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The Influence of Parenting Style, Peer Attachment, and Teacher Support on Personality Traits in Residential Secondary Schools

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Abstract. This study aimed to examine the relationships between parenting style, peer attachment, teacher support, and personality traits among adolescents in residential secondary school settings in Malaysia. Guided by Adler's Individual Psychology and Bandura's Social Learning Theory, a quantitative survey design was employed involving 521 students aged 16 to 17 years, selected through stratified random sampling from residential secondary schools across multiple regions in Malaysia. The research instruments comprised the Big Five Inventory (BFI) to measure personality traits, the Parental Authority Questionnaire (PAQ) to assess parenting styles, the Inventory of Parent and Peer Attachment (IPPA) to measure peer attachment, and the Child and Adolescent Social Support Scale (CASS) to assess teacher support. Data were analyzed using descriptive statistics, Pearson correlation analysis, and multiple regression analysis to identify the dominant predictors of adolescents' personality traits. The findings revealed significant positive relationships between parenting style, peer attachment, teacher support, and adolescents' personality traits. Multiple regression analysis indicated that teacher support, particularly the perceived importance of teacher support ($\beta = .181, p < .001$), emerged as the strongest predictor, followed by maternal parenting style ($\beta = .166, p = .003$) and peer attachment ($\beta = .118, p = .010$). The regression model explained 10.7% of the variance in adolescents' personality traits ($R^2 = .107$). These findings highlight the significant contribution of social support systems to adolescent personality development and provide empirical support for Adler's Individual Psychology and Bandura's Social Learning Theory within residential educational environments.

Keywords: adolescent personality traits; parenting style; peer attachment; teacher support; residential school

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1. Introduction

The development of adolescent personality traits is a complex and dynamic process shaped through continuous interactions between individual characteristics and significant social environments. During adolescence, individuals undergo biological and cognitive changes and face increasingly demanding emotional and social challenges.

Accordingly, family, peers, and school function as primary socialization contexts that influence identity formation, the interpretation of experiences, and the development of behavioral and personality characteristics. In the context of residential education, the influence of the social environment becomes more pronounced, as adolescents spend most of their time at school, are physically separated from their families, and engage in intensive peer interactions and sustained relationships with teachers. This makes residential institutions a central social environment that may contribute to adolescent personality development in significant and enduring ways.

Although the importance of parenting style, peer relationships, and teacher support has been empirically established, most previous studies have examined these factors in isolation. Such an approach limits understanding of how multiple sources of social support collectively contribute to adolescent personality development. Building on this, much of the existing research has focused on developmental outcomes such as psychological well-being, academic motivation, or problem behaviors, rather than personality traits as a relatively stable foundational construct. The application of the Five-Factor Model (FFM) to examine the integrated influence of social support systems also remains limited, particularly within the context of residential education.

In the local context, studies that integrate these three social factors within a single quantitative framework remain limited, particularly in residential institutions. At the same time, this gap underscores the need for research that systematically examines the combined roles of social support systems in shaping adolescent personality within residential school settings. Accordingly, this article aims to examine the relationships among parenting style, peer attachment, teacher support, and personality traits among residential school adolescents, and to identify the dominant predictors of personality development. By employing the Five-Factor Model (FFM) as the conceptual framework and integrating multiple social support systems within a single explanatory model, this study seeks to contribute new empirical evidence regarding adolescent personality development in residential educational settings.

2. Literature Review

2.1 Adolescent Personality Development

Adolescent personality development has increasingly become an important area of discussion within developmental psychology due to its significant role in shaping psychosocial functioning, emotional adjustment, and behavioral orientations. From a personality psychology perspective, the trait approach posits that personality can be understood through basic dimensions that remain

relatively stable across situations and over time. The Five-Factor Model (FFM) of Personality, encompassing openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism, is among the most widely applied frameworks in adolescent personality research (Costa & McCrae, 1992; Soto, 2018). Nevertheless, contemporary developmental perspectives emphasize that personality traits are not solely internal dispositions but are also shaped continuously through interactions with social environments and life experiences.

Recent empirical evidence indicates that adolescent personality traits remain flexible and responsive to contextual influences, particularly within school environments and sustained interpersonal relationships. Bleidorn et al. (2022) highlighted that personality traits continue to evolve across developmental stages through ongoing interactions between individual characteristics and environmental experiences. Similarly, Lechner et al. (2021) demonstrated that educational and social experiences contribute significantly to changes in adolescents' personality traits, particularly in dimensions related to conscientiousness and emotional stability. These findings support the view that personality development during adolescence should be understood as a dynamic process influenced by environmental interactions rather than as a fixed psychological structure.

Within educational settings, the school environment functions as an active developmental context that contributes directly to adolescents' personality formation. Longitudinal evidence by Israel et al. (2023) revealed that school experiences involving achievement, well-being, and social relationships exhibit reciprocal relationships with Big Five personality traits over time. This suggests that personality traits not only shape how adolescents experience school environments but are simultaneously shaped by those experiences. Consequently, adolescent personality development should be interpreted within broader ecological and social contexts, particularly in educational environments characterized by continuous interpersonal interaction and institutional structure.

2.2 Parenting Style and Personality Traits

Parenting style has consistently been identified as one of the most influential socialization factors in adolescent personality development. Consequently, parenting style has been conceptualized not merely as a behavioral management approach but also as a critical socialization mechanism that influences adolescents' personality development, psychosocial adjustment, emotional regulation, and interpersonal functioning. Within developmental contexts, parenting practices shape how adolescents perceive themselves, regulate emotions, and interact with broader social environments.

