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The Mediating Role of Social Isolation in the Relationship Between School Bullying and Academic Commitment Among Lower Secondary Students in Babylon, Iraq

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ABSTRACT

Purpose: This study aimed to determine the mediating role of social isolation in the relationship between school bullying and academic commitment among lower secondary students in the city of Babylon, Iraq.

Methods and Materials: The research method was correlational, and the statistical population consisted of lower secondary school students in Babylon, Iraq, during the spring of 2024. From this population, 368 students were selected through convenience sampling and responded to three instruments: the Academic Commitment Questionnaire (Huenemann-Vogel & Roby, 2015), the School Bullying Questionnaire (Álvarez Marín et al., 2022), and the Social Isolation Questionnaire (Chelabi & Amirkafi, 2004). The data were analyzed using Pearson correlation coefficient and structural equation modeling (SEM) through SPSS version 26 and AMOS version 26.

Findings: The results indicated that school bullying was significantly associated with both social isolation and academic commitment, and that social isolation was significantly related to academic commitment ($p < .05$). The structural equation modeling results showed that social isolation served as a full mediating variable in the relationship between school bullying and academic commitment.

Conclusion: Based on the findings of the present study, it is essential to consider the role of school bullying and social isolation in academic commitment and to implement measures aimed at enhancing students' level of academic commitment.

Keywords: school bullying, social isolation, academic commitment, students

1. Introduction

Human development across the life span is marked by dynamic transitions, and adolescence, as a critical developmental phase, represents a convergence of biological, emotional, cognitive, and social shifts. During this stage, adolescents are particularly vulnerable to various contextual and interpersonal stressors that shape their identity, academic behavior, and social relationships. From a humanistic perspective, adolescence is a time of profound

growth, but also one characterized by potential maladaptive trajectories, especially in the absence of supportive environmental structures (Olatayo Awoyemi et al., 2024; Shurygin et al., 2024). Within this context, the domain of academic development becomes especially significant, as the adolescent's engagement with school lays the groundwork for long-term personal and professional outcomes (Worku & Urgessa, 2024). One of the key constructs underpinning academic progress is *academic commitment*, which encompasses students' emotional attachment to their studies, persistence in the face of academic challenges, and overall investment in their educational goals (Human-Vogel & Rabe, 2015; León Oropeza et al., 2024).

Academic commitment is more than a dispositional or attitudinal state; it reflects a student's integrated response to cognitive, emotional, and behavioral academic demands. Students with high levels of academic commitment are more likely to demonstrate intrinsic motivation, perseverance, and self-regulatory learning strategies, all of which are linked to improved academic performance and psychological resilience (Borja-Gil et al., 2024; Griep, 2021; Worku & Urgessa, 2024). Moreover, commitment to academic tasks has been found to enhance goal orientation, facilitate personal identification with academic roles, and foster adaptive coping mechanisms under pressure (Jefferson et al., 2023). However, academic commitment is not shaped in isolation; rather, it emerges in interaction with the social and emotional climate of the educational environment, which includes peer relationships, teacher support, and exposure to negative social behaviors such as bullying.

Bullying in schools is a persistent global problem that manifests in both overt and covert forms, including verbal abuse, physical aggression, social exclusion, and cyberbullying (Ahmadi & Basharpour, 2023; Álvarez-Marín et al., 2022). It is characterized by repetitive, intentional harm inflicted by individuals or groups with greater perceived power over their victims. Research across cultural and educational settings has consistently shown that bullying is not merely an isolated behavioral issue but one with extensive psychological, social, and academic consequences (Ibrahim et al., 2024; Modecki et al., 2014). For adolescents, who are navigating the complexities of identity formation and social belonging, exposure to bullying—either as victims or perpetrators—can significantly disrupt their emotional equilibrium, peer connections, and academic trajectories.

Numerous studies have documented the negative association between bullying and academic achievement. Victimized students often exhibit diminished school engagement, absenteeism, impaired concentration, and declining academic performance (Al-Raqqad et al., 2017; Behboudi et al., 2023; Murphy et al., 2022). Ahmad Aboud (2023) found that bullying behaviors were negatively correlated with academic vitality, academic self-efficacy, and academic motivation among middle school students, variables that are all integral to academic commitment. Similarly, empirical findings suggest that victims of school bullying report lower academic self-esteem and a reduced sense of academic identity, which impairs their ability to persist with academic goals (Borja-Gil et al., 2024; León Oropeza et al., 2024). In the same vein, Behboudi et al. (2023) concluded that bullying behaviors among elementary students were significantly associated with poorer academic outcomes. These patterns of evidence highlight the importance of examining the psychological and social mechanisms through which bullying disrupts students' academic orientation.

