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# THE ROLE OF WECHAT APPLICATION IN CHINESE FAMILY COMMUNICATION: A CASE STUDY OF CHENGDU CITY, SICHUAN, CHINA

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## Abstract

In this research, the objectives aimed to find out the factors influence Chinese family using WeChat to communicate. Participants were Chinese people who live in the Chengdu City of Sichuan Province, and use WeChat groups to communicate with their family members. With the qualitative and quantitative combined for this research, 20 interviewees have been interviewed, and 417 respondents have completed the questionnaires by using purposive and snowball sampling methods to collect the data. The findings reveal that individual factors such as personal preferences and technological ease play a significant role in the adoption and sustained use of WeChat for family interactions. Additionally, the study highlights the influence of WeChat's unique features, like instant messaging and social media integration, which facilitate frequent and flexible communication among family members, thus supporting the maintenance of familial bonds across geographical distances.

**Keywords:** Chinese Family Communication, China, Chengdu Province, Communication, Supportive Communication, WeChat Application

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## **Introduction**

In recent years, new media has played a huge role and is necessary for human. The importance of online media can create success in every dimension (Nindum, 2021). The widespread use of WeChat has changed the way Chinese families communicate. Compared with traditional methods, WeChat can facilitate daily interactions and maintain long-distance relationships (Wang et al., 2019). With the development of China's mobile internet, more and more people rely on WeChat for communication (Zhu et al., 2016).

As of 2023, the number of WeChat users reached 1.327 billion (Tencent, 2023). Demographic changes and technological advances continue to shape how families communicate. WeChat's integration of various communication features, such as text messaging, video calls, and social media functions, appeals to a wide range of user groups, from young people who are adept at digital platforms to the elderly (Tu, 2016). WeChat has also significantly impacted family relationships (Zhou & Gui, 2017). Based on the extensive literature by scholars both domestically and internationally, researchers have identified general user engagement, including unique dynamics and cultural nuances, as the primary factors driving the adoption and continued use of WeChat among different family members (Chen & Cheung, 2018). However, there has been a lack of focus on the family context.

For the above reasons, it is essential to explore and understand the family context factors that influence WeChat use. In order to focus on the family's context, we have chosen Chengdu, a major urban center in Sichuan Province, is renowned for its advanced digital infrastructure and high Internet and mobile usage rates. And Chengdu comprises 5 cities, 3 counties, and 12 districts, encompassing both urban and rural populations. Its social structure is representative of China (He, 2023). This study investigates the factors that influence WeChat communication among Chengdu families, emphasizing demographic characteristics (age, education) and sociocultural factors (family roles, expectations). Understanding these influences is crucial for customizing digital tools to enhance family communication and cohesion.

## **Literature Reviews**

### **Functional Theory**

As Leydesdorff (2009) claimed that functional theory, or functionalism, is a sociological theory regards society as an interdependent system where each part contributes to stability and equilibrium. Originating from Emile Durkheim and furthered by Talcott Parsons and Robert K. Merton, it includes concepts such as social structure, function, balance, change, and dysfunction.

Harold Lasswell's (1948) framework posits that communication media serve societal functions, such as information dissemination and socialization, which contribute to social stability. His model outlines the sender, message, receiver, channel, and effect, setting a foundation for media and communication analysis.

### **Technological Determinism**

Technological determinism posits that technology is a key driver of societal change and development. McLuhan (1964), a foundational figure in the 20th century, argued in his book "Understanding Media: The Extension of Man" that media technologies shape society and culture, with his famous assertion that "the medium is the message." This perspective suggests that technological advancements dictate how information is spread and thus influence societal structures and behaviors.

In the digital age, this concept is used to examine how the internet, social media, AI, and big data shape society. Dafoe (2015) adds that technology is both a force and a product of social dynamics. Key impacts of communication technology include: global Connectivity, increased access to information, enhanced efficiency, cultural exchange and diversity, challenges to privacy and security, digital divide, changing communication patterns.

