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## A Study on the Influence of Parent-Child Relationship Intimacy among Left-Behind Children from the Perspective of Online Communication Frequency and Quality

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Abstract: Drawing on relevant research regarding the mobile phone parenting model in left-behind families (Lü Shan & Liu Nian, 2023) and examining the current state of 'mobile phone parenting' in left-behind families in Hejiang County, Sichuan Province, this study explores the impact mechanism of online communication frequency and quality on parent-child intimacy within this framework. It systematically investigates the causal relationships among online communication frequency, communication quality, and parent-child intimacy, with the aim of providing theoretical support for enhancing parent-child relationships in left-behind families.

**Keywords:** left-behind children; frequency of online communication; quality of online communication; parent-child relationship intimacy

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## I. Introduction

## (1) Research Background

Rural left-behind children refer to school-age children and adolescents who are left in their registered hometowns for guardianship by one parent or other relatives while their rural migrant worker parents work away from home for more than three consecutive months, and who receive compulsory education there (Ministry of Education, 2014). In the context of long-term separation between parents and children, left-behind children are prone to psychological problems such as anxiety, interpersonal communication disorders, and excessive feelings of loneliness (He Yufeng, 2024). A survey on parent-child relationships among Generation Z college students in Guangdong Province with rural left-behind experiences showed that, due to the lack of parental care and education and the loss of opportunities for emotional communication with parents during their left-behind years, respondents experienced certain negative impacts on their lives, emotions, learning, and other aspects (Xiao Zhuolin, Li Yuanhang, Xiao Kejie, 2023). Another study, focusing on Millennials with left-behind childhood experiences, found that both the respondents themselves and their siblings with similar experiences had their social relationships and behavioral choices influenced by their childhood left-behind experiences (Liu Ling, Wu Lei, 2023). Therefore, it can be seen that left-behind experiences not only have negative effects on children currently in such situations, but also continue to influence the thoughts and behaviors of those who have grown out of the left-behind stage, thereby indirectly affecting the future development of the country and society.

In recent years, the issue of emotional communication deficits in left-behind families has been somewhat alleviated by the rapid development of social technology. This is because online communication, with its convenience, has gradually become an important way to connect the emotions of both sides of left-behind families (Lü Shan & Liu Nian, 2023). Online parent-child communication can serve as a supplement and extension to face-to-face interaction, making up for the lack of parent-child communication faced by left-behind children (Niu Gengfeng, Li Zhanxing, Wang Chenxiao, Ma Xiaotong, Sun Xiaojun, & Zhou Zongkui, 2019), and is beneficial for maintaining interpersonal relationships and improving social adaptation (Burke & Kraut, 2016). However, how exactly does this screen-mediated interaction affect the intimacy between parents and children? Is the frequency of communication more critical, or does the quality of communication play a greater role in determining the depth of emotional connection? This paper will focus on the online communication between left-behind children and their parents, exploring the specific impacts

of communication frequency and quality on the intimacy of parent-child relationships, with the aim of providing references for optimizing online parent-child interaction and enhancing emotional bonds.

## (2) Significance of the Research

This study breaks through the traditional parent-child relationship research paradigm of 'face-to-face interaction' by also considering WeChat video and voice calls as parent-child bonds. Using questionnaire data, it clarifies that quality of conversation matters more than quantity, and the best results come from combining both. The findings offer parents a guide on 'how to use mobile phones without harming relationships,' while also providing solid evidence for governments to design low-cost, practical digital care programs.

## (3) Research Objectives and Questions

This study focuses on left-behind families and establishes a simple yet complete path model: online communication frequency  $\rightarrow$  communication quality  $\rightarrow$  parent—child relationship closeness. Around this path, the study addresses three specific questions: First, are communication frequency and communication quality "acting independently" or "working hand in hand"? Second, among the three quality indicators—emotional expression, conflict resolution, and timeliness of response—which best predicts closeness? Third, do the child's gender, age, and whether one or both parents work away from home change the strength of this path? Clarifying these details can provide solid evidence for targeted and precise interventions in the future.