One prominent mechanism proposed in the literature is *social isolation*, a psychological state characterized by feelings of loneliness, reduced interpersonal interaction, and perceived social disconnection (Chalabi & Amir Kafi, 2004; Modarresi Yazdi et al., 2017). In school contexts, social isolation may emerge as a coping response to victimization or repeated negative peer interactions. For adolescents subjected to bullying, withdrawal from peer interactions can serve as a defense mechanism aimed at minimizing further harm. However, this withdrawal often comes at a high cost, including increased psychological distress, reduced social support, and compromised academic functioning (Alinejad et al., 2022; Pangani & Munyenyembe, 2024).

Jefferson et al. (2023) emphasized that loneliness during the school years is significantly associated with learning difficulties and diminished school adjustment, a finding echoed in other investigations linking social isolation to maladaptive academic outcomes. When adolescents disengage from peer networks, they lose access to collaborative learning opportunities, emotional reinforcement, and mentorship from peers and teachers—all of which are crucial for sustaining academic motivation and commitment (Li et al., 2023; Shahbazian Khoniq et al., 2020). As a result, social isolation becomes not only a consequence of bullying but also a mediating factor that amplifies its negative effect on academic variables such as

engagement, persistence, and commitment (Samara et al., 2021).

From a theoretical standpoint, the mediating role of social isolation between bullying and academic commitment can be understood through the lens of maladaptive coping theory. This perspective posits that when adolescents are exposed to uncontrollable stressors—such as repeated bullying—they may adopt withdrawal-oriented strategies that are psychologically protective in the short term but detrimental in the long term (Samara et al., 2021). Lacking the emotional and cognitive resources to confront the aggressor or seek institutional support, students may resort to avoidance behaviors such as social withdrawal and disengagement from academic tasks. Over time, these behaviors contribute to a decline in academic self-concept and a weakened commitment to school goals.

The current literature provides partial support for this mediating pathway. Shahbazian Khoniq et al. (2020) identified a positive relationship between bullying experiences and social isolation in students, while Li et al. (2023) found that social withdrawal mediated the association between bullying victimization and post-traumatic symptoms among Chinese adolescents. Although these studies do not explicitly address academic commitment, they offer compelling evidence that bullying can set in motion a psychological withdrawal process that undermines students' functioning across multiple domains. In parallel, Human-Vogel and Rabe (2015) highlighted the role of self-differentiation and personal identity in predicting academic commitment, suggesting that socially isolated students may lack the psychological differentiation required to sustain academic engagement. Similarly, Rezaei-Gazki et al. (2019) confirmed the construct validity of academic commitment among Iranian students, further underscoring the interplay between intrapersonal and social dimensions of academic life.

Despite growing evidence in international contexts, research directly examining the role of social isolation as a mediator between bullying and academic commitment in Middle Eastern educational settings remains sparse. This gap is particularly pronounced in Iraq, where the educational infrastructure faces unique post-conflict challenges, and adolescent students are frequently exposed to compounded stressors (Ahmad Aboud, 2023). Furthermore, cultural norms surrounding emotional expression and peer dynamics in Iraqi schools may influence both the manifestation of bullying and the students' responses to it, including their likelihood of withdrawing socially. Consequently, there is a need for context-specific empirical investigations to clarify the psychological pathways through which bullying exerts its academic effects.

This study was designed to address this knowledge gap by exploring whether social isolation mediates the relationship between school bullying and academic commitment among lower secondary students in the city of Babylon, Iraq.

2. Methods and Materials

2.1. Study Design and Participants

This study employed a correlational design using structural equation modeling (SEM). The statistical population consisted of all lower secondary school students in the city of Babylon, Iraq, totaling 8,000 individuals in spring 1403 (spring 2024). Based on Krejcie and Morgan's (1970) table, and considering the likelihood of invalid questionnaires, a sample of 400 students was selected using convenience sampling. After returning the questionnaires, 32 were found to be invalid, reducing the final sample size to 368 participants. The inclusion criteria were willingness to participate in the study and current enrollment in lower secondary school in Babylon, Iraq. The following instruments were used in this study.

