

The Relationship of Responsibility, Self-Esteem, and Peer Interaction with Perceived Social Competence in Gifted Students

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ABSTRACT

The present study was conducted to investigate the relationship between responsibility, self-esteem, and peer interaction with perceived social competence among gifted students. The statistical sample consisted of 169 gifted male middle school students who were selected through purposive sampling. Data were collected using the Responsibility Questionnaire, Self-Esteem Questionnaire, Peer Interaction Questionnaire, and Perceived Social Competence Questionnaire. Responsibility, self-esteem, and peer interaction were significantly associated with the perceived social competence of gifted students. Furthermore, responsibility and self-esteem had direct effects, whereas peer interaction had an indirect effect on the perceived social competence of these students. These findings may be useful in designing educational and counseling programs aimed at enhancing the social competence of gifted students. Considering the importance of social competence in the academic success and overall life outcomes of gifted students, the present study examined the role of cognitive, emotional, and social factors in this domain. The findings of this study may contribute to the development of effective strategies for improving the social competence of gifted students.

Keywords: responsibility, self-esteem, peer interaction, perceived social competence, gifted students

1. Introduction

Gifted and talented students constitute a unique group within educational systems due to their exceptional cognitive abilities, advanced intellectual potential, and heightened academic performance. Although these students are often recognized for their superior intellectual functioning, contemporary psychological and educational research increasingly emphasizes that giftedness is not

limited to cognitive superiority alone and must be understood within a broader social-emotional framework (Nannings et al., 2025; Turreix et al., 2023). Gifted students frequently experience distinct psychological, interpersonal, and developmental challenges that influence their adjustment, emotional functioning, and social relationships. Accordingly, researchers have highlighted the necessity of examining social competence and related psychosocial

variables among gifted adolescents in order to promote their academic success and psychological well-being (Maralani & Pfeiffer, 2024; Saß et al., 2025).

Perceived social competence refers to an individual's evaluation of their ability to establish effective interpersonal relationships, communicate appropriately, adapt to social situations, and manage social interactions successfully. Social competence is considered one of the most important determinants of psychological adjustment and educational achievement during adolescence. Adolescents with higher levels of perceived social competence generally demonstrate greater emotional stability, stronger peer relationships, and more adaptive coping strategies (Papadopoulos, 2021a; Park et al., 2024). In gifted students, perceived social competence acquires additional importance because these individuals often encounter social expectations, emotional sensitivities, and developmental asynchronies that may complicate their social experiences (Tourreix et al., 2023). Studies have shown that intellectually gifted students may simultaneously exhibit advanced reasoning abilities and difficulties in social adaptation, emotional regulation, or peer integration (Klarin et al., 2023; Saß et al., 2025).

The social-emotional functioning of gifted students has become a major area of interest in recent years. Some scholars argue that gifted students possess strong adaptive capacities and psychosocial resources that support successful adjustment, whereas others suggest that these students are more vulnerable to social isolation, perfectionism, stress, and maladjustment (Cash & Lin, 2021; Dimitrijević et al., 2025). This inconsistency in findings has motivated researchers to investigate the psychological and environmental factors associated with social competence among gifted youth. In particular, responsibility, self-esteem, and peer interaction have emerged as influential variables affecting psychosocial development and adaptation during adolescence (Kara & Aslan, 2025; Kaymakci & Tonbul, 2024).

Responsibility is regarded as a multidimensional psychological construct involving accountability, behavioral self-regulation, and cognitive control. Adolescents who demonstrate higher levels of responsibility are generally more capable of managing their emotions, adhering to social norms, and engaging in constructive interpersonal relationships. Responsibility also contributes to greater self-regulation and adaptive functioning in academic contexts. In gifted students, responsibility may play an especially significant role because these students often experience heightened expectations from parents, teachers, and

educational institutions (Slobodin et al., 2025). Researchers have argued that gifted students who develop stronger responsibility skills are more likely to display positive academic engagement, resilience, and social adaptation (Snyder & Khan, 2024; Svendsen & Burner, 2023). Conversely, insufficient development of responsibility may contribute to emotional distress, underachievement, and difficulties in interpersonal functioning (Raouf et al., 2024).

