
ACADEMIC SELF-CONFIDENCE AND PEER ATTACHMENT: A CORRELATIONAL STUDY OF ISLAMIC JUNIOR HIGH SCHOOL STUDENTS

DONY DARMA SAGITA

Universitas Terbuka, Indonesia

Corresponding author: donyds@ecampus.ut.ac.id**Abstract**

This study investigates the correlation between peer attachment and academic self-confidence among students in Islamic junior high schools (*Madrasah Tsanawiyah*). Employing a quantitative correlational approach, the study involved 77 early adolescent students selected randomly. Data were collected using two standardized instruments: the Peer Attachment Inventory ($\alpha=0.95$) and the Academic Self-Confidence Scale ($\alpha=0.93$). Before hypothesis testing, the normality assumption was verified using the Kolmogorov-Smirnov test, and linearity was assessed through the Test of Linearity in ANOVA, with both test met the significance criterion ($p>0.05$). The Pearson Product-Moment correlation analysis revealed a strong and statistically significant positive relationship between peer attachment and academic self-confidence ($r=0.798$, $p<0.001$). The results underscore the crucial roles of emotional closeness, trust, and communication among peers in shaping students' academic resilience. Future studies are recommended to adopt experimental or longitudinal designs to examine the causal pathways and effectiveness of peer-based interventions in enhancing student well-being and performance.

Keywords: academic self-confidence, adolescence, Islamic junior high school, peer attachment

Introduction

Early adolescence is a critical and vital period during which adolescents begin to shift their focus of social development from family and teachers to their peers. Adolescents utilize peer interactions as a primary foundation for building identity and independence (Blakemore & Mills, 2014; Tomova et al., 2021). Several previous findings indicate that changes in the quality of social relationships at school, including peer pressure and support, are significantly associated with increased student motivation to learn during middle school and high school. This condition persists at least throughout the adolescent transition (Duchesne et al., 2014, 2017). These findings highlight the urgency of understanding peer attachment mechanisms in educational contexts to address the motivational and emotional challenges adolescents face.

Peer attachment encompasses three main dimensions: trust, communication, and alienation in peer relationships (Chan et al., 2025; Delgado et al., 2022). When these bonds provide a sense of security and emotional support, adolescents become more willing to make decisions and take risks in the learning process at school, such as daring to ask questions in class, sharing opinions, or trying independent learning methods, which in turn increases their self-confidence as developing adolescents (Freeman & Rees, 2010; Qian et al., 2024). Research on early adolescents has shown that the presence of empathetic and reliable friends is a key factor in creating a conducive learning environment and

reducing fear and anxiety (Sari et al., 2025). Therefore, measuring and facilitating healthy peer attachments in schools should be a strategic step in fostering students' self-confidence and academic achievement during early adolescence.

Peer attachment is defined as the level of trust, quality of communication, and emotional bond between an individual and their peer group (Owen, 2024). A secure bond allows adolescents to feel supported and valued, thus encouraging them to try new things and face challenges (Mikulincer & Shaver, 2022, 2023). Conversely, insecure bonds are often associated with excessive worry, difficulty adapting, and social isolation. Therefore, peer attachment is not only a measure of the strength of peer relationships within friendships but also an important indicator of adolescents' emotional well-being, subjective well-being, psychological well-being, and self-confidence in learning.

Academic self-confidence refers to adolescents' beliefs in their ability to achieve ideal learning goals and has been proven to play a crucial role in influencing the level of participation and persistence in academics. Adolescents with high self-confidence are less likely to experience academic burnout due to their ability to mobilize adaptive coping strategies to overcome the pressure of schoolwork (Moreno-Rosa et al., 2024; Toribio-Méndez et al., 2025). Furthermore, the level of self-confidence is directly and positively correlated with students' cognitive and behavioral engagement in learning, indicating that students with high self-confidence tend to be more active in asking questions and contributing to class discussions (Guo et al., 2024). Additionally, academic self-efficacy has been found to mediate the relationship between professional identity and student academic burnout (Kong et al., 2021; Zhu, 2025). These findings demonstrate that self-confidence is not only a motivator but also a psychological protector for students against the academic stress they face.

Other factors, such as emotional regulation and peer attachment support, also contribute significantly to the development of adolescent self-confidence. The combination of resilience and academic confidence has been found to predict learning motivation by up to 30% in online students, highlighting the importance of both elements (Stein et al., 2024). Furthermore, research on self-esteem and peer attachment suggests that strong emotional bonds with peers can boost self-confidence both directly and through increased self-esteem (Wu et al., 2024). Other findings also indicate that quality communication and trust in peer relationships facilitate feelings of academic competence, making students more willing to take on challenges and risks encountered in school (Monfort et al., 2025). Various interventions emphasizing self-confidence enhancement, such as growth mindset training, motivational training, self-improvement programs, and peer coaching programs, have significantly improved learning outcomes in middle and high school students across various academic disciplines (Capogna & Greco, 2024).

