

# ***Challenges and Responses to Family Communication in the Age of Social-media***

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**Abstract:** The introduction of social media has had a significant impact on many parts of modern life, including the nature of family connections, which is a developing topic of study. The purpose of this article was to look at the impact of social media on family interactions in contemporary China. To achieve this goal, a questionnaire was created to interview family members from various generations of Chinese families on the influence of social media on their intra-family ties. The poll results show that more than half of respondents believe there is a generational gap in social media use among elder family members, and the effect of closing this gap is unclear. The study found that three variables contributed to the generation gap among family members: disparities in learning ability, a lack of age-appropriate design of relevant social media applications, and differences in preferences for using social media functions. To close the generation gap, it is vital to integrate media, compensate cognitively, and encourage family members to appreciate and communicate with one another. The rise of social media is an important trend that will continue to evolve in the future. This study seeks to present fresh ideas and answers for the harmonious development of family connections in the ever-changing world of social media.

**Keywords:** Family Relationship, Social-media, Normative Theory of Media, Age-appropriate Settings, Intergenerational Difference

## **1. Introduction**

### **1.1. Research Background**

Currently, social media is experiencing a surge in popularity worldwide. This phenomenon is pervasive, influencing various aspects of people lives, including shopping, public opinion, and interpersonal interaction. Two institutions, Meltwater and We Are Social, released the Digital 2024 report, revealing that over 5 billion people have become active social media users, representing approximately 63% of the global population [1]. At the same time, the Internet also has a significant impact in China. The China Internet Network Information Center's updated report reveals that China now boasts 1 billion Internet users, making it the world's largest group of social media users [2]. In recent years, the size of Chinese families has been shrinking, with a gradual shift from composite to nuclear households [3]. Concurrently, however, the proportion of multigenerational families remains

at approximately 70 percent, characterized by multigenerational households [4]. Meanwhile, as the times have changed, the younger generation within the family has advanced and expanded their abilities and perspectives. However, the older generation's lack of responsiveness to the evolving discourse of the younger generation has led to conflicts and contradictions between generations, hindering intergenerational exchanges and communications within the family [5].

In the past five years, there have already been many relevant discussions on the impact of social media on family relationships. Based on socioemotional selectivity theory, Tammisalo Kristiina et al. conducted a survey on children and siblings from Finnish families, finding that social media contact is associated with increased happiness for younger generations but not for older generations [6]. After researching 314 social media users in Saudi Arabia, Bdour et al. found that frequent use of social media correlates with a greater likelihood of mental health harm and unhealthy family functioning [7]. Taş İbrahim conducted research on 456 high school students studying in the 2019 academic year [8]. Researchers discovered that ignoring social media positively predicted social media addiction, but it negatively predicted satisfaction with family life.

## 1.2. Research Gap

The subject of contemporary research has extensively and advantageously explored the concept of "media protocol theory" Still, the first look at related literature shows that there is a specific gap in the research that focuses on using "media protocol theory" to explain and evaluate the age gap in family relationships. This finding highlights a lack of research into the influence of social media on communication style and efficacy within families, as well as strategies for bridging the generation gap through appropriate media usage. Exploring this topic in more depth will enhance people's comprehension of evolving family dynamics and the influence of social media, offering fresh insights and remedies to bridge the generation divide.

Therefore, this paper will focus on "What are the effects of social media on the generation gap in families?" The issue revolves around "learning and adaptation at different ages" and the lack of age-appropriate design in social media. "Differences in social media usage habits" are studied and discussed in three aspects. This study will provide an in-depth understanding of the impact of social media on family relationships and provide important theoretical support for enhancing communication and understanding among family members.