### Family Communication

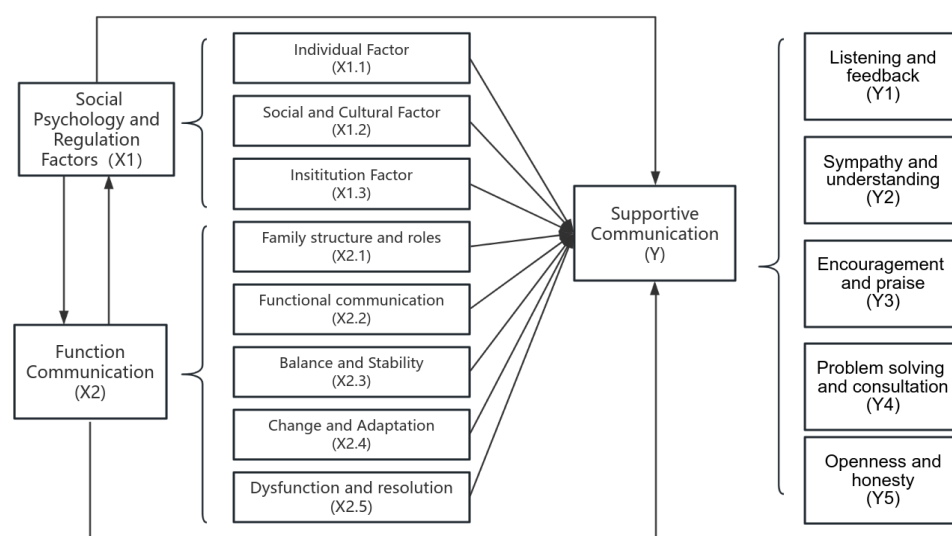
Family Communication (FC) encompasses the dynamic process of exchanging information, emotions, and meanings among family members within specific relational contexts and situational frameworks (Galvin et al., 2015).

Pioneers like Bochner (1975) laid the groundwork, focusing on family interaction therapy and communication strategies. Studies, like those by Manap et al. (2018), explore FC in diverse cultural settings, highlighting its significance in affection expression. Shared media experiences can enhance family bonding, but excessive use may lead to distraction and reduced family time (Jago et al., 2008). Regular, consistent communication is key to maintaining closeness (Gottman & Silver, 2012).

### Supportive Communication Strategy

There is no single originator of supportive communication strategies (SCS). These strategies are significant in business and organizational management, drawing attention from management theorists and communication scholars (Kim et al., 2022). Carl Rogers, an American psychologist, introduced "humanistic psychology," emphasizing empathy, genuineness, and unconditional positive regard, influencing supportive communication strategies. Burleson (2003) notes that supportive communication is crucial in interpersonal interactions, especially during conflict, stress, or negative emotions. Its main goal is to provide care, empathy, and constructive feedback, fostering relationship enhancement and trust-building. Rautakoski (2011) showed that communication partners often use various supportive strategies and that self-assessment methods increase awareness of these strategies. Burch (2014) examined communication strategies from an interactive perspective, focusing on competence and success rather than deficits.

### Conceptual Framework



**Figure 1** prediction among factors of using WeChat, affect of WeChat’s features and supportive communication in family

As illustrated in Figure 1, the researcher has constructed a conceptual framework to investigate how various factors impact family communication via WeChat. The framework comprises three primary categories of independent variables: Social Psychology and Regulation Factors ( $X_1$ ), Individual Factor ( $X_{1.1}$ ), Social and Cultural Factor ( $X_{1.2}$ ), Institution Factor ( $X_{1.3}$ ), Function Communication ( $X_2$ ), Family structure and roles ( $X_{2.1}$ ), Functional communication ( $X_{2.2}$ ), Balance and Stability ( $X_{2.3}$ ), Change and Adaptation ( $X_{2.4}$ ), Dysfunction and resolution ( $X_{2.5}$ ). And Dependent variable: Supportive Communication ( $Y$ ),

Listening and feedback (Y<sub>1</sub>), Sympathy and understanding (Y<sub>2</sub>), Encouragement and praise (Y<sub>3</sub>), Problem solving and consultation (Y<sub>4</sub>), Openness and honesty (Y<sub>5</sub>).

## **Research Methodology**

The study employs a mixed-methods approach, integrating both qualitative and quantitative research techniques. The qualitative component consists of in-depth interviews with individuals, enhancing the depth and credibility of the survey content. A total of 20 participants were involved in these interviews. For the quantitative analysis, a survey was conducted with 417 participants to gather broader statistical data. The following steps outline the research process:

### **Population and Sample**

**In-depth Interview:** Use purposive and voluntary sampling to select 10 single family and 10 extended family to organize an in-depth interview online. Inclusive factors of depth interviewees: Wechat users lived in Chengdu, Sichuan Province, aged over 18.

