Res Dev Med Educ 2026;15:33398
doi:10.34172/rdme.33398
https://rdme.tbzmed.ac.ir/

Original Article

The Ideal Model for Promoting the Mental Health of Adolescents and Young People Using Social Media

Tahereh Hosseinabadi[1], **Abbas Naseri Taheri**[2*], **Ali Jafari**[1]

[1]Department of Communication Sciences, Ardabil Branch, Islamic Azad University, Ardabil, Iran
[2]Department of Communication Sciences, IRIB University, Tehran, Iran

Article info
Article History:
Received: October 16, 2025
Revised: November 5, 2025
Accepted: November 11, 2025
epublished: June 1, 2026

Keywords:
Social media, Media literacy, Adolescent mental health, Healthy digital habits, Mental health education

Abstract

Background: The rapid expansion of social media use among youth and adolescents has raised growing concerns about its psychological and social consequences. Media literacy is increasingly recognized as a protective factor that can mitigate these risks. This exploratory study aimed to develop a conceptual and explanatory model that describes the factors influencing the mental health of youth and adolescents in relation to media literacy.

Methods: A qualitative grounded theory approach was employed. Data were collected through semi-structured interviews with 15 experts in psychology, education, and media. Data were analyzed using MaxQDA 2020. Open, axial, and selective coding techniques were applied until theoretical saturation was reached.

Results: The analysis yielded a descriptive model identifying low media literacy as a central causal factor linked to adverse outcomes such as anxiety, depression, social isolation, and media addiction. The model delineates causal conditions (e.g., harmful content, addictive design), contextual conditions (e.g., identity exploration, performative behaviors), and intervening conditions (e.g., parental mediation). It is intended to inform key stakeholders, including educators, curriculum developers, parents, and designers of preventive mental health programs.

Conclusion: This study provides a conceptual framework for understanding how media literacy interacts with adolescent mental health. The model is explanatory and has not been tested for efficacy; its primary value is in mapping the terrain for future intervention. It explicitly offers a foundation for designing school-based health education, parent guidance initiatives, and preventive mental health promotions by clarifying the mechanisms and key leverage points for potential action. Further research should test specific interventions derived from this model in diverse cultural and educational settings.

Introduction

In contemporary societies, digital technologies and social media have become central to adolescents' daily lives, shaping their social, emotional, and cognitive development. While these platforms offer opportunities for connection and support, their pervasive use—exemplified by near-ubiquitous access to Instagram, TikTok, and Snapchat—has raised significant concerns regarding adolescent mental health. Research consistently links excessive social media engagement with increased risks of depression, anxiety, sleep disorders, and self-harming behaviors, a dynamic often amplified by algorithmic designs that can promote compulsive use and exposure to harmful content.

This study addresses a critical gap in the literature: the lack of integrated intervention models that combine media literacy with mental health education. While numerous studies document the risks of social media, few offer holistic frameworks that also leverage its positive potential for support and learning, particularly within specific cultural and educational contexts such as Iran. Existing programs often treat media literacy and psychological well-being in isolation, lacking a cohesive strategy for prevention and promotion.

Grounded in Digital Well-Being Theory and the Social Ecological Model, this research develops a unified framework. Digital Well-Being Theory underscores the need for mindful engagement with technology, while the Social Ecological Model accounts for the interplay of individual, familial, and societal factors in adolescent development. Together, they inform an actionable model designed for direct application in key settings:

School-based Health Education: The model provides a structured curriculum to equip students with critical digital literacy skills—such as recognizing manipulative algorithms and mitigating social comparison—alongside strategies for managing online stress, thereby embedding

***Corresponding author:** Abbas Naseri Taheri, Email: naseri_a@iribu.ac.ir

mental health promotion into the core educational agenda.

Parent Education: It offers evidence-based guidelines to help parents foster supportive home environments. This includes facilitating healthy digital habits, recognizing signs of psychological distress linked to online activity, and initiating constructive dialogue about social media use.

In Preventive Mental Health Programs: The framework serves as a blueprint for health professionals and policymakers to design community-wide initiatives. It emphasizes building resilience against the risks of excessive use while harnessing digital tools for positive youth development, moving beyond mere risk mitigation to active well-being promotion.

By explicitly linking digital literacy with psychological skills, this integrated model aims to provide educators, families, and health professionals with practical tools to support adolescent mental well-being in the digital age.

The background of both domestic and international studies indicates the multifaceted impacts of social media and media literacy on the mental health, social well-being, and informational and identity-related behaviors of youth and adolescents. However, a significant gap persists in the literature: there is a lack of comprehensive, integrated theoretical models that can coherently explain the dualistic and often paradoxical role of social media. Rezadad et al.[1] conducted a study with a sample of 384 first-year male middle school students in Tehran, showing that social media use acts as a mediator with a coefficient of 0 in the relationship between physical exercise and psychological well-being and social health, emphasizing the role of media in enhancing or undermining the effects of physical activities on mental health. This finding suggests that media use may either amplify or negate the benefits of other protective factors, such as physical exercise, highlighting the complex relationship between media and well-being.

Jahangiri Zarkani et al.[2] found in a comparative study in Ardabil that social media, compared to mass media, reduces commitment to national identity (social, historical, cultural, and political dimensions) among adolescents, indicating the distinct effects of different types of media on identity formation. These findings underscore the importance of considering the type of media in models of identity development, as different media platforms may have varied effects on adolescents' sense of self and social belonging. Salemi et al.[3] examined adult citizens in Tehran in 2019 and showed that conscious use of social media requires media literacy to protect against harms such as fake news, emphasizing the need for education in critical content analysis. This highlights the potential of media literacy as a protective factor, suggesting that well-designed media literacy programs can reduce the negative effects of harmful content.

Sotodeh et al[4] found that high media literacy among technical and vocational high school students is associated with better self-care and mental health, helping to mitigate the harms of emerging media. Hosseini Bafghi and Monadi[5] examined 323 high school students in Yazd and showed that social media improves informational behavior, reduces stress, and facilitates group learning and rapid access to information, highlighting the positive aspects of media when used consciously. However, it is critical to emphasize that these positive outcomes depend heavily on the degree of media literacy and the conscious use of social media, which have not always been present in previous models.