## 1.3. Fill the Gap

In order to fill this research gap, this paper will combine the questionnaire data analysis with the "media protocol theory" and other communication theories. In this process, this study will focus on the age-appropriate design of social media, information reception, interest preferences, and related network resources. These factors will give the important clues about the impact of social media on different age groups. At the same time, this paper will draw on the environmental factors, intergenerational stability factors, and intergenerational dynamic factors summarized in the Research on Intergenerational Differences in Social Media Use in China in the Past 20 Years. These research results provide rich data and a theoretical foundation, which will help researchers more comprehensively analyze the formation and solution of the generation gap phenomenon in the era of social media. By delving into the normative effects of social media, it can better understand the communication barriers between different generations and provide targeted solutions for improving family relationships.

## 2. Case Description

The goal of this study is to investigate the influence of social media on family communication patterns, taking into account China's rapid technological advancement. This study investigated whether a 35-item questionnaire might provide some insight into this matter. In order to examine the influence of social media on family communication patterns, this set of 35 questions encompasses the effects of social media on individuals, families, and related phenomena, as well as people's perspectives regarding these effects. The questionnaire transitions from a shallow level of inquiry to a more comprehensive and profound examination, while the study moves from observable surface occurrences to the underlying essence. Moreover, this questionnaire comprises both multiple-choice and subjective inquiries. As a result, this study categorized and formulated future inquiries based on the responses provided by the participants. This study also aims to make the questionnaire more inclusive and has investigated various age groups and jobs. This paper disseminated the final survey as an internet-based questionnaire on April 1, 2024. This study ultimately gathered a substantial number of surveys.

The poll participants identified 45.32% as male and 54.68% as female (Table 1). The age distribution of the group varied from individuals under 18 to those over 46. Among them, 36.45% were students, while the remaining individuals held occupations such as white-collar workers and professionals (Table 2, 3). Most of them assumed the roles of offspring and caregivers within their households. The individuals involved in this study exhibit diverse familial arrangements. Big families constitute 59.36% of the total population.

Table 1: The sex.

Female	252	53.96%
Male	215	46.04%
The number of respondents:467		

Table 2: The age.

Under 18	106	22.70%
19-25	81	17.34%
26-35	75	16.06%
36-45	105	22.48%
Over 46	100	21.41%
The number of respondents:467		

Table 3: The type of family.

Nuclear family	97	20.77%
Big family	175	37.47%
Single-parent family	81	17.34%

Table 3: (continued)

Blended family	114	24.41%
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According to the questionnaires, Figure 1 shows that text and voice chatting are the main ways of family communication. Among 467 questionnaires, 55.91% of the people believe that there is a generational gap in the use of social media, with family members who have a large age gap (Figure 2). Even though the majority of people noticed that issue, only half of them tried to use social media to reduce the gap between generations. However, it's unfortunate that only half of those who attempted to use social media to reduce the gap between generations considered it effective (Figure 3).