2.2. Measures

To assess academic commitment, the 30-item questionnaire developed and validated by Huenemann-Vogel and Roby (2015) was used. This scale covers five domains: level of commitment (5 items), satisfaction (8 items), investment (5 items), quality of alternatives (3 items), and meaningfulness (9 items). Responses are scored on a 6-point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree). A total academic commitment score is derived by summing the items, ranging from 30 to 180, where higher scores indicate greater academic commitment. Huenemann-Vogel and Roby (2015) provided evidence of construct validity through exploratory factor analysis with Promax rotation and confirmatory factor analysis, and reported convergent validity via significant correlations with the Self-Differentiation Scale. Cronbach's alpha coefficients for the subscales were reported as follows: level of commitment (.84), satisfaction (.90), investment (.90), quality of alternatives (.68), and meaningfulness (.91). Rezaei-Gozaki et al. (2019) validated a Persian version of this scale for Iranian students. Content validity was

confirmed using content validity ratio (CVR) and content validity index (CVI), which were .89 and .86 respectively. Construct validity through confirmatory factor analysis was satisfactory, and Cronbach's alpha values for overall academic commitment, level of commitment, satisfaction, investment, quality of alternatives, and meaningfulness were .87, .70, .81, .87, .80, and .90, respectively (Rezaei-Gazki et al., 2019). For the present study, the questionnaire was translated into Arabic and reviewed by five university professors for content validity. Its reliability in Iraq was assessed using Cronbach's alpha, yielding a coefficient of .94. The academic commitment questionnaire is provided in Appendix 3.

To assess school bullying, the 12-item questionnaire developed by Álvarez Marín et al. (2022) was used. It includes four subscales: victimization (3 items), aggression (3 items), cyber victimization (3 items), and cyber aggression (3 items). The questionnaire is scored on a 5-point scale: never = 0, once or twice = 1, once or twice a month = 2, about once a week = 3, and more than once a week = 4. Students indicate how frequently they have experienced or enacted each behavior over the past two months. Each subscale score ranges from 0 to 12, with higher scores indicating higher levels of each dimension. The questionnaire also allows for calculating scores across two broader dimensions: victimization (direct and cyber) and aggression (direct and cyber), each containing 6 items. Álvarez Marín et al. (2022) validated the scale through exploratory and confirmatory factor analysis. Convergent and divergent validity were demonstrated by significant correlations with the Rosenberg Self-Esteem Scale (ranging from −.05 to −.22, p < .05 or p < .01), the Short Form of the Adolescent Depression Scale (.16 to .27, p < .01 or p < .001), and the Strengths and Difficulties Questionnaire (.16 to .29, p < .01 or p < .001). Cronbach's alpha values for the subscales were: victimization (.65), aggression (.70), cyber victimization (.75), and cyber aggression (.71). Composite reliability values were .72, .76, .81, and .75, and omega coefficients were .72, .72, .82, and .77, respectively

(Álvarez-Marín et al., 2022). In the present study, the Cronbach's alpha coefficient was .73.

To assess social isolation, the 19-item questionnaire developed by Chelabi and Amirkafi (2004) was used. Initially based on local, trans-local, and family relations, associative ties, and social capital, the scale was later modified by researchers to assess four domains: social loneliness, helplessness, social despair, and reduced social tolerance (Modarresi Yazdi et al., 2017). The questionnaire uses a 5-point Likert scale: strongly disagree = 5, disagree = 4, neutral = 3, agree = 2, and strongly agree = 1. Total scores range from 19 to 95, with higher scores indicating higher levels of social isolation. Chelabi and Amirkafi (2004) reported significant positive correlations between the scale and variables such as distrust, suspicion, insecurity, and fear, as evidence of convergent validity. They also reported significant negative correlations with intergroup relationships as evidence of divergent validity. Modarresi Yazdi et al. (2017) reported that scores on the revised questionnaire significantly correlated with self-perception, social norms, traditions, and the perceived importance of marriage, confirming both convergent and divergent validity. The overall Cronbach's alpha coefficient for this questionnaire was .72 (Modarresi Yazdi et al., 2017). In the present study, Cronbach's alpha was calculated as .90.

2.3. Data Analysis

The questionnaires were completed via self-report. The collected data were analyzed using Pearson correlation coefficients along with means and standard deviations. Following confirmation of statistical assumptions—normality via the Shapiro–Wilk test and linearity via scatterplots—structural equation modeling (SEM) was conducted using SPSS version 26 and AMOS version 26.

3. Findings and Results

Table 1 presents the demographic characteristics (grade level, birth order, age, and gender) of the study sample.

Table 1

Demographic Characteristics of the Research Sample (n = 368)

Variable	Frequency	Percentage	Variable	Frequency	Percentage
Grade Level			Birth Order		
First	111	30.2%	Weak	124	33.7%
Second	133	36.1%	Moderate	179	48.6%

Third	124	33.7%	Strong	65	17.7%
Age			Gender		
13–14 years	185	50.3%	Female	190	51.6%
15–16 years	183	49.7%	Male	178	48.4%

Table 2 shows the means, standard deviations, and correlations among the study variables.

