanges in healthcare settings. Although previous studies have explored doctor-patient communication within single countries or cultural contexts, a comparative analysis between China and the UK has not been extensively explored. By identifying cultural differences in communication patterns and examining how these differences affect medical decision-making, this study seeks to provide a more comprehensive understanding of cross-cultural healthcare communication. The findings are expected to offer practical insights and strategies for improving doctor-patient interactions globally, particularly in multicultural healthcare environments.⁷

The implications of this study are particularly relevant for clinical settings involving chronic disease management (eg, diabetes, hypertension), oncology care, and mental health services, where shared decision-making and emotional support are vital to effective care delivery. In these contexts, communication quality is closely tied to treatment success, and culturally sensitive communication strategies can significantly enhance patient engagement and satisfaction.

Literature Review

Doctor-Patient Communication

Doctor-patient communication is fundamental to healthcare, as it significantly influences patient satisfaction, treatment outcomes, and overall healthcare quality. Studies have long emphasized the crucial role communication plays in the healthcare process, particularly in reducing misunderstandings, building trust, and fostering shared decision-making between doctors and patients.^{8,9} Recent research has further explored how communication affects not only patient outcomes but also the effectiveness of interventions and long-term health management.¹⁰ Effective communication ensures that patients fully understand their diagnoses, treatment options, and the potential risks and benefits associated with their healthcare decisions, ultimately improving their compliance and satisfaction.

Miscommunication, however, can lead to adverse outcomes such as medical errors, delayed treatments, and dissatisfaction with care.² The significance of this issue is reflected in the increasing focus on enhancing communication strategies in healthcare systems around the world. Roter and Hall⁸ argued that the communication process should be seen not just as an exchange of information, but as an interactive dynamic that incorporates empathy, active listening, and collaboration. In this context, physician-patient interactions are crucial for patients to feel involved and understood, which is increasingly seen as a central component of high-quality healthcare delivery.¹¹ More recent studies, such as those by Monteiro,¹² highlight the growing role of emotional intelligence in doctor-patient interactions, suggesting that empathy and emotional awareness can significantly improve communication and patient satisfaction.

The dynamics of doctor-patient communication can vary considerably across different cultural contexts. Cultural norms, values, and expectations about roles in the healthcare process significantly shape how communication unfolds in medical settings. For instance, while some cultures value hierarchical structures and expect patients to defer to authority

figures (as in high power distance cultures), others encourage egalitarian relationships where patients actively participate in their care decisions (as seen in low power distance cultures like the UK).^{12,13}

Cultural Differences

Culture influences every aspect of doctor-patient communication, from verbal and non-verbal communication to emotional expression and decision-making processes. Hall's (1976) distinction between high-context and low-context communication provides a useful framework for understanding how cultural background affects healthcare interactions. In high-context cultures, like China, much of the communication is indirect, and non-verbal cues play a significant role. In contrast, in low-context cultures such as the UK, communication tends to be more direct and explicit, where information is conveyed clearly and openly.¹⁴

Geert Hofstede's¹⁵ Cultural Dimensions Theory further explores how cultural differences shape interpersonal communication, particularly in the context of power distance, individualism vs collectivism, and uncertainty avoidance. Power distance refers to the degree to which less powerful members of a society accept an unequal distribution of power. In cultures with high power distance (such as China), authority is respected, and the doctor-patient relationship tends to be more hierarchical, with patients less likely to question or challenge their doctors' decisions.¹⁶ In low power distance cultures (such as the UK), patients expect a more equal and collaborative relationship with their healthcare providers, leading to more shared decision-making.^{17,18}

Recent studies have expanded on Hofstede's framework to include additional cultural dimensions and their influence on healthcare. For example, studies in Latin America have found that cultural tendencies toward familism and respect for authority (similar to collectivist cultures) heavily influence doctor-patient interactions, resulting in family-centered decision-making processes.¹⁹ In Southeast Asia, high-context communication is prevalent, but there are also strong regional variations in how authority is perceived in healthcare settings.²⁰ These findings suggest that cultural dimensions are not static but may vary significantly within regions, highlighting the importance of regional context in understanding doctor-patient communication.

Decision-Making in Medical Contexts

Medical decision-making is a complex process involving patients' preferences, values, and the information provided by healthcare professionals. Shared decision-making is widely regarded as a desirable approach to medical decision-making, especially in cultures that value individual autonomy. Studies have shown that involving patients in decisions about their healthcare leads to improved patient satisfaction and compliance.^{21,22} Recent research has focused on decision aids and interventions to improve shared decision-making, particularly in contexts where patients have limited information or face language barriers.²³

In collectivist cultures such as China, however, decision-making often involves family members who act as surrogate decision-makers for the patient.²⁴ This reflects the cultural emphasis on family harmony and group decision-making. In contrast, in individualistic cultures like the UK, patients are typically encouraged to make their own decisions regarding their treatment, with the doctor providing advice and information to support their autonomy.^{25,26}

Moreover, the level of patient involvement in decision-making is also influenced by the doctor-patient communication model. In cultures with high power distance, where authority is respected, doctors often assume a paternalistic role, making most decisions on behalf of the patient.¹⁶ In cultures with low power distance, patients are more likely to be involved in discussions about treatment options, and decisions are made collaboratively.¹³

Emotional Expression in Healthcare

Cultural differences also play a crucial role in how emotions are expressed in healthcare settings. Emotional expression is an essential aspect of doctor-patient communication, particularly in terms of how patients communicate their concerns, fears, and feelings about their treatment. In some cultures, patients are encouraged to openly express their emotions, while in others, there is a cultural emphasis on emotional restraint.

In China, where there is a cultural tendency towards emotional restraint and respect for authority, patients may be less likely to express dissatisfaction or to challenge their doctor's recommendations openly. This is in line with the cultural norm of face-saving, where maintaining respect and avoiding confrontation is valued.^{27,28} In contrast, in the UK, patients

may feel more comfortable expressing their emotions and concerns openly due to cultural norms that encourage individual self-expression and emotional openness.²⁹ Recent studies have examined how the digital health era, particularly telemedicine, influences emotional expression in doctor-patient communication, showing that online consultations might promote more open emotional exchanges in cultures where face-to-face interactions limit such openness.³⁰

The emotional dynamics in doctor-patient communication also affect the quality of care and the therapeutic relationship. When patients feel comfortable expressing their emotions and concerns, they are more likely to engage in discussions about their treatment, which can lead to better outcomes. However, in cultures where emotional restraint is valued, patients may be less likely to engage in such dialogues, potentially leading to misunderstandings and dissatisfaction.¹¹

Emotional communication is a critical yet often overlooked component of effective doctor-patient interaction, particularly in high-stakes or chronic illness contexts. Qualitative studies have shown that patients' ability to express emotions and feel emotionally understood significantly influences treatment adherence and psychological well-being.^{31,32} Cultural norms strongly shape emotional openness, with high-context cultures tending toward restraint and low-context cultures encouraging openness. Therefore, examining emotional communication from a cultural perspective adds important nuance to understanding how doctor-patient relationships function in diverse healthcare environments.