**Survey:** Use purposive and snowball sampling methods to determine the sample size, following the formula of Yamane's (1973) sample was 400, but to increase the reliability of the research results, data were collected from a sample size of 417. Data samples will be collected through online questionnaires. The questionnaire's sample scope locks on Wechat users in Chengdu, Sichuan Province, aged over 18.

### **Research Tools**

**In-depth Interview Tools:** The researcher created an interview framework, comprising essential information and interview questions, drawing from relevant literature. This framework was then submitted to the IOC to confirm its validity.

**Survey Tools:** The survey employed checklists and the Likert Rating Scale for its questionnaires.

To evaluate the content validity, the Index of Item Objective Congruence (IOC) was applied, with assessments conducted by three qualified experts. These assessments yielded average scores ranging from 0.66 to 1.00 for all questions, indicating their relevance to the topic. Furthermore, a pilot test of the questionnaire was carried out with 30 participants to assess reliability, using the Cronbach's alpha coefficient. The reliability score achieved was 0.975, which exceeds the acceptable threshold of 0.70, indicating good reliability.

### **Statistics Analysis**

Once all the data have been gathered, they are encoded and processed on a computer for statistical analysis, which encompasses both descriptive and inferential statistics. Descriptive statistics provide outcomes in terms of percentages and averages, and include standard deviations to assess the data concerning the samples. A mean ranging from 4.21 to 5.00 signifies a very high level of recognition. A mean from 3.41 to 4.20 denotes a high level of recognition. A mean within the range of 2.61 to 3.40 reflects a moderate level of recognition. A mean from 1.81 to 2.60 suggests a low level of recognition. Finally, a mean between 1.00 and 1.80 indicates a very low level of recognition. In addition, Pearson's Product Moment Correlation, Multiple Regression Analysis will be used to analyze the relationship between the variables.

## **Research Results**

The demographic characteristics of the survey participants included variables such as gender, age, educational attainment, employment type, monthly income, family configuration, relational closeness within the family, preferred WeChat functions, and common topics of discussion on the platform. The majority of those surveyed were females, predominantly aged between 28 and 37 years, and had attained at least a bachelor's degree. Most were employed in state-owned enterprises, public sector roles, or as civil servants, with the common monthly

income ranging from 4,001 to 6,000 RMB. The respondents were almost equally divided between residing in single-family and extended-family homes. Most described their relationship with family members as "very close" and favored WeChat's communication tools like text, voice messages, and video calls. Conversations typically revolved around everyday matters when using WeChat to communicate with family.

"Chat is the most important communication function because voice messages and video calls enable timely contact with family over long distances." (Luo, Interview, September 27, 2023)

"Moments lets me see my son's life abroad and share our activities at home, reassuring him that we're okay." (Duan, Interview, October 7, 2023)

**Table 1** The Mean and Standard Deviation of Factors using WeChat, WeChat's features affect in Chinese family, Supportive Communication for Chinese family

Factors	$\bar{x}$	S.D.	Level of Opinion
Individual Factors	3.57	0.93	High
Social and Cultural Factors	3.45	1.005	High
Institution Factors	3.45	0.993	High
Total	3.49	0.769	High
Variables	$\bar{x}$	S.D.	Level of Opinion
Family structure and roles	3.46	1.026	High
Functional communication	3.44	0.989	High
Balance and stability	3.45	1.037	High
Change and adaptation	3.4	1.029	Medium
Dysfunction and resolution	3.41	0.986	High
Total	3.43	0.763	High
Variables	$\bar{x}$	S.D.	Level of Opinion
Listening and Feedback	3.45	0.962	High
Sympathy and Understanding	3.44	1.036	High
Encouragement and Praise	3.49	1.013	High
Problem Solving and Consultation	3.42	1.009	High
Openness and Honesty	3.4	1.01	High
Total	3.44	0.742	High

As shown in Table 1, in Social Psychology and Regulation Factors, the respondents generally have a high level of recognition of Individual Factors, and the mean score is high (3.57). In WeChat's features affect in Chinese family, the respondents generally have a high level of recognition of Family structure and roles, and the mean score is high (3.46). In Supportive Communication for Chinese family, the respondents generally have a high level of recognition of Encouragement and Praise, and the mean score is high (3.49).

