Analyzing Adolescent Girls' Perception of Social Networks in Cyberspace: A Phenomenological Study

Seyedeh Leyla. Haghparast[1] , Ebrahim. Naeimi[2]* , Kausar. Dehdest[3]

[1] Master's Degree in Family Counseling, Faculty of Psychology and Educational Sciences, Allameh Tabatabai University, Tehran, Iran
[2] Assistant Professor, Counseling Department, School of Psychology and Educational Sciences, Allameh Tabatabai University, Tehran, Iran
[3] Assistant Professor, Counseling Department, Faculty of Welfare, Tehran, Iran

* Corresponding author email address: lila.haghparast62@gmail.com

Article Info

Article type:
Original Research

How to cite this article:

ABSTRACT

Objective: The present study aims to analyze adolescents' perception of cyberspace.

Methods and Materials: This research is a qualitative study of the descriptive phenomenological type. The statistical population consists of adolescent girls aged 12 to 18 who are dependent on cyberspace and reside in the city of Talesh, Gilan Province, during the summer quarter. They were identified using purposive sampling with Young's questionnaire, and semi-structured interviews were conducted with 11 individuals, continuing until saturation and repetition of responses were reached. After recording each interview, the extracted content was transcribed verbatim. Data coding continued simultaneously with data collection. The data analysis was conducted using Colaizzi's seven-step method.

Findings: A total of 2 main themes and 10 sub-themes were obtained from 11 interviews. The main themes include "perceived challenges of presence in cyberspace" with sub-themes such as "family challenges; psychological challenges; challenges arising from intergenerational gaps; challenges of changing cultural patterns and instability of accepted values; transformation of leisure and recreational styles; informational challenges beyond the age of transnational groups" and "perceived opportunities of cyberspace" with sub-themes such as "space for dialogue and exchange of views on social issues; opportunity to present models compatible with local culture; creation of social networks compatible with adolescent characteristics; access to equal educational opportunities." The results indicated that adolescents dependent on cyberspace perceive their presence in cyberspace with various challenges as well as beneficial opportunities.

Conclusion: Therefore, it is necessary for officials and stakeholders to consider the needs of the adolescent period and use the opportunities provided by communication technology and virtual networks to design appropriate digital content to meet the needs of adolescents.

Keywords: Challenges; Adolescent Girls; Opportunities; Cyberspace Dependency.

1. Introduction

Adolescence is the most challenging developmental stage. This developmental period entails numerous changes in various biological, cognitive, physical, and social aspects, accompanied by diverse and new challenges and issues (Saadati & Parsakia, 2023). Additionally, experiencing these transformations makes adolescents more vulnerable (Schwartz et al., 2012).

The extensive changes adolescents face repeatedly create problems in their interactions with others. During this period, the level of emotional expression is high, and perceptions of distrust, instability, incompatibility, and aggression increase when facing frustrations (Kim et al., 2018). Numerous individual, family, and social factors influence the quality of transitioning through the adolescent crisis. In the present era, one of these factors is cyberspace. Unlike previous decades, social factors now exert their influence indirectly through cyberspace (Sobhan, 2019).

The growth and development of communication technologies have created unique interactions in the virtual and emerging world. Virtual networks, due to their attractiveness and diversity, have created a different environment. This virtual community, by providing software and applications, offers a wide range of services and entertainment to its users and has become an essential and integral part of adolescents' daily lives due to its ease of access (Wolfers & Utz, 2022). Like all human inventions and advancements, this advanced technology provides opportunities for both proper and improper use. Misuse can lead to dependency and disrupt mental health (Kawamoto, 2021). In this context, unconventional use of cyberspace is directly related to a lack of social responsibility, lack of social support, failure in job and academic tasks, and inversely related to self-efficacy. It is also correlated with personality variables such as depression and social isolation (Sobhan, 2019; Wolfers & Utz, 2022). Therefore, improper use of cyberspace leads to Internet dependency.

Internet dependency is a physical-psychological disorder accompanied by symptoms such as tolerance, withdrawal, emotional disturbances, and impaired relationships, which are increasingly observed among Internet users (Kuss & Lopez-Fernandez, 2016). In recent decades, improper use has led to the phenomenon known as Internet addiction or Internet dependency (Kim et al., 2018). Adolescents and young adults, due to their curiosity, turn to cyberspace and, lacking the skills to use the Internet, become dependent on it. Thus, this dependency is associated with issues such as "Internet addiction," "Internet dependency," "Internet misuse," "problematic Internet use," and "pathological Internet use" (Kuss & Lopez-Fernandez, 2016).

On the other hand, the importance of social media lies in its role as a crucial channel for transmitting and conveying societal values and norms, leading to changes in the social actions and reactions of children and adolescents. Therefore, studying the perceptions of adolescents dependent on cyberspace regarding social networks is crucial, as it involves the most influential consumption within the most affected age group (Mousavi, 2020). In the current era, the rapid and explosive development of technology and the global Internet network has caused significant transformations in communication and social domains. Among these, the issue of the extent of technology use is notable. Improper use of cyberspace is likely the largest non-drug addiction of the 21st century. Internet dependency is not confined to a specific demographic, but adolescents have outpaced others. In the meta-analysis by Davie and Davie (2014), the prevalence of adolescent addiction was reported to be between 39% and 44% (Masaeli & Farhadi, 2021; Mousavi, 2020).