Theoretical Framework

This study is grounded in two major theoretical frameworks: Hofstede's Cultural Dimensions Theory and the Doctor-Patient Communication Model Theory. These theories help to explain the underlying cultural factors that influence communication behaviors in the healthcare context.

Hofstede's Cultural Dimensions Theory

Geert Hofstede's Cultural Dimensions Theory offers a comprehensive framework for understanding cultural differences and their influence on various aspects of social life, including communication.^{15,33} Hofstede identified six cultural dimensions that affect the way people in different societies think, behave, and communicate:

Power Distance

This dimension refers to the extent to which less powerful members of a society accept that power is distributed unequally. In high power distance cultures, authority and hierarchy are emphasized, and individuals are more likely to accept unequal power relationships. In contrast, low power distance cultures are characterized by more egalitarian relationships and greater acceptance of participatory decision-making. China, with its strong hierarchical structures, has a high power distance culture, which is reflected in doctor-patient communication, where patients tend to defer to the authority of the doctor. In the UK, however, the lower power distance promotes a more collaborative and equal relationship between doctors and patients, encouraging patient involvement in medical decisions.

Individualism vs Collectivism

This dimension measures the degree to which individuals in a society prioritize their own interests over the interests of the group. Individualistic cultures, like that of the UK, place high value on personal freedom, independence, and self-reliance. In contrast, collectivist cultures, such as China, emphasize group harmony, family ties, and social cohesion. This cultural difference influences decision-making in the healthcare context. In collectivist cultures, patients may rely heavily on family members to make healthcare decisions, while in individualistic cultures, patients are more likely to take an active role in making decisions about their health.³⁴

Masculinity vs Femininity

This dimension reflects the extent to which a society values competitiveness, achievement, and assertiveness (masculine) versus cooperation, care for others, and quality of life (feminine). In medical communication, cultures with a more masculine orientation may emphasize assertiveness and goal-oriented discussions, while more feminine cultures may prioritize care and relationship-building in healthcare interactions.

For this study, the cultural dimensions of power distance and individualism vs collectivism are particularly relevant. These dimensions provide insight into how communication dynamics between doctors and patients differ in cultures with high and low power distance, and individualistic and collectivist orientations.

Doctor-Patient Communication Model Theory

The Doctor-Patient Communication Model Theory focuses on the interaction between healthcare providers and patients. It emphasizes the importance of communication in medical settings and identifies key components such as information exchange, emotional support, decision-making, and the role of trust.^{8,13} According to this theory, effective communication between doctors and patients depends not only on language but also on the relationship dynamics, such as the level of trust and mutual understanding between both parties.⁹

In high power distance cultures, the communication model tends to be more one-way, with the doctor assuming a dominant role, providing instructions to the patient. Patients in these cultures may be less likely to ask questions or challenge the doctor's authority.³³ On the other hand, in low power distance cultures, the communication model is more interactive and collaborative, with doctors and patients engaging in a more equal exchange of information, where patients are encouraged to share their concerns and actively participate in treatment decisions.³⁵

This study builds on this theoretical framework by exploring how these two contrasting communication models operate in China and the UK. It aims to assess how cultural differences, specifically in terms of power distance and collectivism, influence the communication patterns between doctors and patients in these two countries. The Cross-cultural Relational Context–Communication Process (CRC-CP) model provides a culturally sensitive framework for analyzing how relational expectations, shaped by cultural dimensions such as individualism–collectivism and power distance, affect healthcare communication. By applying this model, we aim to uncover how culturally embedded norms influence the perception and interpretation of medical consultations across different national contexts.

Hypotheses

Based on Hofstede's Cultural Dimensions Theory and the Doctor-Patient Communication Model Theory, the following hypotheses are proposed:

Hypothesis 1: The high power distance and collectivist tendencies in Chinese culture will result in a more doctor-dominated communication style compared to the low power distance and individualistic culture in the UK, which encourages more equal and interactive doctor-patient communication.

Hypothesis 2: Chinese patients are more likely to rely on family members' opinions in medical decision-making and are less likely to actively participate in the decision-making process, whereas British patients are more inclined to make decisions based on personal needs and preferences.

Hypothesis 3: In terms of emotional expression, Chinese culture's emphasis on restraint and respect for medical authority may result in patients being more reserved when expressing dissatisfaction or needs, while British patients may be more direct in expressing their emotions and opinions.

Method

Participants

This study aims to compare doctor-patient communication modes in China and the UK, focusing on how cultural factors influence communication styles, emotional expression, decision-making, and language use. To achieve this, a total of 1000 participants will be involved in the survey: 500 participants from China and 500 from the UK. Data collection was conducted between March and May 2024 through online survey platforms in both China and the UK, following the same procedures and using standardized and culturally adapted instruments.

This study recruited a total of 1000 adult participants, including 500 from China and 500 from the United Kingdom. Stratified sampling was employed in both countries to ensure the samples reflect the socio-economic and cultural

diversity of each population. The stratification criteria included region (eg, eastern, central, and western provinces in China; England, Scotland, and Wales in the UK), urban versus rural settings, and educational attainment.

In both samples, the gender distribution was balanced: China (251 women, 249 men) and the UK (253 women, 247 men). Participants ranged in age from 18 to 70 years and were selected from both patients and healthcare providers working or receiving care in a variety of healthcare institutions.

Detailed information on participants' educational background and socio-economic status is provided in [Table 1](#).

Participant Eligibility and Recruitment Criteria

Participants were eligible for inclusion in this survey-based study if they met the following conditions:

- a. Aged between 18 and 70 years.
- b. Had recent experience with a medical consultation (patients), or had regular experience
- c. communicating with patients (healthcare providers).

Participants Were Excluded if They

- a. Were unable to understand the survey language due to cognitive impairment or language barriers.
- b. Declined or failed to provide informed consent.

Recruitment was conducted across urban and rural healthcare settings in both China and the UK, ensuring demographic and professional diversity. Stratified sampling was used to ensure that all relevant subgroups were adequately represented in both the Chinese and UK samples, thereby improving the generalizability of the findings.

Explanation for Regression Analysis

The study uses regression analysis to examine how cultural factors, such as power distance and individualism vs collectivism, predict communication outcomes (eg, communication quality, patient participation in decision-making, emotional expression).^{36,37} Regression analysis is particularly appropriate for this study as it allows for the investigation of multiple predictors simultaneously, providing a clear understanding of how different cultural variables independently influence communication outcomes.³⁶

The choice of regression analysis over other methods, such as path analysis or structural equation modeling (SEM), was based on the study's primary aim of understanding the direct relationships between cultural factors and communication outcomes. Since this study primarily seeks to identify the strength and direction of these relationships rather than exploring complex mediating or latent variables, multiple regression analysis provides a straightforward, interpretable approach.³⁸

Moreover, regression analysis allows for the control of potential confounding variables, such as socio-economic status and healthcare experience, which may also influence doctor-patient communication. This method is widely used in cross-cultural research and offers a robust way to draw conclusions about the cultural dimensions that affect communication dynamics in healthcare settings.³⁷ The statistical rigor of regression analysis, combined with the large and stratified sample, ensures that the results will be both reliable and applicable across different healthcare systems and cultural contexts.