Ziari et al.[6] examined the harms of virtual networks and found that excessive use leads to physical and psychological problems (anxiety, loneliness, incompetence) and a decrease in social skills, particularly due to the attractions of the internet and the failure to form a desirable identity. This shows the negative outcomes that arise when media use is not carefully managed, stressing the need for better supervision and media literacy education. Vahedi [7] likened social media to a double-edged sword, which, when used consciously, can enhance education and culture, but without supervision and appropriate content, can lead to cultural and psychological harm.

Jafari[8] reported a direct correlation between social media activity and academic decline, internet addiction, identity crises, physical problems, and reduced concentration, as well as an inverse correlation with family emotions and real-life relationships. This reinforces the idea that unregulated social media use can have detrimental effects on several aspects of adolescent life, including academic performance and social relationships. Panahi et al.[9] studied 2,100 young Iranian users and identified the main motivations for using social media as information acquisition, connecting with friends, dating, group discussions, and entertainment, categorizing users into eight groups (including activists, relationship seekers, and entertainment seekers). Jahangiri Zarkani[10] showed that harmful media content and the lack of media literacy disrupt the cognitive, moral, and educational systems of society, especially for children and adolescents.

In the international literature, Popat et al.[11] identified five main themes related to mental health in a qualitative review of the perspectives of adolescents aged 13 to 17: self-expression, appearance comparison, relationship pressure, peer support, and exposure to bullying and harmful content. Abi-Jaoude et al.[12] highlighted that smartphones and social media use have both beneficial and harmful effects on youth mental health, including increased anxiety, depression, and exposure to harmful content, suggesting the importance of moderation and guidance. American Academy of Pediatrics [13] emphasized that social media influences self-esteem, peer relationships, and emotional regulation in adolescents, reinforcing the need for frameworks addressing both risks and benefits.

Blackwell et al.[14] reported that social media usage patterns significantly predict mental health outcomes in adolescents, underscoring the role of environmental and individual factors in shaping these effects. Naslund et al.[15] found that social media offers opportunities for support and education but also increases vulnerability to stress and anxiety, highlighting the dual nature of digital engagement.

Popat et al.[16] identified five main themes related to mental health in a qualitative review of the perspectives of adolescents aged 13 to 17: self-expression, appearance comparison, relationship pressure, peer support, and exposure to bullying and harmful content. These themes are consistent across various contexts, underlining the complex ways in which social media can affect the mental and social health of adolescents, and reinforcing the need for a model that considers these complexities.

Firar et al.[17] emphasized the necessity of including digital well-being in media literacy programs to improve physical, emotional, and social health. Wang and Zheng[18] found that digital skills positively impact mental well-being among first-generation students, and a lack of these skills leads to reduced mental health in vulnerable populations. These findings support the proposed model's inclusion of digital literacy as a core component for improving youth mental health. Nagata et al.[19] presented a framework for digital well-being with nine dimensions (such as safety, health, and digital creativity) that redefine health in digital environments. Scott et al.[20] showed that nighttime social media use is associated with sleep delays and increased cognitive arousal, leading to anxiety and sleep disorders. Ivie et al.[21] reported that high social media use is associated with anxiety, depression, and fear of missing out among adolescents. These studies highlight that the timing and context of media use—especially excessive or nighttime use—can exacerbate mental health issues. Sharma et al.[22] found that social media addiction impairs cognitive function and emotional regulation, further linking excessive usage to negative mental health outcomes.

Stanford University, Center for Youth Digital Well-Being[23] emphasized the growing concern of social media addiction among youth and its implications for emotional and social development. Okela et al.[24] demonstrated that parental media literacy significantly reduces children's risk of digital media addiction, highlighting the intergenerational aspect of media guidance. Agyapong-Opoku et al.[25] in a scoping review found consistent evidence that social media can both enhance and threaten youth mental health, depending on usage patterns and literacy levels.

Overall, previous studies are immature to present a comprehensive model as they lack specificity in pathways, not detailing how factors like digital literacy or parental mediation actively alter the trajectory from use to outcome.

This gap highlights the necessity for a novel theoretical contribution. The present study addresses this by developing a grounded theory model that moves beyond listing effects to instead map the conditional pathways and core processes through which social media engagement, filtered through varying degrees of media literacy and conscious use, ultimately shapes the mental health and identity landscape of adolescents. This model aims to provide the integrated framework that current literature lacks, explicitly preparing to explain the "how" and "when" behind social media's dual impact.

Methods

The present study is foundational research aimed at developing a conceptual model of the factors influencing the mental health of youth and adolescents, with an emphasis on social media literacy. This research employs a qualitative grounded theory approach based on a parametric model to identify causal, contextual, intervening factors, strategies, and outcomes related to the topic. Grounded theory is a qualitative method designed to discover the underlying categories of the phenomenon under study and to present a paradigmatic model. This method allows for the development of a comprehensive model that systematically shows the relationships among various factors through the analysis of collected data. The main objective of this research is to provide a conceptual model for enhancing the mental health of youth and adolescents through the strengthening of media literacy from the perspective of experts.

This study employs a field-based research strategy, utilizing data collected from real-world contexts. The primary data collection methods are semi-structured interviews with experts (in psychology, media studies, and education) and analysis of related documents.

The rationale for selecting experts over adolescents is to first build a comprehensive theoretical model based on synthesized professional and clinical insights. The authors explicitly acknowledge this as a methodological focus and a potential limitation, as it does not include the direct lived experiences of adolescents. This expert-driven phase aims to establish a conceptually sound foundation for the grounded theory, with the understanding that future research will need to incorporate the adolescent perspective for validation.

This study is descriptive-exploratory in nature, focusing on identifying the factors influencing the mental health of youth and adolescents in relation to media literacy. The main research questions are as follows:

1. What are the causal conditions affecting the mental health of youth and adolescents in the use of social media?
2. What is the central category in designing the mental health model for youth and adolescents with an emphasis on social media literacy?
3. What strategies can enhance mental health in the face of social media?
4. What are the intervening conditions affecting the mental health of youth and adolescents in relation to social media literacy?
5. What is the contextual framework for the mental health of youth and adolescents in using social media?
6. What are the outcomes of enhancing media literacy on the mental health of youth and adolescents?

