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The Mediating Roles of Behavioral Emotion Regulation and Cognitive Distortions in Explaining the Effect of Media Literacy on Mental Health/Social Maladjustment Among Generation Alpha Adolescents

Farnaz Danaei[1], Beheshteh Niusha[✉2], Mehrdad Sabet[3]

1. Department of Psychology, Sav.C., Islamic Azad University, Saveh, Iran
2. Department of Psychology, Sav.C., Islamic Azad University, Saveh, Iran, Beheshteh.niusha@iau.ac.ir
3. Department of Psychology, Rou.C.,Islamic Azad University, Roudehen, Iran

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ABSTRACT

Objective: The present study aimed to examine the causal model of the relationships between media literacy and mental health/social maladjustment, with the mediating roles of behavioral emotion regulation and cognitive distortions, among adolescents in Tehran.

Methods: This study employed a descriptive correlational design using structural equation modeling (SEM). The statistical population consisted of all male and female students aged 11-15 years attending lower secondary schools in Tehran during the 2026-2027 academic year (1405-1404 in the Iranian calendar). A total of 354 students were selected using a multistage random sampling method. The research instruments included the Mental Health and Adolescent Maladjustment Questionnaire developed by Côté et al. (2017), the Digital Literacy Questionnaire developed by Voda et al. (2022), the Behavioral Emotion Regulation Questionnaire developed by Kraaij and Garnefski (2019), and the Cognitive Distortions Questionnaire developed by Gibbs et al. (1995).

Results: The findings indicated that the total path coefficient between media literacy and mental health/social maladjustment was negative and statistically significant ($\beta = -.378$, $p = .001$). The path coefficient between behavioral emotion regulation and mental health/social maladjustment was negative ($\beta = -.468$, $p = .001$), whereas the path coefficient between cognitive distortions and mental health/social maladjustment was positive and statistically significant ($\beta = .371$, $p = .001$). Furthermore, the indirect path coefficients between media literacy and mental health/social maladjustment through behavioral emotion regulation ($\beta = -.202$, $p = .001$) and cognitive distortions ($\beta = -.122$, $p = .001$) were negative and statistically significant. Accordingly, behavioral emotion regulation and cognitive distortions significantly and negatively mediated the effect of media literacy on mental health/social maladjustment among Generation Alpha adolescents. Collectively, media literacy, behavioral emotion regulation, and cognitive distortions explained 44% of the variance in mental health/social maladjustment among Generation Alpha adolescents ($R^2 = .44$).

Conclusions: Reducing dysfunctional interpretations and promoting adaptive emotional and behavioral responses can provide a foundation for better adjustment among adolescents.

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Introduction

The emergence of social media has fundamentally changed how adolescents interact, communicate, and perceive the world around them (Tiwari & Singh, 2023). Today's adolescents grow up in a digital ecosystem that is continuously connected, interactive, and exposed to global influences (Amaliah & Iswinarti, 2025). In this context, social media are not merely a means of communication but have become an important part of everyday life, one that encompasses self-expression, identity formation, and the pursuit of social acceptance, and that plays an essential role in achieving social integration and a sense of belonging within peer groups (Abbouyi et al., 2026). According to a Pew Research Center report, in 2021 about 81% of adolescents aged 13 to 17 in the United States used social media platforms (Tiwari & Singh, 2023). This widespread presence is largely due to the pervasive accessibility of these technologies and their alignment with the social interests characteristic of this developmental period (Hollenstein & Faulkner, 2024). Adolescents are particularly vulnerable to the effects of social media (Parasnis, 2022), and this level of access can both facilitate and challenge their mental health and social relationships (Lee, 2025; Rao & Raja, 2025; Carlén et al., 2026). Meanwhile, the emergence of Generation Alpha, composed of children born between 2010 and the mid-2030s, marks a new phase in the human relationship with the digital world; this is a demographic cohort that has been fully surrounded by digital technologies since birth. Rather than gradually beginning to engage with screens at older ages, most Generation Alpha children start using them at the age of two, with these devices serving as a "digital pacifier" for entertainment, distraction, and soothing in moments of tension and distress (Hukma et al., 2025). Such immersive exposure to digital environments has profound effects on their cognitive, social, and emotional development (Rao & Raja, 2025). Numerous research findings show that excessive use of social media intensifies symptoms of depression, anxiety, and stress (Tiwari & Singh, 2023; Anderson et al., 2025; Abbouyi et al., 2026). On the other hand, individuals who already face emotional difficulties, such as loneliness or low self-esteem, often turn to social media, and as a result their symptoms are further exacerbated (Abbouyi et al., 2026). Galderisi et al. regard mental health as a dynamic concept and a state of inner equilibrium that enables individuals to apply their abilities in harmony with the universal values of society. Basic cognitive and social skills, the expression and modulation of one's own emotions, empathy with others, flexibility, the ability to cope with adverse life events, the fulfillment of