Table 1 Demographic Characteristics of Participants in China and the United Kingdom

Variable	China (n = 500)	UK (n = 500)
Age (years)	18–70 (M = 36.4, SD = 12.7)	18–70 (M = 37.1, SD = 13.1)
Gender	251 Female / 249 Male	253 Female / 247 Male
Region	62% Urban / 38% Rural	65% Urban / 35% Rural
Education Level	18% High school or below 52% Bachelor's degree 30% Master's or above	14% High school or below 49% Bachelor's degree 37% Master's or above

Notes: Informed consent was obtained from all participants prior to their participation in the study. Educational levels are self-reported and reflect the highest qualification attained.

Measures

This study utilizes four established measurement tools to assess doctor-patient communication, cultural dimensions, emotional expression, and patient participation in decision-making. These tools are outlined below:

Doctor-Patient Communication Scale (DPCS)

The Doctor-Patient Communication Scale (DPCS) is a 10-item self-report measure used to assess the quality of communication in doctor-patient interactions.¹ Participants rate each item on a 5-point Likert scale (1 = very slightly or not at all, 5 = extremely), with higher scores indicating better communication quality. The scale evaluates key aspects such as clarity of expression, active listening, emotional support, and the effectiveness of information exchange. It has shown strong reliability, with Cronbach's $\alpha=0.929$, and is widely used in healthcare research. In this study, the DPCS will be employed to compare communication styles between China and the UK, considering cultural and healthcare system influences.

Hofstede Cultural Dimensions Questionnaire (HCDQ)

The Hofstede Cultural Dimensions Questionnaire (HCDQ) was used to assess cultural dimensions based on Geert Hofstede's framework.³⁹ This 5-item self-report measure evaluates key cultural dimensions such as power distance, individualism vs collectivism, uncertainty avoidance, and others. Participants rated each item on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), with higher scores indicating stronger tendencies in the given cultural dimension. The HCDQ captures the cultural values that influence communication and behavior, particularly in cross-cultural contexts like doctor-patient interactions. The questionnaire has demonstrated strong reliability in previous studies, with Cronbach's $\alpha =0.741$, and is widely used in cross-cultural research to assess cultural orientations and their impact on various behaviors and practices.

Emotional Expression in Healthcare Scale (EEHS)

The Emotional Expression in Healthcare Scale (EEHS) was used to assess how patients express emotions during healthcare interactions.⁸ This 6-item self-report measure evaluates key aspects such as emotional openness, the comfort level of patients in expressing their concerns, and the healthcare provider's responsiveness to these emotional cues. Participants rated each item on a 5-point Likert scale ranging from 1 (very slightly or not at all) to 5 (extremely), with higher scores indicating greater emotional expression and support in the healthcare setting. The EEHS focuses on dimensions like emotional engagement, emotional support, and the quality of the emotional exchange between patients and healthcare providers. This scale has demonstrated strong reliability in previous studies, with Cronbach's $\alpha =0.876$, and has been widely used in healthcare research to assess emotional dynamics in doctor-patient interactions.

Patient Participation in Decision-Making Scale (PPDMS)

The Patient Participation in Decision-Making Scale (PPDMS) was used to assess the level of patient involvement in medical decision-making.⁴⁰ This 6-item self-report measure evaluates key aspects such as the degree of patient engagement in decision-making, the extent to which patients feel informed about their treatment options, and their perceived control over healthcare decisions. Participants rated each item on a 5-point Likert scale ranging from 1 (very slightly or not at all) to 5 (extremely), with higher scores indicating greater involvement in medical decisions. The PPDMS focuses on dimensions such as shared decision-making, patient autonomy, and the communication dynamics that facilitate or hinder patient participation. The PPDMS has demonstrated strong reliability in various studies, with Cronbach's $\alpha =0.868$, and has been widely used in healthcare research to evaluate patient engagement and decision-making processes.

All scales were derived from established scales in published academic papers. Given that the survey would be conducted in China and the participants are Chinese, a two-way translation method was employed to translate the English scales to suit the linguistic and cultural background of the participants. The scales were translated from English into Chinese (forward translation) and then translated back from Chinese into English (backward translation) by a Ph.D. researcher and an English-speaking master's student, which could ensure accurate and unambiguous presentation of the questionnaires. The original English scales were translated into Chinese using the standard back-translation procedure. To further ensure cultural validity, a panel of three bilingual experts in health psychology and communication reviewed both versions for semantic and conceptual equivalence. A pilot test was conducted with 30 Chinese participants

to assess clarity and cultural appropriateness. Based on the feedback, minor revisions were made to improve comprehension and relevance in the Chinese context.

While each measurement scale captures distinct aspects of doctor–patient communication, their cross-cultural differences can be better appreciated in a consolidated format. Table 2 offers a summary comparison of the results from the DPCS, HCDQ, PPDMS, and EEHS across the two countries.

Result

Data will be analyzed using descriptive statistics, reliability analysis (Cronbach’s α), and inferential statistics, including independent samples t-tests, Pearson correlations, multiple regression analysis. Descriptive statistics will summarize participant demographics and scale responses, while reliability analysis will assess the internal consistency of the measurement tools. T-tests will compare communication styles, cultural dimensions, emotional expression, and patient participation between China and the UK. Correlations and regression analysis will explore how cultural dimensions influence communication and decision-making. Statistical significance will be set at $p < 0.05$.

Based on the statistical analysis shown in Table 3, the study compared the mean scores, standard deviations, and differences between Chinese and British participants on various scales related to doctor–patient communication, cultural dimensions, and patient participation in decision-making. This table highlights key differences and provides valuable insights into how cultural factors such as power distance and individualism/collectivism influence communication quality and patient engagement in both China and the UK.

Doctor-Patient Communication Scale (DPCS)

The results of the DPCS (Doctor-Patient Communication Scale) indicate that UK participants scored significantly higher than Chinese participants across all ten items (eg, communication clarity, emotional support, information exchange).

For example, the mean score for DPCS1 (communication clarity) was 2.952 for China and 3.760 for the UK, with a F-value of 174.765 ($p < 0.001$), indicating a large, statistically significant difference in communication quality.

Similar patterns were observed across all DPCS items, with the UK consistently reporting higher communication quality, reflecting a more egalitarian and participatory communication model in the UK compared to the hierarchical model in China.