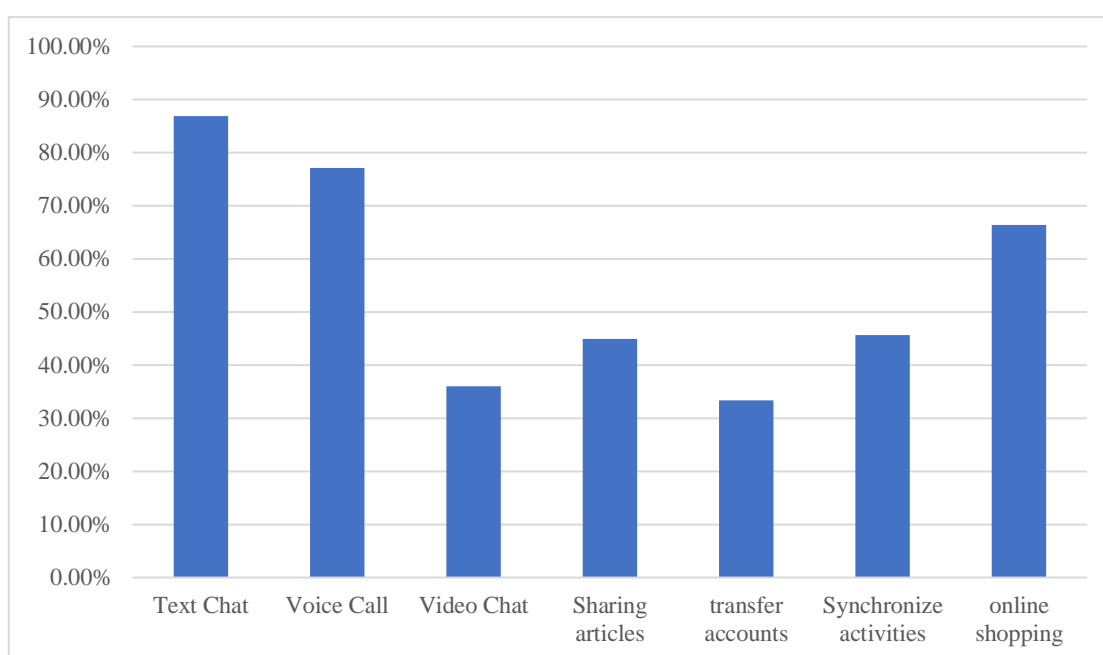


Figure 1: The ways you interact with your family online include.

(Data source: Original)

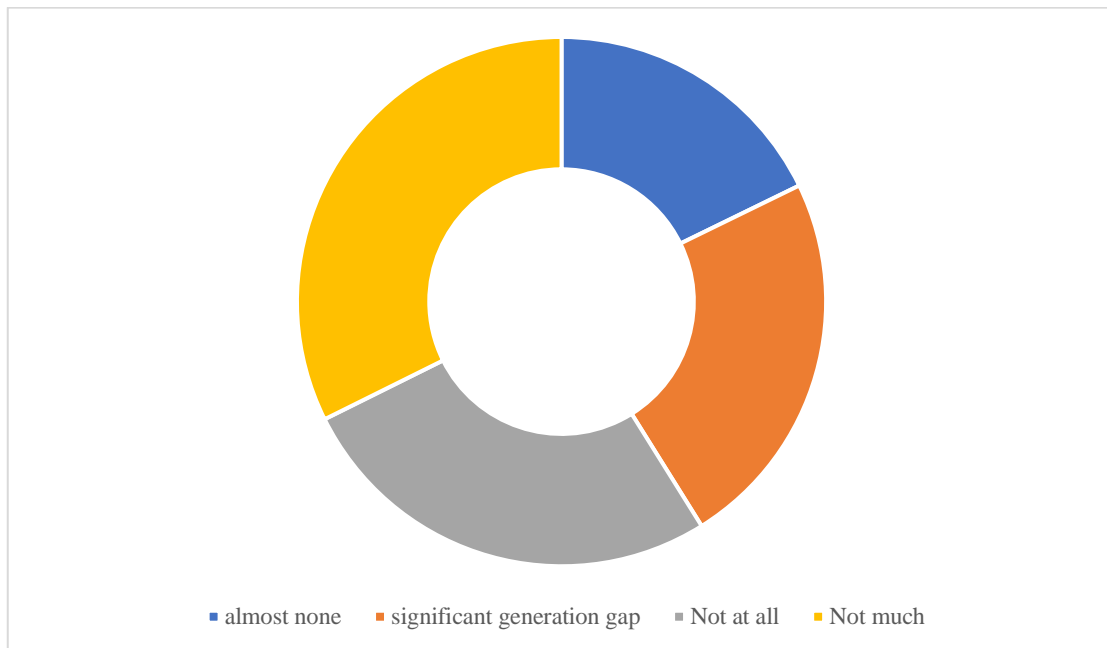


Figure 2: Is there a generation gap between you and your family members with a large age difference in the use of social media?