Table 2

Means, Standard Deviations, and Correlations Between Study Variables

Variables	1	2	3	4	5	6
Bullying in School						
Victimization	–					
Aggression	.36	–				
Cyber Victimization	.30	.33	–			
Cyber Aggression	*10*	.38	.29	–		
Academic Commitment	–.21*	–.32**	–.27**	–.46**	–	
Social Isolation	.21	.39	.41	.28	–.52**	–
Mean	12.52	13.25	12.39	13.33	130.23	82.09
Std. Deviation	1.80	1.64	1.84	1.56	13.55	8.47

As shown in Table 2, the dimensions of bullying in school are negatively and significantly correlated with academic commitment and positively and significantly correlated with social isolation ($p < .01$ or $p < .05$). Additionally, social isolation is negatively and significantly correlated with academic commitment ($p < .01$ or $p < .05$). The conceptual model of the study was tested through structural equation modeling. The analysis of the model coefficients and fit indices showed that both the coefficients and fit indices were satisfactory. The results of the structural equation modeling are presented in Table 3.

Table 3

Coefficients and Explained Variance in the Model of Bullying and Academic Commitment Considering the Mediating Role of Social Isolation

Row	Model Paths	B	SE	β	p	R²
1	Bullying in School → Social Isolation	11.49	2.81	.73	.001	.53
2	Social Isolation → Academic Commitment	–0.83	0.07	–.52	.001	.27

As shown in Table 3, bullying in school is significantly associated with social isolation ($p < .01$, $\beta = .73$), explaining 53% of the variance in this variable. Social isolation is significantly associated with academic commitment ($p < .01$, $\beta = –.52$), explaining 27% of its variance. The structural model of the study is depicted in Figure 1.

Figure 1

Final Structural Model of the Study on School Bullying and Academic Commitment
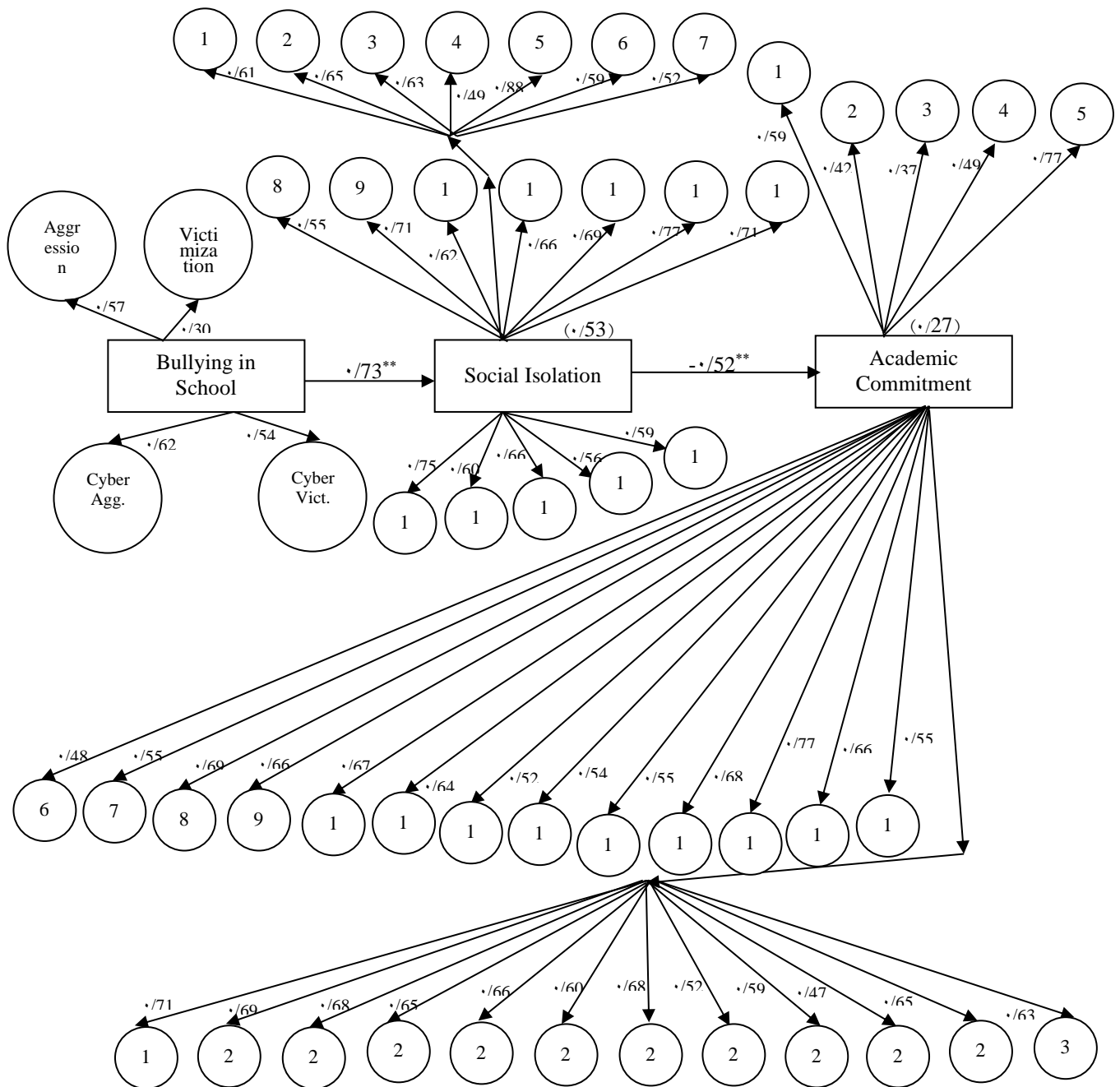
As seen in Figure 1, bullying has an indirect relationship with academic commitment through social isolation. Table 4 presents the indirect effects proposed in the structural model.