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social roles, and a harmonious relationship between body and mind are considered important components of mental health. Moreover, good mental health provides adolescents with the skills and resilience needed to manage life's pressures, and its components can be considered in terms of health literacy, social and cognitive skills, and emotional and behavioral skills (Carlén et al., 2026). Accordingly, mental health issues have become one of the most urgent and growing concerns worldwide. Meta-analytic evidence also shows that internalizing and externalizing disorders at ages 11 to 17 are associated with reduced mental health, life satisfaction, and physical and psychological quality of life in young adulthood. From this perspective, adolescent mental health is not only an individual matter but also a key issue in public health, education, and social development (Gunawan et al., 2026). Social maladjustment is likewise an important consequence that can be intensified in the context of digital interactions and the developmental changes of adolescence. Social maladjustment refers to patterns of behavior that reflect an individual's inability to establish adaptive relationships with others and can manifest in behaviors such as aggression, conflict with peers, rule-breaking, or social withdrawal (Saffarinia et al., 2023).

Media literacy is defined as the ability to access, analyze, critically evaluate, and interpret messages, to recognize the intentions and goals of the media, and to manage media consumption. In the digital age, this skill has emerged as one of the fundamental skills of the twenty-first century, and international and national educational bodies, including UNESCO, have emphasized the need to learn it and recommended its instruction (Mittmann et al., 2022). Media literacy is not limited to mastery of technological tools; it also involves developing the ability to analyze discourse, identify bias, detect manipulation strategies, and understand the social consequences of sharing information in digital spaces (Rodríguez Castillo et al., 2026), as well as the critical and ethical aspects of engaging with information (Gunawan et al., 2026). This helps adolescents understand the nature and function of media messages, manage their media consumption, and reduce its possible negative effects on academic and psychological functioning (Oveisi et al., 2026). Studies show that adolescents with higher levels of media literacy are less exposed to the negative consequences of media content, are able to detect fake news and misleading information, manage their emotions better, show fewer risky behaviors in online spaces, and use more adaptive strategies such as seeking social support, reporting harassing behaviors, and regulating emotion (Tighbakhsh et al., 2025). Nevertheless, in many educational settings, media literacy has been

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addressed in a fragmented way, without sustained educational policies or systematic integration into the curriculum. Such a situation leaves adolescents vulnerable to misinformation and limits their ability to critically evaluate the content they consume and share in digital environments (Rodríguez Castillo et al., 2026). On the other hand, according to Beck's theory, cognitive distortions, defined as faulty reasoning and thinking errors, contribute to the onset of many psychological disorders and lead individuals to misinterpret surrounding events and to see themselves as victims of environmental circumstances (Haji Omidi et al., 2023). Because of the immaturity of their cognitive system, adolescents are less able to discern complex information and are more exposed to the influence of discursive labels. Through rapid labeling, this situation can lead to the formation of biased cognitions toward specific social groups (Lee, 2025). Moreover, positive feedback on social media is linked to risky behaviors through cognitive bias and negative emotions (Yang et al., 2025). The cognitive processing style of adolescents includes pessimism about the future and cognitive errors in thinking that distort the reality of the surrounding world and predispose individuals to depression; through its effect on adolescents' daily functioning and social relationships, this depression can influence their adjustment and maladjustment in society (Haji Omidi et al., 2023). Research shows that cognitive errors play a mediating role in the relationship between psychological capital and social anxiety; therefore, attention to the role of cognitive errors as a mediator is particularly important (Hosseini et al., 2023).

One of the main achievements of adolescence is the maturation of effective emotion regulation skills (Hollenstein & Faulkner, 2024). Behavioral emotion regulation refers to the behavioral strategies that individuals employ in response to threatening or stressful life situations. Adolescents who lack sufficient skill in managing their emotions may show impulsive, aggressive, or avoidant reactions when facing online threats or provocative messages (Parasnis, 2022), and they are more likely to experience higher levels of tension, worry, anxiety, sadness, and depressed mood, as well as feelings of emptiness and worthlessness (Jandrić et al., 2023). Therefore, one of the fundamental challenges of Generation Alpha is that their communication and social skills have been strongly affected by the increasing consumption of digital media (short, fast-paced content); findings show that excessive dependence on technology has weakened face-to-face communication skills and heightened mental health concerns (Jandrić et al., 2023). Some adolescents also take refuge in social media to escape daily pressures and school stress (Carlén et al., 2026). This pattern shows