(Data source: Original)

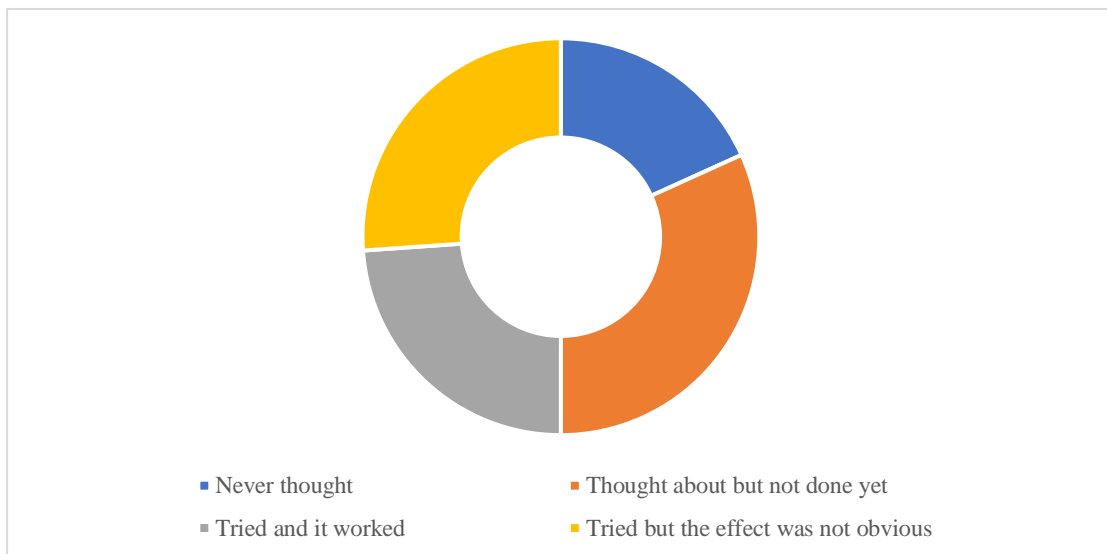


Figure 3: Have you ever tried to eliminate the generation gap with your family members through social media?

(Data source: Original)

On one hand, this study collected the investigations of people who think that social media has had negative impacts in aspects such as the reduction of communication, the unwillingness to share real thoughts, whether conflicts have increased, etc. As it is shown in Figure 4, 35.87% of those people believe that social media weakened emotional connections; 41.67% of them and their families mostly feel negative emotions most of the time due to social media-related content or the post; and 63.04% of them think that it increased the quarrels to varying degrees among family members (Figure 5).

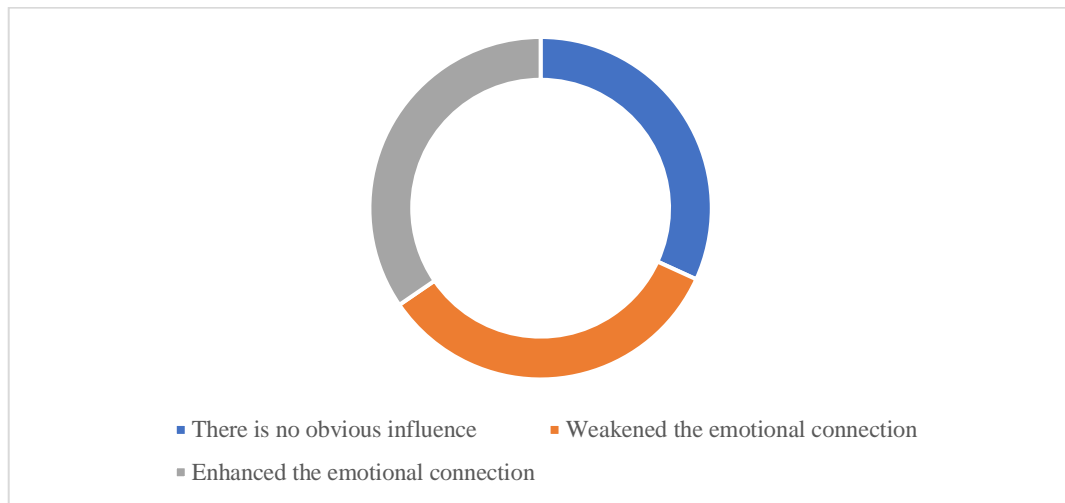


Figure 4: How does social media affect the emotional connection between you and your family members?