2.2.1 Parenting style as a socialization mechanism

Empirical evidence linking parenting style directly to personality traits is demonstrated by Cuadri et al. (2025), who discovered that variations in parenting styles are significantly associated with several Big Five dimensions, including extraversion, conscientiousness, agreeableness, emotional stability, and openness to experience. These findings are consistent with recent research indicating that authoritative parenting supports the development of adaptive personality

characteristics, whereas overly controlling or rejecting parenting styles are associated with less favourable psychosocial outcomes (Pinquart, 2021; Van den Akker et al., 2021). Such findings confirm that family socialization experiences extend beyond short-term behavioral regulation and contribute substantially to the development of relatively stable internal personality characteristics among adolescents.

Recent longitudinal evidence further suggests that maternal and paternal parenting styles exert differential influences on adolescent developmental outcomes. Wang et al. (2026) reported that maternal rejection and overprotection were associated with poorer developmental trajectories, whereas paternal emotional warmth demonstrated protective effects on adolescents' psychosocial functioning. These findings further support previous evidence that parenting influences adolescent development through distinct maternal and paternal socialization processes. Previous research has also demonstrated differential parental influences on adolescent development. Bačíková-Šléšková and Janovská (2024) reported that maternal parenting self-efficacy was more strongly associated with adolescent adjustment outcomes than paternal parenting self-efficacy, suggesting that maternal and paternal contributions to adolescent development may operate through distinct psychosocial pathways.

From a broader developmental perspective, parenting practices influence adolescents through continuous interpersonal interactions that shape emotional security, behavioral expectations, and self-perceptions. Parenting environments characterized by warmth, responsiveness, and consistent guidance are more likely to foster adaptive psychosocial functioning and positive personality development. In contrast, inconsistent, rejecting, or excessively controlling parenting practices may contribute to maladaptive emotional and behavioral tendencies. These patterns indicate that parenting style functions as an important developmental context influencing the formation of adolescents' personality traits through ongoing socialization processes.

2.2.2 Psychological mechanisms underlying parenting influence

From a psychosocial mechanism's perspective, the influence of parenting style on adolescents' internal development is further supported by studies highlighting the role of psychological mediating processes. Peng et al. (2021) reported that warm and supportive parenting exerts positive effects on adolescents' psychological well-being through enhanced self-esteem and psychological flexibility. Meanwhile, rejecting and overcontrolling parenting styles are associated with more negative psychological outcomes. These findings are reinforced by recent evidence indicating that emotion regulation, self-esteem, and psychological autonomy serve as key mechanisms linking parenting experiences to the development of personality characteristics (Soenens et al., 2021; Zimmermann et al., 2023).

In line with these findings, supportive parenting environments provide adolescents with emotional validation, a sense of belonging, and opportunities for adaptive self-development, all of which contribute to healthier personality

formation. Conversely, parenting practices characterized by criticism, rejection, or excessive control may negatively affect emotional regulation and self-concept development. Therefore, parenting style should be understood as both a socialization mechanism and a psychological process that shapes adolescents' personality development through continuous emotional and interpersonal experiences.

2.3 Peer Attachment and Personality Development

As adolescents gradually seek greater autonomy from parents, peers increasingly function as important agents of socialization and psychosocial development. During adolescence, peer interactions provide opportunities for emotional support, identity exploration, interpersonal learning, and social adaptation. Consequently, peer attachment has become an important construct in understanding adolescents' psychosocial and personality development, particularly within educational environments where peer interactions occur continuously and intensively.

Peer attachment refers to emotional bonds characterized by trust, communication, and emotional closeness between adolescents and their peers (Armsden & Greenberg, 1987). Relationships that provide emotional security and mutual understanding create supportive social environments that influence adolescents' attitudes, behaviors, and self-perceptions. In this regard, Shulman and Nurmi (2019) emphasized that peer relationships contribute significantly to adolescents' social and emotional adjustment by shaping identity formation and interpersonal functioning.

Recent empirical studies further indicate that the quality of peer relationships is associated with self-concept, emotional well-being, and social adjustment. Boele et al. (2022) reported that supportive peer relationships contribute positively to adolescents' emotional functioning and psychosocial adjustment, although their influence on core personality traits appears to be more moderate compared to family and school contexts. Similarly, Laursen and Collins (2021) argued that peer relationships primarily influence social identity formation, emotional support, and interpersonal adaptation rather than directly shaping stable personality dimensions.

Within residential educational settings, peer attachment may exert a more sustained influence due to prolonged daily interactions, shared living environments, and continuous social engagement among students. Such environments create extensive opportunities for adolescents to observe, imitate, and internalize peer behaviors and emotional responses. Consequently, peer attachment should be understood not merely as a social relationship but also as an important developmental context contributing to adolescents' emotional regulation, identity exploration, and adaptive personality development.

2.4 Teacher Support and Personality Development

Teacher support has increasingly been recognized as an important protective factor in adolescents' psychosocial and personality development. Within school environments, supportive relationships with teachers contribute significantly to

emotional adjustment, self-regulation, academic motivation, and adaptive behavioral orientations. In educational contexts characterized by intensive academic demands and prolonged interpersonal interaction, teacher support becomes particularly important in shaping adolescents' developmental experiences and psychological functioning.

2.4.1 Teacher support and psychosocial adjustment

Teacher support encompasses perceived care, encouragement, and academic as well as emotional assistance provided by teachers to students. Positive teacher-student relationships are consistently associated with enhanced emotional well-being, motivation, and social adjustment among adolescents (Wentzel, 1998; Lavy & Naama-Golan, 2022). Furthermore, meta-analytic evidence by Wang et al. (2020) demonstrated that classroom climate is significantly related to students' academic performance and psychological well-being. In line with this, Wang and Degol (2022) emphasized that overall school climate, including social relationships, teacher support, and environmental structure, substantially influences students' developmental outcomes.