## II. Research Design

## (1) Research Subject

This questionnaire survey was conducted in Hejiang County, Sichuan Province, focusing on families where one or both parents have been working away from home for at least six months and children remain in their place of origin. The research subjects were school-going children aged 6 to 15, with the requirement that each household owns at least one smartphone capable of video calls to ensure the feasibility of online communication. The sample had a male-to-female ratio of 1:1, with approximately 40% of families having one parent away and 60% having both parents away. It covered all grade levels from first to ninth grade in primary and secondary schools to ensure the representativeness and applicability of the research conclusions.

## (2) Research Tools

This study used a self-developed 'Questionnaire on Left-Behind Children's Online Communication and Parent-Child Relationship' as the research tool. The questionnaire consists of three main sections. The first section collects information on the individual characteristics of left-behind children, such as gender, grade, age, main co-residents, and the length of time parents have been working away from home, to understand the basic background of the subjects. The second section investigates the status of online communication, including communication devices (own mobile phone, guardian's phone, etc.), communication frequency (weekly/monthly frequency of voice calls, video calls, text chats, voice messages, etc.), and communication feelings and experiences (emotional expression, degree of parental concern, communication content, communication barriers, etc.). The third section measures the intimacy of the parent-child relationship based on the child's evaluation of emotional bonds with parents, parents' understanding of them, perception of parental care, willingness to share, and tendency to seek help.

## (3) Data Collection and Analysis

Two rural primary and secondary schools (grades 1–6 in primary school, grades 1–3 in junior high school) in Hejiang County, Sichuan Province were selected, and 300 valid questionnaires were collected. Among them, 150 were boys (50.0%) and 150 were girls (50.0%); ages ranged from 6 to 15 years, with an average age of 10.7 years; 243 students (81.0%) lived with their grandparents, 38 students (12.7%) lived with other relatives, and 19 students (6.3%) had other living arrangements.



Figure 1 Question 2: Your grade

#### III. Research Results

## (1) Analysis of the Correlation Between the Frequency of Online Communication and the Closeness of the Parent-Child Relationship

There is a certain positive correlation between the frequency of online communication and the closeness of the parent-child relationship. According to the data, the online communication between left-behind children and their parents is mainly categorized as 'fairly frequent' and 'very frequent' (a total of 60%), with high-frequency communication via voice calls, video calls, and voice messages exceeding 40%. Among the high-frequency communication group, the proportions of respondents who answered 'very true', 'have a very good relationship', 'feel loved', and 'trust their parents' are higher than those in the low-frequency group. This is because frequent communication can reduce the sense of estrangement caused by separation through real-time interaction, meet the basic need for emotional connection, and make children feel sustained attention. However, even among children who communicate 'occasionally', 20% still give positive evaluations of the parent-child relationship, indicating that frequency is not the only influencing factor; high-quality communication or other forms of care may make up for the lack of frequency.

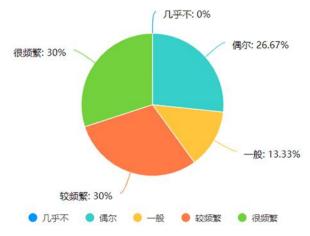


Figure 2 Question 13: Overall, how often do you communicate online with your parents

# (2) Correlation Analysis Between the Quality of Online Communication and the Intimacy of the Parent-Child Relationship

The association between the quality of online communication and the intimacy of parent—child relationships is more significant. Among positive experiences, 30% of children could "easily express their thoughts," and 33.33% "felt cared for" and "felt their parents understood them." Over 50% of these children reported having a "very good relationship" and "trust in their parents." In terms of communication content, 33.33% rated emotional exchanges (such as moods, troubles) as "very accurate." Two-way emotional sharing can enhance children's sense of being cared for and their trust. In contrast, if communication revolves solely around studying (rated as "average" or above by 86.67%) — a one-way, transactional form of interaction — children tend to feel that parents focus on grades rather than themselves. This leads 26.67% of children to

believe "their parents don't understand them," and among the 26.67% who "felt their parents did not listen seriously," the proportion who "were unwilling to confide when facing difficulties" also reached 26.67%. This shows that parental engagement directly affects children's sense of security, which in turn influences intimacy. In summary, a relatively high frequency of online communication is the basis for maintaining close parent—child relationships, especially real-time interactions such as video and voice calls, which are more effective. However, the quality of communication is even more crucial: communication that includes emotional exchange and active parental responses is more effective in enhancing intimacy than purely transactional communication, and two-way emotional sharing is the core of strengthening the parent—child bond.