Previous studies have established a positive relationship between peer attachment and indicators of adolescent psychological well-being (Armsden & Greenberg, 1987), self-esteem (Migena et al., 2022), self-efficacy (Coleman, 2003), and learning motivation (Daumiller & Hemi, 2025). However, the majority of these studies focus on public schools, rendering the findings less relevant to religious-based schools. This is particularly significant in Indonesia, which has numerous religious schools, including integrated elementary schools, Islamic elementary schools (*Madrasah Ibtidaiyah*), Islamic junior high schools (*Madrasah Tsanawiyah*), Islamic senior high schools (*Madrasah Aliyah*), and Islamic boarding schools (*Pesantren*), each possessing unique characteristics.

In the context of Islamic junior high schools (MTs) in Indonesia, peer interactions are inextricably linked to the application of distinctive religious values and community norms. This educational environment aims to develop and shape adolescents' relational character differently than in public schools. For example, research on students at Islamic boarding schools in Palembang found

that emotional closeness with peers significantly increased their self-esteem, confirming the role of peer attachment as a source of psychosocial support in religious settings (Luthfi & Husni, 2020). Another study at Darul Qur'an Wal Irsyad Islamic Boarding School in Yogyakarta also showed that self-confidence and parental attachment jointly predicted student independence, with academic, social, and mood self-confidence contributing the largest portion (Irsyad, 2024).

Although the majority of studies have focused on Islamic boarding schools (*Pesantren*), there appears to be limited research specifically examining peer attachment and self-confidence among students in Islamic junior high schools (MTs). The difference between the full-boarding system implemented in Islamic boarding schools and the full-day learning system in MTs can create unique peer group dynamics, particularly in terms of the frequency of interaction, communication patterns, and integration of Islamic teachings into daily activities (Parapat, 2017). To date, no correlational studies have examined these variables in the Madrasah Tsanawiyah setting, particularly in Jakarta. This gap makes it problematic to generalize findings from Islamic boarding schools to Madrasahs without considering the differences in context and learning patterns. This situation highlights the importance of empirical research to understand the contribution and relationship of peer attachment to academic self-confidence among MTs students in large urban areas in Indonesia.

To address this research gap, the present study seeks to answer the following research questions: (1) Is there a statistically significant correlation between peer attachment and academic self-confidence among students in an Islamic junior high school? (2) To what extent does the quality of peer attachment predict students' levels of academic self-confidence? Accordingly, this study aims to examine the relationship between peer attachment and academic self-confidence among early adolescents at MTs Al-Ihsan Jakarta. Through comprehensive correlational analysis, the findings are expected to provide empirical evidence on the role of peer bonds in supporting students' academic self-confidence. The results of this study will hopefully form the basis for recommendations for developing more targeted peer support programs and guidance and counseling services, as well as provide references and guidelines for school counselors in designing interventions that can improve students' emotional well-being and learning motivation.

Literature Review

This literature review aims to explore four interrelated constructs that serve as the theoretical and empirical foundation of this study: peer attachment, academic self-confidence, early adolescence, and Islamic education context. These constructs are selected because they reflect the core psychosocial mechanisms that influence adolescent behavior in educational settings. First, the concept of peer attachment is discussed through the lens of attachment theory, emphasizing its role in emotional and academic development. Second, academic self-confidence is reviewed as a function of self-efficacy and motivational theory within learning contexts. Third, early adolescence is examined as a sensitive developmental phase in which peer relationships and self-beliefs are particularly influential. Fourth, the Islamic education context is explored to understand the unique characteristics of Madrasah Tsanawiyah that may shape peer dynamics and student confidence. Together, these four sections form a comprehensive framework to understand how peer dynamics can shape academic confidence among students in Islamic junior high schools.

Peer attachment

Peer attachment is rooted in the attachment theory developed by [Bowlby \(1969\)](#), which emphasizes the importance of early emotional bonds in shaping affective regulation mechanisms and lifelong behavioral exploration. [Armsden and Greenberg \(1987\)](#) operationalized this concept in the Inventory of Parent and Peer Attachment (IPPA), which measures three key dimensions: trust (the belief that peers are reliable and understanding), communication (openness in sharing feelings and thoughts), and alienation (feelings of isolation, separation, or emotional detachment from peers). This instrument has been widely validated across diverse cultural contexts and remains a foundational tool for assessing peer relationships in adolescence ([Therriault et al., 2024](#)).

Building upon attachment theory, [Mikulincer and Shaver \(2019, 2023\)](#) demonstrated that secure peer attachment provides a "secure base" that allows adolescents to feel confident in handling social and academic tasks while reducing vulnerability to interpersonal stress. When adolescents perceive their peers as trustworthy and communicative, they develop a sense of psychological safety that encourages exploration and risk-taking in learning environments. Conversely, high levels of alienation are associated with feelings of loneliness, anxiety, and reluctance to engage in academic activities. Peer attachment is also recognized as a significant form of social support in the school context. Harter's theory of self-worth posits that positive peer attachment reinforces feelings of acceptance and esteem, thus fostering the development of identity and self-confidence ([Sezer & Gürtepe, 2025](#)). Furthermore, research by [Fan et al. \(2022\)](#) confirms that the dimensions of trust and communication in peer relationships directly impact academic self-efficacy, explaining up to 20% of variance in courageous learning behaviors. Thus, peer attachment not only reflects the quality of interpersonal relationships but also serves as a foundation for the development of adolescents' motivation, academic engagement, and emotional well-being.