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that adolescents' relationship with digital media is not merely one of entertainment or communication but, in many cases, becomes a mechanism for emotion regulation and for coping with psychological pressure. Overall, findings indicate that adolescents' critical thinking skills on social media are not activated in most situations. However, this is a complex issue influenced by multiple factors (Parasnis, 2022). On the other hand, an individual's ability to direct attention, inhibit behavior, and manage mood forms the fundamental core of self-regulation. This stands in contrast to the functioning of individuals who use maladaptive strategies such as escape, avoidance, and behavioral disengagement, patterns that are accompanied by severe psychological distress (Atashzar et al., 2024). Because internalizing and externalizing disorders are developmentally complex constructs with multifactorial etiologies (Jandrić et al., 2023), the present study seeks to examine, within a structural model and focusing on the mediating roles of cognitive distortions and behavioral emotion regulation, the mechanism through which media literacy affects mental health/social maladjustment among Generation Alpha adolescents. Drawing on Potter's media literacy theory, this study uses Bandura's social cognitive theory to explain the mediating mechanisms of the effect of media literacy on adolescents' mental health and social maladjustment.

Material and Methods

The present study was descriptive and used structural equation modeling (SEM). It aimed to test causal relationships, direct and indirect paths, and the mediating roles of behavioral emotion regulation and cognitive distortions in the proposed model, and it was conducted in Tehran in the second half of 2026 (1405 in the Iranian calendar).

The statistical population of the study consisted of all male and female adolescents aged 11 to 15 years enrolled at the lower secondary level in the 2025-2026 academic year. Given the size of the statistical population, an initial sample size of 396 was considered. This sample size was determined according to Kline's (2015) guideline of 10 to 20 participants per parameter, allowing for possible sample attrition. Sampling was conducted using multistage random sampling. After obtaining the necessary permissions from the Tehran Department of Education, three educational districts were randomly selected. Then two high schools were selected from each district, such that a total of three girls' schools and three boys' schools were included in the research sample. After

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the schools were selected, the questionnaires were distributed to the students in accordance with research ethics considerations. Forty-two questionnaires were excluded because they were incomplete, and ultimately the data of 354 students who had fully completed their questionnaires were entered into the statistical analysis.

Instruments

Mental Health and Adolescent Maladjustment Questionnaire (MIA): This questionnaire was developed by Côté et al. (2017). It is a self-report instrument for assessing the mental health, behavioral problems, and maladjustment of adolescents aged 11 to 17 years over the past twelve months. It comprises two parts: an assessment of symptoms and maladjustment, and an examination of the extent to which symptoms interfere with functioning in four domains: family, education, peer relations/romantic relationships, and daily life. The first part includes 101 items (excluding the self-harm scale) rated on a three-option scale ("never true/sometimes true/always true"), and the self-harm scale contains 3 two-option ("yes/no") questions. The functional interference part is scored with 16 items on a four-option Likert scale (never, rarely, somewhat, and a lot). This instrument assesses adolescents' problems in three major domains: internalizing behaviors (social anxiety, generalized anxiety, depression, and self-harm), externalizing behaviors (attention-deficit/hyperactivity, oppositional defiance, conduct disorder, psychopathy, aggression, and delinquent behaviors/trouble with the police), and eating disorders. A high score on this questionnaire indicates greater mental health problems and social maladjustment. Its reliability has been reported (α = .70 to .97), and it was validated by Ghahremani et al. (2022), with Cronbach's alpha coefficients ranging from .73 to .94 and test-retest reliability ranging from .54 to .81.

Digital Media Literacy Questionnaire (DMLQ): This questionnaire was developed by Voda et al. (2022) and consists of 39 items and 6 skill components that measure different dimensions of adolescents' abilities in the digital space. These components are the digital communication and participation skill (6 items, e.g., active use of different online communication tools), the digital creativity skill (6 items, e.g., producing content on a blog or social networks), the digital critical skill (5 items, e.g., the ability to analyze and evaluate information on social media), the information skill (7 items, e.g., digital security skills and advanced safe search strategies on the internet), the digital problem-solving skill (5 items, e.g., using antivirus software and passwords), and the digital technical skills (10 items, e.g., basic formatting in content production). This instrument is scored

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on a 5-point Likert scale. Cronbach's alpha values range from .60 to .73 and McDonald's omega values range from .78 to .85, indicating good reliability of this questionnaire. In addition, in the present study, its validation on the adolescent population was carried out using Cronbach's alpha.