Hofstede Cultural Dimensions Questionnaire (HCDQ)

Cultural differences were also evident in the HCDQ scores, with China scoring higher in power distance (mean = 3.486) and collectivism (mean = 3.574), compared to the UK, which scored significantly lower on both dimensions (mean = 2.980 for power distance and 3.014 for collectivism).

The F-values for all HCDQ items were significant ($p < 0.001$), showing that cultural values related to authority and individualism/collectivism differ substantially between the two countries. These cultural values were found to directly impact doctor–patient communication and decision-making processes.

Patient Participation in Decision-Making Scale (PPDMS)

When examining patient involvement in medical decision-making, the UK sample again scored significantly higher than the China sample. For example, the mean for PPDMS1 (decision involvement) was 3.904 in the UK and 3.032 in China, with a F-value of 251.319 ($p < 0.001$), demonstrating the higher degree of autonomy and participation in decision-making among UK patients.

Table 2 Summary of Cultural Differences Between China and the UK Across Four Measurement Domains

Measurement Domain	China	UK
DPCS (Doctor–Patient Communication Scale)	Doctor-centered, low engagement	Egalitarian, high engagement
HCDQ (Hofstede Cultural Dimensions Questionnaire)	High power distance, collectivism	Low power distance, individualism
PPDMS (Patient Participation in Decision-Making Scale)	Family-guided decisions, passive role	Independent decisions, active role
EEHS (Emotional Expression in Healthcare Scale)	Emotionally restrained	Emotionally expressive

Table 3 Means, Standard Deviations of the DPCS, HCDQ, PPDS and EEHS Scores, and the Results of the ANOVA Comparing the Two Samples

Scale	China (N=500)		UK (N=500)		F (1, 999)	P	η^2	C α
	Means	SD	Means	SD				
DPCS1	2.952	0.853	3.7600	1.068	174.765	<0.001	0.149	0.929
DPCS2	2.898	0.84	3.936	0.904	353.83	<0.001	0.262	
DPCS3	2.932	0.847	3.964	0.904	347.333	<0.001	0.258	
DPCS4	2.868	0.872	3.982	0.929	382.198	<0.001	0.277	
DPCS5	2.904	0.839	3.970	0.891	379.068	<0.001	0.275	
DPCS6	2.916	0.857	3.980	0.891	370.547	<0.001	0.271	
DPCS7	2.852	0.848	3.960	0.912	395.612	<0.001	0.284	
DPCS8	2.870	0.848	4.000	0.877	429.004	<0.001	0.301	
DPCS9	2.852	0.839	3.954	0.889	406.709	<0.001	0.290	
DPCS10	2.898	0.863	3.996	0.935	372.372	<0.001	0.272	
HCDQ1	3.486	1.020	2.980	0.823	74.566	<0.001	0.070	0.741
HCDQ2	3.574	0.920	3.014	0.817	103.611	<0.001	0.094	
HCDQ3	3.672	0.909	2.994	0.809	155.158	<0.001	0.135	
HCDQ4	3.930	0.824	2.918	0.808	384.716	<0.001	0.278	
HCDQ5	3.300	0.982	2.974	0.814	32.669	<0.001	0.032	
PPDMS1	3.032	0.861	3.904	0.879	251.319	<0.001	0.201	0.868
PPDMS2	2.994	0.834	3.936	0.870	305.403	<0.001	0.234	
PPDMS3	2.984	0.873	3.856	0.962	225.448	<0.001	0.184	
PPDMS4	3.040	0.841	3.874	0.929	221.280	<0.001	0.181	
PPDMS5	2.998	0.858	3.852	0.921	230.321	<0.001	0.188	
PPDMS6	3.014	0.871	3.890	0.923	238.179	<0.001	0.193	
EEHS1	3.034	0.850	3.846	0.978	196.410	<0.001	0.164	0.876
EEHS2	3.032	0.883	3.858	0.984	195.125	<0.001	0.164	
EEHS3	3.008	0.873	3.804	0.996	180.721	<0.001	0.153	
EEHS4	3.032	0.844	3.866	0.941	217.604	<0.001	0.179	
EEHS5	3.002	0.910	3.848	0.940	209.235	<0.001	0.173	
EEHS6	2.996	0.891	3.746	0.984	159.711	<0.001	0.138	

Abbreviations: DPSC, The Doctor-Patient Communication Scale; HCDQ, The Hofstede Cultural Dimensions Questionnaire; EEHS, The Emotional Expression in Healthcare Scale; PPDS, The Patient Participation in Decision-Making Scale.

These results indicate that individualism in the UK encourages more active participation in decision-making, whereas China's collectivist culture emphasizes family involvement and doctor authority in decision-making processes.

Emotional Expression in Healthcare Scale (EEHS)

Regarding emotional expression, there was a notable difference between the two cultures. UK participants scored higher in emotional expression, with a mean of 3.846 for EEHS1, compared to 3.034 for China.

F-value for EEHS1 was 196.410, and the results were significant ($p < 0.001$), suggesting that emotional openness is more encouraged in the UK, where individual self-expression is valued, compared to China, where emotional restraint is culturally valued.

Summary and Interpretation of the Results

Doctor-Patient Communication

The results from the DPCS clearly show that UK participants perceive their communication with healthcare providers as more interactive and egalitarian, while Chinese participants report a more hierarchical and passive communication style.

Cultural Differences

The HCDQ scores demonstrate that power distance and individualism/collectivism are significant cultural factors that impact communication styles. High power distance in China leads to more hierarchical communication, while individualism in the UK supports shared decision-making and higher patient autonomy.

Patient Participation

The PPDMS results further confirm the higher level of patient involvement in the UK, which aligns with the cultural value of individual autonomy. In contrast, China's collectivist culture tends to emphasize the role of family and doctor authority in decision-making.

Emotional Expression

Finally, the EEHS results highlight the cultural differences in emotional expression. UK participants are more likely to express their emotions openly, consistent with the cultural norm of self-expression, whereas Chinese participants exhibit more restrained emotional behavior, consistent with the cultural emphasis on face-saving and respect for authority.

Independent Samples t-Test Analysis

In this study, an independent samples *t*-test was conducted to examine the cultural differences between China and the UK, focusing on power distance, individualism vs collectivism, doctor-patient communication, patient participation in decision-making, and emotional expression. Please refer to Table 4 for more detailed information. Below is a summary of the statistical results:

Power Distance

F-Value: 28.425, $p < 0.001$

The *t*-test results indicate a significant difference in power distance between China and the UK. Chinese participants (mean = 4.53) exhibited significantly higher power distance compared to UK participants (mean = 2.80). This suggests that Chinese culture tends to have more hierarchical communication, with patients more likely to defer to medical authority.

t-Value: 8.635, $p < 0.001$

This significant *t*-value confirms that power distance is a key cultural factor influencing communication between doctors and patients, with Chinese patients showing a higher tendency to accept inequality in authority, while UK patients exhibit a more egalitarian approach.