Academic self-confidence

Academic self-confidence refers to students' beliefs in their capabilities to successfully perform academic tasks, achieve learning goals, and overcome challenges in educational settings ([Bandura, 1997](#); [Stankov et al., 2012](#)). This construct is closely related to, yet distinct from, general self-confidence, as it specifically pertains to the academic domain and encompasses beliefs about one's ability to learn, understand course materials, and perform well in assessments. Academic self-confidence influences how students approach learning tasks, the effort they invest, their persistence when facing difficulties, and ultimately their academic achievement.

In social cognitive theory, [Bandura \(1997, 2023\)](#) emphasized the role of self-efficacy, the personal assessment of one's ability to perform a specific task as a key predictor of risk-taking, persistence, and achievement. Academic self-confidence develops through four primary sources: mastery experiences (successful past performances), vicarious experiences (observing peers succeed), verbal persuasion (encouragement from teachers and peers), and physiological states (emotional and physical well-being). Among these sources, mastery experiences are considered the most influential in building robust academic self-confidence.

Self-regulated learning theory further elaborates how self-confidence operates in academic contexts. [Zimmerman and Moylan \(2009\)](#) highlighted that students who are able to set goals, monitor their progress, and adjust their learning strategies tend to maintain consistent academic self-confidence ([Bozgün & Kösterelioğlu, 2023](#); [Nilson & Zimmerman, 2023](#)). This self-regulation process creates a

positive feedback loop where successful self-management enhances confidence, which in turn promotes further engagement in self-regulated learning behaviors.

Empirically, moderate levels of academic self-confidence are associated with fluctuations in motivation and increased susceptibility to academic burnout (Lochbaum et al., 2022; Vella-Fondacaro & Romano-Smith, 2023). Students with low academic self-confidence tend to avoid challenging tasks, give up easily when encountering obstacles, and experience higher levels of academic anxiety. Meanwhile, Luthfi and Husni (2020) found that self-efficacy-enhancing interventions through mastery experiences and verbal persuasion were effective in fostering self-confidence among Islamic boarding school students. Therefore, academic self-confidence is not simply a stable trait but rather a dynamic construct that can be enhanced through successful experiences, appropriate social support, and conducive learning environments.

Early adolescence

Early adolescence, typically spanning ages 10 to 14 years, represents a critical phase in psychosocial development. According to Erikson's (1968) psychosocial development theory, individuals at this stage navigate the industry versus inferiority crisis, during which they learn social and academic skills outside the family context and develop a sense of competence (Maree, 2022). Success in this stage fosters feelings of capability and confidence, while failure may result in feelings of inadequacy and low self-esteem.

From a neurobiological perspective, Blakemore and Mills (2014) emphasized that during early adolescence, the brain undergoes significant synaptic reorganization that affects emotional regulation, social cognition, and risk-taking behaviors. The prefrontal cortex, responsible for executive functions and decision-making, continues to develop throughout adolescence, making environmental support—including peer groups, critical for healthy development (Polite-Corn et al., 2023). This neurological sensitivity means that early adolescents are particularly responsive to social feedback and peer influences.

In educational contexts, early adolescents demonstrate heightened responsiveness to peer norms and feedback, which significantly influence their motivation, learning behavior, and self-identity formation (Lu et al., 2021; Trude et al., 2021). Research indicates that peer support during this developmental period not only increases self-efficacy but also moderates the effects of academic stress. Early adolescents with strong peer bonds are better equipped to maintain emotional well-being amidst school pressures compared to those with weaker peer connections (de Jong et al., 2022; Rabin et al., 2024). Therefore, understanding the developmental characteristics and unique needs of early adolescents is crucial for designing effective educational interventions that leverage peer relationships to enhance academic confidence.

Islamic education context

Islamic junior high schools (Madrasah Tsanawiyah/MTs) in Indonesia represent a unique educational environment that integrates religious instruction with the national curriculum. Unlike public schools, Madrasah Tsanawiyah incorporates Islamic values, teachings, and practices into daily school activities, creating a distinctive sociocultural context that shapes student interactions and development (Lukens-Bull, 2001; Tan, 2014). Understanding this context is essential for examining how peer attachment and academic self-confidence manifest among MTs students.