"WeChat Pay has made online shopping, bill payments, and money transfers to family members very convenient." (Xia, Interview, October 6, 2023)

**Table 2** The Correlation of Factors for Using WeChat (Social Psychology and Regulation Factors), WeChat Features Affecting Chinese Family Communication (Function Communication) on Supportive Communication

Variables (X)	Supportive Communication (Y)
Social Psychology and Regulation Factors (X <sub>1</sub> )	0.777**
Individual Factor (X <sub>1.1</sub> )	0.596**
Social and Cultural Factor (X <sub>1.2</sub> )	0.656**
Institution Factor (X <sub>1.3</sub> )	0.584**
Function Communication (X <sub>2</sub> )	0.707**

Family Structure and Roles (X <sub>2.1</sub> )	0.562**
Functional Communication (X <sub>2.2</sub> )	0.627**
Stability and Balance (X <sub>2.3</sub> )	0.628**
Change and Adaption (X <sub>2.4</sub> )	0.633**
Dysfunction and Resolution (X <sub>2.5</sub> )	0.575**

\*\* Correlation is significant at the 0.01 level (2-tailed).

As shown in Table 2, indicating that Supportive Communication (Y) was related to Social Psychology and Regulation Factors (X<sub>1</sub>) which have the most significant correlation with correlation coefficient 0.777. Supportive Communication (Y) was related to Function Communication (X<sub>2</sub>) which have the second correlation with correlation coefficient with 0.707.

**Table 3** Variance Inflation Factor in Multiple Regression Analysis of Factors for Using WeChat (Social Psychology and Regulation Factors), WeChat Features Affecting Chinese Family Communication (Function Communication)

Variables	VIF
Individual Factor (X <sub>1.1</sub> )	1.618
Social and Cultural Factor (X <sub>1.2</sub> )	1.657
Institution Factor (X <sub>1.3</sub> )	1.540
Family Structure and Roles (X <sub>2.1</sub> )	1.530
Functional Communication (X <sub>2.2</sub> )	1.752
Stability and Balance (X <sub>2.3</sub> )	1.756
Change and Adaption (X <sub>2.4</sub> )	1.707
Dysfunction and Resolution (X <sub>2.5</sub> )	1.612

Table 3 shows that in the multiple regression analysis, the VIF values for independent variables (X<sub>1.1</sub>-X<sub>2.5</sub>) are all under 10, indicating no multicollinearity issue.

**Table 4** R<sup>2</sup> and Std. Error of the Estimate of Enter Multiple Regression for Factor Using WeChat and WeChat Feature Affect on Listening and Feedback (Y<sub>1</sub>)

	b	SEb	β	t	p-value
Constant	0.600	0.186	-	3.231	0.001
Individual Factor (X <sub>1.1</sub> )	0.140	0.051	0.135	2.744	0.006
Social and Cultural Factor (X <sub>1.2</sub> )	0.148	0.048	0.155	3.099	0.002
Institution Factor (X <sub>1.3</sub> )	0.162	0.047	0.168	3.486	0.001
Family Structure and Roles (X <sub>2.1</sub> )	0.006	0.045	0.006	0.124	0.901
Functional Communication (X <sub>2.2</sub> )	0.103	0.050	0.106	2.071	0.039
Stability and Balance (X <sub>2.3</sub> )	0.024	0.048	0.026	0.502	0.616
Change and Adaption (X <sub>2.4</sub> )	0.145	0.047	0.155	3.056	0.002
Dysfunction and Resolution (X <sub>2.5</sub> )	0.096	0.048	0.099	2.008	0.045

R<sup>2</sup> = 0.387, R<sup>2</sup> adj = 0.375, F = 32.216

As shown in Table 4, R<sup>2</sup> = 0.387, shows that 38.7% of the variation in the dependent variable Y<sub>1</sub> (Listening and Feedback) is caused by the independent variables (Social Psychology and Regulation Factors and Function Communication).