Additionally, given that adolescence is the most stressful and harmful developmental period, the quality of life during this phase plays a significant role in the quality of subsequent developmental stages. Adolescent growth in physical, sexual, and social areas places them in a world between childish desires and adult thoughts and desires, subjecting them to the stress of this new world (Namazi & Sohrabi Shegefti, 2018). Hence, one of the prominent characteristics of adolescence is vulnerability, as the growth of different brain regions that affect adolescent behavior develops differently. Some brain regions sensitive to rewards and pleasure-seeking develop, while areas responsible for responsibility and delaying desires do not fully develop until adulthood. As a result, despite understanding the risks of behavior, adolescents engage in behavior due to its pleasurable and exciting nature and fail to delay such behaviors. This predisposes adolescents to engage in risky and self-harming activities such as drinking and reckless driving (Berenbaum et al., 2015; Schwartz et al., 2012; Sobhan, 2019). Similarly, excessive Internet use can disrupt social activities, functioning, and individual identity crises. Developmental changes are not uniform across all aspects of existence, leading to mood swings, increased curiosity, emotional turmoil, and the formation of values and beliefs (Kuss & Lopez-Fernandez, 2016).

Therefore, without education and support from family and society for safe passage through this stage, adolescents may become anxious and feel insecure, leading to conflicts with family and society, delinquency, and various behavioral and social issues (Berenbaum et al., 2015). Furthermore, treating Internet addiction, like treating substance addiction, requires sensitive psychological, motivational counseling, psychotherapy, and in some cases, medication (Kuss & Lopez-Fernandez, 2016).

The progress and prosperity of societies depend on the growth and nurturing of their adolescents and young people, as these individuals will soon reach adulthood and, with their decisions and actions, determine the country's future. Considering that the demographic composition of our country is young, with over twenty million adolescents and young people, their role in the future growth and development of our country is a highly influential determinant. Therefore, special attention must be paid to social adjustment during adolescence to prevent social maladjustment and achieve this goal. Identifying and addressing the causes of social harms is crucial (Taghvaee Yazdi, 2019).

Moreover, research findings from a 2020 national study by Mousavi highlighted the negative consequences of pathological use of cyberspace, identifying it as a factor in procrastination behaviors and increasing dissatisfaction among significant others. The study reported an Internet addiction prevalence rate of 2.4%, with gender-specific rates of 2.9% for boys and 2% for girls, and age-specific rates of 2.5% for adolescents and 2.3% for young adults. Although the prevalence of severe Internet addiction was low, a worrying number of adolescents were found to have mild to moderate dependency, which has significant implications for society and necessitates prevention and education (Mousavi, 2020).

With the increasing number of Internet users, studying the impact of cyberspace on users and, consequently, on the cultural structures of society is essential. Positive outcomes include access to diverse information, ease of communication with users from different parts of the world, and the ability to purchase various goods globally (Bağatarhan & Siyez, 2022). However, findings indicate reduced daily activities, decreased trust in children, reduced face-to-face interactions, social withdrawal, and decreased social activities due to Internet use. Given that adolescents are the primary age group using the Internet and cyberspace, excessive non-educational use can lead to academic decline. Those who dedicate most of their time to cyberspace experience problems in various life aspects, including occupational, academic, and social domains (Mohebi et al., 2020). These issues are more pronounced during adolescence because this period involves intense socialization, including establishing acceptable relationships with peers and society. Success in this area ensures the psychological and social security of adolescents. Social growth is measured by one's ability to adapt to others. Adolescents who are not accepted by their peers and society are more likely to be rebellious, aggressive, and confrontational (Mahvash et al., 2024; Tung et al., 2022).

Typically, adolescent girls grapple with dualities such as the attractions of the virtual and modern life presented in cyberspace and the limitations they experience in real life. More than ever, adolescent girls seek lifestyles that display fewer constraints of traditional life. These new behavioral patterns in adolescent girls manifest in leisure activities, body management, the use of specific words, phrases, and language in social interactions, and relationships with the opposite sex before marriage.

Given these circumstances, there remains a conflict between accepting the culture presented in virtual networks and living in the real society. Examining the effects of these factors requires research such as the present study. By filling the existing knowledge gap in understanding adolescent girls' perceptions of cyberspace, as well as the challenges and opportunities they face, we can better understand their needs and experiences. This understanding will help develop educational programs and raise awareness to deal with the high percentage of unreliable information in various fields. Accordingly, this study aims to answer the question: What is the perception of adolescent girls dependent on cyberspace regarding social networks?