The statistical population of this research consists of experts in psychology, education, media, and mental health who have knowledge and experience regarding the impact of social media on the mental health of youth and adolescents. Participants were selected through purposive sampling based on their expertise in the fields

of psychology, media, and mental health. This purposive sampling ensured that only individuals who had in-depth knowledge and experience related to the research topic were included in the study. The inclusion criteria for participants were at least 5 years of professional experience and expertise in the area of social media's impact on youth mental health. Sampling was conducted purposefully, selecting individuals who could provide valuable and relevant information. In qualitative research, data collection continues until theoretical saturation is reached, meaning when no new information is obtained regarding the categories of interest. The theoretical saturation was reached after conducting interviews with 15 experts from the fields of psychology, education, and media, from whom the necessary information was gathered through semi-structured interviews (Table 1).

The main data collection tool in this study was the semi-structured interview. This type of interview allows the researcher to maintain the overall framework of questions while having the flexibility to explore deeper into the participants' responses. In addition to interviews, the examination of relevant documents and reports, including credible reports and previous studies on social media and mental health, was used as a complementary tool. A sample of interview questions is provided below to highlight the alignment of the questions with the research aims:

- What are the key factors influencing the mental health of adolescents in relation to social media use?
- How do you perceive the role of media literacy in mitigating the negative effects of social media on youth?
- What strategies would you recommend for improving media literacy among adolescents?

The collected data were initially typed as text and then entered into MaxQDA software for coding and analysis.

Data analysis was conducted based on the three stages of coding in grounded theory, including open, axial, and selective coding. In the open coding phase, a multitude of codes were extracted from the interview texts. Subsequently, conceptually similar codes were combined to form axial categories. Finally, the axial categories led to selective codes that formed the basis of the research paradigmatic model. Examples of raw data, including direct quotations from interviews, have been provided to support the coding categories. For instance, one participant described the role of media literacy as follows: "Media literacy helps to filter harmful content and promotes healthier social media use, especially among adolescents" (Interview 5, Expert in Psychology).

The process of data analysis is schematically presented in the following diagram (Figure 1). In this research, during the data collection phase, the interviews were initially transcribed verbatim and entered into the software. Then, a multitude of open codes were identified. By reading and reflecting on the initial codes, those that were conceptually closely related were combined to form similar concepts (axial codes), and the axial codes subsequently formed the selective codes.

Additionally, the researcher's reflexivity was taken into account throughout the study to minimize biases and ensure validity. The researcher's background in psychology and previous exposure to the topic may have influenced the interpretation of data, but efforts were made to remain objective by maintaining an open coding process and constantly checking the emerging categories against the data.

Table 1. Participants' Characteristics.

No.	Gender	Age	Degree	Field of Study	Job Title
1	Female	47	PhD	Psychology	Psychology Expert
2	Male	50	PhD	Psychology	Psychology Expert
3	Female	37	PhD	Psychology	Psychology Expe
4	Male	44	PhD	Communication	Communication Expert
5	Female	44	PhD	Psychology	Psychology Expert
6	Male	40	PhD	Psychology	Psychology Expert
7	Female	51	PhD	Communication	Communication Expert
8	Male	60	PhD	Communication	Communication Expert
9	Female	50	PhD	Psychology	Psychology Expert
10	Male	45	PhD	Communication	Communication Expert
11	Female	55	PhD	Communication	Communication Expert
12	Male	44	PhD	Communication	Communication Expert
13	Male	51	PhD	Communication	Communication Expert
14	Female	56	PhD	Psychology	Psychology Expert
15	Male	39	PhD	Psychology	Psychology Expert

Results

In open coding, the interview data were broken down into meaningful units and categorized with conceptual labels. Table 2 summarizes the codes and the related interviews: The codes indicate the negative impacts of low media literacy on mental and social health. For example, Interviewee number 9 stated: "Using social media

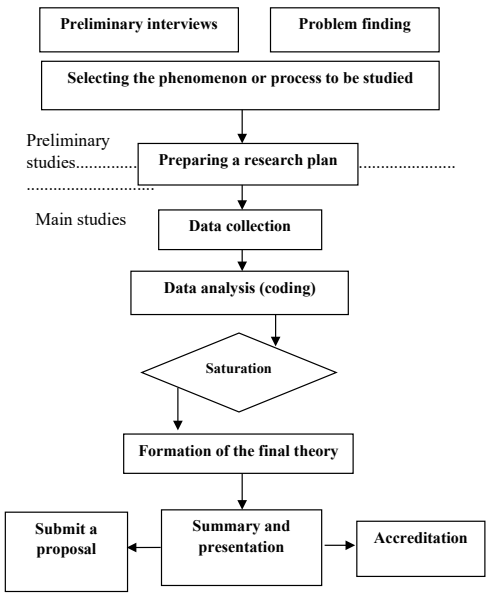

Figure 1. Data analysis process

Table 2. Open coding results.

Key code	Related words	Documents (interviews)
Waste of time	Waste of time, aimless use, time-killing	12,10,9,3
Sleep disorders	Insomnia, sleep disturbance	12,10,8,5
Stress	Psychological stress, psychological anxiety	12,10,8,6,5,3,1
Anxiety and depression	Depression, loneliness, frustration	12,8,6,5,4,3,1
Media addiction	Addiction, continuous use	12,11,6,4,3
Moral deviations	Immoral content, risky behaviors	7,4,2
Social isolation	Social distancing, feeling of loneliness	12,11,10,9,8,4,3
Decreased quality of communication	Superficial communication, misunderstanding	6,4,3
Family disputes	Family tension, irrational control	7,5,4
Physical problems	Neck osteoarthritis, obesity, and poor vision	10,9,8,5,1
Aggression	Aggressive behavior, irritability	6,5,4,1
Decreased self-confidence	Frustration, incorrect comparison	11,8,6,4,1
Decreased concentration	Attention: academic performance decline	12,10,8,5
Decreased physical activity	Inactivity, sedentary lifestyle	12,10,9,8
Distance from reality	Virtual identity, identity crisis	11,9,4,1
Unhealthy competition	Envy, incorrect comparison	11,7,4,3
Fake news	Incorrect information, gossiping	11,6,5,2,1
Lack of media literacy	Social ignorance, lack of understanding of the media	11,7,4
Parental lack of awareness	Low media literacy, parental ignorance	11,7,4
Lack of supervision	Irrational control, secret use	7,5,4,2
Internet costs	Financial pressure, high cost	5,1
Destructive media	Harmful content, negative impact	7,4,2
Fear of missing out (FOMO)	Social anxiety, pressure to be up to date	12,6,3
Distortion of reality	Show Unrealism, distorted reality	11 4,
Academic decline	Decreased academic performance, distraction	10,8,5
Eating disorders	Irregular diets, nutritional problems	6,4
Show-off	Show-off, unrealistic attention seeking	11,7,4
Decreased empathy	Indifference, lack of empathy	12,8,3
Weakened emotional relationships	Cold relationships, emotional distance	8,4,3