The β value of Individual Factor is 0.135 (t = 2.744, p = 0.006 < 0.01), Social and Cultural Factor is 0.155 (t = 3.099, p = 0.002 < 0.01), Institution Factor is 0.168 (t = 3.486, p = 0.001 < 0.01), Functional Communication is 0.106 (t = 2.071, p = 0.039 < 0.05), Change and Adaption is 0.155 (t = 3.056, p = 0.002 < 0.01), Dysfunction and resolution is 0.099 (t =

2.008,  $p = 0.045 < 0.05$ ), which means that Individual Factor, Social and Cultural Factor, Institution Factor, Functional Communication, Change and Adaption, Dysfunction and Resolution will have a significant positive influence relationship on Listening and Feedback.  
 $Y_1 = 0.168 * X_{1.3} + 0.155 * X_{1.2} + 0.155 * X_{2.4} + 0.135 * X_{1.1} + 0.106 * X_{2.2} + 0.099 * X_{2.5}$

**Table 5** R<sup>2</sup> and Std. Error of the Estimate of Enter Multiple Regression for Factor Using WeChat and WeChat Feature Affect on Sympathy and Understanding (Y<sub>2</sub>)

	<b>b</b>	<b>SEb</b>	<b>β</b>	<b>t</b>	<b>p-value</b>
Constant	0.329	0.194	-	1.692	0.091
Individual Factor (X <sub>1.1</sub> )	0.107	0.053	0.096	2.002	0.046
Social and Cultural Factor (X <sub>1.2</sub> )	0.265	0.050	0.258	5.306	0.000
Institution Factor (X <sub>1.3</sub> )	0.001	0.049	0.001	0.018	0.986
Family Structure and Roles (X <sub>2.1</sub> )	0.105	0.047	0.104	2.219	0.027
Functional Communication (X <sub>2.2</sub> )	0.120	0.052	0.114	2.292	0.022
Stability and Balance (X <sub>2.3</sub> )	0.111	0.050	0.112	2.231	0.026
Change and Adaption (X <sub>2.4</sub> )	0.122	0.050	0.121	2.450	0.015
Dysfunction and Resolution (X <sub>2.5</sub> )	0.070	0.050	0.067	1.398	0.163

R<sup>2</sup> = 0.420, R<sup>2</sup> adj = 0.408, F = 36.870

As shown in Table 5, R<sup>2</sup> = 0.420, indicating that the predictor variables can explain 42% of the dependent variable. That is, Social Psychology and Regulation Factors and Function Communication can explain 42% of Sympathy and Understanding (Y<sub>2</sub>).

The β value of Individual Factor is 0.096 (t = 2.002, p = 0.046 < 0.05), Social and Cultural Factor is 0.258 (t = 5.306, p = 0.000 < 0.01), Family Structure and Roles is 0.104 (t = 2.219, p = 0.027 < 0.05), Functional Communication is 0.114 (t = 2.292, p = 0.02 < 0.05), Stability and Balance is 0.112 (t = 2.231, p = 0.026 < 0.05), Change and Adaption is 0.121 (t = 2.450, p = 0.015 < 0.05), which means that Individual Factor, Social and Cultural Factor, Family Structure and Roles, Functional Communication, Stability and Balance, Change and Adaption, will have a significant positive influence relationship on Sympathy and Understanding.

$$Y_2 = 0.258 * X_{1.2} + 0.121 * X_{2.4} + 0.114 * X_{2.2} + 0.112 * X_{2.3} + 0.104 * X_{2.1} + 0.096 * X_{1.1}$$

**Table 6** R<sup>2</sup> and Std. Error of the Estimate of Enter Multiple Regression for Factor Using WeChat and WeChat Feature Affect on Encouragement and Praise (Y<sub>3</sub>)

	<b>b</b>	<b>SEb</b>	<b>β</b>	<b>t</b>	<b>p-value</b>
Constant	0.588	0.198	-	2.972	0.003
Individual Factor (X <sub>1.1</sub> )	0.054	0.054	0.050	0.992	0.322
Social and Cultural Factor (X <sub>1.2</sub> )	0.203	0.051	0.202	3.987	0.000
Institution Factor (X <sub>1.3</sub> )	0.085	0.050	0.083	1.712	0.088
Family Structure and Roles (X <sub>2.1</sub> )	0.081	0.048	0.082	1.684	0.093
Functional Communication (X <sub>2.2</sub> )	0.174	0.053	0.170	3.263	0.001
Stability and Balance (X <sub>2.3</sub> )	0.103	0.051	0.105	2.024	0.044
Change and Adaption (X <sub>2.4</sub> )	0.037	0.051	0.037	0.724	0.469
Dysfunction and Resolution (X <sub>2.5</sub> )	0.104	0.051	0.101	2.029	0.043

R<sup>2</sup> = 0.371, R<sup>2</sup> adj = 0.358, F = 30.030

From Table 6, R<sup>2</sup> = 0.371, indicating that the predictor variables can explain 37.1% of the dependent variable. That is, Social Psychology and Regulation Factors and Function Communication can explain 37.1% of Encouragement and Praise (Y<sub>3</sub>).