2. Methods and Materials

2.1. Study Design and Participants

The present study is a qualitative research conducted using Colaizzi's descriptive phenomenological method. Phenomenological research is a method and philosophy that aims to describe life experiences as they are perceived by individuals, focusing on studying subjective phenomena and individual perceptions. Analytical, perceptual, and categorized descriptions emerge from the data collected. Colaizzi's seven-step method includes: 1) a thorough review of all findings to familiarize and understand the research comprehensively, 2) extracting essential and relevant statements related to the phenomenon under study, 3)

conceptualizing the significant extracted statements, 4) organizing participants' descriptions and common statements into specific categories, 5) providing a comprehensive description of the extracted opinions, 6) formulating a comprehensive description of the phenomenon under study into a clear and explicit statement of the phenomenon's basic structure, often referred to as the essence of the phenomenon, and 7) returning to the participants for validation of the findings.

The study participants, selected using criterion-based purposive sampling, included 13 adolescent girls aged 12 to 18 from Talesh County, Gilan Province, during the summer quarter of 2023. Two interviews were excluded due to superficial and irrelevant responses. After interviewing nine participants, the themes reached saturation, and two additional interviews (a total of 11) were conducted to ensure data adequacy and completeness. The inclusion criteria for the samples were: scoring above average on the Young Internet Addiction Questionnaire, having a relative ability to express their feelings, opinions, and willingness to participate fully and voluntarily in the study. Exclusion criteria included incomprehensible recorded content or withdrawal from participation at any point during the study process. Before conducting the interviews, participants received a copy of the interview guidelines containing the main questions to allow them time to consider the questions.

2.2. Measures

2.2.1. Semi-Structured Interview

Data were collected using semi-structured interviews. Sample questions included: "Describe a day in cyberspace?", "What conditions and limitations do you adhere to when interacting with others in cyberspace?", "To what extent can you adhere to your family's and society's norms and culture?", "Under what conditions would you withdraw from cyberspace?", "In which matters do you prefer to take on a leadership role, whether in cyberspace or social life?", "How would you respond to a discussion request on a topic from someone you do not know?", "How would you feel if you were respected and praised at a party or in cyberspace?", "Which part and content in cyberspace are interesting and attractive to you?", and "How do you respond to a request for help or a task from an anonymous user in cyberspace?". When the interviewee had difficulty describing their experience, the researcher used follow-up and exploratory questions (e.g., "What do you mean by that? Can you explain more?") appropriate to the flow of the discussion to give them enough opportunity to illustrate their experience more precisely.

2.3. Data analysis

At the beginning of each interview, the researcher introduced themselves and explained the research topic. Each individual was interviewed once, and the entire spoken content was recorded using a voice recorder. The recorded content was then meticulously transcribed verbatim on paper to prepare it for coding and analysis. The duration of the interviews ranged from 35 to 45 minutes. To enhance the accuracy and validity of the study, Lincoln and Guba's (1994) four criteria were used in the participant interview section. To assess validity (credibility), a trustworthy relationship with participants was established. For credibility and confirmability, researchers engaged with the data for an extended period. Peer review and expert review were also applied. To confirm the data, the interview text was returned to the participants after analysis, and their opinions were incorporated into the process. For reliability, coding was reviewed by multiple coders (two assistant professors and a master's degree holder in counseling). For transferability, expert review, purposive sampling, and heterogeneous sampling were used. Coding was also reviewed by the research advisor and counseling professor.

3. Findings and Results

In this study, 11 adolescent girls participated, ranging in age from 12 to 18 years. Regarding their educational status, 5 of them were in the 5th grade, 4 were in the 6th grade, and 2 were in the 7th grade of middle school. The participants were active on both foreign social networks (such as Instagram, Facebook, Twitter, YouTube) and Iranian ones (such as Eitaa, Shad, Rubika), with Instagram and Rubika being the most frequently used networks. The average time spent in cyberspace was 3.5 hours.

Overall, the data analysis from the qualitative interviews with 11 adolescent girls, using Colaizzi's seven-step method, resulted in the extraction of 2 main themes and 10 sub-themes. The analysis of the participants' statements regarding the exploration of adolescents' perceptions of cyberspace is presented in Table 1.

Table 1

Main and Sub-Themes of Adolescents' Perception of Cyberspace

Main Theme	Sub-Theme
Perceived Challenges of Adolescents in Cyberspace	Family Challenges
	Psychological Challenges
	Challenges Arising from Intergenerational Gaps
	Challenges of Changing Cultural Patterns and Instability of Accepted Values
	Challenges of Changing Leisure and Recreational Styles
	Informational Challenges Beyond Age and Transnational Groups
Perceived Opportunities of Adolescents in Cyberspace	Space for Dialogue and Exchange on Social Issues
	Opportunity to Present Models Compatible with Local Culture
	Creation of Social Networks Compatible with Adolescence
	Access to Equal Educational Opportunities

3.1. Perceived Challenges of Adolescents in Cyberspace

Dependency on cyberspace accompanies adolescents with various challenges in the realms of psychology, family, culture, leisure styles, transnational and beyond-age groups. Adolescents experience dual spaces in real life, and these challenges lead to perceived intergenerational disconnection and distancing from their family lifestyle. The significance of these challenges is particularly high during the identity formation and character development of adolescence. These challenges impact cognitive and behavioral components of adolescents' identity, becoming ingrained in their existence. Sub-themes within this category include "Family Challenges," "Psychological Challenges," "Challenges Arising from Intergenerational Gaps," "Challenges of Changing Cultural Patterns and Instability of Accepted Values," "Challenges of Changing Leisure and Recreational Styles," and "Informational Challenges Beyond Age and Transnational Groups."