The educational philosophy of Madrasah emphasizes not only academic achievement but also character development (*akhlak*) and spiritual growth. Students in MTs are exposed to Islamic teachings that promote values such as *ukhuwah* (brotherhood/sisterhood), *ta'aruf* (mutual cooperation), and *silaturahmi* (maintaining social bonds), which may influence the nature and quality of peer relationships (Azra et al., 2007). These religious values potentially create a framework for peer interactions that differs from secular school settings, where peer attachment may be reinforced by shared religious identity and communal practices such as congregational prayers and religious study circles.

Research on Islamic educational institutions in Indonesia has demonstrated the significant role of peer relationships in student development. Luthfi and Husni (2020) found that emotional closeness with peers significantly increased self-esteem among students at Islamic boarding schools in Palembang, confirming the role of peer attachment as a source of psychosocial support in religious settings. Similarly, Irsyad (2024) reported that self-confidence and parental attachment jointly predicted student independence at an Islamic boarding school in Yogyakarta, with academic, social, and emotional self-confidence contributing substantially to the model.

However, it is important to distinguish between the full-boarding system (*Pesantren*) and the full-day schooling system (*Madrasah Tsanawiyah*). While students in *Pesantren* live together and interact with peers continuously, MTs students return home after school hours, resulting in different patterns of peer interaction frequency and intensity (Parapat, 2017). This distinction suggests that findings from *Pesantren* contexts may not be directly generalizable to Madrasah settings. The unique combination of Islamic values, educational practices, and social dynamics in *Madrasah Tsanawiyah* warrants specific investigation to understand how peer attachment contributes to academic self-confidence in this particular context.

Methodology

Research design and approach of the study

This study employed a quantitative approach with a correlational design to examine the relationship between peer attachment and academic self-confidence among early adolescents at an Islamic Junior High School (*Madrasah Tsanawiyah*). The correlational design enables researchers to measure the strength and direction of the relationship between variables without manipulating field conditions, making it suitable for studies conducted in naturalistic school settings (Creswell & Creswell, 2018; Nurhayati et al., 2025). This design allows variations in scores on both variables to be analyzed to determine the extent to which peer attachment correlates with students' academic self-confidence. As a non-experimental design, this study does not establish causality but provides valuable insights into the association between the two constructs.

Research site and participants

This research was conducted at MTs Al-Ihsan Jakarta during the 2024/2025 academic year. The school was purposively selected as it represents a typical urban Islamic junior high school that integrates religious education with the national curriculum. A total of 77 students were selected using simple random sampling from the eighth-grade population. The demographic characteristics of participants are presented in Table 1.

Table 1. *Demographic Characteristics of Participants (N = 77)*

Characteristic	Category	Frequency	Percentage
Gender	Male	[n]	[%]
	Female	[n]	[%]
Age	12 years	[n]	[%]
	13 years	[n]	[%]
	14 years	[n]	[%]

The inclusion criteria were: (1) students aged between 12 and 14 years, corresponding to the early adolescence developmental stage; (2) enrolled as full-time students during the research period; and (3) willing to participate voluntarily with parental or guardian consent. Students who were absent during data collection or did not complete the questionnaires were excluded from the analysis.

The justification for selecting this age group is based on Erikson's (1968) psychosocial theory, which emphasizes that identity exploration and peer influence are particularly dominant during early adolescence (Maree, 2022). Additionally, this developmental period is characterized by heightened sensitivity to peer relationships and social feedback, making it an appropriate population for examining peer attachment and academic self-confidence.

The sample size of 77 participants is considered adequate for correlational analysis. According to Cohen (1992), a minimum sample size of 67 is required to detect a medium effect size ($r = 0.30$) with a statistical power of 0.80 at $\alpha = 0.05$ in bivariate correlation studies. Thus, the current sample size meets the recommended minimum for detecting meaningful correlations between variables.

Research instruments

Two standardized instruments were utilized in this study to measure the primary variables: the Peer Attachment Inventory and the Academic Self-Confidence Scale.

Peer attachment inventory

Peer attachment was measured using an adapted version of the Inventory of Parent and Peer Attachment (IPPA) developed by Armsden and Greenberg (1987). This instrument assesses three dimensions of peer attachment: trust (the belief that peers are reliable, understanding, and respectful), communication (the quality and openness of verbal exchange with peers), and alienation (feelings of isolation, anger, or detachment from peers). The inventory consists of [number] items rated on a 5-point Likert scale ranging from 1 (almost never or never true) to 5 (almost always or always true). Items measuring alienation were reverse-scored so that higher total scores indicate stronger and more secure peer attachment. The instrument demonstrated excellent internal consistency in this study, with a Cronbach's alpha coefficient of 0.95.

Academic self-confidence scale

Academic self-confidence was measured using an adapted scale based on the academic self-efficacy framework proposed by [Bandura \(1997\)](#) and subsequent developments by [Stankov et al. \(2012\)](#). The scale assesses students' beliefs in their capabilities to perform academic tasks, understand course materials, and achieve learning goals. The instrument consists of [number] items rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Higher scores indicate greater levels of academic self-confidence. The scale demonstrated excellent internal consistency in this study, with a Cronbach's alpha coefficient of 0.93.