often becomes aimless wandering in the digital space" (Interview 9), which refers to the waste of time. Also, Interviewee number 8 said: "It has caused a lack of sleep and disruption in life" (Interview 8), confirming sleep disorders. Moreover, Interviewee 2 shared: "Spending all my time on social media has led to losing real human connections." (Interview 2) Similarly, Interviewee 4 noted: "Engaging excessively with media results in anxiety and fear of falling behind others." (Interview 4)

Axial Coding

In axial coding, the codes were organized into meaningful categories, and the relationships among them were clarified. Table 3 summarizes the axial categories. These categories represent various dimensions of the impacts of low media literacy. For instance, Interviewee number 6 stated: "Excessive use leads to addiction to social media, which creates many psychological problems," referring to the category of media addiction. One interviewee further emphasized: "Spending too much time on social media has made me feel empty and worthless." (Interview 7), and another one added: "Social media platforms have a toxic effect on mental health, leading to depression in many people." (Interview 10)

Selective Coding

In selective coding, the axial categories were connected to the paradigmatic model. This model was developed based on the Strauss and Corbin paradigm and illustrates the relationships among causal, contextual, intervening conditions, strategies, and outcomes (Table 4).

Causal Conditions: Causal conditions are factors that directly lead to the emergence of the main phenomenon, namely, the harmful effects of low media literacy. Addiction and dependence on social media, stemming from the addictive design of platforms and the need for social approval, exacerbate excessive use and intensify psychological and social harms. Harmful and unethical content, including illegal images and materials, leads to behavioral and psychological deviations and impacts users' mindsets. The dissemination of misinformation and fake news increases stress and anxiety by creating confusion and reducing trust in information sources. Unhealthy competition and social jealousy, through

Table 3. Axial coding results.

Axial category	Codes	Number of repetitions
Psychological stress	Stress, fear of missing out (FOMO)	10
Anxiety and depression	Anxiety and depression, social anxiety	13
Low confidence and self-esteem	Low self-confidence, negative impact on self-esteem	8
Negative emotions	Psychological emptiness, self-blame, worthlessness	7
Aggression	Aggression, impulsive behaviors	6
Media addiction	Addiction, obsession with checking the phone	8
Cognitive disorders	Low concentration, distraction	5
Sleep and physical disorders	Sleep disorders, physical problems	9
Nutritional problems	Eating disorders, obesity	4
Decrease in academic performance	Academic decline, reduced book reading	6
Waste of time	Waste of time, planning disorder	5
Social isolation	Social isolation, avoidance of reality	15
Decrease in group activities	Decrease in collective activities, reduced social capital	6
Unhealthy competition	Unhealthy competition, social jealousy	7
Distortion of identity and reality	Distortion of reality, identity disorder	6
Acting behaviors	Showoff, unreal sharing	6
Decrease in the quality of communication	Misunderstanding, superficial communication	12
Decrease in empathy and emotional relationships	Decrease in empathy, weakening of emotional relationships	6
Moral deviations	Moral deviations, risky behaviors	6
Spreading false information	Fake news, excessive trust	12
Family tensions	Family disputes, secret use	5
Aloofness from family	Distance from family, reduced family interaction	4
Parental psychological pressure	Parental psychological pressure, control tensions	4
Monitoring deficiencies	Lack of awareness Parents, lack of supervision	12
Media literacy deficiencies	Lack of media literacy, lack of education	4
Destructive content	Destructive media, immoral content	4

Table 4. Selective coding results.

Category	Categories	Explanation
Causal Conditions	Media addiction, destructive content, fake news, and unhealthy competition	Addictive design, immoral content, misinformation, and social comparisons exacerbate psychological and social harms.
Intervening Conditions	Parental monitoring deficiencies, media literacy deficiencies, and financial costs	Parental ignorance, lack of media literacy education, and financial pressure exacerbate negative effects.
Contextual Conditions	Acting behaviors, identity distortion, and negative cultural influences	Self-promotion, virtual identity, and consumerism provide a platform for media harms.
Consequences	Psychological stress, anxiety, and depression, decreased self-esteem, social isolation, academic failure, physical problems, decreased empathy	Consequences include psychological, social, and physical problems resulting from low media literacy.
Strategies	Enhancing media literacy, parental monitoring, family communication, real-life activities, and time management	Media literacy education, informed monitoring, and reinforcement of real-life interactions reduce harms.

unrealistic comparisons with others' lives on media, lead to dissatisfaction and psychological pressure. These factors act as primary triggers and result in widespread damage. One interviewee highlighted: "News reports on social media, especially negative news, make me feel stressed and anxious." (Interview 5) Another interviewee stated: "Unrealistic and unhealthy competition on social media makes me feel inadequate and unsuccessful in life." (Interview 11)

Intervening Conditions: Intervening conditions are factors that moderate the intensity or direction of the impact of causal conditions. Parental supervision deficiencies, including a lack of awareness and inadequate monitoring, exacerbate the misuse of media, as parents cannot serve as appropriate role models or manage their children's usage. Structural deficiencies in media literacy, such as insufficient education at the community and educational system levels, hinder the acquisition of necessary skills for proper media use and increase harm. Financial costs of media, especially high internet costs, may limit access to media but simultaneously increase financial pressure, which adds stress to families. These factors, by moderating causal conditions, intensify harmful effects.

Contextual Conditions: Contextual conditions provide the background and environment in which the phenomenon occurs. Performative and unrealistic behaviors, such as self-promotion and presenting an unrealistic image of life on media, create an environment that promotes unhealthy comparisons and jealousy. Identity and reality distortion, through unrealistic portrayals of life and the creation of virtual identities, lead to a disconnection from reality and dissatisfaction with real life. Negative cultural influences, such as a tendency toward consumerism and the weakening of traditional values, create a context in which psychological and social harms are intensified. These environmental conditions act as a backdrop for the emergence and spread of media-related harms.