Family Challenges: Previous studies have extensively discussed the simultaneous rapid physical, psychological, social, and sexual changes of adolescence, accompanied by high psychological pressure. Another feature of this stage is the increasing importance of peers and the diminishing role of the family for adolescents. With advancements in communication technology and easy access to cyberspace, adolescents spend hours with friends in cyberspace, shifting their priority from family to virtual friends. Family challenges arise in various dimensions such as the amount of usage, type of content consumed, internet costs, reminding adolescents to complete their homework, emphasizing not using it during rest time, and more importantly, adolescents modeling their attire and relationships with the opposite sex, leading to tension.

"I like to wear a hat. My dad says this is not for Iranians but for Westerners and Europeans (Code 1). I don't say anything bad, but my parents don't like it. Everyone talks like that (Code 2). I want to dress like modern girls because I want to be trendy and follow fashion (Code 3)."

Psychological Challenges: Adolescents worry about the quality and consequences of what they share, which is stressful. Their activities in cyberspace, while enjoyable, lead to the need to be seen, liked, and to have flawless posts, resulting in anxiety about approval and perfection. Continuous anxiety leads to aggression, withdrawal, and isolation.

"When posting, I pay a lot of attention to ensure that the clips or photos I edit are flawless to avoid negative feedback (Code 4). It's disappointing when you put so much effort into something you want to post, and it doesn't get likes or approval; it really depresses me, especially when they criticize you (Code 5). It's annoying when people in some groups, who are about the same age, ask why I don't wear short sleeves or have a profile picture without a headscarf or wear short clothes (Code 11). Our friends in cyberspace look for people who are like them, and when we follow our family's specific culture, we have problems with our friends (Code 6)."

Challenges Arising from Intergenerational Gaps Due to Cyberspace Dependency: Various factors intensify the effect of cyberspace dependency on the intergenerational gap, including parents' lack of empathy and understanding of the sensitive adolescent period, disruption in adolescents' identification process due to advancements in communication technology, full-time employment of parents outside the home due to economic conditions, reduced psychological and physical capacity to spend time with children, decreased verbal communication, and

consequently, a severe reduction in enjoyable experiences and opportunities with parents. These factors collectively contribute to communication poverty, the influence of propagated cultures by powerful entities in cyberspace, and the intergenerational gap. Continuing this trend creates a phenomenon of mutual incomprehension between two generations.

"My virtual friends are very trendy and modern, but I still have to live and dress like previous decades or other things. When you tell your parents, they don't understand at all and compare our time to theirs (Codes 3, 9, 5, 7). They say what kind of talk and actions are these? During our time, these things didn't exist; you are all weird (Codes 3, 4, 8, 10). They criticize a lot; they think their life was correct and don't understand modern life (Codes 4, 10, 11, 2)."

Challenges of Changing Cultural Patterns and Instability of Accepted Values: Adolescents are exposed to various ideological and value teachings from society, the education system, cyberspace, and national media. More importantly, they observe the discrepancy between the words and actions of prominent individuals. These factors lead to confusion and value instability, questioning accepted values, and leaning towards Western culture and skepticism towards their own ideological values. Assessing and determining the vulnerability of adolescents in terms of value instability is crucial because adolescence is the time for identity formation. Recognizing and planning for this important issue is a fundamental step in safeguarding adolescents against value, cultural, and social changes.

"At school and on TV, they talk about one style, but society, reality, and cyberspace seem like a different world, and this creates two models (Code 3). In cyberspace, we see people with a specific style, but when you visit their page, you realize they were different in real life and said different things (Code 8). They criticize my style a lot; my style is dark, meaning a sloppy style (Code 2). Many actions or words are things I learn in cyberspace, and when I get angry, they come out of my mouth, and my mom or school argues with me (Code 10). We have a specific style of talking with friends in cyberspace that is unique to our group of friends, but my family doesn't like it when I talk like that; my mom always tells me to be polite (Code 3)."

Challenges of Changing Leisure and Recreational Styles Between Children and Parents: The leisure styles favored by adolescents today are fundamentally and drastically different from those of previous generations. Adolescents, seeing the types of entertainment of famous people abroad displayed through social networks, engage in mixed-group gatherings, sharing photos and clips of their enjoyment. Such activities, including the use of various drugs or smoking, encourage adolescents to try similar entertainments. Over time, adolescents themselves become promoters of these recreational styles by sharing photos and clips of their activities. Additionally, the increase in the number of coffeehouses in the city, even in small towns, reflects this change in taste, along with more people keeping pets. Policy-making in this area requires comprehensive and expert examinations to use the opportunity of cyberspace to promote safe and healthy recreational and relational styles.