(Data source: Original)

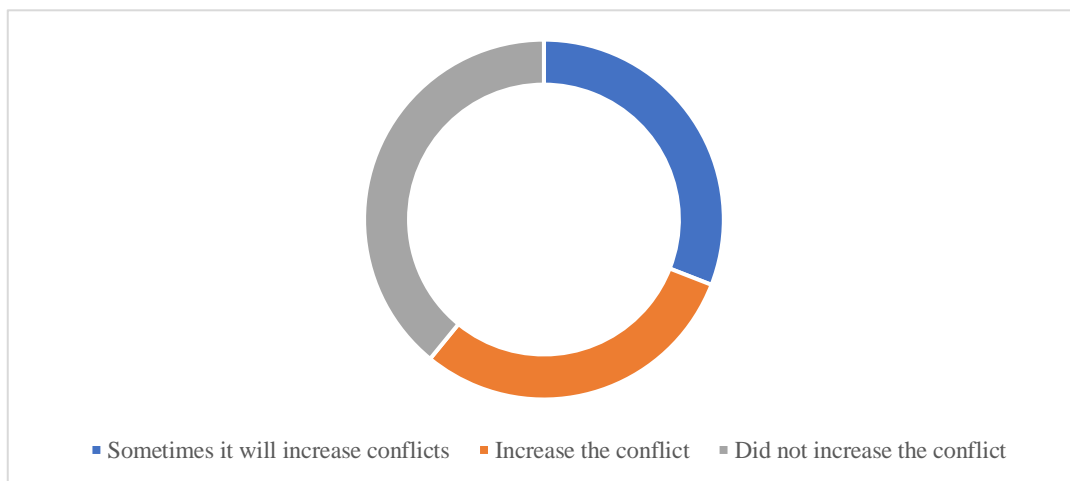


Figure 5: Do you think the use of social media has increased conflicts or quarrels among family members?

(Data source: Original)

It's important to note that only 25% of individuals believe people should take seriously the phenomenon where social media discourages family members from sharing their genuine emotions and thoughts. On the other hand, this study also asked other people for their opinions and methods on how to reduce the negative impacts of social media on family communication. They offered abundant constructive suggestions, such as teaching the elderly to use the internet, cultivating healthy communication habits, and so on. In the end, this study asked the person conducting the questionnaire whether they were willing to accept in-depth interviews.

In this world, this questionnaire reflects that in the era of the development of social media, the generation gap problem between family members is closely related to social media. The following study will conduct a further analysis of the issues between social media and the generation gap in the family.

### 3. Analysis on Problems

#### 3.1. Reasons on Intergenerational Difference

The experiences, learning, and adaptability at different age stages result in diverse feelings when utilizing social media, widening the generation gap.

People frequently refer to Generation Z, the younger generation born during the thriving Internet era, as "Internet natives" because of their familiarity and aptitude with digital technologies. While earlier generations witnessed technological advancements and rejuvenation, their experiences and transitions differed from those of Generation Z. As a result, their attitude toward social media may be more conservative. The elderly's sensory functions will deteriorate to some extent as they age, and this decline will have an impact on intellectual performance such as cognitive ability, reasoning ability, and so on [9]. The younger generation has exceptional learning capacity and a great desire to discover new things. They are always eager to discover and accept new trends, demonstrating a greater capacity to learn and adapt in the digital arena.