Recent studies further indicate that supportive teacher relationships contribute positively to adolescents' self-development, emotional regulation, and adaptive behavioral orientations. Longobardi et al. (2021) highlighted that positive teacher-student relationships strengthen adolescents' socio-emotional development and psychological adjustment within educational settings. In residential school environments, where interactions between teachers and students occur more frequently and continuously, teacher support may exert a stronger influence on adolescents' emotional experiences and developmental functioning.

2.4.2 Teacher relationships and personality mechanisms

Beyond psychosocial adjustment, teacher-student relationships also influence adolescents' development through internal personality-related mechanisms. Wan et al. (2023) reported that teacher-student relationships significantly predict adolescents' emotional intelligence, with openness and empathy functioning as full mediators. These findings suggest that supportive educational relationships influence developmental outcomes by shaping internal emotional and personality-related characteristics.

Similarly, recent evidence demonstrates that teacher emotional support promotes the development of openness, empathy, and emotion regulation, all of which are closely associated with adaptive personality development (Longobardi et al., 2021; Wang & Degol, 2022). Through continuous interaction, observation, and reinforcement, teachers function not merely as instructional agents but also as important socialization agents who shape adolescents' cognitive frameworks, emotional responses, and behavioral tendencies. Consequently, teacher support should be understood as a significant developmental mechanism influencing adolescent personality formation, particularly within structured educational environments characterized by sustained interpersonal engagement.

2.5 Residential School Context and Personality Development

Residential schools represent highly structured educational environments characterized by intensive academic demands, close supervision, and sustained social interaction among students, peers, and teachers. Within these settings, adolescents spend a substantial portion of their developmental years in institutional environments, thereby amplifying the influence of school-based social experiences on their emotional, behavioral, and personality development. Consequently, residential schools function not only as educational institutions but also as developmental ecosystems that shape adolescents' psychosocial adjustment and personality formation.

Previous research has shown that social support within educational environments serves as an important protective factor that promotes adolescents' psychological well-being, academic adjustment, and adaptive coping, particularly in academically demanding contexts (Suldo et al., 2009; Rueger et al., 2016). Supportive relationships with parents, peers, and teachers contribute to emotional regulation, social adaptation, and the development of positive behavioral orientations, highlighting the importance of social support systems within residential educational settings.

Furthermore, longitudinal evidence suggests that school experiences and personality development influence one another reciprocally over time. Israel et al. (2023) demonstrated that achievement experiences, social relationships, and psychological well-being interact dynamically with Big Five personality traits throughout adolescence. These findings indicate that residential school environments provide sustained social experiences that contribute significantly to adolescents' personality development through continuous interpersonal interaction and institutional socialization processes.

2.6 Research Gap and Theoretical Foundation

From a theoretical perspective, this study is grounded in Alfred Adler's Individual Psychology and Bandura's Social Learning Theory (SLT). Adler's theoretical framework emphasizes the importance of social interest, belongingness, interpersonal relationships, and environmental experiences in shaping personality development and lifestyle formation. According to Adler, adolescents' psychological development is strongly influenced by their experiences within significant social contexts, including family, peer groups, and educational environments. Supportive social relationships promote feelings of belonging and psychological security, which contribute positively to personality development and adaptive functioning.

Meanwhile, Bandura's Social Learning Theory explains that personality-related behaviors, emotional responses, and social competencies develop through observation, imitation, modeling, and social reinforcement processes. Adolescents continuously learn and internalize attitudes, values, and behavioral tendencies through interactions with significant social agents such as parents, peers, and teachers. Within educational settings, repeated social experiences and environmental reinforcement play an essential role in shaping patterns of thinking, emotional regulation, and behavioral adaptation.

The integration of Adler's Individual Psychology and Bandura's Social Learning Theory provides a comprehensive framework for understanding adolescent personality development within social contexts. Adler explains personality development through experiences of social belongingness, interpersonal relationships, and the individual's striving for social connectedness. In contrast, Bandura explains the mechanisms through which social environments influence personality development through observation, modelling, imitation, and reinforcement processes.

Together, these theoretical perspectives suggest that adolescents' personality traits develop through continuous interaction with significant social agents, including parents, peers, and teachers, within their social and educational environments. Integrating these theoretical perspectives, the present study conceptualizes parenting style, peer attachment, and teacher support as interconnected socialization mechanisms that contribute to adolescents' personality development through continuous interpersonal interaction, social learning processes, and experiences of social belonging.

2.7 Research Gap and Original Contribution

Despite extensive research examining the influence of social environments on adolescent development, several important gaps remain in the existing literature. First, previous studies have predominantly investigated parenting style, peer attachment, and teacher support as separate predictors of adolescent outcomes, resulting in limited understanding of their relative and collective contributions to personality development. Consequently, empirical evidence integrating these three major social support systems within a single explanatory framework remains scarce.

Second, existing research has largely focused on developmental outcomes such as psychological well-being, academic achievement, emotional adjustment, motivation, and behavioral problems, while comparatively less attention has been given to personality traits as relatively stable developmental characteristics. Studies applying the Five-Factor Model (FFM) to examine the combined influence of multiple social support systems on adolescent personality development remain limited.

Third, research conducted within residential educational environments, particularly in the Malaysian context, remains insufficient. Residential secondary schools represent unique developmental settings characterized by prolonged social interaction, intensive academic demands, and sustained relationships with significant social agents. However, limited empirical evidence exists regarding how family, peer, and school support systems collectively influence adolescents' personality development within these environments.

Furthermore, previous studies examining teacher support have generally focused on overall perceptions of support, with limited attention given to the distinct dimensions of support frequency and support importance. Examining these

dimensions separately may provide a more comprehensive understanding of how teacher support contributes to adolescent personality development.

Accordingly, this study offers several original contributions to the literature. First, it integrates parenting style, peer attachment, and teacher support within a single explanatory model of adolescent personality development. Second, it extends existing research by focusing on residential secondary schools in Malaysia as a unique developmental context. Third, it differentiates between the frequency and importance dimensions of teacher support, thereby providing a more nuanced understanding of educational support systems. Finally, this study contributes empirical evidence regarding personality traits as a holistic developmental construct within the ecosystem of residential education.