Both instruments were adapted to the Indonesian language and cultural context following standard translation and back-translation procedures. A pilot study was conducted with 30 students from a similar population to ensure clarity of items and to establish preliminary reliability estimates before the main data collection.

Data collection procedure

The data collection process was conducted over two weeks in a controlled classroom setting following ethical approval from the relevant institutional review board. Prior to data collection, informed consent was obtained from both students and their parents or guardians. All participants were briefed on the objectives of the research, assured of their anonymity and confidentiality, and informed of their right to withdraw at any stage without academic penalty.

Questionnaires were administered in printed form during school hours in a classroom setting. Students completed the instruments individually under the supervision of the research team. To minimize response bias, the researcher maintained a neutral stance and refrained from offering explanations or comments that could influence students' responses [\(Nurhayati et al., 2025\)](#). The completion of both questionnaires took approximately 20–30 minutes. Completed questionnaires were collected immediately and stored securely to ensure data confidentiality.

Data analysis

The collected data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 26.0. A sequence of statistical procedures was applied to ensure the robustness and validity of the findings. First, descriptive statistical analysis was performed to calculate the mean, standard deviation, minimum, and maximum values for both peer attachment and academic self-confidence scores. This analysis provided an overview of the distribution and central tendency of the data.

Second, assumption testing was conducted prior to the main analysis. The normality of data distribution was assessed using the Kolmogorov-Smirnov test, where a significance level (p) above 0.05 indicated that the data were normally distributed and suitable for parametric testing (Selviana et al., 2024). Subsequently, the linearity assumption was examined through the Test of Linearity in ANOVA to determine whether the relationship between the two variables followed a linear pattern. A non-significant deviation from linearity ($p > 0.05$) confirmed that the assumptions for linear correlation were satisfied.

Third, the Pearson Product-Moment correlation analysis was conducted to assess the strength and direction of the relationship between peer attachment and academic self-confidence. The correlation coefficient (r) was interpreted using Cohen's (1988) guidelines, which classify effect sizes

as follows: values of 0.10–0.29 indicate a small effect, 0.30–0.49 indicate a medium effect, and values ≥ 0.50 indicate a large effect. A significance threshold of $p < 0.05$ was applied to determine statistical significance.

This analytical procedure allowed for a comprehensive and statistically valid examination of the hypothesized relationship between peer attachment and academic self-confidence, aligning with best practices in quantitative social science research (Cohen, 1988; Creswell & Creswell, 2018).

Ethical considerations

This study adhered to ethical principles for research involving human participants. Ethical approval was obtained from the relevant institutional authority prior to data collection. Informed consent was secured from both participants and their parents or guardians, ensuring voluntary participation. Participants were informed of their right to withdraw from the study at any time without any negative consequences. All data were treated confidentially, with participant identities anonymized through the use of numerical codes. The collected data were stored securely and accessible only to the research team for analysis purposes.

Results

This section presents the findings of the study, organized into four parts: descriptive statistics, assumption testing (normality and linearity), and correlation analysis between peer attachment and academic self-confidence.

Descriptive statistics

Descriptive analysis was conducted to examine the distribution of scores for peer attachment and academic self-confidence among students at MTs Al-Ihsan Jakarta. The results are presented in Table 1.

Table 1: Descriptive Statistics of Peer Attachment and Academic Self-Confidence ($N = 77$)

Variable	Min	Max	M	SD	Category
Peer Attachment	48	114	73.97	[SD]	Moderate (68.8%)
Academic Self-Confidence	44	99	72.53	[SD]	Moderate (67.5%)

Note. Min = minimum score; Max = maximum score; M = mean; SD = standard deviation. Categories were determined based on the score distribution divided into three levels: low, moderate, and high.

As shown in Table 1, the peer attachment variable has a minimum score of 48 and a maximum score of 114, with a mean of 73.97, which falls within the moderate category (68.8% of participants). Similarly, the academic self-confidence variable recorded a minimum score of 44 and a maximum of 99, with a mean of 72.53, also in the moderate category (67.5% of participants). These results indicate that the majority of students demonstrated moderate levels of both peer attachment and academic self-confidence. The relatively close mean values between peer attachment ($M = 73.97$) and academic self-confidence ($M = 72.53$) suggest a parallel distribution of scores between the dimensions of social

relationships and students' academic beliefs, warranting further analysis of the potential relationship between these two variables.

Assumption testing

Prior to conducting the correlational analysis, assumption tests were performed to ensure the appropriateness of parametric statistical procedures.

Normality Test

The Kolmogorov-Smirnov test was employed to assess the normality of data distribution for both variables. The results are presented in Table 2.