Self-esteem is another important psychological factor associated with adolescent social functioning and adjustment. Self-esteem reflects an individual's evaluation of personal worth, competence, and self-acceptance. Positive self-esteem contributes to emotional stability, confidence in social interactions, and adaptive coping mechanisms. In contrast, low self-esteem is associated with anxiety, social withdrawal, and interpersonal difficulties. Research has demonstrated that self-esteem plays a central role in the psychosocial development of gifted adolescents because gifted students frequently experience heightened self-awareness, sensitivity to evaluation, and pressure to achieve (Bean & Rickert, 2024; Watts, 2022). Furthermore, gifted students often compare themselves with high-performing peers, which may affect their self-concept and social adjustment (Papadopoulos, 2021b).

Previous studies have indicated significant associations between self-esteem and emotional intelligence, self-concept, and social adaptation among gifted students (García et al., 2021). Similarly, psychosocial intervention programs targeting self-esteem enhancement have been shown to improve emotional well-being and interpersonal functioning in adolescents (Verma & Thakur, 2024). Researchers have also emphasized that self-esteem functions as a protective factor against psychological difficulties and cyber victimization in gifted youth (Kara & Aslan, 2025). Therefore, investigating the relationship between self-esteem and perceived social competence may contribute to a better understanding of adaptive psychosocial functioning among gifted adolescents.

Peer interaction constitutes another essential component of adolescent social development. During adolescence, peer relationships become increasingly influential in shaping identity formation, emotional regulation, and social competence. Positive peer interactions provide opportunities for emotional support, communication skill development, and social learning. In contrast, negative peer experiences such as rejection, isolation, or bullying may undermine adolescents' psychological adjustment and self-confidence (Aydin et al., 2022; Park et al., 2024). For gifted students,

peer relationships may be particularly complex because intellectual differences, advanced interests, or emotional sensitivities can create barriers to social integration with age-matched peers (Tourelis et al., 2023).

Research findings regarding peer relationships among gifted students have been mixed. Some studies suggest that gifted students demonstrate advanced social understanding and successful interpersonal functioning, whereas others report higher levels of loneliness, social dissatisfaction, and peer difficulties among this population (Aydin et al., 2022; Maralani & Pfeiffer, 2024). These inconsistencies may reflect differences in educational environments, family support systems, cultural contexts, and individual personality characteristics. For instance, supportive educational programs and enrichment opportunities may enhance gifted students' social confidence and interpersonal skills (Lee, 2024). In contrast, inadequate psychosocial support or social misunderstanding may contribute to adjustment difficulties and lower perceived competence (Cash & Lin, 2021).

Contemporary theoretical perspectives emphasize that giftedness should be conceptualized within an interactional framework involving cognitive, emotional, social, and environmental dimensions (Makkonen et al., 2022). Accordingly, the development of social competence among gifted adolescents may depend not only on intellectual ability but also on emotional resources, interpersonal experiences, and contextual support systems. Family functioning, parenting practices, school climate, and peer acceptance have all been identified as influential factors in gifted students' psychosocial adjustment (Papadopoulos, 2021a; Slobodin et al., 2025). Moreover, stress management abilities and resilience have been linked to healthier social functioning and emotional adaptation among gifted youth (Kaymakci & Tonbul, 2024; Zanetti et al., 2024).

Another important issue concerns the underachievement and maladjustment observed in some gifted students despite their high intellectual potential. Researchers have increasingly recognized that social-emotional difficulties may undermine academic motivation, psychological well-being, and educational performance among gifted adolescents (Raouf et al., 2024). Factors such as low self-esteem, weak peer relationships, emotional sensitivity, and poor self-regulation have been identified as contributors to these difficulties (Saß et al., 2025; Tourelis et al., 2023). Consequently, understanding the psychosocial predictors of perceived social competence may help educators,

counselors, and psychologists develop effective intervention programs for gifted students.