Consequences: The consequences are the direct and indirect results of the main phenomenon. Psychological stress and fear of missing out (FOMO) arise from the pressure to stay updated and exposure to negative content, disrupting mental health. Anxiety and depression, along with social anxiety, stem from unrealistic comparisons and isolation caused by the media. Decreased self-confidence and self-esteem occur due to comparisons with unrealistic images in the media. Negative feelings such as emptiness, self-blame, worthlessness, and reduced motivation for life arise from aimless media use. Aggression and impulsive behaviors increase due to stress and sleep deprivation. Cognitive disorders, such as decreased concentration and distraction, disrupt mental capabilities. Sleep disorders and physical issues, including fatigue and skeletal problems, result from prolonged media use. Nutritional and physical problems, such as eating disorders and obesity, are caused by unrealistic body images and a sedentary lifestyle. Declines in academic performance and reduced reading stem from distractions caused by the media. Time wastage and inefficient time management reduce productivity. Social isolation, reduced real interactions, and decreased group activities occur due to the replacement of virtual interactions with real ones. The decline in the quality of social communications, weakened communication skills, and superficial interactions arise from the lack of non-verbal cues in media. Reduced empathy and emotional relationships are created by cold virtual communications. Moral and behavioral deviations, such as risky behaviors, stem from exposure to harmful content. Family tensions, distance from the family unit, and psychological pressure on parents arise from decreased family interactions and unreasonable control. Reduced social responsibility and anti-social behaviors occur due to excessive focus on the media. Strategies are actions taken to reduce or manage negative consequences. Strengthening media literacy through training in analysis skills and proper media use can reduce psychological and social harms. Parental supervision and education, by increasing awareness and establishing constructive oversight, can limit children's misuse of media. Strengthening family communications through real interactions and managing communication channels reduces distance from family. Increasing real activities, such as physical activities and presence in real spaces, replaces virtual interactions and improves physical and mental health. Time management through careful planning reduces aimless media use and increases productivity. These strategies, as preventive and corrective measures, mitigate the negative consequences of low media literacy.

Paradigmatic Model

The paradigmatic model illustrates that causal conditions (such as media addiction) lead to negative consequences within contextual conditions (such as reality distortion) and are influenced by intervening conditions (such as supervisory deficiencies). Strategies like media literacy education can moderate these consequences (Figure 2).

Although the model developed in this study is grounded in Strauss and Corbin's paradigm, it introduces several innovations that distinguish it from previous models. One of the key contributions is the incorporation of intervening conditions—such as inadequate parental supervision and structural gaps in media-education systems—which have been largely overlooked in earlier frameworks. These elements provide a more comprehensive perspective on how media influences individuals' psychological and social well-being, particularly in the digital age.

Moreover, the paradigm model proposed in this research advances contemporary theoretical discourse by integrating emerging phenomena—such as social media addiction and misinformation—as primary causal factors and analyzing their interaction with the cognitive and psychological effects of media use. This approach offers a dynamic and nuanced understanding of how media literacy develops and how it contributes to individual well-being. By elucidating the complex relationships among causal conditions, contextual factors, and intervening variables, the model enhances our understanding of how media-related harms emerge and intensify.

Reliability of the Qualitative Model

To measure reliability, Cohen's Kappa statistic was used. Cohen[26] utilized a method in which another individual (an expert in the field), unaware of how the codes and categories created by the researcher were merged, categorized the codes into categories. The categories presented by the researcher were then compared with those provided by this individual. Finally, based on the number of similar and different categories created, the Kappa statistic was calculated. As shown in Table 5, the researcher created 7 categories, while the other individual created 6 categories, of which 5 were common.

$$\text{Observed Agreements} = \frac{A+D}{N} = \frac{5}{8} = 0.625$$

$$\text{Chance Agreements} = \frac{A+B}{N} \times \frac{A+C}{N} \times \frac{C+D}{N} \times \frac{B+D}{N} = \frac{6}{8} \times \frac{7}{8} \times \frac{2}{8} \times \frac{1}{8} = 0.021$$

$$K = \frac{Chance\ Agreements - Observed\ Agreements}{1 - \text{Chance Agreements}} = \frac{0.625 - 0.021}{1 - 0.021} = 0.617$$

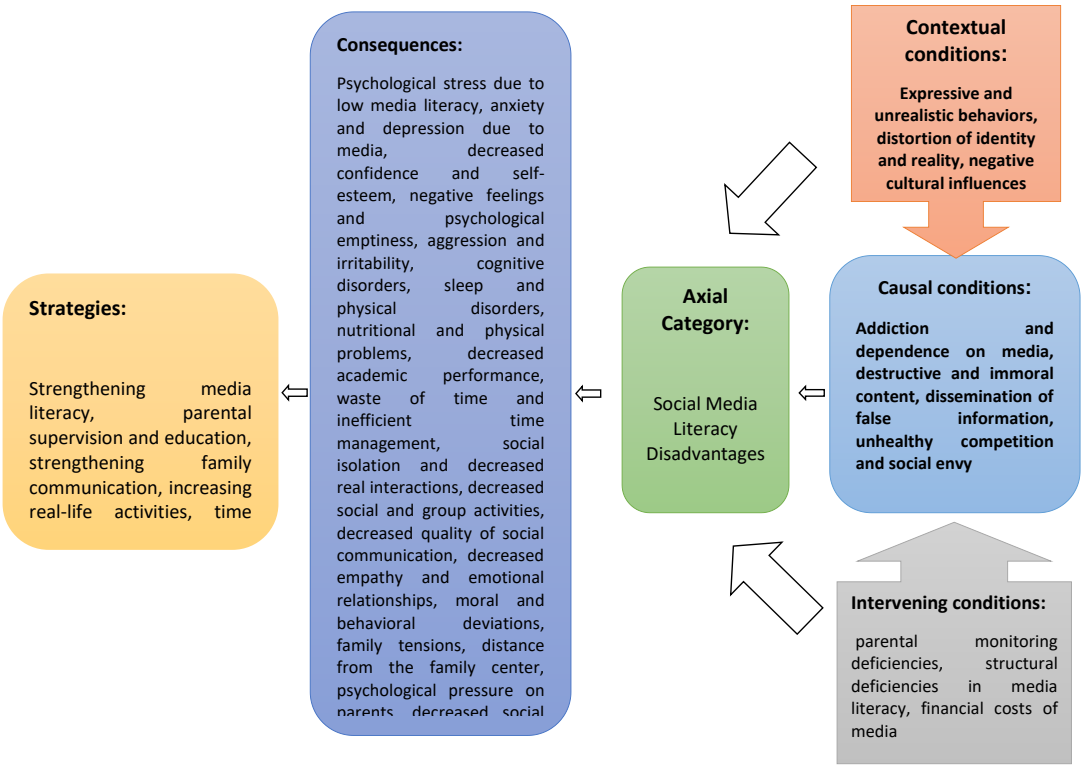

Figure 2. Research paradigm model

Table 5. Comparison of Categories Identified by the Researcher and the Other Individual.

