

# The Impact of Digital Technologies on the Quality of Family Relationships

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(Presented by Academy Member Irakli Imedadze)

**Abstract.** The rapid advancement of digital technology has significantly transformed family dynamics. This paper presents the dual impact of these technologies on family relationships, with a focus on adolescents aged 14-17. Although technology develops connections through video calls and instant messaging, allowing families to overcome distance and share experiences and emotions, it also contains notable disadvantages. Excessive screen time often replaces face-to-face interaction, leading to emotional disconnection and isolation. Additionally, conflicts over screen use and parental control can strain family bonds. Empirical research has revealed a strong positive correlation between technology use and family communication. However, the nature of this interaction often remains superficial, focusing on control or academic assistance rather than emotional connection. Balanced technology use, reducing screen time and promoting meaningful face-to-face connections, is essential for strengthening family bonds. This research highlights the importance of implementing strategies that maximize the positive aspects of technology and reduce its negative impact. While technological advancements have somewhat helped families or family members become closer, it has also affected the quality and style of their relationships. This paper discusses the influence of technology on shaping family communication highlighting its advantages and drawbacks.

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**Keywords:** digital technologies, adolescents, family relationship

## Introduction

The development of digital technologies has presented a series of challenges for people. On the one hand, it helps people easily solve issues, find information, and connect with each other. However, on the other hand, its frequent use can lead to self-isolation. Digital technology has changed communication between people, activities, and relationships in general, becoming an integral part of everyday life.

Adolescence is a critical stage of human development, accompanied by physical, emotional, and social shifts. In today's digital age, the use of technology has become one of the main activities for adolescents, affecting their relationships. One of the main challenges caused by technology is the emergence of superficial relationships and decline in face-to-face interactions. Many adolescents give preference to social networks [1].

One of the most significant advantages of digital technology is its ability to overcome physical distance between family members. Tools such as video calls, instant messaging, and social media allow families to maintain close connections, even when they are separated by distance. For example, a parent working abroad can remain involved in their child's life through daily video calls and provide emotional support despite physical separation. Technology allows families to share experiences and establish connections based on common interests [2]. Using online tools, family members can learn new skills together through virtual courses.

**The negative impact of technology on family relationships.** Although technology promotes digital communication, it can also reduce the time families spend in face-to-face communication. Excessive screen time often distances family members from important interactions, causing feelings of isolation in the family. For example, family gatherings intended for joint decision-making, or sharing daily emotions and experiences are hindered because adolescents are mostly busy with their mobile phones [3].

Excessive use of technology causes conflicts in the family. Disagreements about the proper use of devices can strain relationships, especially when family members have different views on digital technology. Social media and other online activities can create emotional distance between family members [4]. When individuals prioritize virtual interactions over real relationships, this can lead to the feelings of neglect or disconnection. This issue is particularly concerning for younger and minor family members, who may struggle to develop essential interpersonal skills [5].

Since identity formation occurs during adolescence, it is important to understand the dynamics of digital technology use during this period as well as the attitudes of family members. The research aims to study the impact of digital technologies such as social media, mobile phones, internet on family

relationships among adolescents aged 14 to 17. Specifically, we study how technology use affects family communication, emotional connection, and the overall quality of relationships.

## Data Analysis

Of the respondents, 71% (36 individuals) were females, while 29% (18 individuals) were male. However, no significant difference was found in technology use time or family communication process based on gender differences.

Based on the data analysis, we can say that adolescents spend more time with mobile phones: 44%-44% of respondents (24-24 respondents) spend 3-5 and 5-7 hours, while 12% (6 participants) claim they spend only up to 3 hours using mobile phones, mainly for communication with peers. However, as interviews reveal, mobile phones are one of the means for interacting with family members. The extensive use of computers was dependent on video games and searching for educational resources online. In contrast, significantly fewer adolescents spend time using other digital technologies. It is worth noting, that watching television was almost excluded. Only a few respondents (7 respondents) note that they watch television only with their parents.

A large portion of respondents (24 individuals) reported spending up to 1 hour per day on telephone communication with family members. The research established that the correlation coefficient between time spent using mobile phones and the frequency of interaction with family members is 0.896, indicating a strong positive connection, which means that mobile phone use time and frequency of interaction with family members are closely related to each other.

Despite the spread of digital technologies, the quality of face-to-face communication often remains compromised. However, interviews reveal that this communication mainly concerns the discussion of everyday issues. Only a small portion of respondents (5 individuals) note that face-to-face com-

munication with family members involves joint family decisions, sharing emotions, or discussing solutions to family problems.

Some users (16 respondents) perceive technologies positively, though the majority think that its influence is neutral or negative. It should also be noted that respondents mainly implied parental control, help with studies, or simple check-ins during the communication process. They rarely mentioned emotional connections with family members.