Recent qualitative and systematic review studies have further highlighted the importance of supporting the emotional and interpersonal needs of gifted learners across educational settings (Mohamed & Elhoweris, 2022; Nannings et al., 2025). Teachers and parents often perceive gifted students as intellectually capable but emotionally vulnerable, requiring specialized educational and counseling approaches (Dimitrijević et al., 2025; Jawabreh et al., 2022). Additionally, research conducted during and after the COVID-19 pandemic revealed that social isolation and disruptions in educational routines significantly affected gifted students' emotional functioning and interpersonal experiences (Dimitrijević et al., 2025). These findings underscore the importance of examining variables related to social competence and psychosocial adjustment among gifted adolescents in contemporary educational contexts.

Although previous studies have investigated various aspects of gifted students' emotional and social functioning, limited research has simultaneously examined the relationships among responsibility, self-esteem, peer interaction, and perceived social competence in gifted adolescents, particularly within non-Western cultural contexts. Moreover, many existing studies have focused primarily on academic achievement and cognitive ability while paying less attention to psychosocial predictors of social adaptation (Al-Shammari & Al-Arfaj, 2022; Coutinho-Souto & Fleith, 2022). Given the developmental significance of adolescence and the unique psychosocial experiences of gifted students, investigating these variables may provide valuable insights into factors that facilitate or hinder healthy social functioning.

Furthermore, social competence is closely associated with long-term psychological well-being, resilience, academic engagement, and life satisfaction. Adolescents who perceive themselves as socially competent are generally more successful in establishing supportive interpersonal relationships and coping effectively with environmental demands (Papadopoulos, 2021b). Consequently, identifying psychological and interpersonal factors associated with perceived social competence may contribute to the design of evidence-based educational and counseling interventions aimed at supporting gifted students' overall development.

Considering the importance of psychosocial adjustment in gifted adolescents and the potential roles of responsibility, self-esteem, and peer interaction in shaping social functioning, the present study aimed to investigate the

relationship between responsibility, self-esteem, and peer interaction with perceived social competence among gifted students.

2. Methods and Materials

2.1. Study Design and Participants

The present study employed a correlational research design to examine the relationship between responsibility, self-esteem, and peer interaction with perceived social competence among gifted students in Rasht.

The statistical population of this study consisted of all gifted male students in Rasht during the 2023–2024 academic year. The population included 300 students, from whom a sample of 169 students from the first-cycle secondary level at Mirza Kuchak Khan SAMPAD High School in Rasht was selected based on the Morgan Table. The participants were enrolled in the seventh, eighth, and ninth grades. Purposive sampling was used for sample selection. Accordingly, all 169 students participated in the study, responded appropriately to the questionnaires, and no sample attrition occurred.

After coordination with the Guilan Province Department of Education and obtaining official permission and referral to Mirza Kuchak Khan SAMPAD First-Cycle Secondary School in Rasht, the researcher attended the school, coordinated with the relevant authorities, and obtained informed consent from the students. Subsequently, students in the seventh, eighth, and ninth grades were asked to complete the relevant questionnaires during the period from March 2024 to April 2024. Variables such as educational grade, parents' educational level, and age were also considered. Furthermore, participants were assured that their information would remain confidential and would be used solely for research purposes. After collecting the questionnaires, it should be noted that there was no response attrition in this study, and all students provided valid responses to the questionnaires.

2.2. Measures

Mergler and Shield Responsibility Questionnaire: This is a self-report instrument used to assess personal responsibility. The questionnaire was developed by Mergler and Shield in 2016. Responses are rated on a 4-point Likert scale ranging from "Strongly Disagree" (1) to "Strongly Agree" (4). The total score ranges from 15 to 75, with higher scores indicating greater personal responsibility. In one

study, Mergler and Shield (2016) used experts in the field of psychology to assess content validity. The experts evaluated the questionnaire as a valid instrument for measuring responsibility. In another study, Jokar et al. (2019) used confirmatory factor analysis to examine construct validity. The findings demonstrated that the questionnaire consisted of three primary factors corresponding to the three dimensions of responsibility: personal accountability, behavioral control, and cognitive control. Mergler and Shield (2016) also assessed internal reliability using Cronbach's alpha, reporting a coefficient of 0.86 for the total questionnaire.