Table 2: Normality Test Results Using Kolmogorov-Smirnov

Variable	N	Kolmogorov-Smirnov Z	Asymp. Sig. (2-tailed)
Peer Attachment	77	1.267	0.098
Academic Self- Confidence	77	0.857	0.200

As presented in Table 2, the Kolmogorov-Smirnov test yielded significance values of 0.098 for peer attachment and 0.200 for academic self-confidence. Since both significance values exceed the alpha level of 0.05, the null hypothesis of normal distribution is retained. This indicates that the data distribution for both variables does not differ significantly from a normal distribution, thereby satisfying the normality assumption required for parametric testing.

Linearity test

The linearity assumption was examined using the Test of Linearity in ANOVA to determine whether the relationship between peer attachment and academic self-confidence follows a linear pattern. The results are presented in Table 3.

Table 3: Linearity Test Results

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Groups (Combined)	[SS]	[df]	[MS]	[F]	[Sig.]
Linearity	[SS]	1	[MS]	[F]	[Sig.]
Deviation from Linearity	[SS]	[df]	[MS]	0.47	0.496
Within Groups	[SS]	[df]	[MS]		
Total	[SS]	76			

Note. The critical value for assessing linearity is the significance of Deviation from Linearity.

The linearity test results show that the Deviation from Linearity yielded an F-value of 0.47 with a significance value of 0.496. Since this p-value exceeds 0.05, the deviation from linearity is not statistically significant, indicating that the relationship between peer attachment and academic self-confidence can be considered linear. Therefore, the linearity assumption is satisfied, and the Pearson Product-Moment correlation analysis can proceed appropriately.

Correlation analysis

Having confirmed that the assumptions of normality and linearity were met, the Pearson Product-Moment correlation analysis was conducted to examine the relationship between peer attachment and academic self-confidence. The results are presented in Table 4.

Table 4: Pearson Correlation Between Peer Attachment and Academic Self-Confidence

Variable	1	2
1. Peer Attachment	—	
2. Academic Self-Confidence	0.798**	—

Note. N = 77. **p < 0.001 (2-tailed).

The correlation analysis revealed a Pearson correlation coefficient of $r = 0.798$ with a significance value of $p < 0.001$ (2-tailed). According to [Cohen's \(1988\)](#) guidelines for interpreting effect sizes, a correlation coefficient of 0.50 or above indicates a large effect. Thus, the obtained coefficient of 0.798 represents a strong positive correlation between peer attachment and academic self-confidence.

The coefficient of determination ($r^2 = 0.637$) indicates that approximately 63.7% of the variance in academic self-confidence can be explained by peer attachment, while the remaining 36.3% is attributable to other factors not examined in this study. This substantial shared variance underscores the meaningful relationship between peer relationships and students' academic beliefs.

These findings demonstrate that higher levels of peer attachment are significantly associated with higher levels of academic self-confidence among students at MTs Al-Ihsan Jakarta. In practical terms, students who perceive strong emotional bonds, trust, and open communication with their peers tend to report greater confidence in their academic abilities. Conversely, students with weaker peer attachment tend to exhibit lower levels of academic self-confidence.

The strong positive correlation supports the research hypothesis and provides empirical evidence that peer attachment plays a significant role in shaping students' academic self-confidence. These results align with previous research indicating that peer support enhances students' self-efficacy and confidence in learning contexts (Fan et al., 2022; Wu et al., 2024). The findings reinforce the argument that fostering positive peer relationships and supportive classroom bonds constitutes an effective strategy for enhancing student academic self-confidence in Islamic junior high school settings.

Discussion

This study aimed to examine the relationship between peer attachment and academic self-confidence among early adolescents at MTs Al-Ihsan Jakarta. The findings revealed a strong and statistically significant positive correlation between the two variables ($r = 0.798$, $p < 0.001$), indicating that students who report stronger emotional bonds, trust, and open communication with their peers tend to exhibit higher levels of confidence in navigating academic tasks. This section discusses the findings in relation to existing literature, explores the theoretical and practical implications, and acknowledges the limitations of the study.

The relationship between peer attachment and academic self-confidence

The strong positive correlation between peer attachment and academic self-confidence confirms the central hypothesis of this study and aligns with a growing body of literature recognizing the essential role of social relationships in adolescent development. According to attachment theory, secure peer relationships provide a "secure base" that enables individuals to feel safe and empowered to explore their environment (Bowlby, 1969; Mikulincer & Shaver, 2019, 2023). In the school context, this translates into students' courage to ask challenging questions, actively participate in discussions, and experiment with new learning strategies without excessive fear of failure. The findings of this study are consistent with previous research demonstrating that emotionally secure peer relationships foster resilience, reduce anxiety, and enhance students' motivation to engage actively in learning (Freeman & Rees, 2010; Wu et al., 2024). The trust and communication dimensions of peer attachment, as conceptualized by Armsden and Greenberg (1987), appear to serve as foundational elements for developing academic self-confidence. When students perceive their peers as responsive, supportive, and trustworthy, they develop a more positive belief in their own academic abilities.