The integration of Adler's Individual Psychology and Bandura's Social Learning Theory provides a complementary framework for understanding adolescent personality development. Adler's theory emphasizes the importance of social belonging, interpersonal relationships, and social interest in shaping personality development, whereas Bandura's theory explains how personality characteristics develop through observational learning, social interaction, and environmental experiences. Together, these theories provide a comprehensive explanation of how parenting style, peer attachment, and teacher support function as socialization mechanisms influencing adolescent personality development.

Based on the identified research gaps and the theoretical foundations underpinning this study, Figure 1 presents the conceptual framework integrating parenting style, peer attachment, and teacher support as predictors of adolescents' personality traits within residential secondary school settings. The framework is guided by Adler's Individual Psychology and Bandura's Social Learning Theory, which emphasize the role of social experiences, interpersonal relationships, and socialization processes in shaping adolescent personality development.

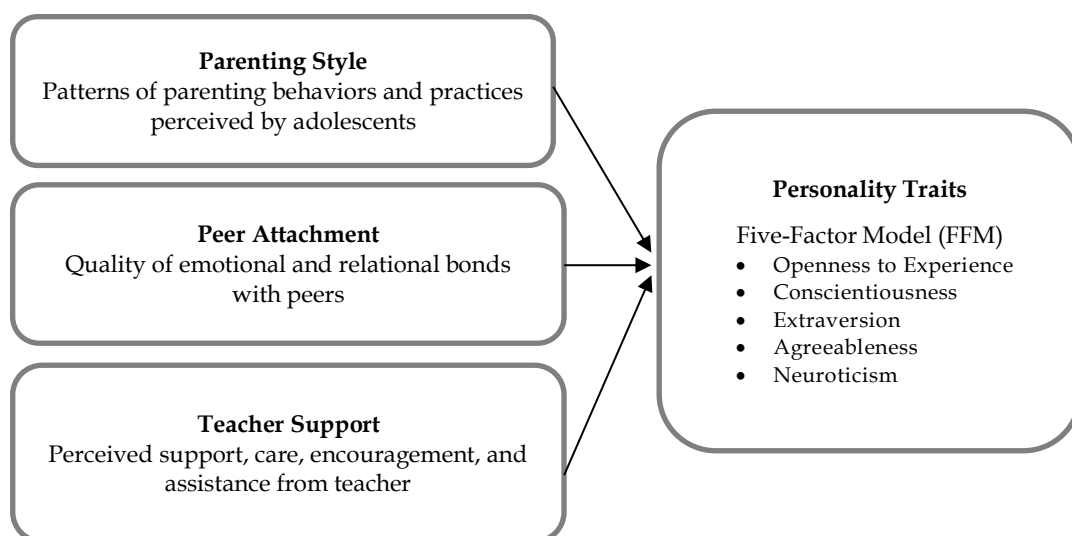


Figure 1: Conceptual Framework of the Study

As illustrated in Figure 1, parenting style, peer attachment, and teacher support are conceptualized as interconnected socialization mechanisms influencing adolescents' personality traits. The framework further assumes that personality development within residential educational environments is shaped through continuous interpersonal interaction, social learning processes, and experiences of social belonging.

3. Methodology

3.1 Research Design

This study employed a quantitative cross-sectional survey design to examine the relationships between parenting style, peer attachment, teacher support, and adolescents' personality traits. This approach enables empirical measurement of relationships among variables as well as the identification of dominant predictors of personality traits within a specific time frame. The survey design was selected because it is appropriate for examining relationships within large populations and generating statistically analyzable findings, thereby supporting data-driven inferences.

3.2 Population and Sample

The study population comprised students aged 16 to 17 years enrolled in residential secondary schools throughout Malaysia. A total population of 37,129 students was identified based on official records obtained from the MARA Secondary Education Division. The study employed proportionate stratified random sampling to ensure adequate representation of students from different geographical regions. The population was stratified into four educational zones, namely the Northern Zone (20 schools; 12,812 students), Eastern Zone (15 schools; 6,075 students), Western Zone (11 schools; 10,811 students), and Southern Zone (12 schools; 7,431 students).

A total of 521 students were selected through a combination of proportionate stratified random sampling and systematic sampling procedures. First, residential secondary schools were grouped according to the four educational zones established by MARA. Subsequently, schools within each zone were selected randomly through a lottery procedure to ensure geographical representation. The number of participants selected from each zone was determined proportionately according to the population size of each stratum.

Following school selection, systematic sampling was employed to select students from the official enrolment lists of Form Four and Form Five students, whereby respondents were chosen based on predetermined sampling intervals. This procedure ensured that all students had an equal probability of being selected while maintaining adequate representation across the different geographical zones.

3.3 Research Instruments

Data were collected using a structured questionnaire comprising four standardized instruments widely applied in adolescent development research.

The Big Five Inventory (BFI) was used to measure personality traits across five primary dimensions: openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism. This instrument allows for a comprehensive assessment of personality based on a robust and widely recognized trait model in psychological research.

Although the Big Five Inventory (BFI) measures five distinct personality dimensions, the present study operationalized adolescents' personality traits as a holistic developmental construct based on the Five-Factor Model framework. Accordingly, an overall personality trait score was computed by aggregating the scores across the five personality dimensions. This approach was adopted to examine adolescent personality development as a comprehensive psychosocial construct within the context of social support systems in residential educational settings, rather than to investigate each personality dimension separately.

The Parental Authority Questionnaire (PAQ) was used to assess maternal and paternal parenting styles across the authoritative, authoritarian, and permissive dimensions based on adolescents' perceptions of parental practices.