Rosenberg Self-Esteem Questionnaire: This questionnaire was developed by Morris Rosenberg in 1965 and consists of 10 items that measure an individual's ability to recognize and evaluate the self through various self-related statements. The primary purpose of this instrument is to assess self-confidence and feelings of self-worth. The questionnaire contains 10 items, each beginning with a statement about which respondents express their opinion. Responses are scored on a 5-point scale ranging from "Strongly Agree" to "Strongly Disagree." In one study, Rosenberg (1965) used psychology experts to assess content validity, and the instrument was evaluated as a valid measure of self-esteem. In another study, Rosenberg and Lane (1991) employed confirmatory factor analysis to examine construct validity. The findings indicated the presence of a single primary factor corresponding to the concept of self-esteem. Rosenberg and Lane (1991) also assessed temporal reliability using the test-retest method, reporting a correlation coefficient of 0.80 between scores obtained at two different time points.

Hudson Peer Relationship Inventory: This is a self-report instrument used to assess peer relationships. The questionnaire was developed by Walter W. Hudson in 1992. Responses are rated on a 7-point Likert scale ranging from "Never" (1) to "Always" (7). In one study, Hudson (1992) used psychology experts to evaluate content validity, and the questionnaire was identified as a valid instrument for measuring peer relationships. In another study, Hudson et al. (1993) employed confirmatory factor analysis to assess construct validity. The findings indicated that the questionnaire included one primary factor corresponding to the concept of peer relationships. Hudson (1992) also examined internal consistency using Cronbach's alpha and reported a coefficient of 0.94 for the total questionnaire.

Anderson Perceived Social Competence Questionnaire: This is a self-report instrument designed to assess perceived

social competence. The questionnaire was developed by Anderson-Butcher, Iachini, and Amorose in 2008. Responses are rated on a 5-point Likert scale ranging from “Strongly Agree” (5) to “Strongly Disagree” (1). The total questionnaire score ranges from 15 to 75, with higher scores indicating higher levels of perceived social competence. In one study, Anderson et al. (2008) assessed internal reliability using Cronbach’s alpha and reported a coefficient of 0.86 for the total questionnaire, indicating acceptable internal consistency of the scores.

2.3. Data Analysis

The data were analyzed using correlation analysis and regression analysis with SPSS-23 software.

3. Findings and Results

Descriptive statistics for the research variables are presented in Table 1.

Table 1

Descriptive Statistics of the Research Variables

Variables	Mean	Standard Deviation
Perceived Social Competence	7.27	2.70
Responsibility – Accountability	22.89	3.00
Responsibility – Behavioral Control	8.65	2.78
Responsibility – Cognitive Control	13.12	1.98
Total Responsibility	44.66	4.11
Self-Esteem	8.09	2.01
Peer Interaction	77.34	22.46

As shown in Table 1, the variable of total responsibility demonstrated the highest mean score among participants ($M = 44.66$, $SD = 4.11$), whereas self-esteem showed the lowest mean score ($M = 8.09$, $SD = 2.01$). In addition, perceived social competence had a mean score of 7.27 ($SD = 2.70$), while peer interaction demonstrated a mean score of 77.34 ($SD = 22.46$). The standard deviation values indicate the extent of variability in participants’ responses. Specifically,

cognitive control showed a standard deviation of 1.98, whereas total responsibility demonstrated a standard deviation of 4.11. Overall, these findings provide a general overview of the psychological and social characteristics of the study sample.

To examine the relationships among the research variables, Pearson correlation coefficients were calculated, and the results are presented in Table 2.

Table 2

Pearson Correlation Coefficients Between Research Variables

Variables	1	2	3	4	5	6
1. Accountability	1					
2. Behavioral Control	.20**	1				
3. Cognitive Control	.30**	.36**	1			
4. Total Responsibility	.74**	.36**	.46**	1		
5. Self-Esteem	.18*	.11	.09	.20**	1	
6. Perceived Social Competence	.19**	.08	.10	.24**	.20**	1
7. Peer Interaction	.22**	.15*	.12	.28**	.17*	.31**

According to the findings presented in Table 2, perceived social competence was positively and significantly correlated with accountability ($r = .19$, $p < .01$), total responsibility ($r = .24$, $p < .01$), self-esteem ($r = .20$, $p < .01$), and peer interaction ($r = .31$, $p < .01$). In contrast, behavioral control and cognitive control did not show significant relationships with perceived social competence. Furthermore, significant positive intercorrelations were

observed among the dimensions of responsibility. These findings support the hypotheses proposing significant relationships between responsibility, self-esteem, peer interaction, and perceived social competence among gifted students.