**Conflicts due to digital technology use.** A large portion of respondents – 56% (31 respondents), state that digital technologies often become a source of conflict between family members, which may be caused by excessively intensive use or improper rules. The indicator is relatively low (16% – only 9 respondents) for cases of infrequent use, though it still causes conflict. It is worth noting that in this case, the conflict is mainly caused by improper time allocation. 26% of respondents (14 participants) report no conflict, the portion of respondents who indicate they have no conflict during active use of digital technologies. They point to their parents' busy schedules and, conversely, express dissatisfaction that they cannot spend more time with their parents.

Additional information was collected through interviews with respondents on issues such as the positive or negative effects of technology use.

Adolescents note that the use of technology (in this case, mobile phones) facilitates sharing emotions with their parents. They find it easier to express emotions and communicate by phone, through special messages. They also note that they communicate quickly by phone, which increases their sense of security. Watching movies and playing video games together also increase emotional bonds between parents and adolescents. However, they also note the negative aspects of technology.

Some parents' or children's use of digital devices for extended periods weakens face-to-face

relationships. Excessive parental monitoring causes tension in the family.

It is also worth noting that excessive use of digital technologies by parents creates a sense of isolation in adolescents. As interviews reveal, parents are more interested in controlling the time spent on smartphones and show less interest in the adolescent's emotional and/or psychological state. Excessive use of digital devices often leads to isolation or a decrease in relationship quality, especially when certain rules are not implemented.

## Conclusion

The development of digital technologies has had a significant impact on family relationships, both positive and negative. The research results showed that the proper use of technology can facilitate and deepen communication between family members. Tools such as video calls and messaging allow family members to maintain contact, which is particularly beneficial for emotional support and daily communication. However, excessive use can lead to isolation, decreased communication quality, and increased conflicts between family members. Prolonged screen time often interferes with face-to-face communication, significantly weakening emotional bonds. Additionally, excessive use of smartphones and control can cause tension in the family, especially between adolescents and their parents.

The research also showed that the impact of technology on family relationships is multifaceted and depends on both the intensity of technology use and communication style.

In conclusion, technology is neither solely an obstacle nor a benefit – it is the foundation for both. To overcome this challenge, a balanced approach needs to be implemented, aimed at reducing screen time, encouraging face-to-face relationships, and maximizing the positive use of digital technology. Such approach can strengthen family relationships and contribute to the overall emotional well-being of family members.

## ფსიქოლოგია

# ციფრული ტექნოლოგიების გავლენა ოჯახური ურთიერთობების ხარისხზე

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ციფრული ტექნოლოგიის სწრაფმა წინსვლამ შეცვალა ოჯახის დინამიკა, წინამდებარე ნაშრომში წარმოდგენლია აღნიშნული ტექნოლოგიების ორმაგი გავლენა ოჯახურ ურთიერთობებზე. კვლევა ფოკუსირებულია 14-17 წლის მოზარდებზე. მიუხედავად იმისა, რომ ტექნოლოგია ავითარებს ურთიერთკავშირს ვიდეოზარებითა და სწრაფი შეტყობინებებით, რაც საშუალებას აძლევს ოჯახებს გადალახონ მანძილი და გაიზიარონ გამოცდილება, გადასცენ ემციები, ის ასევე შეიცავს მნიშვნელოვან ნაკლოვანებებს. ეკრანთან გადაჭარბებული დროის გატარება ხშირად ცვლის პირისპირ ინტერაქციას, რაც იწვევს ემოციურ გათიშვასა და იზოლაციას. გარდა ამისა, ეკრანის გამოყენებასთან და მშობელთა კონტროლთან დაკავშირებულმა დავებმა შეიძლება დაძაბოს ოჯახური კავშირები. ემპირიულმა კვლევამ გამოავლინა ძლიერი დადებითი კორელაცია ტექნოლოგიის გამოყენებასა და ოჯახურ კომუნიკაციას შორის, თუმცა ამ ურთიერთქმედების ბუნება ხშირად ზედაპირული რჩება, ფოკუსირებულია კონტროლზე ან აკადემიურ დახმარებასა და არა ემოციურ კავშირზე. დაბალანსებული ტექნოლოგიების გამოყენება ხაზს უსვამს ეკრანთან დროის შემცირებას და მნიშვნელოვანი პირისპირ კავშირების ხელშეწყობას, რომელიც აუცილებელია ოჯახური ურთიერთობების გასაძლიერებლად. კვლევაში აღნიშნულია სტრატეგიების განხორციელების მნიშვნელობა, რომელიც მაქსიმალურად გაზრდის ტექნოლოგიის პოზიტიურ ასპექტებს და შემცირებს მის უარყოფით ეფექტებს. მიუხედავად იმისა, რომ ტექნოლოგიების განვითარებამ გარკვეულწილად ოჯახების ან ოჯახის წევრების დაახლოებას შეუწყო ხელი, ასევე გავლენა მოახდინა მათი ურთიერთობის ხარისხსა და სტილზე. წინამდებარე ნაშრომში განხილულია ტექნოლოგიების გავლენა ოჯახში კომუნიკაციის ჩამოყალიბებაზე, მის უპირატესობასა და ნაკლზე.

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