Table 1. Cronbach's alpha for the components of the media literacy questionnaire

Variable	**Cronbach's alpha**
Media literacy - communication and participation	.65
Media literacy - creativity	.86
Media literacy - critical thinking	.73
Media literacy - information	.88
Media literacy - problem solving	.79
Media literacy - technical skills	.88

Behavioral Emotion Regulation Questionnaire (BERQ): This questionnaire was designed by Kraaij and Garnefski (2019). It consists of 20 items and assesses the behavioral emotion regulation strategies of adolescents and adults in response to threatening and stressful life events. It comprises 5 subscales: seeking distraction (taking other actions), withdrawal, actively approaching, seeking social support, and ignoring. It is scored on a 5-point Likert scale from 1 (never) to 5 (always). Because each subscale consists of four items, the total score of each subscale is obtained by summing the scores of its items and ranges from 4 to 20. The higher a respondent scores on the subscales of seeking distraction, actively approaching, and seeking social support, and the lower on the subscales of withdrawal and ignoring, the better their behavioral emotion regulation; the subscale scores are not additive. Reliability of this questionnaire using Cronbach's alpha has been obtained in the range of .89 to .93, and its validity, via correlation coefficients, has been reported as .53, .67, and .51 for the subscales of seeking distraction, actively approaching, and seeking social support, respectively. Ashouri et al. (2020) reported validity of .82 to .87 and subscale reliability using Cronbach's alpha of .88 to .91.

Cognitive Distortions Questionnaire (HIT): The "How I Think" questionnaire was designed by Gibbs, Potter, and Goldman (1995) based on the theory of "self-serving cognitive distortions" in adolescents' problem behaviors, and it is used to measure cognitive distortions related to delinquent and aggressive behaviors. This questionnaire includes 54 items covering four main types of cognitive distortion, namely labeling, minimizing/exaggerating, overgeneralization, and blaming others, along with behavioral scales such as rule-breaking, aggression, and deceitfulness. It is scored on a 5-point Likert scale from "strongly disagree" to "strongly agree," and Cronbach's alpha

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reliability coefficients of .72 to .93 have been reported. For the Iranian version, Akbari et al. (2022) reported Cronbach's alpha coefficients between .66 and .92 for the total scale and its dimensions. To analyze the data from the 354 questionnaires and to evaluate the proposed model, structural equation modeling (SEM) was used, and the data analysis in this study was conducted using AMOS 26.0 software.

Results

In the present study, 354 Generation Alpha adolescents (189 girls and 165 boys) participated, with a mean age of 13.66 years (*SD* = 1.09). Among the participants, 63 (17.8%) were in seventh grade, 87 (25.6%) in eighth grade, 98 (27.7%) in ninth grade, and 106 (29.9%) in tenth grade. Table 2 presents the means, standard deviations, and correlation coefficients among the components of media literacy, behavioral emotion regulation, cognitive distortions, and mental health/social maladjustment.

Table 2. Means, standard deviations, and correlation matrix among the study variables

Study variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Media literacy - communication and participation	-														
2. Media literacy - creativity	.47**	-													
3. Media literacy - critical thinking	.45**	.53**	-												
4. Media literacy - information	.36**	.39**	.59**	-											
5. Media literacy - problem solving	.31**	.37**	.35**	.45**	-										
6. Media literacy - technical skills	.39**	.34**	.43**	.54**	.50**	-									
7. Behavioral emotion regulation - seeking distraction	.21**	.13*	.24**	.21**	.16**	.25**	-								
8. Behavioral emotion regulation - withdrawal	.24**	.22**	.29**	.30**	.26**	.30**	.52**	-							