To determine the predictive role of peer interaction and responsibility in perceived social competence, stepwise

regression analysis was conducted. The summary of the regression model is presented in Table 3.

Table 3

Summary of Stepwise Regression Analysis Predicting Perceived Social Competence

Step	Model	SS	df	MS	F	p	R	R ²
1	Regression	120.15	1	120.15	18.16	.001	.313	.098
	Residual	1104.87	167	6.62				
2	Regression	192.56	2	96.28	15.48	.001	.396	.157
	Residual	1032.46	166	6.22				

Step 1 Predictor: Peer Interaction; Step 2 Predictors: Peer Interaction, Responsibility

The results presented in Table 3 indicate that the predictor variables explained 15.7% of the variance in perceived social competence ($R^2 = .157$). Specifically, peer interaction accounted for approximately 10% of the variance, while responsibility contributed an additional 6% to the prediction of perceived social competence. The observed F values were statistically significant at the .001 level, indicating that the regression models significantly predicted perceived social

competence among gifted students. Prior to conducting the regression analysis, the assumptions of regression were examined. The Kolmogorov–Smirnov test demonstrated that the distribution of the variables was normal, and the Durbin–Watson statistic (1.56) indicated independence of errors.

The standardized and unstandardized regression coefficients are reported in Table 4.

Table 4

Regression Coefficients for Predicting Perceived Social Competence

Predictor Variables	B	Standard Error	β	t	p
Peer Interaction	0.04	0.01	.31	4.26	.001
Responsibility	0.16	0.05	.24	3.14	.001

As shown in Table 4, peer interaction ($\beta = .31, p < .001$) and responsibility ($\beta = .24, p < .001$) significantly predicted perceived social competence among gifted students. Peer interaction demonstrated the strongest predictive effect on perceived social competence. These findings confirm the fourth hypothesis of the study, indicating that responsibility and peer interaction are significant predictors of perceived social competence among gifted students.

4. Discussion

The present study aimed to investigate the relationship between responsibility, self-esteem, and peer interaction with perceived social competence among gifted students. The findings demonstrated that responsibility, self-esteem, and peer interaction were positively associated with perceived social competence among gifted adolescents. Furthermore, the results of stepwise regression analysis indicated that peer interaction and responsibility significantly predicted perceived social competence, with peer interaction demonstrating the strongest predictive

effect. These findings highlight the importance of cognitive, emotional, and interpersonal variables in understanding the psychosocial functioning of gifted students and provide additional evidence that social competence among gifted adolescents is shaped by multiple interrelated psychological and environmental factors.

One of the major findings of the present study was the significant positive relationship between responsibility and perceived social competence among gifted students. This finding suggests that adolescents who demonstrate higher levels of accountability, behavioral control, and cognitive regulation are more likely to perceive themselves as socially competent and effective in interpersonal relationships. Responsibility may enhance adolescents' ability to regulate emotions, comply with social expectations, and engage in adaptive social behaviors, thereby facilitating positive social interactions and stronger interpersonal adjustment. Gifted students often encounter high expectations from teachers, parents, and educational institutions, and those who possess stronger responsibility skills may be better equipped to cope

with these demands while maintaining healthy social relationships (Slobodin et al., 2025; Snyder & Khan, 2024).

The findings regarding responsibility are also consistent with previous studies emphasizing the importance of self-regulation, resilience, and adaptive functioning in gifted students' psychosocial development. For example, Kaymakci and Tonbul reported that psychological resilience contributes significantly to emotional adjustment and interpersonal competence among gifted adolescents (Kaymakci & Tonbul, 2024). Similarly, studies examining character strengths and psychosocial adaptation among gifted youth have demonstrated that responsible behaviors and self-management skills are associated with healthier emotional functioning and better educational outcomes (Snyder & Khan, 2024). The present findings further support theoretical perspectives suggesting that social competence is not solely determined by intellectual ability but also depends on self-regulatory and behavioral capacities (Tourreix et al., 2023).