Figure 3 Question 24: Overall, you feel satisfied with the online communication with your parents

#### IV. Reasons

The correlation between the frequency of online communication and the closeness of the parent-child relationship arises from the fact that high-frequency communication can simulate a sense of 'being present' through real-time interactions such as voice and video calls, thus meeting the basic emotional connection needs of left-behind children. Daily greetings and the sharing of life details enable children to perceive their parents' continuous attention, thereby alleviating the sense of estrangement caused by separation. Consequently, groups characterized by high-frequency communication tend to exhibit stronger closeness. However, among children who engage in 'occasional communication,' some still provide positive assessments of their parent-child relationship, possibly due to the high quality of communication (characterized by high emotional intensity), younger children's lesser sensitivity to online communication frequency coupled with a greater reliance on offline interactions, or parents indirectly conveying care through alternative means such as sending gifts, which compensates for the insufficient frequency.

The strong correlation between the quality of online communication and the closeness of the parent-child relationship primarily stems from the notion that emotional interaction constitutes a key bond in the parent-child connection. Children who can 'easily express their thoughts' and 'discuss their feelings' feel understood and valued, which leads to more favorable evaluations of their relationships. When parents also share insights about their own work and life, it enhances children's sense of participation and mitigates feelings of unfamiliarity. Conversely, if communication is restricted to one-way transactional exchanges regarding academic matters, children may perceive that their parents care solely about their academic performance rather than their well-being, resulting in a lack of emotional resonance. This situation may render them reluctant to share their inner thoughts, diminish trust, and amplify the perception that 'parents do not understand me.' Simultaneously, parental engagement directly influences children's sense of security—those who 'feel listened to attentively and understood' are more likely to cultivate trust and feel supported even during periods of separation, while perfunctory responses can lead children to feel that their needs are overlooked, causing them to withhold confiding in their difficulties and diminishing closeness (Lü Shan & Liu Nian, 2023).

In summary, left-behind children's perception of the parent-child relationship is more contingent upon whether they feel loved and understood during communication rather than merely on the frequency of interactions. High-frequency communication devoid of emotional interaction may become a mere formality, whereas low-frequency yet high-quality emotional exchanges can sustain or even enhance closeness. This observation also elucidates why 100% of children express a desire for their parents to spend more time with them—they seek not only an increase in communication instances but also warmth within those interactions

(Chen Liang, Zhang Lijin, Shen Jie, 2009).