"When you see peers your age with tattoos on their bodies or going out in groups, you wish you could also hang out with friends freely (Code 3). They criticize me for smoking and my Joker necklace, saying it looks like a collar; they criticize a lot (Code 8). I like modern and youthful suggestions such as going to cafes, smoking hookah, cigarettes, and social gatherings (Code 2)."

Unlimited Access to Content and Membership in Transnational Groups: Alongside the numerous beneficial facilities of cyberspace, there are unintended consequences to consider. Adolescents' participation in transnational groups and live sessions held by famous people abroad, as participants mentioned, exposes them to unconventional and culturally inappropriate behaviors, leading to diminished inhibition towards these actions and fostering a dual-world perception and influence from negative peers and role models. Over time, transferring and disseminating these behaviors into real life results in risky actions. Adolescents also spoke about easy access to age-inappropriate content. Unlimited access is influenced by many factors, but what the researcher gathered from participants' statements can be attributed to the lack of parental supervision for various reasons mentioned earlier, feelings of abandonment, and the absence of restrictions through digital literacy awareness and monitoring mechanisms. Adolescents who had parental awareness and boundaries reported the effectiveness of discussions with their parents.

"Maybe once or twice out of curiosity and by accident, I followed immoral content to see what it's about and how it ends (Code 4). Information or content that is not age-appropriate is easily accessible (Code 6). There are many unethical songs and vulgar insults (Code 9). I have YouTube but deactivated it recently; I felt it wasn't suitable for my age, with inappropriate content and many unethical songs and vulgar insults. During live sessions, singers invite people from the U.S. and other countries who don't have proper appearances or behavior (Code 9). I have about 700 to 800

messages on Facebook Messenger that I haven't opened. Facebook shows some videos that are unethical, with very bad content (Code 8)."

3.2. Perceived Opportunities of Adolescents in Cyberspace

Adolescents see cyberspace as an opportunity for optimal use, while also acknowledging the threats and dangers resulting from cyberspace dependency. The perceived opportunities from cyberspace include communication with friends, creating groups that align with adolescent interests, using virtual education not available in their hometown, and the ability to introduce their culture, customs, and traditions to others and learn about other cultures.

Space for Dialogue and Exchange on Social Issues: Participants viewed maintaining friendships and discussing current events as reasons for their dependency on cyberspace. This motivation provides social cohesion. With adolescents entering adolescence, gender restrictions on socializing with friends begin, and belonging to a group becomes doubly important. Thus, adolescents maintain their relationships in cyberspace and pursue social issues, achieving intimacy with peers despite physical distance.

"The main reason for using cyberspace among my friends and me is to follow and be curious about recent events in society; we want to see how things end (Code 3). We message each other and talk in our groups under the pretext of news (Code 5). News appears in cyberspace before it does on TV (Code 10). Some people are killed as hijackers or said to be Basij and police forces; seeing these scenes is very painful because both are humans, and I can't accept disrespect to humans; it's very upsetting (Code 4). Messages increase curiosity and research in cyberspace, making me stay in channels to read messages (Code 3). Twitter is also used. Singers or famous people post about daily events and their opinions; others like and save them; I also tweet (Codes 7, 6). Worries about the future draw me to groups and channels discussing societal issues and debates on expenses (Code 10)."

Opportunity to Present Models Compatible with Local Culture: Participants stated that after becoming familiar with channels introducing their regional culture, they gained more motivation to learn about their local culture and ancestors' history and became acquainted with successful Iranian women recognized worldwide. Adolescents attributed this awareness and motivation to knowing successful individuals through social networks. The impact of this awareness on adolescents from small towns can expand motivation and increase self-belief, encouraging them to strive for more success with better information.

"I feel like I can be one of those successful Iranian women I read about in channels and pages (Code 5). Since installing Instagram, my knowledge about successful Iranian women who are poets, mathematicians, or work at NASA has increased (Codes 3, 4, 7). Followers with different cultures send me clips or songs in their language, or post stories; I like learning many things from these songs (Codes 2, 7, 8). I post stories with beautiful, colorful Talishi traditional dresses, receiving many approvals and likes (Code 8). Posting stories of special occasions with traditional dresses has many fans (Code 9). Posting stories of scenic and historical places increases my followers (Code 11)."

Creation of Social Networks Compatible with Adolescence: The researcher emphasized the inseparability and irremovability of cyberspace in the era known as the age of communication and information. The characteristics mentioned by participants include ease of access, enjoyable social interactions, easy communication with friends, finding like-minded individuals, sharing content to express feelings and opinions, features to create boundaries and privacy, awareness of the latest information in areas of interest, and the inclusion of music and creating a joyful and exciting environment.