The  $\beta$  value of Social and Cultural Factor is 0.202 ( $t = 3.987, p = 0.000 < 0.01$ ), Functional Communication is 0.170 ( $t = 3.263, p = 0.00 < 0.01$ ), Stability and Balance is 0.105 ( $t = 2.024, p = 0.044 < 0.05$ ), Dysfunction and Resolution is 0.101 ( $t = 2.029, p = 0.043 < 0.05$ ), which means that Social and Cultural Factor, Functional Communication, Stability and Balance, Dysfunction and Resolution will have a significant positive influence relationship on Encouragement and Praise.

$$Y_3 = 0.202 * X_{1.2} + 0.170 * X_{2.2} + 0.105 * X_{2.3} + 0.101 * X_{2.5}$$

**Table 7**  $R^2$  and Std. Error of the Estimate of Enter Multiple Regression for Factor Using WeChat and WeChat Feature Affect on Problem Solving and Consultation ( $Y_4$ )

	<b>b</b>	<b>SEb</b>	<b><math>\beta</math></b>	<b>t</b>	<b>p-value</b>
Constant	0.346	0.191	-	1.806	0.072
Individual Factor ( $X_{1.1}$ )	0.126	0.053	0.116	2.388	0.017
Social and Cultural Factor ( $X_{1.2}$ )	0.090	0.049	0.090	1.833	0.067
Institution Factor ( $X_{1.3}$ )	0.129	0.048	0.127	2.694	0.007
Family Structure and Roles ( $X_{2.1}$ )	0.114	0.046	0.116	2.452	0.015
Functional Communication ( $X_{2.2}$ )	0.068	0.051	0.067	1.319	0.188
Stability and Balance ( $X_{2.3}$ )	0.134	0.049	0.138	2.726	0.007
Change and Adaption ( $X_{2.4}$ )	0.162	0.049	0.165	3.315	0.001
Dysfunction and Resolution ( $X_{2.5}$ )	0.065	0.050	0.064	1.321	0.187

$$R^2 = 0.407, R^2 \text{ adj} = 0.396, F = 35.073$$

As shown in Table 7,  $R^2 = 0.407$ , indicating that the predictor variables can explain 40.7% of the dependent variable. That is, Social Psychology and Regulation Factors and Function Communication can explain 40.7% of Problem Solving and Consultation ( $Y_4$ ).

The  $\beta$  value of Individual Factor is 0.116 ( $t = 2.388, p = 0.017 < 0.05$ ), Institution Factor is 0.127 ( $t = 2.694, p = 0.007 < 0.01$ ), Family Structure and Roles is 0.116 ( $t = 2.452, p = 0.015 < 0.05$ ), Stability and Balance is 0.138 ( $t = 2.726, p = 0.007 < 0.01$ ), Change and Adaption is 0.165 ( $t = 3.315, p = 0.001 < 0.01$ ), which means that Individual Factor, Institution Factor Family Structure and Roles, Stability and Balance, Change and Adaption, will have a significant positive influence relationship on Problem Solving and Consultation.

$$Y_4 = 0.165 * X_{2.4} + 0.138 * X_{2.3} + 0.127 * X_{1.3} + 0.116 * X_{1.1} + 0.116 * X_{2.1}$$

**Table 8**  $R^2$  and Std. Error of the Estimate of Enter Multiple Regression for Factor Using WeChat and WeChat Feature Affect on Openness and Honesty ( $Y_5$ )