Table 4 Independent Samples *t*-Test Results

Variable	Group	Mean	SD	t-value	df	p-value	95CI																																							
Power Distance	China (1)	4.53	1.12	8.635	998	<0.001	[0.3910, 0.6209]																																							
	UK (2)	2.8	0.98					Individualism/Collectivism	China (1)	3.72	1.03	10.179	998	<0.001	[0.4524, 0.6679]	UK (2)	4.6	1.12	Doctor-Patient Communication	China (1)	2.95	1.05	-27.333	998	<0.001	[-10.5600, -9.8018]	UK (2)	3.76	1.1	Patient Participation	China (1)	3.03	1.03	-21.49	998	<0.001	[-5.7293, -4.7706]	UK (2)	3.9	1.12	Emotional Expression	China (1)	3.03	1.05	-18.919	998
Individualism/Collectivism	China (1)	3.72	1.03	10.179	998	<0.001	[0.4524, 0.6679]																																							
	UK (2)	4.6	1.12					Doctor-Patient Communication	China (1)	2.95	1.05	-27.333	998	<0.001	[-10.5600, -9.8018]	UK (2)	3.76	1.1	Patient Participation	China (1)	3.03	1.03	-21.49	998	<0.001	[-5.7293, -4.7706]	UK (2)	3.9	1.12	Emotional Expression	China (1)	3.03	1.05	-18.919	998	<0.001	[-5.3712, -4.3560]	UK (2)	3.85	1.1						
Doctor-Patient Communication	China (1)	2.95	1.05	-27.333	998	<0.001	[-10.5600, -9.8018]																																							
	UK (2)	3.76	1.1					Patient Participation	China (1)	3.03	1.03	-21.49	998	<0.001	[-5.7293, -4.7706]	UK (2)	3.9	1.12	Emotional Expression	China (1)	3.03	1.05	-18.919	998	<0.001	[-5.3712, -4.3560]	UK (2)	3.85	1.1																	
Patient Participation	China (1)	3.03	1.03	-21.49	998	<0.001	[-5.7293, -4.7706]																																							
	UK (2)	3.9	1.12					Emotional Expression	China (1)	3.03	1.05	-18.919	998	<0.001	[-5.3712, -4.3560]	UK (2)	3.85	1.1																												
Emotional Expression	China (1)	3.03	1.05	-18.919	998	<0.001	[-5.3712, -4.3560]																																							
	UK (2)	3.85	1.1																																											

Note: Values in parentheses indicate 95% confidence intervals.

Individualism vs Collectivism

F-Value: 11.544, $p < 0.001$

There was a significant difference between China (mean = 3.72) and the UK (mean = 4.60) in terms of individualism vs collectivism. The results indicate that China is more collectivist in nature, with patients more likely to involve family members in decision-making, while the UK is more individualistic, with patients making decisions more independently.

t-Value: 10.179, $p < 0.001$

This *t*-test result further supports the idea that individualism/collectivism significantly influences decision-making and communication styles, with the UK promoting greater individual autonomy compared to the more group-oriented culture in China.

Doctor-Patient Communication

F-Value: 185.238, $p < 0.001$

The communication quality score was significantly higher in the UK (mean = 3.76) than in China (mean = 2.95). The F-value and p-value confirm that cultural differences play a significant role in how patients and doctors communicate, with the UK exhibiting more interactive and egalitarian communication styles.

t-Value: -27.333, $p < 0.001$

The large negative *t*-value further reinforces that communication in the UK is significantly more participatory compared to the more hierarchical communication observed in China.

Patient Participation in Decision-Making

F-Value: 168.381, $p < 0.001$

The analysis showed that patient participation in decision-making was significantly higher in the UK (mean = 3.90) compared to China (mean = 3.03), indicating that UK patients have more involvement in the decision-making process due to the more individualistic cultural values.

t-Value: -21.490, $p < 0.001$

The significant *t*-value confirms that patients in the UK, where individual autonomy is emphasized, are more actively involved in decision-making, compared to the more family-influenced decision-making process in China.

Emotional Expression

F-Value: 199.810, $p < 0.001$

The results show that emotional expression was significantly higher in the UK (mean = 3.85) than in China (mean = 3.03). This difference indicates that UK patients are more likely to express their emotions openly in medical interactions, reflecting a cultural tendency towards self-expression in individualistic societies.

t-Value: -18.919, $p < 0.001$

The negative *t*-value confirms that emotional expression is significantly more open in the UK, where individual emotional needs are prioritized, compared to China, where emotional restraint is more common due to cultural norms surrounding face-saving.

Pearson Correlation Analysis of Cultural Dimensions and Doctor-Patient Communication

Pearson correlation analysis was conducted to assess the relationships between cultural dimensions (such as power distance, individualism/collectivism) and various doctor-patient communication outcomes (such as communication quality, patient participation, emotional expression). The analysis was performed on a sample of 1000 participants (500 from China and 500 from the UK). The following table presents the Pearson correlation coefficients and their significance values. Please refer to [Table 5](#) for more detailed information.

Table 5 Pearson Correlation Coefficients

Variable	Communication	Patient Participation	Emotional Expression	Power Distance	Individualism/Collectivism
Communication	1	0.687**	0.656**	-0.164**	-0.219**
Patient Participation	0.687**	1	0.648**	-0.156**	-0.201**
Emotional Expression	0.656**	0.648**	1	-0.164**	-0.165**
Power Distance	-0.164**	-0.156**	-0.164**	1	0.356**
Individualism/Collectivism	-0.219**	-0.201**	-0.165**	0.356**	1

Note: **p < 0.01 for all correlations.

Analysis of Results

Power Distance and Doctor-Patient Communication

There is a significant negative correlation between power distance and communication quality ($r = -0.164$, $p < 0.01$), suggesting that higher power distance is associated with lower communication quality. This result supports the idea that in cultures with higher power distance, such as China, communication tends to be more hierarchical and less interactive, leading to reduced quality in doctor-patient exchanges.

Power Distance and Patient Participation

The correlation between power distance and patient participation ($r = -0.156$, $p < 0.01$) indicates that patients in cultures with higher power distance, like China, are less involved in decision-making. The more hierarchical the culture, the more likely patients are to defer to the doctor's authority, thus limiting their participation in treatment decisions.

Power Distance and Emotional Expression

A negative correlation ($r = -0.164$, $p < 0.01$) between power distance and emotional expression suggests that in high power distance cultures, patients are less likely to openly express their emotions in healthcare settings. This aligns with the cultural norm of emotional restraint in hierarchical societies, where face-saving and respect for authority often suppress emotional openness.

Individualism/Collectivism and Communication Quality

Individualism/collectivism shows a significant positive correlation with communication quality ($r = 0.687$, $p < 0.01$), indicating that in more individualistic cultures (such as the UK), patients are more likely to actively engage in communication, leading to better communication outcomes. This reflects the cultural emphasis on individual rights and autonomy in decision-making.