"We find each other if we like a particular music band, then create fan pages for those singers (Code 7). I found my friends through fan pages of specific singers I like, such as Blackpink and BTS, following these pages full of joy and excitement (Codes 1, 2, 6, 7). In cyberspace, I can talk with people who understand and don't criticize us for saying things they can't comprehend (Code 3). I will definitely help someone if I can, or introduce them to someone else who can help (Code 4). My friends ask for my help in photo editing (Code 7)."

Access to Equal Educational Opportunities: The most critical application of information technology advances reflects the opportunity for adolescents to make optimal use of this space. Due to ease of access and the fastest means of obtaining educational materials, individuals can acquire needed information even in remote towns and villages. Online education is particularly beneficial for families who do not allow their adolescent daughters to travel to distant cities for training not available in their hometown. The lack of need to relocate for specific education can bring psychological comfort to families and greater adaptability within the family environment. Adolescents are not forced to face numerous problems in an unfamiliar city at a young

age, promoting family and social compatibility and mental health for adolescent girls. However, benefiting from online education requires preparing conditions and platforms, and considering the study's goal, the researcher refrains from providing further explanations on online education.

"When I don't understand something in my lessons, I watch the tutorials of several teachers on Instagram or Aparat (Codes 1, 2, 6, 9, 10, 11). I am interested in patina and painting, but there are no training courses for these in our town, and if there are, they are very basic; I learn from the groups I am a member of (Code 5). I am interested in hairstyling, but no professionals are available in our town; I learn from the groups I am a member of (Code 4). I got to know several famous teachers through cyberspace; attending their classes in person was not possible due to distance, so I attended virtual classes, which were cost-effective (Codes 4, 8, 10, 11)."

4. Discussion and Conclusion

The themes extracted from the participants' statements aimed to understand adolescent girls' perceptions of cyberspace using a qualitative descriptive phenomenology method. The analysis of the interviews showed that adolescents' perceptions of cyberspace can be examined in two categories: challenges and opportunities. Indeed, like any phenomenon, technology and advancements in communication have their pros and cons, and it is not feasible to adopt an all-or-nothing perspective. The main themes derived from this research are discussed and explained below.

The participants indicated that being in cyberspace is consistently intertwined with numerous challenges in various aspects of family and social life. For example, adolescents' statements regarding family challenges or the intergenerational gap stem from a lack of empathy and family support for the sensitive period of adolescence, leading to fundamental needs being overlooked. Consequently, adolescents increasingly seek to fulfill their fundamental needs for understanding, worth, and intimacy in cyberspace. This situation results in cultural, value, and perceptual gaps between generations. Observations from the participants' statements revealed that parents do not understand adolescents' preferences and worldviews, and conversely, adolescents do not accept their families' lifestyles and preferences. Participants pointed out the parents' lack of awareness of current trends and adolescent issues, accusing parents of not understanding and accepting

their thoughts and desires due to this gap and lack of awareness.

Another aspect of explaining the intergenerational gap pertains to parents' literacy in modern communication technologies. Communication technology, like other human achievements, is a double-edged sword, requiring an understanding of its characteristics. Lack of awareness and proficiency in new communication technologies results in children being left unsupervised in a space without control tools. Children, assuming they know more than their parents or gaining a false sense of confidence, engage in cyberspace activities without cyber literacy, exposing themselves to various threats and harms in this unknown world. Previous findings (Álvarez-García et al., 2015; Asdolahzadeh et al., 2021; Aslani et al., 2019; Buelga et al., 2016; Cohen-Almagor, 2018; Elsaesser et al., 2017; Faghiharam, 2019) align with the present study, indicating that parents' lack of control in cyberspace due to unfamiliarity with this technology creates a private space beyond parental reach. Similarly, the perceived psychological challenges of cyberspace stem from the need for approval, making adolescents feel that their thoughts, feelings, and behaviors are under scrutiny. If adolescents' behaviors do not align with the propagated culture in cyberspace, they feel rejected and isolated. On the other hand, conforming to the accepted culture in cyberspace leads to tension and challenges with family and real society. Kim et al.'s (2018) study findings align with this research, showing family challenges among adolescents dependent on cyberspace, related to various causes and sustaining factors (Kim et al., 2018). The alignment of perceived psychological challenges with the research by Wolfers and Utz (2022) indicates that adolescents experience psychological challenges due to peer feedback sensitivity and approval anxiety in cyberspace (Wolfers & Utz, 2022). Cyberspace not only facilitates risky behavior learning but also promotes behaviors termed as leisure and recreation.

Alongside the challenges, participants also mentioned perceived opportunities in cyberspace. Some adolescent girls in this study, considering the gender-based restrictions accepted in traditional cultures for women, used cyberspace as a tool for optimal liberation from these social limitations. They repeatedly acknowledged the threats and risks that cyberspace dependency could pose. Perceived opportunities included communication with friends, creating groups aligned with adolescent interests, and utilizing virtual education unavailable in their hometowns due to distance. Another opportunity identified from the interview analysis

was the ability to introduce their culture, customs, and traditions to others and learn about other cultures. Kawamoto's (2021) study highlights that social media plays a crucial role in fostering adolescents' positive transformative aspirations and future civic engagement, and that adolescents use cyberspace to differentiate their identities and escape role confusion (Kawamoto, 2021). Various studies introduce social media as an inseparable and complementary part of adolescents' lives, providing diverse and functional platforms for user interaction (Kawamoto, 2021; Wolfers & Utz, 2022).