		Researcher's Opinion		
		Yes	No	Total
Other Individuals' Opinion	Yes	A = 5	B = 1	6
	No	C = 2	D = 0	2
	Total	7	1	8

Table 6. Kappa Index Status.

Agreement Status	The numerical value of the kappa index
Poor	Less than zero
Insignificant	Between 0 and 0.2
Moderate	Between 0.21 and 0.4
Suitable	Between 0.41 and 0.6
Valid	Between 0.61 and 0.8
Excellent	Between 0.81 and 1

Table 6 shows the Kappa Index Status.

As seen in Table 5, the Kappa value was calculated to be 0.617, indicating valid agreement.

Content Validity of Codes Obtained from the Qualitative Section of the Research

In this research, content validity was examined using the Content Validity Index (CVI) and the Content Validity Ratio (CVR). To assess content validity, two relative content validity coefficients were used.[27] To measure content validity, two questionnaires were distributed among 15 experts. CVR: For calculation, a questionnaire specifically for the CVR section was divided, and experts and informants rated the obtained components based on a 3-point Likert scale: "It is necessary", "Useful but not necessary", and "Not necessary". Also, to calculate CVI , a 4-point questionnaire: "Not relevant", "It is relatively relevant", "It is relevant", and "It is completely relevant" was distributed, and the following results were obtained:

Permissible values for the CVR index : 0.49 and Permissible values for the CVI index: 0.7 (Table 7).

The formulas used to calculate the Content Validity Ratio (CVR) and Content Validity Index (CVI) are as follows:

$$VR = \frac{ne - \frac{N}{2}}{\frac{N}{2}}$$

$$CVI = \frac{Number\ of\ experts\ who\ rated\ the\ item\ as\ 3 or\ 4}{N}$$

where N is the total number of experts (15), and ne is the number of experts who voted for the option "It is necessary."

In Table 7 and 8, the calculated values for the CVR and CVI indices are reported.

According to Table 7, the values of the content validity coefficient (CVR) index, which are all higher than 0.49, indicate that all variables have a good content validity ratio and the operational definitions are related to the content of their questions.

According to Table 8, the values of the Content Validity Index (CVI) are all above 0.70; all variables have appropriate content validity, and all variables have appropriate correlation.

Table 7. Table of results for the CVR index.

Organizing concepts (Axial category)	CVR index
Psychological stress caused by low media literacy	0.86
Media-induced anxiety and depression	0.93
Decreased confidence and self-esteem	0.88
Negative feelings and psychological emptiness	0.79
Aggression and irritability	0.81
Media addiction and dependence	0.94
Cognitive disorders	0.73
Sleep and physical disorders	0.86
Nutritional and physical problems	0.73
Decreased academic performance	0.79
Waste of time and inefficient time management	0.88
Social isolation and reduced real interactions	0.93
Decreased social and group activities	0.86
Decreased quality of social communication	0.88
Decreased empathy and emotional relationships	0.81
Moral and behavioral deviations	0.79
Family tensions	0.73
Aloofness from the family center	0.86
Psychological pressure on parents	0.73
Decreased social responsibility	0.79
Destructive and immoral content	0.86
Spreading false information	0.93
Unhealthy competition and social jealousy	0.88
Demonstrative and unrealistic behaviors	0.81
Distortion of identity and reality	0.86
Parental supervisory inadequacies	0.94
Structural Inadequacies in Media Literacy	0.88
Media Costs	0.73
Negative Cultural Impacts	0.79

Table 8. Table related to the CVI index.

Organizing concepts (Axial category)	CVI Index
Psychological stress caused by low media literacy	0.86
Media-induced anxiety and depression	0.93
Decreased confidence and self-esteem	0.88
Negative feelings and psychological emptiness	0.80
Aggression and irritability	0.82
Media addiction and dependence	0.94
Cognitive disorders	0.79
Sleep and physical disorders	0.86
Nutritional and physical problems	0.77
Decreased academic performance	0.80
Waste of time and inefficient time management	0.88
Social isolation and reduced real interactions	0.93
Decreased social and group activities	0.86
Decreased quality of social communication	0.88
Decreased empathy and emotional relationships	0.82
Moral and behavioral deviations	0.80
Family tensions	0.77
Aloofness from the family center	0.86
Psychological pressure on parents	0.79
Decreased social responsibility	0.80
Destructive and immoral content	0.86
Spreading false information	0.93
Unhealthy competition and social jealousy	0.88
Demonstrative and unrealistic behaviors	0.82
Distortion of identity and reality	0.86
Parental supervisory inadequacies	0.94
Structural Inadequacies in Media Literacy	0.88
Media Costs	0.77
Negative Cultural Impacts	0.80

To enhance the credibility and trustworthiness of the qualitative findings, in addition to the CVR and CVI indices, two complementary validation techniques—member checking and peer debriefing—were employed. In the member-checking process, a summary of the extracted codes and categories was shared with all 15 participants to determine whether the researcher's interpretation accurately reflected their perspectives and experiences. The results demonstrated that 87% of the codes were confirmed, while only 13% required modification to better align with participants' narratives.

In the peer-debriefing phase, two independent experts in qualitative research methods, who were not involved in the coding process, examined the axial and selective categories and provided their feedback. The level of agreement was 90%, with only two minor conceptual adjustments made to enhance clarity.