## V. Recommendations

In summary, the primary factor influencing the emotional closeness between left-behind children and their parents is the quality of emotional interactions rather than the frequency of online communication. Even if there is only a single video or voice interaction each week, as long as it is characterized by active listening, empathy, and a collaborative approach to problem-solving, it can significantly reduce the emotional distance between parent and child. Conversely, if communication is limited to one-sided inquiries about academic performance or trivial daily matters, even daily contact will not prevent emotional alienation. Based on this insight, the following recommendations are proposed for parents of left-behind families: ensure a minimum frequency of communication, and utilize real-time interactions to enhance the "sense of presence" — frequent communication through real-time interactions such as voice and video can simulate the feeling of being present (Gu Ning, Sheng Qingyun, 2024), addressing the basic emotional connection needs of left-behind children and alleviating the estrangement caused by separation. Specifically, parents can establish fixed daily or weekly communication times, actively share details about their lives, and show genuine concern for the child's daily experiences, thereby creating an impression of sustained attention through regular interactions. For those engaging in "occasional communication," strategies should be tailored to the child's age. Among children who experience occasional communication, some continue to view the parent-child relationship positively, potentially due to high-quality interactions, younger children's greater reliance on face-to-face meetings, or parents expressing care through indirect means such as sending gifts (Wang Jiaxi, 2015). Therefore, for parents with limited communication frequency, it is advisable to increase in-person meetings for younger children; for all children, parents can regularly send personalized gifts accompanied by notes expressing affection and encouragement, conveying emotions through non-verbal channels. It is essential to focus on emotional interactions to enhance the quality of communication children who can "easily express their thoughts" and "share their feelings" tend to feel understood and valued, which leads to a more positive evaluation of the parent-child relationship. Moreover, when parents share their own work and life experiences, it can foster a sense of participation in children (Liu Ling, Wu Lei, 2023). Consequently, during communication, parents should minimize one-way conversations centered solely on academic inquiries, actively encourage children to express their emotions, and simultaneously share their own feelings while inviting children to discuss family-related topics, thereby reinforcing twoway emotional resonance. It is crucial to avoid purely transactional communication and to balance the focus of attention — if communication is limited to schoolwork in a one-sided manner, children may perceive that parents are only concerned about their grades, leading to a lack of emotional resonance, which diminishes trust and the willingness to share (Yang Feifan, Yu Chenghai, 2021). Thus, parents should adjust their mindset, prioritizing emotional exchanges with their children, attending to their spiritual needs, and being more mindful of their psychological feelings, particularly their emotional needs, during parent-child interactions. It is important to recognize the significance of emotional expression, enhance parental involvement, and improve the quality of listening and responses — parental involvement directly influences a child's sense of security. Children who feel "genuinely listened to and understood" are more likely to develop trust, whereas superficial responses can diminish closeness (Gu Ning, Sheng Qingyun, 2024). Therefore, during communication, parents should maintain focus, for example, by putting down their phones and looking directly at the screen, and provide specific responses to children's expressions; when a child shares a difficulty, parents should first empathize and then collaboratively discuss solutions, making the child feel that "my parents will take my needs seriously." Furthermore, parents should acknowledge the child's yearning for offline companionship, and when feasible, increase the frequency of returning home, treating online communication as a supplement rather than a replacement for in-person companionship, thereby allowing children to experience both the "frequency" and the "warmth" of communication, ultimately enhancing the closeness of the parent-child relationship (Yang Feifan, Yu Chenghai, 2021).

## VI. Research Limitations and Prospects

## (1) Limitations of the Study

This study only covers two rural primary and secondary schools in Hejiang County, Sichuan Province, with obvious limitations in sample region and age range; relying solely on self-reported questionnaires from left-behind children, lacking both the parents' perspective and behavioral observation, makes it easily influenced by subjective emotions; moreover, it does not control for confounding variables such as duration of migrant work, personality, and type of guardianship, and the cross-sectional design cannot track the long-term dynamic effects of online communication on parent—child relationships, thus limiting both the generalizability of the conclusions and causal inference.

## (2) Future Research Directions

Future research should break through existing limitations, unfold the map, and collect samples across the eastern, central, and western regions, from preschool to high school, and across urban and rural areas and provinces. It should incorporate factors such as the length of parents' absence, family conditions, and children's personalities into the model to analyze the deeper effects of online communication. At the same time, by focusing on special groups such as single-parent left-behind children and left-behind children with disabilities, and developing personalized support strategies, research can be more effectively applied to real-world contexts.

### VII. Conclusion

In summary, as an important link for left-behind children to maintain emotional bonds with their parents, online communication's frequency and quality jointly influence the closeness of the parent-child relationship, with quality playing a more central role. High-frequency communication through real-time interactions such as voice and video provides children with continuous emotional attention, forming the foundation for maintaining the relationship; while high-quality communication—featuring two-way emotional sharing and active parental responses—allows children to truly feel understood and cared for, which is the key to strengthening trust and connection. For parents of left-behind children, rather than merely pursuing the number of interactions, it is better to infuse warmth into limited exchanges—listening attentively to the child's inner feelings, sharing each other's daily life and emotions—so that online communication transcends transactional information exchange and becomes a bridge for emotional flow. At the same time, online communication cannot completely replace offline companionship; providing children with real moments together when conditions permit can more comprehensively meet their expectations for the parent-child relationship, making this love that bridges distance possess both the stability of "frequency" and the depth of "quality."

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