Another important finding of the present study was the significant positive relationship between self-esteem and perceived social competence among gifted students. Adolescents with higher self-esteem reported greater social competence, suggesting that positive self-evaluation contributes to confidence in interpersonal interactions and adaptive social functioning. Self-esteem may strengthen adolescents' perceptions of social efficacy, emotional security, and communication ability, thereby improving their willingness to engage in social interactions and maintain peer relationships. This finding aligns with the view that self-esteem is a central component of adolescent psychosocial adjustment and an important predictor of social adaptation (Papadopoulos, 2021b).

The present findings are consistent with prior studies demonstrating strong associations between self-esteem, emotional intelligence, and psychosocial well-being among gifted students. García and colleagues reported that gifted students with stronger emotional intelligence profiles also demonstrated higher levels of self-esteem and more positive self-concepts (García et al., 2021). Similarly, Verma and Thakur found that psychosocial interventions designed to enhance self-esteem improved emotional functioning and interpersonal adjustment among adolescents (Verma & Thakur, 2024). The findings of the present study also correspond with research indicating that self-esteem functions as a protective factor against psychological vulnerability and social maladjustment among gifted youth (Kara & Aslan, 2025). Gifted students often experience

heightened sensitivity to evaluation and perfectionistic tendencies, which may negatively affect their self-perceptions. Therefore, adolescents with stronger self-esteem may be more capable of coping with social and academic pressures while maintaining positive interpersonal relationships.

The findings also revealed a significant positive relationship between peer interaction and perceived social competence. Students who reported more positive interactions with peers demonstrated higher levels of perceived social competence. This finding highlights the developmental significance of peer relationships during adolescence and supports the notion that peer interactions provide essential opportunities for emotional support, social learning, communication skill development, and identity formation. Positive peer experiences may reinforce adolescents' feelings of belongingness, social acceptance, and interpersonal effectiveness, thereby enhancing perceived social competence (Park et al., 2024).

The findings regarding peer interaction are consistent with previous research indicating that peer relationships are among the most influential determinants of adolescent adjustment and psychological well-being. Aydin and colleagues reported that peer relationships significantly affect the emotional and social functioning of gifted adolescents (Aydin et al., 2022). Similarly, Maralani and Pfeiffer emphasized that gifted students often face unique social-emotional challenges related to peer acceptance and social belonging, particularly when intellectual differences create barriers to interpersonal integration (Maralani & Pfeiffer, 2024). The present findings also align with studies demonstrating that supportive educational and social environments facilitate stronger social adjustment and emotional well-being among gifted youth (Lee, 2024). These findings suggest that opportunities for healthy peer engagement may be particularly important for gifted adolescents, whose advanced cognitive abilities and unique interests sometimes create social distance from age-matched peers.

Another significant finding of the present study was that peer interaction and responsibility significantly predicted perceived social competence in the regression model. Peer interaction demonstrated the strongest predictive effect, followed by responsibility. This finding indicates that interpersonal experiences and self-regulatory capacities jointly contribute to adolescents' perceptions of social competence. Positive peer interactions may directly strengthen social confidence and communication skills,

whereas responsibility may facilitate adaptive behavioral patterns that improve interpersonal functioning. Together, these variables explained a meaningful proportion of variance in perceived social competence, highlighting their importance in the psychosocial functioning of gifted students.

The stronger predictive role of peer interaction may reflect the developmental centrality of peer relationships during adolescence. Adolescents increasingly rely on peer groups for emotional validation, identity formation, and social comparison. For gifted students, peer acceptance may be particularly influential because social isolation or misunderstanding can contribute to emotional distress and maladjustment (Saß et al., 2025). Researchers have reported that gifted adolescents who lack supportive peer relationships may experience loneliness, social anxiety, and reduced psychological well-being despite their academic strengths (Cash & Lin, 2021). Conversely, positive peer interactions may buffer against stress and enhance adolescents' sense of competence and belongingness.