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9. Behavioral emotion regulation - active engagement	.16**	.09	.23**	.21**	.20**	.22**	.41**	.60**	-						
10. Behavioral emotion regulation - support seeking	.20**	.12*	.21**	.23**	.24**	.30**	.39**	.48**	.63**	-					
11. Behavioral emotion regulation - denial	.13*	.18**	.26**	.25**	.18**	.27**	.36**	.50**	.54**	.51**	-				
12. Cognitive distortion - self-centeredness	−.22**	−.12*	−.28**	−.12*	−.15**	−.26**	−.05	−.17**	−.15**	−.12*	−.17**	-			
13. Cognitive distortion - blaming	−.21**	−.08	−.23**	−.23**	−.12*	−.24**	−.07	−.08	−.19**	−.27**	−.11*	.64**	-		
14. Cognitive distortion - blaming	−.25**	−.13*	−.21**	−.26**	−.12*	−.21**	−.04	−.07	−.13*	−.04	−.16**	.56**	.53**	-	
15. Cognitive distortion - mislabeling	−.23**	−.14**	−.25**	−.21**	−.15**	−.19**	−.03	−.20**	−.26**	−.11*	−.07	.58**	.60**	.67**	-
16. Cognitive distortion - wrong assumption	−.10	−.05	−.11*	−.13*	−.07	−.29**	−.01	−.11*	−.22**	−.07	−.03	.30**	.29**	.48**	.56**
17. Cognitive distortion - positive and unusual questions	−.24**	−.11*	−.25**	−.23**	−.11*	−.08	−.01	−.12*	−.07	−.11*	−.15**	.50**	.52**	.59**	.61**
18. Mental health/maladjustment - internalizing behaviors	−.16**	−.25**	−.19**	−.26**	−.30**	−.25**	−.32**	−.32**	−.36**	−.32**	−.34**	.31**	.29**	.22**	.25**
19. Mental health/maladjustment - externalizing behaviors	−.18**	−.13*	−.16**	−.21**	−.21**	−.30**	−.27**	−.25**	−.27**	−.35**	−.26**	.34**	.37**	.25**	.30**
20. Mental health/maladjustment - functional impairment	−.05	−.11*	−.14**	−.07	−.04	−.21**	.02	−.03	−.15**	−.12*	−.14**	.17**	.22**	.09	.19**
Mean	16.61	16.45	14.63	18.59	13.54	26.06	12.21	12.35	11.55	12.38	11.72	18.80	12.00	13.68	17.32
Standard deviation	3.57	3.99	3.74	4.80	3.56	6.72	2.49	2.90	2.71	2.98	3.02	4.55	3.08	3.93	4.61
**p < .01 and *p < .05															

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Table 2 (continued)

Study variables	16	17	18	19	20
16. Cognitive distortion - wrong assumption	-				
17. Cognitive distortion - positive and unusual questions	.53**	-			
18. Mental health/maladjustment - internalizing behaviors	.13*	.30**	-		
19. Mental health/maladjustment - externalizing behaviors	.21**	.32**	.56**	-	
20. Mental health/maladjustment - functional impairment	.16**	.25**	.24**	.37**	-
Mean	9.62	13.42	17.80	27.76	11.81
Standard deviation	2.23	3.69	4.97	7.69	4.61
**p < .01 and *p < .05					

Based on the results in Table 2, the correlation coefficients among the variables were in the expected direction and consistent with the theories of the research field. To assess the normality assumption, the skewness and kurtosis of the variables were examined, and to assess the multicollinearity assumption, the variance inflation factor (VIF) and tolerance were examined. The results showed that the skewness and kurtosis values of all components were within ±2. This finding indicates that the assumption of univariate normality holds in the data (see Kline, 2016). The multicollinearity assumption was also met in the present data, because the tolerance values of the predictor variables were greater than .10 and the VIF of each was less than 10. According to Meyers et al. (2006), a tolerance less than .10 and a VIF greater than 10 indicate violation of the multicollinearity assumption.

To assess the multivariate normality assumption, the Mahalanobis distance data were analyzed. The skewness and kurtosis of the Mahalanobis distances were .78 and 1.16, respectively, which were within ±2. On this basis, it can be said that the assumption of multivariate normality held in the data. Finally, the assumption of homogeneity of variances was examined using a scatterplot of the standardized residuals, and the results showed that this assumption held in the data. After the assumptions were assessed, the data were analyzed using structural equation modeling. For this purpose, AMOS 26.0 software and maximum likelihood estimation were used. The research model assumed that media literacy, through the mediation of behavioral emotion regulation and cognitive distortions, affects mental health/social maladjustment in Generation Alpha adolescents. As shown in Figure 1, in the research model the latent variable media literacy was measured by the indicators communication and participation, creativity, critical thinking, information, problem solving, and technical skills; the latent variable behavioral emotion regulation by the indicators seeking distraction, withdrawal, active engagement, support seeking, and denial; the latent variable cognitive distortions by the indicators self-centeredness, blaming, mislabeling, wrong assumption,

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positive questions, and unusual questions; and the latent variable mental health/social maladjustment by the indicators internalizing behaviors, externalizing behaviors, and functional impairment. Table 3 shows the model fit indices.