Wang and others' research delved into four key dimensions [10]. According to this research, the younger generation, primarily students, exhibits characteristics of dependence, sharing, innovation, and entertainment when using social media. While the elderly are both inquisitive and resistant, they are in a state of contradiction. They tend to use social media more frequently [10].

To sum up, the experiences, learning, and adaptability of different age groups lead to different views on social media among them, which affects their preferences on social media. Thus, it indirectly intensifies the communication generation gap.

#### 3.2. Reasons on Age-appropriate Settings

The lack of age-appropriate settings on certain platforms has led to the older generation's reluctance or inconvenience when using social media, which in turn can be one of the main reasons for the generation gap to emerge.

The WeChat user page, for example, primarily uses black and white icons, with thin lines defining them. Additionally, there is a lack of eye-catching area division between these icons. Such a design is not suitable for the elderly to distinguish various functional icons and is prone to confusion. With TikTok, there are also related page design issues. Many function buttons, designed with only icons, lack textual elaboration to maintain a simple layout. Such abstracted icons are not easy for the older generation to understand their meaning. Activating the app's 'Elder Mode' only increases the font size, without fundamentally altering the related icon settings.

Scientific research indicates that cognitive abilities that are significantly affected by aging include the ability to switch thoughts, the ability to form images, and short-term memory. Furthermore, aging also reduces the ability of older adults to inhibit irrelevant information, which negatively affects selective attention [11]. However, many applications fail to take into account the cognitive characteristics of the elderly and lack age-friendly designs. Furthermore, the implemented age-friendly designs do not yield efficient results.

As a result, these design deficiencies will not only dissuade some older individuals from attempting to use social media to enhance familial connections, but they will also create cognitive obstacles for some of the older individuals who have already initiated the use of social media, thereby impeding their capacity to adapt to novel modes of communication and indirectly exacerbating the intergenerational generation gap.

### 3.3. Reasons on Differences in Social-media Habits

The variations in usage habits and language styles inherent in social media have created a generational gap between different age groups. The rise of social media has brought about many changes in today's society, one of which is the emergence of the generation gap. This phenomenon can be traced to the unique characteristics of social media and the evolution of family communication patterns. Social media, as a new communication channel, has quickly entered people's lives and reshaped the way of communication between family members.

The "media protocol theory" in communication science provides a clue to explain this phenomenon. The media protocol theory argues that different types of media have varying degrees of influence on human perception, thinking, and behavior. Thermal media, such as television, directly stimulate people's senses and emotions in a vivid and intuitive way, which has a strong thermal effect. Books and other cold media rely more on readers' active participation and thinking, which has a strong media cold effect. According to this theory, the choice and use of media will directly shape the way people communicate, thus affecting the communication effect within the family. Older people may prefer face-to-face communication, focusing on verbal rigor and emotional expression, while the younger generation is more inclined to use abbreviations, emojis, and other novel language methods, as well as to show their lives and emotions through social media platforms. This difference leads to a deeper generation gap, making understanding and communication between family members more difficult.

Despite some attempts to bridge the generation gap through social media, the effectiveness of these efforts often falters due to differences in information presentation and uncertainty about communication effectiveness. Information transmission on social media often lacks facial expression, intonation, and other non-linguistic factors, which makes the interpretation of information prone to deviation and further increases the possibility of a generation gap. For instance, users criticized and attacked a middle-aged woman in Station B's comment area, misinterpreting the irony of the "smiling dog's head" emoji as a mere smile when she described the death of her loved ones.

Furthermore, the virtual nature of social media has also created a hidden danger for the formation of a generation gap. In virtual space, it is easier for people to present an "idealized" image of themselves and ignore the emotions and needs of real life. Since there are more real contact scenes in family life, this virtuality may bring a certain sense of contradiction and lead to a generation gap between real and virtual family members, making it difficult for both sides to establish real communication and understanding.