Table 4

Indirect Effects in the Final Model in Standardized and Unstandardized Forms for Academic Commitment

Row	Indirect Effects	Unstandardized
1	Indirect effect of Bullying on Academic Commitment via Social Isolation	−9.60 (p<0.01)

As shown in Table 4, the indirect effect of bullying on academic commitment through social isolation is significant (p < .01). Bootstrap analysis also confirmed that social isolation fully mediates the relationship between bullying and academic commitment. Model fit indices for the final model are presented in Table 5.

Table 5

Model Fit Indices for the Final Model of Academic Commitment

Fit Index	Acceptable Threshold	Observed Value	Conclusion
1. Chi-square (χ^2)	Non-significant	$\chi^2 = 10.61$, p = .06	Acceptable
2. Chi-square/df ratio (χ^2/df)	Less than 3	2.12	Acceptable
3. Goodness-of-Fit Index (GFI)	.90 or above	.991	Acceptable
4. Comparative Fit Index (CFI)	.90 or above	.988	Acceptable
5. Incremental Fit Index (IFI)	.90 or above	.987	Acceptable
6. Root Mean Square Residual (RMR)	.08 or lower	.055	Acceptable
7. Root Mean Square Error of Approximation (RMSEA)	Non-significant	$\chi^2 = 10.61$, p = .06	Acceptable

As shown in Table 5, all the model fit indices in the final structural model meet the acceptable thresholds according to Wang and Wang (2012), indicating that the final model is well-fitting. Therefore, the results presented in Tables 3 to 5 confirm the research hypothesis that social isolation plays a mediating role in the relationship between school bullying and academic commitment among lower secondary school students in the city of Babylon, Iraq.

4.   Discussion and Conclusion

The purpose of this study was to examine the mediating role of social isolation in the relationship between school bullying and academic commitment among junior high school students in Babylon, Iraq. The results of structural equation modeling (SEM) confirmed that school bullying was positively associated with social isolation and negatively associated with academic commitment. Furthermore, social isolation showed a significant negative relationship with academic commitment and fully mediated the relationship between school bullying and academic commitment. These findings highlight the detrimental psychological and educational consequences of bullying during early adolescence and underscore the significance of social isolation as a psychological mechanism through which bullying exerts its impact on students' academic trajectories.

The positive relationship found between bullying and social isolation aligns with a broad range of previous research indicating that adolescents who experience bullying are at increased risk of social withdrawal, loneliness, and detachment from peer groups (Ghardallou et al., 2024; Li et al., 2023). As a defensive mechanism against victimization, students often avoid social settings where bullying occurs, which can lead to chronic social isolation (Jefferson et al., 2023). In the current study, this phenomenon was confirmed with a strong positive path coefficient between school bullying and social isolation (β = .73, p < .01), explaining 53% of the variance in social isolation. These findings are consistent with the results of Shahbazian Khoniq et al. (2020), who found that students exposed to bullying were significantly more likely to experience social detachment and reduced peer interaction.

The negative association between social isolation and academic commitment, as identified in this study (β = –.52, p < .01), is also in line with prior evidence suggesting that adolescents' feelings of isolation interfere with school motivation, learning goals, and educational persistence (Griep, 2021; León Oropeza et al., 2024). Students who experience social disconnection often perceive the school

environment as alienating, resulting in decreased engagement and weaker identification with academic roles (Borja-Gil et al., 2024). The current study supports this pattern, showing that social isolation alone explained 27% of the variance in academic commitment. Such results echo earlier research by Chalabi (2004) and Modarresi Yazdi et al. (2017), who demonstrated that prolonged social isolation could compromise educational responsibility and motivation among youth. Moreover, these findings are compatible with the theoretical framework of maladaptive coping, whereby socially isolated students resort to psychological withdrawal rather than proactive academic engagement (Samara et al., 2021).