The Inventory of Parent and Peer Attachment (IPPA) was used to measure peer attachment through the dimensions of trust, communication, and emotional bonding, reflecting the quality of adolescents' interpersonal relationships.

The Child and Adolescent Social Support Scale (CASS) was used to assess teacher support based on the frequency and importance of support received by students in both academic and emotional contexts.

All instruments employed in this study have demonstrated satisfactory levels of reliability and validity in previous research and are considered appropriate for investigating psychosocial development and adolescent personality within educational settings. To ensure their suitability for the Malaysian context, the instruments underwent a systematic adaptation process involving translation, expert review, and pilot testing. The instruments were translated into Malay using established cross-cultural adaptation procedures. In particular, the Child and Adolescent Social Support Scale (CASS), which had not previously been applied in the Malaysian context, underwent a forward-backward translation procedure based on Brislin's (1970, 1986) guidelines to ensure semantic equivalence.

Subsequently, all adapted instruments were reviewed by experts in psychology, counselling, and education to establish content validity and cultural appropriateness. Prior to the main study, pilot testing was conducted among adolescents with characteristics similar to those of the target population to assess the clarity, suitability, reliability, and validity of the instruments. The findings indicated satisfactory psychometric properties, supporting their use in the Malaysian educational context. In addition to the pilot study findings, the internal consistency reliability of the instruments was reassessed using the actual study sample ($N = 521$). Cronbach's alpha coefficients indicated satisfactory to excellent reliability across all instruments. Specifically, the Big Five Inventory (BFI)

demonstrated good reliability ($\alpha = .838$), followed by the Parental Authority Questionnaire for mothers ($\alpha = .712$) and fathers ($\alpha = .608$), the Inventory of Parent and Peer Attachment (IPPA) ($\alpha = .818$), and the Child and Adolescent Social Support Scale (CASS), which demonstrated excellent reliability for both the importance ($\alpha = .903$) and frequency ($\alpha = .904$) dimensions. These findings indicate that the instruments exhibited acceptable internal consistency for use in the present study.

Table 1: Internal Consistency Reliability of the Study Instruments

Construct	Instrument	Pilot Study α	Actual Study α
Personality Traits	BFI	.811	.838
Parenting Style (Mother)	PAQ	.699	.712
Parenting Style (Father)	PAQ	.686	.608
Peer Attachment	IPPA	.779	.818
Teacher Support (Frequency)	CASS	.859	.904
Teacher Support (Importance)	CASS	.892	.903

The pilot's study demonstrated satisfactory internal consistency reliability, with Cronbach's alpha coefficients ranging from .686 to .892. Subsequently, the reliability of the instruments was reassessed using the actual study sample ($N = 521$), yielding Cronbach's alpha coefficients ranging from .608 to .904. Although the reliability coefficient for paternal parenting style was slightly lower, it remained within the acceptable range for exploratory social science research. Overall, the findings indicate satisfactory to excellent internal consistency and reliability of the instruments employed in the present study.

3.4 Data Collection Procedures and Ethical Considerations

The study was conducted in accordance with the ethical principles outlined in the Declaration of Helsinki and was approved by the Faculty of Education, Universiti Kebangsaan Malaysia (Reference No. UKM.FND.SPS.600-4/2/2/P93624; approved on 29 May 2023). Permission to conduct the study within residential educational institutions was also obtained from Majlis Amanah Rakyat (MARA) (Reference No. MARA.600-6/1/6 JLD2 (30); approved on 22 August 2022), as well as from the participating residential secondary schools.

Given that the participants were adolescents aged between 16 and 17 years, parental or guardian consent was obtained prior to data collection. In addition, participant assent was obtained from all students after they had been informed about the purpose, procedures, and voluntary nature of the study. Participants were assured that their participation was entirely voluntary and that they could withdraw from the study at any stage without penalty or adverse consequences. To protect participants' privacy and welfare, no identifying information was collected, and all responses were treated anonymously and confidentially. The collected data were used solely for research purposes and were securely stored to ensure data protection and confidentiality.

Furthermore, appropriate measures were implemented to safeguard participants' psychological well-being throughout the research process. Participants were informed that they could decline to answer any questions that caused discomfort, and the study procedures were designed to minimize potential psychological risks. Data collection was conducted using self-administered questionnaires to reduce social desirability bias, maintain respondent anonymity, and enhance response accuracy.

3.5 Data Analysis

Data was analyzed using IBM SPSS Statistics Version 29. Descriptive analyses were conducted to describe respondents' demographic characteristics and the distribution of study variables. Pearson correlation analysis was employed to examine the strength and direction of relationships between parenting style, peer attachment, teacher support, and adolescents' personality traits. Subsequently, multiple regression analysis was conducted to determine the relative contribution of each predictor variable and to identify the most dominant factors influencing adolescents' personality traits. Statistical significance levels were established to assess the validity of the relationships examined and the reliability of the study findings.

4. Results and Findings

4.1 Descriptive Statistics

Descriptive statistics were conducted to examine the distribution of the main study variables among adolescents in residential secondary schools. As presented in Table 2, the mean score for adolescents' personality traits was 140.45 ($SD = 15.54$). Maternal parenting style recorded the highest mean score ($M = 79.18$, $SD = 8.92$), followed by peer attachment ($M = 68.60$, $SD = 10.33$), paternal parenting style ($M = 47.15$, $SD = 5.95$), and teacher support ($M = 29.04$, $SD = 5.08$). Overall, the findings indicate that the respondents generally reported positive perceptions of social support and adaptive personality characteristics.

Table 2: Descriptive Statistics of the Study Variables

Variable	Mean	SD
Personality Traits (BFI)	140.45	15.54
Parenting Style - Mother (PAQ)	79.18	8.92
Parenting Style - Father (PAQ)	47.15	5.95
Peer Attachment (IPPA)	68.60	10.33
Teacher Support (CASS)	29.04	5.08

Note. M = mean; SD = standard deviation. The reported scores represent composite scores derived from the respective instrument dimensions.