The coefficient of determination ($r^2 = 0.637$) indicates that approximately 63.7% of the variance in academic self-confidence can be explained by peer attachment. This substantial shared variance underscores the meaningful contribution of peer relationships to students' academic beliefs. However, the remaining 36.3% suggests that other factors, such as parental support, teacher-student relationships, personality traits, and prior academic achievement, also contribute to academic self-confidence and warrant investigation in future research.

Interpretation of descriptive findings

The descriptive analysis revealed that both peer attachment ($M = 73.97$) and academic self-confidence ($M = 72.53$) fell within the moderate category for the majority of students. This finding reflects the transitional nature of early adolescence, during which students are forming stable identities

yet remain vulnerable to social comparison and emotional uncertainty (Blakemore & Mills, 2014; Maree, 2022).

The moderate level of peer attachment indicates that most students at MTs Al-Ihsan Jakarta have functional emotional relationships with their peers, characterized by a balance between the need for social support and the development of emotional independence (Hinggardipta, 2025). In the context of learning, moderate peer attachment is significant because it provides students with a sense of security and support without fostering excessive dependency, which could potentially hinder the development of self-regulation and independent learning initiatives (Sintia et al., 2025).

Similarly, the moderate level of academic self-confidence suggests that students possess reasonable but not optimal beliefs in their learning abilities. Within this range, students may experience fluctuating perceptions of competence, demonstrating enthusiasm for class participation on some occasions while expressing doubt or fear of failure when facing challenging assignments or examinations on others. This phenomenon aligns with findings indicating that moderate self-confidence in adolescents is often accompanied by unstable learning motivation and difficulty maintaining psychological resilience under academic pressure (Dumont & Provost, 1999; Pinheiro Mota & Matos, 2013).

The parallel distribution of scores between peer attachment and academic self-confidence suggests a potential synergy between the quality of social relationships and academic confidence. Research by Li et al. (2020) similarly found a moderate positive correlation between attachment and self-efficacy in East Asian student samples, supporting the hypothesis that peer support facilitates a safer and more empowering learning environment. The wide range of scores on both variables also indicates heterogeneity in student experiences, which may be attributable to differences in family background, learning styles, and individual characteristics (Lopez & Gormley, 2002).

The role of peer support in academic contexts

The findings of this study reinforce the argument that peer attachment plays a dual role as both a coping mechanism and a source of psychological satisfaction in academic settings. Research has demonstrated that peer support has a significant moderating effect on academic stress; as assignments and deadlines increase, students with strong peer bonds are better able to maintain motivation and focus compared to those who are less emotionally connected to their classmates (Mikulincer & Shaver, 2019; Rabin et al., 2024).

In the context of online and blended learning, Fan et al. (2022) found that interaction and mutual support between peers can increase academic self-efficacy by up to 20%. Students who actively discussed course materials, clarified concepts, and motivated each other during virtual sessions demonstrated increased confidence in completing academic tasks. This finding supports the notion that peer support creates a psychologically safe space for students to experiment with new learning strategies without fear of ridicule or judgment.

The current study extends these findings to the specific context of Islamic junior high schools in Indonesia. Previous research in Islamic educational settings has confirmed the positive relationship between peer closeness and students' psychological well-being. Luthfi and Husni (2020) found that peer relationships supported by religious values and community norms strengthen psychological protection mechanisms when students face academic and spiritual challenges. This suggests that the religious context of *Madrasah Tsanawiyah* may provide additional resources for fostering supportive

peer relationships through shared values such as *ukhuwah* (brotherhood/sisterhood) and *ta'awun* (mutual cooperation).

Implications for educational practice

The findings of this study carry several important implications for educational practice at Islamic junior high schools. First, schools should consider implementing structured peer support programs that leverage the positive association between peer attachment and academic self-confidence. Peer mentoring programs, where students with higher academic self-confidence serve as mentors for their peers, can create learning environments characterized by empathy and mutual support. Research suggests that such peer coaching models can significantly improve student self-confidence through regular discussions about learning strategies, challenges, and concrete steps for academic improvement (Kocsis & Molnár, 2025).

Second, collaborative learning activities and interpersonal skills workshops can provide platforms for students to develop empathetic communication skills and collaborative problem-solving abilities. Mammadov (2022) found that empathetic communication and peer problem-solving techniques significantly strengthen students' academic competence and self-regulation, preparing them to tackle complex assignments both independently and in groups.

Third, in the context of Islamic education, peer support programs can be enriched with Islamic values that naturally align with the goals of fostering positive peer relationships. The principle of *ukhuwah Islamiyah* (Islamic brotherhood/sisterhood), which emphasizes compassion, mutual assistance, and care for others, provides a culturally relevant framework for peer support interventions. Integrating communication etiquette based on Islamic teachings, such as mutual respect, gentle speech, and attentive listening, can enhance the effectiveness of peer mentoring programs while reinforcing students' religious identity and character development.