	<b>b</b>	<b>SEb</b>	<b><math>\beta</math></b>	<b>t</b>	<b>p-value</b>
Constant	0.335	0.191	-	1.750	0.081
Individual Factor ( $X_{1.1}$ )	0.082	0.053	0.076	1.563	0.119
Social and Cultural Factor ( $X_{1.2}$ )	0.125	0.049	0.124	2.532	0.012
Institution Factor ( $X_{1.3}$ )	0.164	0.048	0.162	3.425	0.001
Family Structure and Roles ( $X_{2.1}$ )	0.070	0.046	0.071	1.516	0.130
Functional Communication ( $X_{2.2}$ )	0.091	0.051	0.090	1.780	0.076
Stability and Balance ( $X_{2.3}$ )	0.154	0.049	0.158	3.142	0.002
Change and Adaption ( $X_{2.4}$ )	0.121	0.049	0.123	2.475	0.014
Dysfunction and Resolution ( $X_{2.5}$ )	0.081	0.049	0.079	1.636	0.103

$$R^2 = 0.410, R^2 \text{ adj} = 0.398, F = 35.390$$

As shown in Table 8,  $R^2 = 0.410$ , indicating that the predictor variables can explain 41% of the dependent variable. That is, Social Psychology and Regulation Factors and Function Communication can explain 41% of Openness and Honesty ( $Y_5$ ).



The  $\beta$  value of Social and Cultural Factor is 0.124 ( $t = 2.532, p = 0.012 < 0.05$ ), Institution Factor is 0.162 ( $t = 3.425, p = 0.001 < 0.01$ ), Stability and Balance is 0.158 ( $t = 3.142, p = 0.002 < 0.01$ ), Change and Adaption is 0.123 ( $t = 2.475, p = 0.014 < 0.05$ ), which means that Social and Cultural Factor, Institution Factor, Stability and Balance, Change and Adaption will have a significant positive influence relationship on Openness and Honesty.

$$Y_5 = 0.162 * X_{1,3} + 0.158 * X_{2,3} + 0.124 * X_{1,2} + 0.123 * X_2$$

The above conclusion reveals that various factors significantly influence different aspects of supportive communication within family dynamics, as facilitated by WeChat. Notably, the Institution Factor has a substantial impact on Listening and Feedback, Sympathy and Understanding, Problem Solving and Consultation, and Openness and Honesty, with impact weights ranging from 16.2% to 16.8%. Social and Cultural Factors also play a crucial role, particularly in Sympathy and Understanding and Encouragement and Praise, where they lead with impact weights of 25.8% and 20.2%, respectively. Other factors such as Change and Adaptation and Functional Communication also show significant influences across various dimensions of supportive communication, highlighting their importance in the communication process. The detailed coefficients provided (e.g.,  $\beta$  values) further validate the significance of these factors in enhancing supportive communication within families using WeChat.

## Conclusion and Discussion

This research evident that the technological aspects of WeChat significantly bolster supportive communication within families. The detailed multiple regression analysis confirms the substantial impact of institutional and social-cultural factors, as well as individual user preferences, on fostering functional and supportive communication dynamics.

This in-depth analysis aligns with prior studies that emphasize the role of social media platforms in enhancing interactive and supportive communication among family members. For instance, research by Tu (2016) highlights how technological features specific to WeChat, like instant messaging and video calls, significantly enhance the quality of family interactions by supporting direct and empathetic communication. Similarly, Fang & Gong (2020) discusses the integration of these technologies within traditional Chinese cultural contexts, noting their role in strengthening familial bonds across generations.

Furthermore, the analysis elaborates on how changes in family structure and the roles of different family members influence the adoption and utilization of WeChat for various communicative purposes. Studies by Nishikitani et al. (2022) and Tian et al. (2023) provide evidence that the evolution of family roles and responsibilities in modern Chinese society correlates with increased reliance on digital communication tools to maintain family coherence and manage conflicts.

These insights collectively demonstrate that WeChat is not merely a communication tool but a significant facilitator of familial cohesion, adept at bridging generational gaps and accommodating the evolving communication needs of modern Chinese families.

## Suggestions

It is recommended that future studies should increase the sample size to improve the understanding of WeChat's impact on family communication and support. Also, the findings should be utilized to develop new software features specifically tailored for family communication. These features could include enhanced privacy settings, user-friendly interfaces for older users, and tools for managing family group activities. Moreover, qualitative methods such as ethnographic studies should be integrated to provide deeper insights into the subjective and contextual factors influencing family communication on digital platforms.

### Limitations

The randomness of the sample is limited by the difficulty of the survey; more random sampling techniques should be used to reduce potential biases and increase the representativeness of the sample. And the scale of in-depth interviews needs to be more substantial; more in-depth interviews or focus groups are necessary to comprehensively understand individual experiences and perspectives. Therefore, it is also necessary to conduct long-term observational research to track how the use of WeChat for family communication evolves over time and its long-term impacts on familial relationships.

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