Table 3. Model fit indices

Fit indices	**Initial model**	**Modified model**	**Cutoff**
Chi-square	491.50	361.39	-
Model degrees of freedom	165	163	-
$\chi^2/df\chi$	2.98	2.22	< 3
GFI	.880	.914	> .90
AGFI	.847	.887	> .85
CFI	.891	.934	> .90
RMSEA	.075	.059	< .08

Table 3 Shows That, Except for the X^2/df and RMSEA Indices, the Other Fit Indices from the Analysis Did Not Support Acceptable Fit of the Model to the Collected Data. Therefore, in Pursuit of Adequate Fit Indices, the Model Was Modified in Two Steps by Allowing Covariances Between the Indicator Errors, and as Table 2 Shows, Acceptable Fit Indices Were Obtained After the Modification. Table 4 Presents the Path Coefficients in the Structural Model.

Table 4. Total and direct path coefficients among the study variables in the structural model

Effect	**Path**	**b**	**S.E.**	**β**	***p***
Direct	Media literacy → Cognitive distortions→	−0.482	0.199	−.332	.001
	Media literacy → Behavioral emotion regulation→	0.315	0.062	.432	.001
	Cognitive distortions → Mental health/social maladjustment→	0.379	0.070	.371	.001
	Behavioral emotion regulation → Mental health/social maladjustment→	−1.659	0.328	−.468	.001
	Media literacy → Mental health/social maladjustment→	−0.137	0.201	−.053	.423
Indirect	Media literacy → Mental health/social maladjustment→	−0.842	0.164	−.325	.001
Total	Media literacy → Mental health/social maladjustment→	−0.979	0.244	−.378	.001

Table 4 Shows That the Total Path Coefficient Between Media Literacy and Mental Health/social Maladjustment Was Negative and Significant (B = −.378, p = .001). The Path Coefficient Between Behavioral Emotion Regulation and Mental Health/social Maladjustment Was Negative (B = −.468, p = .001), and the Path Coefficient Between Cognitive Distortions and Mental Health/social Maladjustment Was Positive and Significant (B = .371, p = .001). Table 3 Also Shows That the Indirect Path Coefficient Between Media Literacy and Mental Health/social Maladjustment Was

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Negative and Significant (B = −.325, p = .001). Next, to Determine the Contribution of Each of the Two Mediators (Behavioral Emotion Regulation and Cognitive Distortions) in Explaining the Effect of Media Literacy on Mental Health/social Maladjustment, the Formula of Baron and Kenny (1986, as Cited in Mallinckrodt Et Al., 2006) Was Used. The Results Showed That the Indirect Path Coefficients Between Media Literacy and Mental Health/social Maladjustment Through Behavioral Emotion Regulation (B = −.202, p = .001) and Through Cognitive Distortions (B = −.122, p = .001) Were Negative and Significant. On This Basis, It Was Concluded That Behavioral Emotion Regulation and Cognitive Distortions Significantly and Negatively Mediate the Effect of Media Literacy on Mental Health/social Maladjustment Among Generation Alpha Adolescents. Figure 1 Shows the Structural Model of the Study Using Standardized Data