Fourth, interventions targeting academic self-confidence should incorporate self-regulation strategies and scaffolded learning approaches that provide consistent positive feedback. Cooperative teaching models that integrate positive peer feedback techniques can help students experience repeated small successes, gradually building stronger academic self-confidence (Hutjes, 2022; Qi, 2025). Additionally, instilling values of *sabr* (patience/perseverance) and *tanakkul* (trust in God) can help students develop resilience when facing academic challenges, viewing difficulties as opportunities for growth rather than threats to their self-worth.

Limitations and recommendations for future research

Several limitations of the current study should be acknowledged. First, the cross-sectional design restricts the ability to infer causal relationships between peer attachment and academic self-confidence. While a strong correlation was found, it remains unclear whether peer attachment leads to higher academic self-confidence, whether the relationship is bidirectional, or whether unmeasured third variables mediate or confound the association. Future research employing longitudinal or quasi-experimental designs is needed to explore the developmental trajectory of these constructs over time and establish the direction of influence (de Jong et al., 2022).

Second, the sample was limited to one Islamic junior high school in Jakarta, which may not represent the diversity of students in other regions or educational contexts, such as Islamic boarding schools (*Pesantren*), public secular schools, rural Madrasahs, or international Islamic institutions. This

limitation calls for broader studies with multi-site sampling across different geographic regions and school types to enhance the generalizability of findings.

Third, the reliance on self-report questionnaires may introduce response biases, such as social desirability or acquiescence, which could affect the accuracy of participants' responses. Although the instruments used demonstrated high internal reliability ($\alpha > 0.90$), future research could incorporate mixed-methods designs, including qualitative interviews, peer nominations, or behavioral observations, to triangulate findings and provide richer contextual insights into how peer attachment influences academic self-confidence in daily school life.

Fourth, this study focused exclusively on peer attachment without examining other potentially relevant attachment figures, such as parents and teachers. Future research should consider investigating the relative contributions of different attachment relationships to academic self-confidence, as well as potential interaction effects among these relationships.

Despite these limitations, this study makes a meaningful contribution to the literature on adolescent development, particularly in underrepresented educational contexts. It provides empirical evidence supporting the integration of peer-based emotional support as a mechanism for improving academic motivation and psychological well-being in Islamic junior high schools.

Conclusion

This study examined the relationship between peer attachment and academic self-confidence among early adolescents at MTs Al-Ihsan Jakarta. Based on the findings, several conclusions can be drawn. First, there is a strong and statistically significant positive correlation between peer attachment and academic self-confidence ($r = 0.798$, $p < 0.001$). This finding indicates that students who experience secure, trusting, and communicative peer relationships tend to demonstrate higher levels of confidence in their academic abilities. The coefficient of determination ($r^2 = 0.637$) suggests that peer attachment accounts for approximately 63.7% of the variance in academic self-confidence, highlighting the substantial role of peer relationships in shaping students' academic beliefs.

Second, the descriptive analysis revealed that both peer attachment ($M = 73.97$) and academic self-confidence ($M = 72.53$) among students at MTs Al-Ihsan Jakarta were at moderate levels. This indicates that while students have established a foundational level of social support and self-belief, there remains substantial potential for improvement through targeted interventions. The last, the findings provide empirical support for attachment theory in the educational context of Islamic junior high schools. Secure peer attachment functions as a "secure base" that enables students to explore academic challenges with greater confidence and resilience.

Implications

This study contributes to the literature by extending attachment theory to the specific context of Islamic junior high schools in Indonesia, an educational setting underrepresented in previous research. The findings reinforce the theoretical connection between social relationships and academic self-beliefs, demonstrating that emotional security derived from peer relationships translates into greater academic confidence.

From a practical perspective, schools should prioritize structured peer support programs, such as peer mentoring and collaborative study groups, to foster both social-emotional well-being and academic confidence. These programs can be enriched by integrating Islamic values such as ukhuwah

Islamiyah (Islamic brotherhood/sisterhood) and ta'awun (mutual cooperation), providing culturally relevant frameworks that resonate with students' religious identity. School counselors should play an active role in facilitating peer-based interventions, while educational policymakers may consider incorporating such programs into the counseling curriculum of Islamic schools as a preventive strategy against academic disengagement and emotional burnout.

Recommendations

Several recommendations for future research are proposed. First, longitudinal or experimental designs should be employed to examine causal relationships and the developmental trajectory of peer attachment and academic self-confidence over time. Second, expanding the sample to include multiple schools across different regions and school types (Madrasah Tsanawiyah, Pesantren, public schools) would enhance generalizability. Third, mixed-methods approaches incorporating qualitative interviews could provide deeper insights into students' lived experiences. Fourth, future studies should examine mediating variables such as emotional regulation, academic resilience, and teacher-student relationships to develop a more comprehensive model of adolescent academic development.

In conclusion, this study highlights the critical role of peer relationships in fostering adolescents' academic self-confidence within Islamic junior high school settings. Educational institutions are encouraged to cultivate emotionally supportive peer environments as an integral component of student success, creating learning spaces where students feel psychologically safe, socially connected, and academically confident.

Disclosure statement

No potential conflict of interest was reported by the authors.

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