The use of these triangulated verification strategies indicates that, beyond quantitative validity measures (CVR/CVI), the findings hold strong conceptual and interpretive rigor. This complementary validation approach ensures that the proposed paradigm model is not only methodologically sound and evidence-based but also theoretically coherent and trustworthy.

Discussion

This study utilized a grounded theory approach and analyzed data obtained from semi-structured interviews with 15 experts in psychology, education, and media to develop a conceptual model of factors affecting the mental health of youth and adolescents concerning social media literacy. The findings, presented in tables of open, axial, and selective coding, demonstrate the extensive impacts of low media literacy on mental and social health, including psychological stress, anxiety and depression, social isolation, social media addiction, decreased self-esteem, declining academic performance, physical issues such as sleep disorders and obesity, reduced empathy, and weakened emotional relationships. These results align with previous studies and shows that social comparisons on social media with unrealistic images of others lead to anxiety, depression, and decreased self-esteem, corresponding with the axial categories of "decreased trust and self-esteem" and "anxiety and depression"

(Tables 2–4). Additionally, Shannon et al.[28] reported that the pressure to stay updated and exposure to negative content increase stress, aligning with the category of FOMO (Fear of Missing Out).

From a theoretical perspective, Festinger's social comparison theory explains the mechanisms behind decreased self-esteem, anxiety, and social jealousy observed in youth, but this study extends the theory by incorporating digital literacy as a moderating factor that can mitigate these negative outcomes. Putnam's social capital theory also indicates that substituting virtual interactions for real communication reduces social capital and increases social isolation[29]; the current model refines this by showing the specific mediating roles of identity distortion and performative behaviors on social media. Grant et al. [30] 's behavioral addiction theory explains the psychological dependence induced by media platform design; our findings expand this theory by linking parental supervision and community-level media literacy deficits as key intervening conditions influencing addictive behaviors. Goffman[31]'s media representation theory highlights how presenting unrealistic identities distorts reality; our model advances this perspective by integrating identity distortion with multiple negative outcomes, including psychological, social, and physical consequences.

Furthermore, the present study provides novel insights beyond previous research. For instance, it highlights the interconnectedness of causal, contextual, and intervening factors in a comprehensive paradigmatic model, showing how low media literacy acts simultaneously as a causal and systemic factor affecting youth across individual, family, and community levels. Direct participant quotations were used to illustrate each main category, adding empirical depth to the conceptual framework. For example, one participant noted: *"Excessive time on social media has led to stress, disrupted sleep, and reduced motivation for real-life activities"* (Interview 8), illustrating the category of psychological stress and life disruption. Another participant stated: *"Without parental guidance, teens often fall into addiction and ignore the consequences of their online behavior"* (Interview 6), highlighting the role of supervisory deficiencies as an intervening condition.

These findings emphasize the potential for targeted interventions at multiple levels, including educational curricula, teacher training, and parental guidance programs. Policy and educational implications are further clarified: integrating media literacy into school curricula, designing workshops for parents to enhance conscious supervision, promoting real-life social and physical activities, producing positive and educational online content, reducing internet costs to alleviate financial stress, and teaching time management to reduce dependence on media. These strategies are explicitly supported by the model and provide actionable steps for stakeholders in education, psychology, and communication.

Limitations of this study are acknowledged. The sample size was limited to 15 experts, which may affect the generalizability of the findings. Additionally, the study relied solely on expert perspectives and did not include youth participants, which may introduce bias. Future research should empirically test the proposed model using experimental or longitudinal designs and include diverse participant groups to validate and refine the framework. The study also provides theoretical innovation by extending and integrating existing models—social comparison, social capital, behavioral addiction, and media representation—within a single comprehensive framework that emphasizes media literacy as a central moderating factor.

Conclusion

This research demonstrates that low media literacy is both a causal and systemic factor influencing mental and social health among youth and adolescents. The proposed paradigmatic model provides a theoretically and practically novel framework that integrates existing social, psychological, and behavioral theories with the moderating role of media literacy. The study highlights the necessity of systemic interventions, including curriculum design, parental education, and community-based programs, to mitigate the adverse effects of social media while promoting positive digital engagement. The model's interdisciplinary potential allows stakeholders from education, psychology, and communication fields to collaboratively enhance youth mental health in the digital era.

Policy and practical implications are emphasized: the integration of media literacy into educational programs, designing workshops for teachers and parents, promoting offline activities, developing positive online content, reducing internet costs, and teaching time management are all practical measures directly supported by the model.

The limitations and future research directions are clear: small sample size, reliance on expert perspectives, and lack of direct youth input may limit generalizability. Future research should focus on empirical validation of the model, including pilot studies and cross-cultural testing, to ensure broader applicability and effectiveness.

Overall, this study provides a comprehensive, empirically grounded framework that extends previous theoretical models, incorporates systemic interventions, and highlights media literacy as a pivotal factor in promoting youth mental health.

Acknowledgments

The authors declare no acknowledgements.

Authors' Contribution

Conceptualization: Tahereh Hosseinabadi.
Data curation: Tahereh Hosseinabadi.
Investigation: Abbas Naseri Taheri, Tahereh Hosseinabadi.
Methodology: Abbas Naseri Taheri, Tahereh Hosseinabadi.
Project administration: Tahereh Hosseinabadi.
Resources: Tahereh Hosseinabadi.
Software: Tahereh Hosseinabadi.
Supervision: Abbas Naseri Taheri.

Writing–original draft: Tahereh Hosseinabadi.
Writing–review & editing: Abbas Naseri Taheri.

Competing Interests
The authors declare no conflict of interest.

Ethical Approval
This study was compiled with ethical research principles. Participation was voluntary, and informed consent was obtained from all interviewees.

Funding
None.