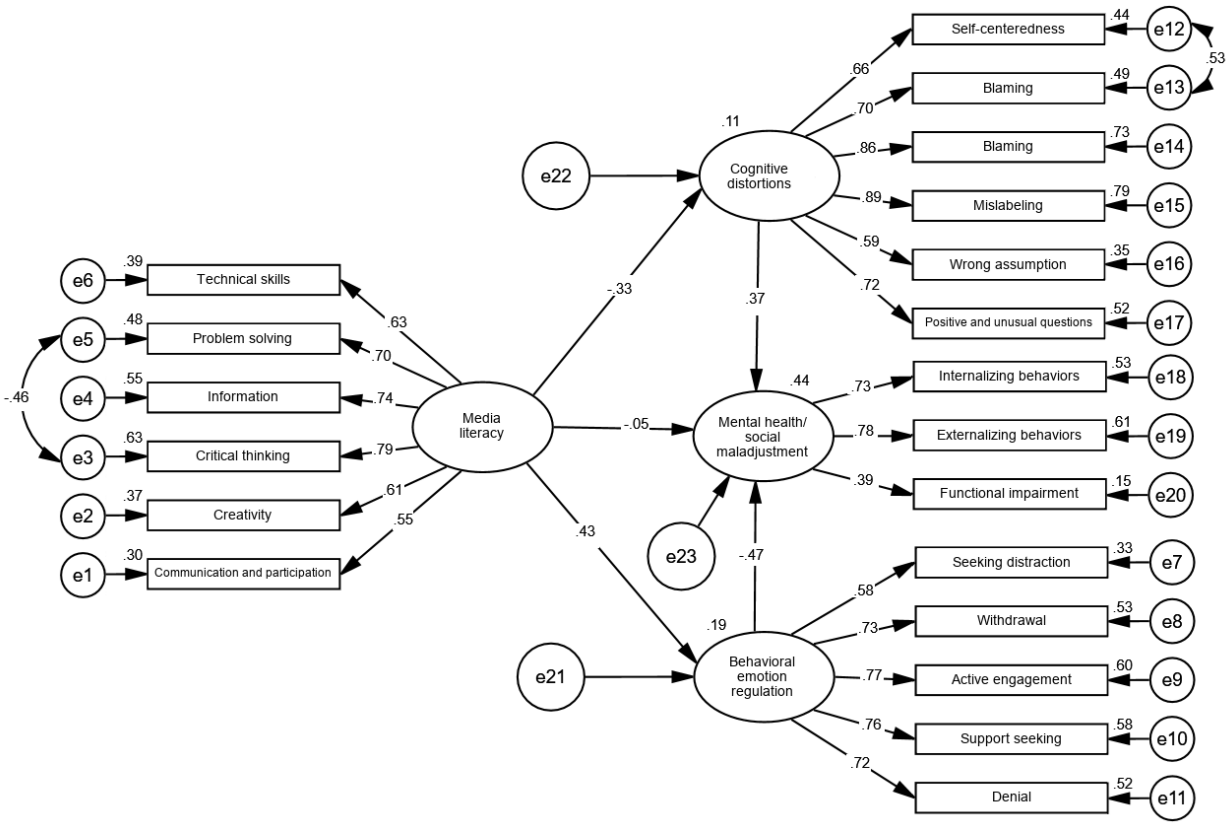

Figure 1. Standardized Parameters in the Structural Model of the Study

Figure 1 Shows That the Squared Multiple Correlation (R^2) for Mental Health/social Maladjustment Was .44, Indicating That Media Literacy, Behavioral Emotion Regulation, and

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Cognitive Distortions Together Explain 44% of the Variance in Mental Health/social Maladjustment Among Generation Alpha Adolescents

Discussion

The aim of the present study was to examine the structural model of the relationships between media literacy and mental health/social maladjustment, with the mediating roles of behavioral emotion regulation and cognitive distortions, among Generation Alpha adolescents. After the fit indices were evaluated and the model was modified, it became clear that the empirical data fit the hypothesized conceptual model well and that the structural fit indices fell within the standard, acceptable range. In addition, the multiple coefficients of determination indicates that the predictor and mediating variables together explained 44% of the variance in mental health/social maladjustment, which reflects considerable explanatory power and the adequacy of the structural model in representing the hypothesized relationships among the variables. The total effect of media literacy on mental health/social maladjustment was also negative and significant ($\beta = -.378$, $p = .001$). This finding shows that among Generation Alpha adolescents, the higher the media literacy, the fewer the mental health problems and social maladjustment. This is consistent with the meta-analysis of Gordon et al. (2025), the systematic review of Saputra et al. (2024), and the study of Shu and Chen (2025), which emphasize the protective role of media or digital literacy in reducing maladaptive outcomes. Abbouyi et al. (2026) also showed that in this generation, problematic use of social media, fear of missing out, and engagement with social networks can intensify psychological distress, and [media literacy] can be a preventive factor. The second finding was that the path coefficient between behavioral emotion regulation and mental health/social maladjustment was negative and significant ($\beta = -.468$, $p = .001$), which shows that among Generation Alpha adolescents, the greater the ability for behavioral emotion regulation, the fewer the mental health problems and social maladjustment. The present finding is consistent with Bandura's social cognitive theory and its emphasis on the role of self-regulation, because self-regulation helps regulate behavior and emotional reactions through the processes of self-monitoring, self-evaluation, and self-reaction. Previous evidence has also shown that higher self-regulation is associated with greater psychosocial strengths and fewer internalizing and externalizing problems, and that emotional dysregulation is associated with declining mental