Additionally, the full mediation effect of social isolation in the relationship between school bullying and academic commitment confirms that bullying affects academic commitment indirectly, through its impact on students' social connectedness. This indirect effect (standardized β = –.38, p < .01) was statistically significant, suggesting that social isolation is a critical pathway through which bullying reduces students' academic commitment. These findings corroborate previous literature, which suggests that the impact of bullying on academic outcomes is often mediated by internalizing psychological symptoms such as low self-worth, anxiety, or impaired social functioning (Alinejad et al., 2022; Murphy et al., 2022). Specifically, Samara et al. (2021) found that bullying-related academic underperformance could be partially explained by a reduction in self-esteem and motivation—variables closely associated with the experience of social isolation.

In addition to reinforcing the importance of academic commitment as a predictor of student success, this study provides empirical support for the assumption that school bullying, a prevalent and often underestimated phenomenon, contributes to serious psychological and academic harm (Ahmad Aboud, 2023; Behboudi et al., 2023). This is consistent with earlier findings suggesting that bullying victimization can lower students' academic performance by impairing concentration, motivation, and engagement in the classroom (Al-Raqqad et al., 2017; Ibrahim et al., 2024). Likewise, the relationship observed in this study is consistent with previous work by Álvarez-Marín et al. (2022), who identified social-emotional difficulties, including loneliness and reduced peer belonging, as significant consequences of school bullying.

Importantly, the present findings also offer a contextual contribution by validating these psychological dynamics in a Middle Eastern, post-conflict region where adolescent students may already be exposed to higher levels of cumulative stress. The confirmation of the mediating role of social isolation among Iraqi students reflects not only universal patterns observed globally but also specific vulnerabilities shaped by social, cultural, and educational constraints in the region (Ahmad Aboud, 2023; Olatayo Awoyemi et al., 2024). The findings affirm the need for culturally responsive frameworks in addressing bullying and its academic consequences in fragile educational environments.

These results further support the role of academic commitment as a multifaceted construct influenced by interpersonal experiences in school settings. Human-Vogel and Rabe (2015) conceptualized academic commitment as comprising cognitive, emotional, and behavioral dimensions, which are directly affected by students' sense of social integration and perceived academic value. The decline in academic commitment due to social isolation, as shown in this study, validates this multidimensional perspective. Furthermore, the findings resonate with Worku and Urgessa (2024), who emphasized academic commitment as a mediator between resilience and academic achievement, thereby reinforcing its relevance in education-oriented interventions.

From a methodological perspective, the model tested in this study exhibited satisfactory goodness-of-fit indices, including RMSEA (.055), GFI (.991), and CFI (.988), indicating a robust structural model (Wang & Wang, 2012). These indicators lend additional credibility to the hypothesized relationships and the generalizability of the mediating effect of social isolation. Moreover, the use of validated instruments such as the Academic Commitment Scale (Human-Vogel & Rabe, 2015; Rezaei-Gazki et al., 2019), the European Bullying and Cyberbullying Questionnaire (Álvarez-Marín et al., 2022), and the Social Isolation Inventory (Chalabi & Amir Kafi, 2004) ensures that the constructs were measured with theoretical and empirical precision.

Collectively, the results of this study confirm that bullying in school settings can significantly disrupt students' academic paths through its impact on their social relationships and sense of belonging. These findings reinforce the call for multidimensional anti-bullying strategies that incorporate psychological support, social skills training, and academic counseling to protect students' mental health and sustain their educational commitment. The interaction between external stressors like bullying and internal responses like social isolation highlights the

importance of fostering emotionally safe environments within schools to enhance student retention, academic motivation, and long-term educational success.

Despite the valuable insights provided by this study, several limitations should be acknowledged. First, the sample was drawn exclusively from junior high school students in Babylon, Iraq, which may limit the generalizability of the findings to other regions or educational systems. Cultural, socio-economic, and institutional differences could influence how bullying and social isolation manifest and affect academic commitment. Second, the use of self-report questionnaires introduces the possibility of response bias, particularly in a sensitive context such as bullying, where students may underreport experiences due to fear or stigma. Finally, the cross-sectional design of the study prevents any causal inferences. While the mediation model is theoretically sound, longitudinal studies are needed to establish temporal precedence among the variables.