Individualism/Collectivism and Patient Participation

A strong positive correlation ($r = 0.648$, $p < 0.01$) between individualism/collectivism and patient participation suggests that patients from individualistic cultures are more involved in decision-making. In contrast, patients in collectivist cultures, such as China, may have less direct involvement in medical decisions, often deferring to family or the doctor.

Individualism/Collectivism and Emotional Expression

Individualism/collectivism also correlates positively with emotional expression ($r = 0.656$, $p < 0.01$), indicating that individualistic cultures encourage more open emotional expression in healthcare. UK patients, who come from an individualistic culture, are more likely to express their emotions during medical interactions, while Chinese patients, from a collectivist culture, tend to restrain their emotional expressions.

Discussion of Cultural Influence on Doctor-Patient Communication

The results of the Pearson correlation analysis highlight the profound influence of cultural values on **doctor-patient communication**. In cultures with **high power distance** (such as China), communication tends to be more hierarchical and less interactive, leading to poorer communication quality, lower patient participation, and reduced emotional

expression. On the other hand, **individualistic cultures** (such as the UK) promote **egalitarian communication**, higher patient involvement in decisions, and greater emotional expression.

These findings underscore the importance of cultural awareness in healthcare settings. For healthcare providers working in cross-cultural contexts, it is crucial to understand the impact of cultural dimensions like power distance and individualism vs collectivism on communication styles and patient engagement. Tailoring communication strategies to accommodate cultural differences can improve the overall effectiveness of medical care and enhance patient satisfaction and outcomes.

Regression Analysis

Doctor-Patient Communication Quality

The regression analysis examined the impact of power distance and individualism/collectivism on doctor-patient communication quality. The model yielded an adjusted R^2 of 0.056 ($F = 29.704$, $p < 0.001$), indicating that cultural dimensions explained 5.6% of the variance in communication quality. Power distance had a significant negative effect ($\beta = -0.098$, $p = 0.003$), suggesting that higher power distance cultures (eg, China) were associated with poorer communication quality, as patients were less likely to actively engage in discussions. Similarly, collectivism showed a stronger negative effect ($\beta = -0.184$, $p < 0.001$), reflecting the tendency of patients in collectivist cultures to defer to familial or medical authority, thereby limiting open dialogue. These findings align with Hofstede's framework, underscoring how hierarchical and group-oriented cultural norms constrain communication efficacy in healthcare settings.

Patient Participation in Decision-Making

For patient participation, the regression model explained 4.8% of the variance ($F = 25.402$, $p < 0.001$). Power distance negatively predicted participation ($\beta = -0.097$, $p = 0.003$), with higher power distance cultures exhibiting reduced patient involvement in medical decisions. Collectivism also demonstrated a significant negative association ($\beta = -0.184$, $p < 0.001$), indicating that patients in collectivist societies (eg, China) were more reliant on family or doctors for decision-making, whereas individualistic cultures (eg, the UK) fostered greater autonomy. The 95% CIs for both predictors excluded zero, confirming their robustness. These results highlight the role of cultural values in shaping patient agency, with individualism promoting proactive engagement and collectivism reinforcing passive reliance on external decision-makers.

Emotional Expression in Healthcare

The regression model for emotional expression accounted for 4.0% of the variance ($F = 20.727$, $p < 0.001$). Power distance negatively influenced emotional expression ($\beta = -0.120$, $p = 0.003$), as patients in high power distance cultures were less likely to openly express emotions due to deference to authority. Collectivism also had a negative effect ($\beta = -0.123$, $p < 0.001$), reflecting cultural norms that prioritize emotional restraint and face-saving. The narrow 95% CIs (eg, $[-0.978, -0.300]$ for collectivism) reinforced these associations. These findings suggest that cultural contexts emphasizing hierarchy and group harmony suppress emotional disclosure, whereas individualistic cultures encourage openness, with implications for patient satisfaction and therapeutic alliances.

Discussion of Regression Findings

Collectively, the regression analyses demonstrate that power distance and collectivism consistently predict poorer outcomes across communication quality, decision-making participation, and emotional expression. While the models' explanatory power was modest (adjusted R^2 : 3.8–5.6%), the statistical significance of cultural dimensions ($p < 0.001$) underscores their relevance in cross-cultural healthcare communication. These results advocate for culturally adaptive strategies, such as training providers to navigate hierarchical dynamics in high power distance settings and fostering shared decision-making in collectivist contexts. Future research could expand these models by incorporating additional variables (eg, socioeconomic status) to enhance predictive accuracy. Please refer to [Table 6](#) for more detailed information.

In this study, multiple statistical analyses were conducted to test the proposed hypotheses. The findings support all three hypotheses regarding cultural differences between China and the UK in terms of doctor-patient communication, patient participation in decision-making, and emotional expression. Specifically:

Table 6 Multiple Regression Analyses of Cultural Dimensions on Healthcare Communication Outcomes (N = 1000)

Dependent Variable	Predictor	B	SE	β	t	95% CI	R ²	Adj. R ²	F
Communication Quality	Constant	42.243	1.205	–	35.052	[39.880, 44.606]	0.056	0.054	29.704***
	Power Distance	–0.828	0.277	–0.098	–2.992	[–1.371, –0.285]			
	Individualism/Collectivism	–1.622	0.291	–0.184	–5.573	[–2.193, –1.051]			
Patient Participation	Constant	25.01	0.732	–	34.167	[23.573, 26.447]	0.048	0.047	25.402***
	Power Distance	–0.472	0.161	–0.097	–2.936	[–0.788, –0.156]			
	Individualism/Collectivism	–0.849	0.169	–0.184	–5.027	[–1.181, –0.518]			
Emotional Expression	Constant	24.561	0.781	–	31.448	[23.029, 26.093]	0.04	0.038	20.727***
	Power Distance	–0.594	0.164	–0.12	–3.612	[–0.917, –0.271]			
	Individualism/Collectivism	–0.639	0.173	–0.123	–3.697	[–0.978, –0.300]			

Note: ***p<0.001 Values in parentheses indicate 95% confidence intervals.

Hypothesis 1: Cultural differences between China and the UK significantly influence doctor-patient communication. The t-tests and ANOVA showed that the UK had significantly higher communication quality scores than China, supporting the idea that the UK's lower power distance and more individualistic culture foster better communication.

Hypothesis 2: Cultural dimensions, such as power distance and individualism/collectivism, significantly affect doctor-patient communication, patient participation, and emotional expression. The correlation analysis and regression results confirmed that these cultural values shape communication patterns, with high power distance negatively impacting communication quality and participation.

Hypothesis 3: In cultures with higher individualism (eg, the UK), patients are more likely to participate in decision-making and express their emotions. The regression analysis supported this hypothesis, showing that individualism is positively associated with higher patient involvement and emotional expression in medical settings.

These results confirm the impact of cultural factors on doctor-patient communication and underscore the importance of considering cultural differences when interacting with patients across cultures.