4.2 Correlation Analysis

Pearson correlation analysis was conducted to examine the relationships between parenting style, peer attachment, teacher support, and adolescents' personality traits among residential secondary school students. The results indicated that all predictor variables were positively and significantly associated with adolescents' personality traits, highlighting the importance of social support systems in personality development.

Maternal parenting style demonstrated the strongest positive relationship with adolescents' personality traits ($r = .233, p < .001$), followed by teacher support ($r = .227, p < .001$), peer attachment ($r = .211, p < .001$), and paternal parenting style ($r = .170, p < .001$). Although the strength of these relationships ranged from weak to moderate levels, the findings suggest that supportive family, peer, and school environments are positively associated with adolescents' personality development.

Overall, the findings indicate that higher levels of perceived parenting quality, peer attachment, and teacher support are associated with more adaptive personality traits among adolescents. These findings support the collective influence of social support systems in shaping adolescents' personality development within residential educational environments.

Table 3: Correlation Analysis Between Study Variables and Adolescents' Personality Traits

Variable	r	p
Maternal Parenting Style	.233**	< .001
Paternal Parenting Style	.170**	< .001
Peer Attachment	.211**	< .001
Teacher Support	.227**	< .001

Note. $p < .01$ (2-tailed).

4.3 Multiple Regression Analysis

Prior to conducting multiple regression analysis, the assumptions of multicollinearity and normality were assessed. Collinearity diagnostics indicated no evidence of multicollinearity among the predictor variables included in the final regression model, with tolerance values ranging from .564 to .946 and variance inflation factor (VIF) values ranging from 1.058 to 1.772. In addition, the histogram of standardized residuals demonstrated an approximately normal distribution, while the normal probability (P-P) plot showed that the standardized residuals were reasonably aligned with the diagonal line. These findings indicate that the assumptions underlying multiple regression analysis were satisfactorily met.

Multiple regression analysis was conducted to identify the relative contribution of parenting style, peer attachment, and teacher support in predicting adolescents' personality traits among residential secondary school students. The results revealed that the regression model was statistically significant, $F(4, 516) = 15.395, p < .001$, indicating that the combined effects of the predictor variables significantly contributed to adolescents' personality traits.

The coefficient of determination indicated that the predictor variables explained 10.7% of the variance in adolescents' personality traits ($R^2 = .107$, Adjusted $R^2 = .100$). This finding suggests that social support systems within family, peer, and school environments contributed modestly to the prediction of adolescents' personality traits.

Teacher support in the importance dimension emerged as the strongest predictor of adolescents' personality traits ($\beta = .181, p < .001$), followed by maternal parenting style ($\beta = .166, p = .003$) and peer attachment ($\beta = .118, p = .010$). In contrast, paternal parenting style did not significantly predict adolescents' personality traits ($\beta = .013, p = .821$). The teacher support frequency dimension was not retained in the final regression model due to substantial overlap with the teacher support importance dimension, indicating that the perceived importance of teacher support contributed more meaningfully to the prediction of adolescents' personality traits.

Overall, the findings indicate that teacher support, particularly the perceived importance of support received from teachers, represents the most influential predictor of adolescents' personality traits within residential educational settings. Maternal parenting style and peer attachment also contributed significantly, highlighting the collective role of social support systems in adolescent personality development.

Table 4: Multiple regression analysis predicting adolescents' personality traits

Predictor	β	t	p	Tolerance	VIF	
Peer Attachment (IPPA)	.118	2.574	.010	.830	1.205	
Paternal Parenting Style	.013	0.226	.821	.564	1.772	
Maternal Parenting Style	.166		3.035	.003	.582	1.719
Teacher Support – Importance	.181	4.220	< .001	.946	1.058	

Note. $R^2 = .107$; adjusted $R^2 = .100$; $F(4, 516) = 15.395, p < .001$. Tolerance values ranged from .564 to .946, and variance inflation factors (VIF) values ranged from 1.058 to 1.772, indicating no evidence of multicollinearity among the predictor variables.

5. Discussion

This study examined the influence of parenting style, peer attachment, and teacher support on adolescents' personality traits within residential secondary school settings. Overall, the findings demonstrated that all three social environmental factors were significantly associated with adolescents' personality traits. However, the regression analysis revealed an unequal pattern of contribution, with teacher support emerging as the most dominant predictor, followed by maternal parenting style and peer attachment.

This pattern suggests that although social support systems function collectively, their contribution to adolescent personality development varies according to the nature and intensity of social interactions within the developmental environment. Recent evidence suggests that social relationships may influence adolescent developmental outcomes through indirect psychosocial mechanisms. Godor et al. (2024) demonstrated that attachment relationships contribute to adolescents' resilience, emotional adjustment, and coping capacities, suggesting that social support systems shape developmental outcomes through complex psychosocial processes rather than through direct effects alone.

The finding that teacher support emerged as the strongest predictor suggests the important role of school-based socialization within residential educational environments. In residential secondary schools, adolescents spend a substantial proportion of their developmental years in boarding institutions and engage in continuous interactions with teachers within highly structured academic and social environments. The prolonged duration of teacher-student interaction may position teachers not only as instructional agents but also as significant attachment figures and institutional socialization agents who contribute to adolescents' emotional regulation, behavioral orientations, and cognitive development.

From a boarding school ecology perspective, the residential environment provides sustained opportunities for social learning, interpersonal interaction, and emotional support, thereby enhancing the role of teacher support in adolescent development. Recent evidence from residential school settings further supports the importance of psychosocial support systems in adolescent development. Alom et al. (2026) reported that adolescents in residential school's experience significant developmental challenges related to psychological well-being, social relationships, and environmental adjustment, particularly among older adolescents. The authors emphasized that structured psychosocial support mechanisms are essential to facilitate adolescents' emotional adjustment, social connectedness, and overall well-being within residential educational environments. These findings provide additional support for the present study's interpretation that sustained interpersonal support, particularly from teachers, may play a critical developmental role in residential school contexts.