Future research should consider expanding the scope of the study to include diverse educational levels and settings, such as elementary schools, high schools, and private institutions, to examine potential developmental and contextual variations. Longitudinal studies could provide a more accurate picture of how bullying and social isolation influence academic commitment over time. Additionally, future work might explore the role of potential moderators—such as gender, parental support, or teacher-student relationships—in shaping the strength or direction of these relationships. It would also be useful to replicate this model in other countries or post-conflict settings to compare cross-cultural dynamics and to design universally effective interventions.

To translate these findings into practical action, school administrators should develop comprehensive anti-bullying policies that emphasize early detection, prevention, and intervention. Training programs for teachers and school staff must include strategies for identifying socially isolated students and creating inclusive classroom environments that foster peer support. Counseling services should be made available to help victimized students build social skills and resilience. Moreover, embedding socio-emotional learning (SEL) programs into the school curriculum may equip students with the coping mechanisms necessary to handle bullying situations and maintain their academic focus. Finally, engaging parents and community stakeholders in awareness campaigns can strengthen the support systems that protect students from the long-term consequences of bullying and social isolation.

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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Ethical Considerations

All procedures performed in studies involving human participants were under the ethical standards of the institutional and, or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

References

Ahmad Aboud, A. (2023). *The multiple relationship of bullying behaviors with academic vitality, academic self-efficacy, and academic procrastination among middle school students in Kirkuk* Master's thesis in Psychology, Faculty of Educational Sciences and Psychology, Islamic Azad University, Isfahan (Khorasgan) Branch].

Ahmadi, S., & Basharpour, S. (2023). Predicting cyberbullying based on online disinhibition and perceived maternal acceptance with the mediating role of emotional stability: A descriptive study. *Journal of Rafsanjan University of Medical Sciences*, 22(4), 319-332. https://doi.org/10.61186/jrums.22.4.319

Al-Raqqad, H., Al-Bourini, E., Al Talahin, F., Michael, R., & Aranki, E. (2017). The impact of school bullying on students'

academic achievement from teachers point of view. *International Education Studies*, *10*(6), 44-50. https://doi.org/10.5539/ies.v10n6p44

Alinejad, V., Parizad, N., Yarmohammadi, M., & Radfar, M. (2022). Loneliness and academic performance mediates the relationship between fear of missing out and smartphone addiction among Iranian university students. *BMC psychiatry*, *22*(1), 550. https://doi.org/10.1186/s12888-022-04186-6

Álvarez-Marín, I., Pérez-Albéniz, A., Lucas-Molina, B., Martínez-Valderrey, V., & Fonseca-Pedrero, E. (2022). Development and validation of a brief version of the European bullying and cyberbullying intervention project questionnaires (EBIP-Q and ECIP-Q). *Psicothema*, *34*(4), 571-581. https://doi.org/10.7334/psicothema2022.156

Behboudi, R., Pourakbar, S., & Azimi, H. (2023). Investigating the relationship between bullying behaviors and academic performance in elementary school students in Hachirood in 2023.

Borja-Gil, J., Castellanos Verdugo, M., & Oviedo-García, M. (2024). Engagement and commitment in higher education: Looking at the role of identification and perception of performance. *European Journal of Education*, *59*(2), e12642. https://doi.org/10.1111/ejed.12642

Chalabi, M., & Amir Kafi, M. (2004). Multi-level analysis of social isolation. *Iranian Journal of Sociology*, *5*(2), 3-31. https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://www.sid.ir/paper/67441/fa&ved=2ahUKEwi7_dmpppmOAxUuSfEDHVklCJQQFnoECBoQAQ&usg=AOvVaw0Ra2kGRiypURc3Dpz-jFqs

Ghardallou, M., Mtiraoui, A., Ennamouchi, D., Amara, A., Gara, A., Dardouri, M., Zedini, C., & Mtiraoui, A. (2024). Bullying victimization among adolescents: Prevalence, associated factors and correlation with mental health outcomes. *PLoS One*, *19*(3), e0299161. https://doi.org/10.1371/journal.pone.0299161

Griep, Y. (2021). Capturing the process of academic commitment: a taxonomy and test of post-secondary student academic commitment trajectories. *Higher Education Research & Development*, *41*, 1900-1915. https://doi.org/10.1080/07294360.2021.1967886

Human-Vogel, S., & Rabe, P. (2015). Measuring self-differentiation and academic commitment in university students: A case study of education and engineering students. *South African Journal of Psychology*, *45*(1), 60-70. https://doi.org/10.1177/0081246314548808