## 4. Suggestion

### 4.1. Suggestion on Intergenerational Difference

The elderly have not adapted to the rapid development of social media in the new era. They prefer more mundane, practical information. Teenagers may lack maturity in their values, but they can easily become addicted to the Internet or experience negative effects from social media.

Combining the traditional old media with the emerging new media. In fact, there are many ways to do this. For example, short videos, a popular medium, can effectively transmit practical information of great significance. Moreover, various apps, like Himalaya, can transform some books from a traditional reading mode to a listening mode. This innovative approach allows people to gain access to knowledge and information in a more convenient and diversified way, opening up new possibilities for the elderly to better integrate into the Internet.

TikTok, Kwai, and other videos use big data to predict user preferences and then provide video content that aligns with their interests. This enables the elderly to better integrate into this digital world and keeps them up-to-date with the times.



The state has introduced policies to control the time young people spend online. Because of the differences in experiences across generations, At the same time, the platform launched the youth mode and the elderly mode, which are in line with the use habits of more age groups and correctly guide people at all stages to a healthy and happy Internet.

#### 4.2. Suggestion on Age-appropriate Settings

In the contemporary era, novel network technology is gaining traction, and novel forms of online communication, such as mobile payment and online chatting, are also enhancing the quality of life. Concurrently, it is imperative that the elderly also benefit from these conveniences and do not become digital outcasts, marginalized by their families due to the shortcomings of the relevant design. Consequently, the associated applications must be age-adapted to address the cognitive disadvantages of the elderly through cognitive compensation.

If a person loses or starts to lose a sensory or brain structure, their brain redeploys cognitive resources to help them find a new way to coordinate their actions that lets them do the same work. This is called compensation in biology. Program developers can also use this concept in age-friendly design to compensate for older people's cognitive disadvantages. Designers can mitigate the inconvenience caused by cognitive disadvantages in the design process by increasing the color saturation and font size of key information, reducing the interference of secondary information, and simplifying the operation process. This enables the elderly to make more effective use of social media.

Chinese taxi software named Didi Chuxing has implemented a related practice. By selecting the "taxi for the elderly" option on the Didi Chuxing homepage, users can access a special taxi channel. The interface design in this mode is simple, removing advertisements and other unnecessary information, leaving only the most essential details about location and destination. This filtering process eliminates the interference of non-essential information. Additionally, users can utilize the voice call function to communicate directly with the driver, eliminating the need for complicated operational processes. Following identity confirmation, the platform will also prioritize matching drivers for elderly users, which facilitates the lives of the elderly through a multi-faceted design. Furthermore, Si Chen discovered that optimizing the age-appropriate design of the APP interface of SSC products using DL technology can significantly enhance the elderly's user experience and satisfaction [12].

#### 4.3. Suggestion on Differences in Social-media Habits

As social media continues to gain popularity, it gradually diversifies communication channels between people and continuously improves convenience. However, the questionnaire results of this study show that 75% of the respondents believe that using social media will lead to less communication with family members around them. The differences in usage habits and language styles inherent in social media have resulted in a generational gap between different age groups. Based on these phenomena, this paper makes the following suggestions:

Given the differences in usage habits and language styles inherent in social media, which have caused a generation gap between different age groups, and the "media protocol theory" in communication, this paper can make the following recommendations:

Increase training in communication awareness. Family members should be aware that differences in social media usage habits and language styles may lead to generation gaps, and they should make efforts to strengthen communication and understand each other's communication styles and habits. This requires mutual respect and understanding among family members, as well as a willingness to listen and adapt to each other's communication style. On this basis, this paper develops an understanding and inclusive attitude, respecting the communication styles and habits of different age

groups. The older generation can adapt to the younger generation's social media habits, and the younger generation should also understand the needs of the older generation, who prefer face-to-face communication and reduce the generation gap through mutual understanding and tolerance.

Emphasize the balance between authenticity and virtuality. Family members should emphasize the balance between authenticity and virtuality when using social media, avoiding over-reliance on virtual images and neglect of emotions and needs in real life. Organizing more offline family activities like travel picnics and household cleaning can reflect an increase in real communication and interaction.