In summary, it should be emphasized that cyberspace is inseparable from the age of communication and information. Adolescent girls, entering adolescence, face physical and psychological changes due to puberty, along with increased gender-based restrictions from family and society. Undoubtedly, in an era where communication technology facilitates access beyond local culture and age groups, releasing them from restrictive traditions and impacting religious stereotypes and recreational styles, adolescents experience confusion and fragmentation. If these challenges persist and achieving balance is not possible, it results in suffering, stress, and conflict, eventually leading to extreme attraction to one side. Generally, contemporary Iranian adolescent girls, influenced by communication technology, create a blend of traditional and modern values, forming a semi-modern, semi-traditional culture. The intergenerational gap and family challenges lead to distancing from traditional identity sources and turning towards globalization forces and diverse lifestyle offerings through cyberspace, resulting in family and social challenges. Adolescents today, exposed to a variety of values and cultural models through mass media and global communication, have opportunities to introduce their values and culture on a global level, sharing parts of their beliefs and traditions, giving them a sense of authenticity. These opportunities in cyberspace, with appropriate planning and policymaking by specialists, can address adolescents' psychological and developmental needs. Finally, understanding contemporary adolescents requires recognizing their dual influence from Iran's deep-rooted history and culture and the dynamic changes brought about by communication technology and the newly emerging society and culture.

5.   Limitations & Suggestions

The following limitations should be noted: since the perception of cyberspace is abstract, it was challenging for participants to accurately express their thoughts and attitudes. Another limitation is the potential for incorrect responses to interview questions due to fear of revealing results, necessitating careful consideration. Additionally, given that the study population consisted of adolescents aged 11 to 18 in Talesh County, caution should be exercised in generalizing the findings to adolescents in other cities. Repeating similar studies to understand adolescents' perceptions of cyberspace could be beneficial. Another limitation is the cross-sectional nature of the study; future researchers could conduct longitudinal studies to examine the perceptions of adolescent girls over time. Studying boys' perceptions of cyberspace could also provide better understanding.

Increasing awareness among officials and cultural custodians about adolescents' perceptions of cyberspace can help address the needs of this sensitive group. One of the critical challenges for adolescents, their parents, and social custodians today is choosing a balanced and rational strategy in the face of numerous cultural values and styles offered by cyberspace and internet accessibility. Adopting a logical strategy requires strengthening positive values and critical thinking about emerging virtual phenomena. Critical thinking skills, including cognitive abilities and data analysis, are essential. Therefore, digital literacy should receive increasing attention from specialists and custodians in this field.

Acknowledgments

We would like to express our appreciation and gratitude to all those who cooperated in carrying out this study.

Declaration of Interest

The authors of this article declared no conflict of interest.

Ethics Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

Funding

Authors' Contributions

References

Álvarez-García, D., Núñez Pérez, J. C., Dobarro González, A., & Rodríguez Pérez, C. (2015). Risk factors associated with cybervictimization in adolescence. *International Journal of Clinical and Health Psychology*, *15*(3), 226-235. https://doi.org/10.1016/j.ijchp.2015.03.002

Asdolahzadeh, P., Sadeghi, J., & Abbasi Asfajir, A. A. (2021). Modeling the Structural Equations of Mode Metacognition with a Tendency to Cyberspace Mediated by Self-efficacy in Gifted Students [Research Article]. *Iranian Journal of Educational Sociology*, *4*(2), 14-23. https://doi.org/10.52547/ijes.4.2.14

Aslani, G., Azimi, S., & Soleimani, N. (2019). Relationship between Parenting Styles and Internet safety of Children among Male and Female Students of Dezful. *Technology of Education Journal (TEJ)*, *14*(1), 211-220. https://doi.org/10.22061/jte.2018.3959.1969

Bağatarhan, T., & Siyez, D. M. (2022). Rumination and internet addiction among adolescents: the mediating role of depression. *Child and Adolescent Social Work Journal*, *39*(2), 209-218. https://link.springer.com/article/10.1007/s10560-020-00715-y

Berenbaum, S. A., Beltz, A. M., & Corley, R. (2015). Chapter Two - The Importance of Puberty for Adolescent Development: Conceptualization and Measurement. In J. B. Benson (Ed.), *Advances in Child Development and Behavior* (Vol. 48, pp. 53-92). JAI. https://doi.org/10.1016/bs.acdb.2014.11.002

Buelga, S., Martínez-Ferrer, B., & Musitu, G. (2016). Family Relationships and Cyberbullying. In R. Navarro, S. Yubero, & E. Larrañaga (Eds.), *Cyberbullying Across the Globe: Gender, Family, and Mental Health* (pp. 99-114). Springer International Publishing. https://doi.org/10.1007/978-3-319-25552-1_5