This interpretation is consistent with recent findings emphasizing the unique developmental ecology of residential educational environments. Azad (2024) argued that residential school students experience continuous social, emotional, and educational adjustment demands due to prolonged exposure to structured institutional environments, requiring sustained interpersonal support and adaptive social functioning. The study further highlighted that students residing in boarding schools rely heavily on their immediate social environment to facilitate emotional adjustment, social integration, and developmental adaptation. These findings support the present study's interpretation that prolonged interaction within residential educational settings may strengthen the influence of teacher support on adolescent development. Accordingly, the present findings suggest that teacher support plays a particularly significant role within the residential school context, while parental and peer influences remain important complementary socialization agents in adolescent personality development.

These findings are consistent with previous literature highlighting teacher support as an important protective factor within academically demanding educational settings. Suldo et al. (2009) and Rueger et al. (2016) emphasized that social support within school environments promotes psychological adjustment, emotional well-being, and adaptive coping among adolescents experiencing academic stress. Similarly, Lavy and Naama-Golan (2022) reported that positive teacher-student relationships contribute significantly to students' psychosocial

adjustment and academic functioning. Within high-achieving residential educational settings, teacher support may therefore function not only as academic guidance but also as a developmental mechanism influencing adolescents' emotional and personality development.

This interpretation is further reinforced by a recent systematic review conducted by Podiyya et al. (2025), which concluded that positive school climate characteristics, including supportive teacher-student relationships, peer support, school connectedness, and a sense of belongingness, were significantly associated with reduced emotional distress, improved self-esteem, enhanced well-being, and better academic achievement among adolescents. The review further emphasized that supportive interactions with teachers function as important protective factors that promote adolescents' emotional adjustment, school engagement, and developmental outcomes. These findings provide additional support for the present study's conclusion that teacher support plays a critical role in adolescent development within structured educational environments.

Further support for the present findings is provided by recent cross-national evidence examining school belonging and teacher-student relationships. Using data from more than 500,000 adolescents across 74 countries, Elizondo-González et al. (2025) demonstrated that positive teacher-student relationships were consistently associated with stronger school belonging across diverse educational contexts. The authors further argued that supportive teacher-student interactions promote emotional security, psychological adjustment, and social connectedness, thereby strengthening adolescents' engagement and attachment to their educational environments. These findings reinforce the present study's interpretation that supportive teacher relationships function as important developmental resources within structured educational settings, including residential schools.

This interpretation is also consistent with recent evidence emphasizing the importance of supportive educational environments for adolescents experiencing psychosocial challenges. Donoga (2025) reported that adolescents facing significant academic, emotional, and social difficulties demonstrated greater resilience and educational persistence when they perceived supportive relationships within the school environment. These findings suggest that educational support systems may function as protective psychosocial resources that facilitate adolescents' emotional adjustment, resilience, and broader developmental outcomes.

The present findings are further supported by studies examining the psychological mechanisms underlying teacher-student relationships. Wan et al. (2023) demonstrated that openness and empathy mediate the relationship between teacher support and adolescents' emotional intelligence, indicating that supportive educational relationships contribute to the development of internal emotional and personality-related characteristics. This supports the interpretation that teacher support may contribute to adolescents' personality traits through continuous emotional interaction, reinforcement, and interpersonal learning.

processes within educational environments. Similarly, Saxer et al. (2025) highlighted that supportive teacher-student relationships serve as important developmental resources that foster students' emotional security, academic self-concept, and psychological adjustment over time. Their longitudinal findings further suggest that positive teacher-student interactions contribute substantially to adolescents' well-being and social functioning within school environments.

Recent evidence further highlights the importance of supportive school environments in promoting adolescents' emotional and psychosocial development. Chen et al. (2025), guided by Self-System Processes Theory, Social Support Theory, and Stress and Coping Theory, demonstrated that positive school climate characteristics, particularly teacher support, peer support, and opportunities for autonomy, significantly reduced adolescents' negative emotions through increased school belonging and reduced social avoidance and distress. Their findings suggest that supportive teacher-student relationships foster emotional security, psychological adjustment, and social connectedness, thereby contributing to healthier developmental outcomes among adolescents. This evidence further supports the present study's interpretation that teacher support may influence adolescents' personality development through sustained emotional support, interpersonal connectedness, and psychosocial adjustment processes within educational environments.

An important methodological consideration concerns the teacher support frequency dimension, which was due to substantial overlap with the teacher support importance dimension. The findings indicated that adolescents who frequently received teacher support also tended to perceive such support as highly important, resulting in substantial overlap between the two dimensions. Consequently, the frequency dimension did not contribute additional explanatory variance beyond the perceived importance of teacher support. This finding suggests that the perceived significance and quality of teacher support, rather than merely the frequency of support received, may play a more meaningful role in adolescents' personality development within residential educational environments.

In addition to teacher support, maternal parenting style also emerged as a significant predictor of adolescents' personality traits. This finding indicates that family influence remains important despite adolescents residing within boarding school environments. Supportive and responsive maternal parenting may provide emotional stability and psychological security that subsequently contribute to adolescents' interactions within broader social environments. This interpretation is consistent with recent findings among boarding adolescents, which suggest that parenting influence may operate indirectly through adolescents' internal and external psychosocial resources. Zhang et al. (2026) demonstrated that positive parenting enhanced adolescents' self-efficacy and social support, which subsequently contributed to better psychosocial adjustment outcomes among boarding students. These findings suggest that parenting practices may shape adolescent development through complex psychosocial pathways rather than solely through direct parental influence.