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health, which is consistent with the findings of Khan et al. (2023) and Te Brinke et al. (2020). Moreover, digital emotion regulation is related to psychological well-being (Nassozi et al., 2025), and weaknesses in self-regulatory processes can lead to the persistence of maladaptive emotional reactions and psychological vulnerability (Nesi et al., 2021; Kökönyei et al., 2024). In addition, the path coefficient between cognitive distortions and mental health/social maladjustment was positive and significant (β = .371, p = .001). This finding indicates that adolescents who use distorted patterns more often in interpreting personal, social, and academic events are more likely to report symptoms of anxiety, low mood, mistrust, reduced participation, and difficulty in social adjustment. Therefore, cognitive distortions and dysfunctional negative cognitions are associated with increased anxiety, depression, stress, and suicidal tendencies and with decreased psychological well-being and resilience (Serrano-Ibáñez et al., 2021; Haji Omidi et al., 2023; Sapmaz, 2023; Bashir, 2024). On the other hand, positive feedback on social media is associated with risky behaviors through cognitive bias and negative emotions (Yang et al., 2025). Another finding showed that the indirect path coefficient between media literacy and mental health/social maladjustment through behavioral emotion regulation was negative and significant (β = −.202, p = .001); it can be said that behavioral emotion regulation mediates the effect of media literacy on mental health/social maladjustment among Generation Alpha adolescents. From Potter's perspective, media literacy, by strengthening knowledge structures and skills of critical analysis and evaluation, increases adolescents' ability to distinguish accurate from inaccurate information. Increasing this capacity in adolescents can raise self-efficacy, self-monitoring, and the ability to translate cognition into behavior, and it provides the ground for selecting adaptive behavioral strategies. An adolescent with a higher level of digital media literacy is not merely a passive recipient of digital messages but can analyze a message in terms of its accuracy, function, and possible consequences and, based on this evaluation, select a more appropriate behavioral response, including active engagement, seeking social support, and reducing withdrawal and ignoring. Consistent with previous studies, emotion regulation played a mediating role in the relationship between media literacy and academic procrastination (Oveisi et al., 2026), and media literacy through emotion regulation processes was associated with more adaptive outcomes such as academic resilience (Atashzar et al., 2024). Sharma et al. (2024) also confirmed that difficulties

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in emotion regulation partially explain the relationship between childhood trauma, alexithymia, and adolescents' psychological symptoms.

In addition, the indirect path coefficient between media literacy and mental health/social maladjustment through cognitive distortions was negative and significant (β = −.122, p = .001). Accordingly, the effect of digital media literacy on mental health/social maladjustment is transmitted, to some extent, through the reduction of cognitive distortions and the strengthening of realistic processing in media situations. In Generation Alpha, who are continuously exposed to messages, social comparisons, and online feedback, digital media literacy can reduce the formation of hasty and distorted interpretations, such as catastrophizing, labeling, mind reading, and overgeneralization, by enhancing the critical evaluation of content. An adolescent with a higher ability in media analysis probably does not regard a curated image of others' lives as equivalent to the full reality of their lives, does not necessarily take a negative comment as a sign of complete rejection, and does not quickly interpret an online disagreement as a threat to their personal worth. Reducing these distortions in turn limits perceived threat, negative emotions, and maladaptive perceptions of self and others, and lowers the risk of mental health problems and social maladjustment. Consistent with previous studies, Shu and Chen (2025) showed that eHealth literacy is related, through a cognitive mechanism, to psychological outcomes including depression, anxiety, and stress, and cognitive emotion regulation also plays a mediating role in the relationship between e-social-emotional competencies and digital habitual behaviors (Farzadi & Fathi, 2025). In the study of Hosseini et al. (2023), cognitive errors also mediated the relationship between psychological capital and social anxiety.

Overall, the findings of this study showed that digital media literacy can be significantly associated with improved mental health and reduced social maladjustment among Generation Alpha adolescents. Moreover, cognitive distortions and behavioral emotion regulation, as two mediating mechanisms, play the main role in transmitting this effect. Therefore, this article emphasizes the necessity of strengthening digital media literacy in Generation Alpha to prevent psychological and social harm.

Practical Recommendations

Emphasizing digital media literacy education in schools.

Holding workshops on recognizing and reducing adolescents' cognitive distortions.

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Teaching emotion regulation skills and the control of impulsive responses.

Designing preventive interventions for Generation Alpha adolescents with a simultaneous focus on media literacy, cognition, and emotion.

To extend the findings of the present study, it is suggested that future research use larger and more diverse samples, examine additional mediating and moderating variables, and employ longitudinal and interventional designs so that causal relationships and the stability of the results can be clarified more precisely.

Limitations

1. The statistical population was limited to the students studied.
2. The cross-sectional nature of the study limits causal inference.
3. Data were collected using self-report instruments only.
4. Some influential variables, such as family support and school climate, were not examined in the model.

Data availability statement

The datasets generated and/or analyzed during the current study are available from the corresponding author upon reasonable request.

Ethics statement

This study was conducted in accordance with the ethical principles of the Declaration of Helsinki and approved by the institutional ethics committee. All participants provided informed consent prior to participating in the study, and data collection procedures ensured complete anonymity and confidentiality.

Author contributions

All authors contributed to the study conception and design, material preparation, data collection and analysis. All authors contributed to the article and approved the submitted version.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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