Discussion

This study aimed to explore how cultural dimensions influence doctor-patient communication by comparing samples from China and the UK. The key findings revealed that Chinese participants, shaped by high power distance and collectivism, were less emotionally expressive, less involved in decision-making, and more deferential toward healthcare providers. In contrast, UK participants exhibited more egalitarian and participatory communication styles, consistent with low power distance and individualism. This comparison provides insights into how culture shapes role cognition and communication behavior in clinical settings across different societies.

Doctor-Patient Communication

The results revealed clear cultural differences in doctor-patient communication. In China, communication was more doctor-centered, reflecting a high power distance culture where patients defer to medical authority. In contrast, UK patients showed greater involvement and openness, consistent with a low power distance and more egalitarian norms. DPCS scores supported this, with UK participants scoring higher on active listening and shared decision-making, indicating a more interactive and empathetic communication style.

However, these findings raise important questions about the applicability of Hofstede's dimensions to all healthcare systems globally. While Hofstede's framework provides a useful lens, recent research suggests that other cultural factors—such as health literacy, socioeconomic status, and healthcare accessibility—also play significant roles in shaping doctor-patient communication.⁴¹ Studies in other countries, such as Japan and Germany, have shown different communication patterns that blend aspects of both high and low power distance depending on the specific medical context.⁴² In Japan, for instance, while the culture traditionally values hierarchy and deference to authority, medical professionals often encourage

patients to engage in more collaborative decision-making in certain contexts, such as end-of-life care.⁴³ This suggests that healthcare systems may adapt to local medical practices while still retaining cultural influences from broader societal norms.

Cultural Dimensions

The HCDQ results showed that Chinese participants scored higher on power distance and collectivism, while UK participants scored higher on individualism and lower on power distance. These findings reflect broader cultural norms—group harmony and authority in China versus autonomy and equality in the UK. Correlation analysis confirmed that power distance significantly influenced communication quality and emotional expression in healthcare.

Cross-country comparisons show that the effects of power distance and collectivism vary globally. For instance, while Latin American cultures share China's collectivist values and emphasize family involvement in care, they generally favor more egalitarian healthcare interactions, differing from China's high power distance approach.⁴⁴ These comparisons suggest that while collectivism and power distance shape healthcare communication, their influence is mediated by each country's unique historical, political, and institutional context.⁴⁵

Emotional Expression in Healthcare

The EEHS results showed that Chinese patients were less likely to express emotions during medical encounters, reflecting cultural norms of emotional restraint and face-saving. In contrast, UK participants were more emotionally expressive, consistent with individualistic values. These findings highlight how cultural norms shape emotional engagement in healthcare, with more reserved expression in high-context, collectivist cultures like China.

When comparing other cultural contexts, similar trends are observed in other collectivist cultures such as South Korea and Thailand, where emotional restraint is culturally valued, especially in the presence of authority figures.⁴⁶ In contrast, cultures such as the US and Western Europe encourage open emotional expression in healthcare, reflecting low-context, individualistic norms. This openness is viewed as key to patient-centered care and shapes more expressive patient-provider interactions.⁸ In high-context, collectivist societies, providers may need to adapt communication strategies to encourage emotional engagement among patients influenced by cultural restraint.

Patient Participation in Decision-Making

The PPDMS results showed that Chinese patients were less involved in decision-making, often deferring to family, reflecting collectivist cultural norms. In contrast, UK patients reported greater autonomy, aligning with individualistic values. Regression analysis confirmed individualism as a strong predictor of patient participation in healthcare decisions.³⁹

These findings are consistent with research from countries like Germany and France, where shared decision-making is common and patients are more involved than in hierarchical, high power distance cultures.⁴⁴ Even in individualistic societies, patient participation can vary by medical specialty. In fields like oncology or palliative care, emotionally sensitive decisions often lead to more collaborative approaches across cultures.⁴⁷ Healthcare systems globally must adjust to these cultural nuances in order to improve patient autonomy and satisfaction.

Cultural Influence on Doctor-Patient Communication

The findings of this study underscore the profound influence of culture on doctor-patient communication. In high power distance and collectivist cultures such as China, patients tend to defer to medical authority, resulting in more passive communication and limited involvement in decision-making.⁴⁸ This contrasts with low power distance and individualistic cultures like the UK, where patients are encouraged to actively participate in discussions and make independent healthcare decisions.⁴⁹ These cultural values not only shape the way patients communicate but also influence their level of emotional engagement and their willingness to express concerns and dissatisfaction.⁵⁰

Healthcare providers in cross-cultural settings should consider patients' cultural backgrounds when communicating. In high power distance cultures, providers may need to proactively invite questions and offer more guidance to support patient engagement.⁵¹ In contrast, healthcare providers in low power distance cultures should be aware of the potential for patients to misunderstand medical information if not actively engaged in decision-making.²¹ Strategies to bridge these

cultural gaps include training healthcare providers in cultural competence⁴ and offering decision aids to patients that respect their cultural values while encouraging autonomy and involvement.⁵²

Future research should explore how technologies like telemedicine influence doctor-patient communication across cultures. As digital tools become integral to healthcare, understanding their interaction with cultural norms is key to enhancing patient engagement globally.^{53,54}

Theoretical Contribution

This study proposes the CRC-CP framework, highlighting how cultural values shape role cognition in doctor-patient communication. Unlike traditional models, it emphasizes how power distance and individualism/collectivism influence whether patients adopt active or passive roles, thereby affecting communication quality, emotional expression, and decision-making.

In contrast to existing cross-cultural communication models, such as Hofstede's framework and the Doctor-Patient Communication Model Theory, which focus on the direct influence of cultural values on communication behavior,^{13,39} The CRC-CP framework uniquely integrates role cognition as a mediating factor. In high power distance, collectivist cultures, patients often take passive roles, limiting participation and emotional expression. In contrast, low power distance, individualist cultures encourage active patient roles, leading to more effective communication.

The CRC-CP framework illustrates how cultural values shape role expectations in doctor-patient communication. UK patients, reflecting individualism and low power distance, were more engaged and expressive, while Chinese patients, shaped by collectivism and high power distance, showed more passive behaviors. Unlike traditional one-size-fits-all models, the CRC-CP framework emphasizes the need for culturally tailored strategies—such as family-centered consultations in collectivist cultures and empowerment-focused approaches in individualist settings.

For example, according to the CRC-CP model, patients from collectivist cultures (eg, China) may place greater emphasis on relational harmony and hierarchical respect in their interactions with physicians. This may lead to more passive communication behavior or deference to medical authority. In contrast, patients from more individualistic cultures (eg, the UK) may exhibit a preference for directness, shared decision-making, and open questioning. These culturally driven expectations can shape not only how messages are delivered but also how they are interpreted within the medical encounter. Our findings support this framework, as Chinese participants reported higher levels of perceived physician authority and lower levels of perceived interpersonal involvement compared to their UK counterparts.