In summary, the key steps to addressing the generation gap include understanding and learning the characteristics of media use by different generations, conducting an in-depth analysis of its impact on users, and, on this basis, educating and guiding family members to use social media correctly, as well as cultivating correct communication skills and awareness.

## 5. Conclusion

This study has examined the impact of social media on the generation gap within families, particularly in China's rapidly advancing technological context. Using a comprehensive questionnaire and integrating "media protocol theory" with other communication theories, it explored how different age groups interact with social media, resulting communication barriers, and strategies to bridge these gaps.

This paper addresses a critical research gap by applying "media protocol theory" to understand age-related differences in family communication styles and efficacy. Previous studies have explored social media's impact on family relationships, but this research uniquely combines cognitive and environmental factors for a comprehensive view.

This study has limitations that future research should address. Firstly, the reliance on self-reported data from questionnaires may introduce biases, such as social desirability or recall bias. Future studies could incorporate observational or experimental methods to validate these findings. Secondly, while this study focuses on the Chinese context, cultural differences may influence the generalizability of the results. Comparative studies across different cultural settings could provide a more global perspective on social media's influence on intergenerational communication.

Future research should also explore the long-term effects of social media on family dynamics. Longitudinal studies could track changes over time, offering insights into how evolving social media platforms and usage patterns impact family relationships across generations. Additionally, examining the role of emerging technologies, such as virtual reality and artificial intelligence, in mediating family communication could provide new avenues for bridging the generation gap.

## Authors Contribution

All the authors contributed equally and their names were listed in alphabetical order.

## References

- [1] Meltwater. 2024. Retrieved from <https://www.meltwater.com/en/global-digital-trends>
- [2] China Internet Network Information Centre. (2024). Retrieved from [https://www.gov.cn/yaowen/liebiao/202403/content\\_6940952.htm](https://www.gov.cn/yaowen/liebiao/202403/content_6940952.htm)
- [3] Liu, S.S. (2022). Study of the effect of family structure type on the demand for commercial medical insurance among Chinese residents. *Xinjiang University of Finance and Economics*. DOI:10.27428/d.cnki.gxcjc.2022.000405.
- [4] Zou, Y.H., Wang, H. (2019). Study on the development of the family and special types of families in China. *Population and health*. (03). 37-42.
- [5] Yang, J.P. (2023). Digital generation gap and digital feedback: a study of parent-child interaction in the Internet age. Northwest Normal University. DOI:10.27410/d.cnki.gxbfu.

- [6] Tammisalo, K. et al. (2024). *Social media contact with family members and happiness in younger and older adults. Computers in Human Behavior.* 153. 108103-.
- [7] Bdour, A., Alfie, A., Rita, B. (2024). *The Impact of Social Media Use on Mental Health and Family Functioning Within Web-Based Communities in Saudi Arabia: Ethnographic Correlational Study. JMIR formative research.* 8. e44923-e44923.
- [8] Taş, İ. (2023). *The Relationship Between Social Ignore and Social Media Addiction Among Adolescents: Mediator Effect of Satisfaction With Family Life. Youth & Society.* 55(4). 708-729.
- [9] Lindenberger, U., & Baltes, P. B. (1994). *Sensory functioning and intelligence in old age: A strong connection. Psychology and Aging,* 9(3), 339–355.
- [10] Wang S.Y., Wang, Y.H., and Yu, L. (2014) *Research on intergenerational differences in social media usage in China over the past 20 years: Psychological studies of cognitive aging. Science Press.*
- [11] Chen, S. (2024). *Age-appropriate design of smart senior care product APP interface based on deep learning. Heliyon.* 10(7). e28567-
- [12] Lu Xu *Research on intergenerational information flow in families in the era of integrated media [D]. Hunan University, 2022.*