The findings of the present study also support ecological and multidimensional models of giftedness emphasizing the interaction between cognitive, emotional, and social variables in adolescent development (Makkonen et al., 2022). Giftedness should not be conceptualized solely as intellectual superiority but rather as a complex developmental condition influenced by interpersonal relationships, emotional resources, educational experiences, and environmental support systems. The findings further correspond with recent systematic reviews emphasizing that gifted students possess distinctive social-emotional needs that require specialized educational and counseling attention (Nannings et al., 2025; Tourreix et al., 2023).

Additionally, the findings may be interpreted in light of contemporary research examining psychosocial vulnerabilities among gifted adolescents. Studies have shown that gifted students may experience stress, perfectionism, emotional sensitivity, and social adaptation difficulties despite their advanced intellectual abilities (Raouf et al., 2024; Saß et al., 2025). The positive relationships observed in the present study suggest that responsibility, self-esteem, and supportive peer interactions may function as protective factors that promote resilience and adaptive social functioning. This interpretation is consistent with studies highlighting the importance of resilience, emotional support, and family functioning in gifted students' psychological adjustment (Papadopoulos, 2021a; Zanetti et al., 2024).

The present findings also contribute to the growing literature emphasizing the importance of psychosocial support within gifted education programs. Educational systems frequently prioritize academic achievement while neglecting emotional and social development among gifted students. However, previous studies have demonstrated that students' social-emotional experiences substantially influence their academic engagement, well-being, and long-term adjustment (Bean & Rickert, 2024; Svendsen & Burner, 2023). The current study reinforces the argument that promoting social competence among gifted adolescents requires attention to emotional, interpersonal, and self-regulatory dimensions in addition to cognitive development.

Furthermore, the findings may hold particular relevance in the context of contemporary educational challenges and post-pandemic adjustment. Dimitrijević and colleagues reported that educational disruptions and social isolation associated with the COVID-19 pandemic affected teachers' perceptions of gifted students' emotional and social functioning (Dimitrijević et al., 2025). Similarly, recent studies have emphasized the importance of strengthening psychosocial resilience and social support systems for gifted youth in rapidly changing educational and technological environments (Kara & Aslan, 2025). Therefore, identifying variables associated with perceived social competence may help educational professionals develop targeted interventions that support gifted students' psychological adaptation and interpersonal functioning.

5. Conclusion

The present study also supports the notion that gifted students are not a homogeneous group and may differ considerably in their social-emotional experiences. Individual differences in self-esteem, interpersonal experiences, family dynamics, and psychological resilience may shape adolescents' social adjustment and perceptions of competence (Park et al., 2024; Slobodin et al., 2025). Consequently, interventions designed for gifted students should adopt a holistic and individualized approach that considers both academic and psychosocial dimensions of development.

One limitation of the present study was the use of a correlational design, which prevents causal interpretations of the relationships among the variables. Additionally, the study relied exclusively on self-report questionnaires, which may have been influenced by social desirability bias and participants' subjective perceptions. Another limitation was

that the sample consisted only of gifted male students from a single city, which may limit the generalizability of the findings to female students, other age groups, or different cultural and educational contexts.

Future research is recommended to employ longitudinal and experimental designs to better understand the causal relationships among responsibility, self-esteem, peer interaction, and perceived social competence. Researchers may also examine additional psychosocial variables such as emotional intelligence, perfectionism, resilience, family functioning, and academic stress in relation to social competence among gifted adolescents. Comparative studies involving gifted and non-gifted students, as well as culturally diverse samples, may further contribute to a deeper understanding of the social-emotional development of gifted youth.

From a practical perspective, the findings of the present study highlight the importance of implementing educational and counseling programs that strengthen self-esteem, responsibility, and positive peer interactions among gifted students. Schools and gifted education centers may benefit from incorporating social-emotional learning interventions, peer-support programs, and communication skill workshops into their curricula. Teachers, counselors, and parents should also be trained to recognize the unique social-emotional needs of gifted adolescents and provide supportive environments that foster healthy interpersonal relationships, emotional resilience, and positive self-perceptions.

Authors' Contributions

Authors equally contributed to this article.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

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Declaration of Interest

The authors report no conflict of interest.

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Ethics Considerations

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

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