Cohen-Almagor, R. (2018). Social responsibility on the Internet: Addressing the challenge of cyberbullying. *Aggression and Violent Behavior*, *39*, 42-52. https://doi.org/10.1016/j.avb.2018.01.001

Elsaesser, C., Russell, B., Ohannessian, C. M., & Patton, D. (2017). Parenting in a digital age: A review of parents' role in preventing adolescent cyberbullying. *Aggression and Violent Behavior*, *35*, 62-72. https://doi.org/10.1016/j.avb.2017.06.004

Faghiharam, B. (2019). The Relationship between Social Health and Social Networks using among Female Student's Parent [Research Article]. *Iranian Journal of Educational Sociology*, *2*(1), 150-160. https://doi.org/10.29252/ijes.2.1.150

Kawamoto, T. (2021). Online self-presentation and identity development: The moderating effect of neuroticism. *PsyCh Journal*, *10*(5), 816-833. https://doi.org/10.1002/pchj.470

Kim, H.-J., Min, J.-Y., Min, K.-B., Lee, T.-J., & Yoo, S. (2018). Relationship among family environment, self-control, friendship quality, and adolescents' smartphone addiction in South Korea: Findings from nationwide data. *PLoS One*, *13*(2), e0190896. https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0190896

Kuss, D. J., & Lopez-Fernandez, O. (2016). Internet addiction and problematic Internet use: A systematic review of clinical research. *World journal of psychiatry*, *6*(1), 143. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4804263/

Mahvash, M., Yamini, M., & Mahdian, H. (2024). Comparing the Effectiveness of Instructional Mental Imagery and Tolerance of Ambiguity Training on Students' Academic Procrastination [Research Article]. *Iranian Journal of Educational Sociology*, *7*(1), 10-20. https://doi.org/10.61838/kman.ijes.7.1.2

Masaeli, N., & Farhadi, H. (2021). Internet Addiction and Depression in Iran: Investigating the Mediating Roles of Loneliness and Disordered Sleep and Moderating Role of Gender. *International Journal for the Advancement of Counselling*, *43*(4), 407-423. https://doi.org/10.1007/s10447-021-09447-9

Mohebi, M., Asadzade, H., & Farrokhi, N. (2020). Modeling the structural relationships of internet addiction based on executive functions and problems interpersonal: the mediating role of Alexithymia [Research]. *Shenakht Journal of Psychology and Psychiatry*, *7*(3), 150-165. https://doi.org/10.52547/shenakht.7.3.150

Mousavi, S. V.-a. (2020). Prevalence of Internet addiction and the Status of the use of virtual social networks in Iranian Teenagers and Youths in 2018. *Journal of Military Medicine*, *22*(3), 281-288. https://www.sid.ir/FileServer/JF/63313990307

Namazi, F., & Sohrabi Shegefti, N. (2018). The Mediating Role of the Social Adjustment for Family Communication Pattern and Adolescent Mental Health. *Journal of Educational Psychology Studies*, *15*(29), 237-256. https://doi.org/10.22111/jeps.2018.3614

Saadati, N., & Parsakia, K. (2023). The Predictive Role of Parents' Marital Relationship Quality on The Adolescents' Psychological Capital. *Journal of Adolescent and Youth Psychological Studies (JAYPS)*, *4*(8), 139-146. https://doi.org/10.61838/kman.jayps.4.8.16

Schwartz, O. S., Dudgeon, P., Sheeber, L. B., Yap, M. B. H., Simmons, J. G., & Allen, N. B. (2012). Parental Behaviors During Family Interactions Predict Changes in Depression and Anxiety Symptoms During Adolescence. *Journal of abnormal child psychology*, *40*(1), 59-71. https://doi.org/10.1007/s10802-011-9542-2

Sobhan, Y. (2019). media consumption mechanism in adolescents. *Journal of New Media Studies*, *5*(19), 291-323. https://www.magiran.com/paper/2105187

Taghvaee Yazdi, M. (2019). The Impact of Information and Communication Technology on Student Self-Efficacy and Social Adjustment. *Information and Communication Technology in Educational Sciences*, *9*(2), 45-60. https://www.magiran.com/paper/1984309

Tung, S. E. H., Gan, W. Y., Chen, J.-S., Ruckwongpatr, K., Pramukti, I., Nadhiroh, S. R., Chang, Y.-L., Lin, C.-C., Pakpour, A. H., Lin, C.-Y., & Griffiths, M. D. (2022). Internet-Related Instruments (Bergen Social Media Addiction Scale, Smartphone Application-Based Addiction Scale, Internet Gaming Disorder Scale-Short Form, and Nomophobia Questionnaire) and Their Associations with Distress among Malaysian University Students. *Healthcare*, *10*(8), 1448. https://doi.org/10.3390/healthcare10081448

Wolfers, L. N., & Utz, S. (2022). Social media use, stress, and coping. *Current opinion in psychology*, *45*, 101305. https://doi.org/10.1016/j.copsyc.2022.101305