Ibrahim, F. M., Rashad Dabou, E. A., AbdelSamad, S., & Abuijlan, I. A. M. (2024). Prevalence of bullying and its impact on self-esteem, anxiety and depression among medical and health sciences university students in RAS Al Khaimah, UAE. *Heliyon*, *10*(3), e25063. https://doi.org/10.1016/j.heliyon.2024.e25063

Jefferson, R., Barreto, M., Verity, L., & Qualter, P. (2023). Loneliness during the school years: How it affects learning and how schools can help. *The Journal of School Health*, *93*(5), 428-435. https://doi.org/10.1111/josh.13306

León Oropeza, M. A., Aguilar Morales, D. N., & Surdez Pérez, D. E. G. (2024). Instrument to measure academic commitment of secondary school students in science and mathematics subjects: Adaptation and validation. *Educational Administration: Theory and Practice*, *30*(6), 3367-3381. https://doi.org/10.53555/kuey.v30i6.6106

Li, T., Chen, B., Li, Q., Wu, X., Li, Y., & Zhen, R. (2023). Association between bullying victimization and post-traumatic stress disorders among Chinese adolescents: a multiple mediation model. *BMC psychiatry*, *23*(1), 758. https://doi.org/10.1186/s12888-023-05212-x

Modarresi Yazdi, F. S., Farahmand, M., & Afshani, A. (2017). Examining social isolation among single women and the socio-cultural factors influencing it (a study of single women over 30 years old in Yazd). *Social Issues in Iran*, *8*(1), 121-144. https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://sid.ir/paper/173536/fa&ved=2ahUKEwi5l5O0ppmOAxW1cPEDHQoPBigQFnoECBkQAQ&usg=AOvVaw0r26HFNdOeF-eJvEnNw5i7

Modecki, K. L., Minchin, J., Harbaugh, A. G., Guerra, N. G., & Runions, K. C. (2014). Bullying prevalence across contexts: a meta-analysis measuring cyber and traditional bullying. *The Journal of Adolescent Health: Official Publication of the Society for Adolescent Medicine*, *55*(5), 602-611. https://doi.org/10.1016/j.jadohealth.2014.06.007

Murphy, D., Leonard, S. J., Taylor, L. K., & Santos, F. H. (2022). Educational achievement and bullying: The mediating role of psychological difficulties. *The British Journal of Educational Psychology*, *92*(4), 1487-1501. https://doi.org/10.1111/bjep.12511

Olatayo Awoyemi, A., Akinduyo, T., Ajokpaniovo, M. I., & Mabaso, N. (2024). Influence of stress on academic performance of in-school adolescents in Ilorin Metropolis. *Journal for Educators, Teachers and Trainers (JETT)*, *15*(3), 44-55. https://dialnet.unirioja.es/servlet/articulo?codigo=9895446

Pangani, J., & Munyenyembe, B. (2024). The impact of stress and loneliness on cyberloafing of health workers in Malawi: The moderating role of age. *African Journal of Empirical Research*, *5*(3), 640-648. https://doi.org/10.51867/ajernet.5.3.55

Rezaei-Gazki, P., Delavar, A., & Samavi, A. (2019). Standardization of the Persian version of the academic commitment scale. *Strides in Development of Medical Education*, *16*(1), e90940. https://doi.org/10.5812/sdme.90940

Samara, M., Da Silva Nascimento, B., El-Asam, A., Hammuda, S., & Khattab, N. (2021). How can bullying victimization lead to lower academic achievement? A systematic review and meta-analysis of the mediating role of cognitive-motivational factors. *International journal of environmental research and public health*, *18*(5), 2209. https://doi.org/10.3390/ijerph18052209

Shahbazian Khoniq, A., Ali Pour, F., Anahid, I., Mohammadian Gharibe, A. A., & Sheikh Ali Zadeh, S. (2020). The diagnostic role of social intelligence, bullying, and academic well-being in the social isolation of students. *New Educational Ideas*, *16*(4), 135-151. https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://ensani.ir/fa/article/460492/

Shurygin, V., Abdullayev, I., Hajiyev, H., Yakutina, M., Kozachek, A., & Zakieva, R. (2024). Blended learning: The effect on students' self-regulation and academic achievements. *Novitas-ROYAL (Research on Youth and Language)*, *18*(1), 137-154. https://eric.ed.gov/?id=EJ1422421

Wang, J., & Wang, X. (2012). *Structural equation modeling: Applications using Mplus*. John Wiley & Sons. https://doi.org/10.1002/9781118356258

Worku, B., & Urgessa, D. (2024). Students' academic culture: the mediating role of academic commitment in the relationship between academic resilience and academic performance of university students. *Cogent Education*, *11*, 1-14. https://doi.org/10.1080/2331186X.2024.2377004