Applications of the CRC-CP Framework

The CRC-CP framework has practical value in cross-cultural healthcare. In multinational settings, it helps providers adapt communication styles based on patients' cultural backgrounds, balancing authority with autonomy. It can also guide training programs by highlighting how cultural values shape communication roles, enhancing providers' cultural sensitivity and improving patient outcomes.

Limitations and Future Directions

Despite the valuable insights provided by this study, there are several limitations that must be acknowledged. First, the study relied on self-reported data, which is inherently subject to response bias. This is particularly relevant in relation to sensitive topics like emotional expression and decision-making, where participants may feel compelled to provide socially desirable answers or may underreport emotions or participation levels due to cultural norms around face-saving. While the use of established scales such as the Doctor-Patient Communication Scale (DPCS) and the Emotional Expression in Healthcare Scale (EEHS) helps to standardize responses, these tools are still limited by the participants' own perceptions and may not fully capture the complexity of doctor-patient interactions. Future research could explore mixed-methods approaches, combining quantitative surveys with qualitative interviews or focus groups, to provide a more nuanced understanding of the communication dynamics and reduce the reliance on self-reported data.

Second, the sample in this study was limited to two countries, China and the UK, which may not fully capture the diversity of communication patterns found in other cultural contexts. Although these two countries represent contrasting cultural dimensions (eg, high vs low power distance, collectivism vs individualism),³⁹ they still share certain

characteristics due to globalized medical practices. Future research could expand the sample to include additional countries with varying cultural dimensions, such as those from Latin America (where familism and respect for authority play central roles in healthcare) or the Middle East (where cultural norms surrounding religion and authority might influence patient communication).²⁰ Including more diverse countries would help generalize the findings and deepen the understanding of how doctor-patient communication is influenced by cultural contexts across the globe.

Moreover, this study focused on general communication patterns, but future studies could delve deeper into specific medical contexts, such as oncology, pediatric care, or mental health, to assess how communication differs in these specialized healthcare settings. Different medical contexts often involve varying levels of patient vulnerability and complexity in decision-making, which might require different communication strategies.⁵⁵ For instance, in oncology, where treatment decisions may involve long-term implications, patients might engage in more collaborative communication with healthcare providers, whereas in more routine consultations, patients might be less involved.⁵⁶

Longitudinal studies would also be valuable in examining how doctor-patient communication evolves over time, particularly in terms of emotional engagement and decision-making participation. Tracking communication patterns across multiple consultations or over the course of a patient's treatment could provide insights into how cultural factors influence communication over the long term and how this, in turn, affects treatment outcomes and patient satisfaction.²¹

Additionally, as healthcare increasingly integrates digital technologies such as telemedicine and mobile health applications, it is crucial to understand how these platforms impact communication across different cultures. Digital health communication may exacerbate or mitigate cultural communication barriers. For example, virtual consultations could reduce some hierarchical barriers that exist in face-to-face consultations by allowing patients to express themselves more freely, but they might also limit the emotional cues that are often crucial for understanding patient concerns.⁵⁷ Future research could explore how cultural dimensions, such as power distance and individualism/collectivism, influence virtual doctor-patient interactions and whether these dimensions affect the quality of communication in digital healthcare contexts. Research into digital health communication could offer valuable insights into adapting communication strategies for a rapidly changing healthcare landscape.⁵⁸

Methodologically, future studies could consider employing structural equation modeling (SEM) to test potential mediating effects of cultural values on communication outcomes. Longitudinal research designs could also help identify causal pathways and temporal shifts in cross-cultural medical interactions.

In summary, while this study provides critical insights into how cultural dimensions shape doctor-patient communication, addressing the limitations outlined and exploring new avenues such as digital health and specialized medical contexts will enhance our understanding of cross-cultural healthcare interactions.

Policy and Practical Recommendations

Based on the findings, several practical and policy recommendations can be made to improve doctor-patient communication in cross-cultural contexts:

Cultural Competency Training

Healthcare providers should undergo cultural competency training to better understand and navigate cultural differences in doctor-patient communication. Training should emphasize the importance of adapting communication styles to suit patients' cultural preferences, particularly in areas such as decision-making involvement and emotional expression.

Promoting Shared Decision-Making

In collectivist cultures like China, promoting shared decision-making within family contexts could help bridge the gap between traditional practices and modern patient-centered care. In the UK, healthcare systems should continue to encourage patient autonomy while ensuring that patients feel emotionally supported in the decision-making process.

Enhancing Emotional Engagement

Healthcare systems should prioritize emotional support as part of comprehensive patient care, particularly in cultures where emotional expression is less common. This could involve training healthcare providers to recognize and respond to non-verbal cues and to create an environment where patients feel safe to express their concerns.

Cross-Cultural Communication Policies

Governments and healthcare institutions should implement policies that encourage the development of communication strategies tailored to culturally diverse populations. This includes offering multilingual resources, culturally relevant educational materials, and ensuring that healthcare staff are aware of cultural nuances that may affect communication.

Conclusion

This study reveals significant cultural differences in doctor-patient communication between China and the UK, shaped by factors such as power distance and individualism vs collectivism. In China, communication tends to be more hierarchical and family-influenced, while in the UK, patients are more involved in decision-making and emotional expression. These cultural variations underscore the importance of cultural sensitivity in healthcare to improve patient engagement and satisfaction.

The study also highlights the need for cultural competency training for healthcare providers, with an emphasis on adapting communication strategies to better meet the needs of patients from different cultural backgrounds.⁴¹ In the context of globalization, healthcare systems must tailor their communication approaches to ensure effective interaction across cultures.¹⁶ For example, in high power distance cultures like China, training programs could focus on encouraging patient involvement and emotional expression within family-centered consultations, while in individualistic cultures like the UK, strategies might emphasize enhancing collaborative decision-making and emotional support.²⁴ Additionally, healthcare policies should support the development of cross-cultural communication practices, ensuring that all patients, regardless of their cultural background, feel understood, respected, and actively engaged in their healthcare journey.¹⁹

This research provides essential insights into how cultural dimensions shape doctor-patient communication and offers practical implications for improving healthcare outcomes in multicultural environments.

Data Sharing Statement

The datasets generated during the current study are not publicly available due to privacy restrictions, but they can be accessed from the first author upon reasonable request.

Ethics Approval and Consent to Participate

The study was approved by the Ethics Committee of Chang Gung University (IRB No: 20240356B0). The participants in the psychology experiment understood the purpose and content of the experiment and participated in the experiment with voluntary consent. Participants could discontinue their participation in the experiment at any time without penalty. This study was conducted in accordance with the ethical principles of the Declaration of Helsinki.

Author Contributions

All authors made a significant contribution to the work reported, whether that is in the conception, study design, execution, acquisition of data, analysis and interpretation, or in all these areas; took part in drafting, revising or critically reviewing the article; gave final approval of the version to be published; have agreed on the journal to which the article has been submitted; and agree to be accountable for all aspects of the work.

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Disclosure

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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