References
1. Rezadad N, Shoaee MH. the Moderating Role of Media Literacy in the Relationship between Family Health Level and Emotional-Behavioral Problems of Adolescents. Religion & Communication 2020;27(1):323–56. doi:10.30497/rc.2020.75523
2. Jahangiri Zarkani R, Hashemi S, Geranmayeh Poor A. Investigating the Relationship between Media Literacy and Physical Health Literacy of Citizens of Bandar Abbas. Journal of Culture-Communication Studies 2021;22(55):39–62. doi:10.22083/jccs.2020.230109.3078
3. Salemi A, Khaniki H, Sabouri Khosroshahi H, Hashemi, S. Users' use of social media and its relationship with media literacy (In the field of health in Tehran). Quarterly Scientific Journal of Interdisciplinary Studies in Communication and Media 2021;4(12):5-36. doi:10.22034/jiscm.2021.296970.1243
4. Sotodeh R, Darzian Rostami H, Shahmansouri B. Role of media literacy in improving mental health of Iranian population: a mixed method study. JHA 2024;27(1):71-84
5. Hosseini Bafghi N, Monadi M. Yazd high school Students 'world in Virtual Social Networks: A qualitative research. Society Culture Media 2021;10(38):31–51.
6. Ziari A, Binaei F, Ansari M, Valinejadi A. The gap between the service quality and patients' expectations in Amir-al-Momenin Hospital of Semnan University of Medical Sciences in 2016, Semnan, Iran. Koomesh. Social Determinants of Health Supplement 2018;20(2):221-7.
7. Vahedi Z, Sibalis A, Sutherland JE. Are media literacy interventions effective at changing attitudes and intentions towards risky health behaviors in adolescents? A meta-analytic review. J Adolesc 2018;67:140–52. doi:10.1016/j.adolescence.2018.06.007
8. Jafari A. Harmful effects of social network use among adolescents and young people in Ardabil. Journal of Communication Research 2016;23(3):87. [Persian].
9. Panahi S, Fahimi F, Asgharnezad Farid A, Ansari M. The effect of library use on improving the mental health of homeless people recovered from addiction. J Health Adm 2023;26(1):90-109.
10. Nematifar N, Khojasteh Bagherzadeh H, Kazemi H. A study of media literacy level among social media users (Case study: Telegram social network). New Media Studies 2018;4(16):143-175. doi:10.22054/nms.2019.24432.282
11. Popat A, Tarrant C. Exploring adolescents' perspectives on social media and mental health and well-being - A qualitative literature review. Clin Child Psychol Psychiatry 2023;28(1):323–37. doi:10.1177/13591045221092884
12. Abi-Jaoude E, Naylor KT, Pignatiello A. Smartphones, social media use and youth mental health. Cmaj 2020;192(6):E136–e41. doi:10.1503/cmaj.190434
13. Narayan A, Chao SD. Structural Sequelae of the COVID Pandemic: The Youth Mental Health Crisis. Pediatrics 2024;153(1). doi:10.1542/peds.2023-062963
14. Blackwell CK, Mansolf M, Rose T, Pila S, Cella D, Cohen A, et al. Adolescent Social Media Use and Mental Health in the Environmental Influences on Child Health Outcomes Study. J Adolesc Health 2025;76(4):647–56. doi:10.1016/j.jadohealth.2024.12.003
15. Naslund JA, Bondre A, Torous J, Aschbrenner KA. Social Media and Mental Health: Benefits, Risks, and Opportunities for Research and Practice. J Technol Behav Sci 2020;5(3):245–57. doi:10.1007/s41347-020-00134-x
16. Orben A, Meier A, Dalgleish T, Blakemore SJ. Mechanisms linking social media use to adolescent mental health vulnerability. Nature Reviews Psychology 2024;3:407-423. doi:10.1038/s44159-024-00307-y
17. Feerrar J. Bringing digital well-being into the heart of digital media literacies. Journal of Media Literacy Education 2022;14(2):72-77. doi:10.23860/JMLE-2022-14-2-6
18. Deng X, Yang Z. Digital proficiency and psychological well-being in online learning: Experiences of first-generation college students and their peers. Social Sciences 2021;10(6):192. doi:10.3390/socsci10060192
19. Nagata JM, Hur JO, Talebloo J, Lee S, Choi WW, Kim SJ, et al. Problematic Social Media Use Interventions for Mental Health Outcomes in Adolescents. Current Psychiatry Reports 2025;27(9):491–9. doi:10.1007/s11920-025-01619-3
20. Scott H, Biello SM, Woods HC. Social media use, sleep delay, and anxiety: The impact of nighttime screen engagement. J Adolesc. 2018;68:61–72.
21. Ivie EJ, Pettitt A, Moses LJ, Allen NB. A meta-analysis of the association between adolescent social media use and depressive symptoms. J Affect Disord 2020;275:165–74. doi:10.1016/j.jad.2020.06.014
22. Sharma K, Gera M, Bhatia P. Social media addiction and adolescent mental health: The mediating role of cognitive interference in digital communication. Language, Technology, and Social Media 2025;3(2):169–83. doi:10.70211/ltsm.v3i2.185
23. Minamitani K. Social media addiction and mental health: The growing concern for youth well-being. Stanford Law School. Retrieved January 15, 2025, Available from: https://law.stanford.edu/2024/05/20/social-media-addiction-and-mental-health-the-growing-concern-for-youth-well-bein
24. Okela AH, Olatokun WM, Anumudu CE, Ziani A, Nser KK, Ben Lagha F. Parental social media literacy antecedents and children's digital media addiction: observations from two African countries. Competitiveness Review 2025;35(4):685–700. doi:10.1108/CR-11-2023-0294
25. Agyapong-Opoku N, Agyapong-Opoku F, Greenshaw AJ. Effects of Social Media Use on Youth and Adolescent Mental Health: A Scoping Review of Reviews. Behav Sci (Basel) 2025;15(5). doi:10.3390/bs15050574
26. Cohen J. A Coefficient of Agreement for Nominal Scales. Educational and Psychological Measurement 1960;20(1):37–46. doi:10.1177/001316446002000104
27. Schultz T, Waller G, Singh P. Assessing content validity in psychological research: Applications of CVI and CVR indices. Int J Behav Res. 2013;5(2):55–72.
28. Zhang Q, Huang Z, Sui Y, Lin FH, Guan H, Li L, Wang K, Neitzel A. Social-media-based mental health interventions: Meta-analysis of randomized controlled trials. Journal of Medical Internet Research 2025;27:e67953. doi:10.2196/67953
29. Putnam RD. Bowling alone: The collapse and revival of American community. New York: Simon & Schuster; 2000.
30. Grant JE, Potenza MN, Weinstein A, Gorelick DA. Behavioral addictions: Recognition and treatment. American Journal of Psychiatry 2010;167(5):562–570. doi:10.1176/appi.ajp.2009.08101419
31. Goffman E. The presentation of self in everyday life. New York: Anchor Books; 1959.