This interpretation is further supported by recent evidence demonstrating that both maternal and paternal authoritative parenting may influence adolescent developmental outcomes through internal psychological mechanisms. Waseem and Firdous (2026) reported that self-efficacy partially mediated the relationship between authoritative parenting and adolescents' emotional intelligence, suggesting that supportive parenting practices contribute to adolescent development by strengthening internal psychological resources. These findings further reinforce the view that parenting influences adolescents' developmental outcomes through complex psychosocial pathways rather than through direct parental effects alone. Similarly, Cuadri et al. (2025) reported significant associations between parenting styles and several Big Five personality dimensions, thereby reinforcing the important role of family socialization experiences in adolescent personality development.

In contrast, paternal parenting style did not emerge as a significant predictor of adolescents' personality traits in the present study. This finding may be understood within the broader context of Asian family culture, where mothers often assume a more prominent role in daily caregiving, emotional support, and interpersonal communication with children. Previous studies have suggested that maternal caregiving practices tend to contribute more substantially to adolescents' emotional and psychosocial development due to more frequent and sustained interactions.

This interpretation is further supported by recent evidence indicating that maternal and paternal influences may contribute differently to adolescent developmental outcomes. Bačíková-Šléšková and Janovská (2024) found that maternal parenting self-efficacy was significantly associated with adolescents' behavioural adjustment, self-esteem, and life satisfaction, whereas paternal parenting self-efficacy was not significantly related to adolescent adjustment outcomes. These findings suggest that maternal influences may play a more direct role in adolescents' emotional and psychosocial development, while paternal influences may operate through alternative developmental mechanisms that require further investigation.

This interpretation is further supported by recent longitudinal evidence demonstrating that maternal parenting practices exert stronger associations with adolescents' developmental outcomes than paternal parenting practices. Wang et al. (2026) reported that maternal rejection and overprotection predicted poorer developmental trajectories among adolescents, whereas paternal influences appeared to operate through different protective mechanisms, particularly emotional warmth and resilience promotion. These findings suggest that maternal and paternal parenting may contribute to adolescent development through distinct socialization pathways.

Furthermore, within residential secondary school settings, the physical distance created by boarding school environments may further reduce the frequency of father-adolescent interactions, thereby limiting the potential influence of paternal parenting practices on adolescents' personality development. Nevertheless, this

finding should not be interpreted as indicating that paternal influence is unimportant, but rather that its contribution may operate through different developmental pathways that warrant further investigation. Consistent with ecological perspectives of adolescent development, Saxer et al. (2025) suggested that adolescents' developmental outcomes are shaped through the dynamic interaction of multiple interpersonal systems, including family, teacher, and peer relationships. Therefore, the nonsignificant effect of paternal parenting in the present study may reflect the relative influence of other socialization agents within residential educational environments rather than the absence of paternal influence itself.

This interpretation is consistent with recent family systems research suggesting that maternal and paternal parenting behaviors are dynamically interconnected rather than operating independently. Wang et al. (2024) demonstrated that parental behaviors influence one another through reciprocal family processes, whereby maternal behaviors may affect paternal parenting practices and subsequently shape adolescent developmental outcomes. These findings further support the notion that paternal influences may contribute to adolescent development through complex family interaction mechanisms that extend beyond direct parent-child relationships.

Peer attachment also demonstrated a significant but comparatively weaker contribution relative to teacher support and maternal parenting style. This pattern suggests that peer relationships primarily contribute to emotional regulation, identity formation, and interpersonal adjustment rather than being directly associated with relatively stable personality traits. During adolescence, peer relationships provide important opportunities for emotional expression, social comparison, and the development of self-identity, all of which contribute to psychosocial adjustment and a sense of belongingness. This interpretation is supported by recent evidence demonstrating that peer attachment contributes primarily to adolescents' emotional adjustment processes rather than directly influencing stable personality characteristics.

Muntamah and Pratama (2025) found that stronger peer attachment was significantly associated with better cognitive reappraisal and emotional regulation abilities among adolescents. Their findings further suggest that supportive peer relationships facilitate emotional coping, self-understanding, and psychosocial adjustment through interpersonal and emotional processes, thereby reinforcing the indirect developmental role of peer attachment during adolescence. Similarly, Chen et al. (2025) demonstrated that peer support contributed to adolescents' emotional adjustment primarily through indirect psychosocial mechanisms, including school belonging and reduced social avoidance and distress, suggesting that peer relationships may influence adolescent development through emotional and social adaptation processes rather than through direct developmental pathways.

This finding is consistent with recent longitudinal evidence suggesting that peer relationships primarily contribute to adolescents' emotional adjustment, social connectedness, and psychological well-being rather than directly influencing stable developmental characteristics. Saxer et al. (2025) demonstrated that student-student relationships serve important functions in fulfilling adolescents' needs for belongingness and relatedness, thereby supporting psychosocial adjustment and emotional well-being within educational settings.

This finding is further supported by Godor et al. (2024), who demonstrated that attachment relationships contribute to adolescents' resilience and coping capacities, particularly in fostering social support, emotional adjustment, and problem-solving abilities. The authors argued that attachment experiences shape adolescents' internal working models, which subsequently influence how adolescents respond to stressors and develop psychosocial competencies. Therefore, attachment relationships may influence personality development indirectly through their effects on emotional regulation, resilience, and adaptive coping mechanisms rather than through direct changes in stable personality traits.

Recent qualitative evidence further supports the importance of peer relationships in fostering adolescents' sense of belonging and psychosocial adjustment. Montecillo et al. (2024) found that peer acceptance contributed significantly to adolescents' self-esteem, emotional well-being, and sense of belonging, whereas peer rejection was associated with loneliness, low self-worth, and psychological distress. Their findings suggest that peer relationships primarily influence adolescents' emotional and social functioning through interpersonal acceptance, social validation, and emotional support processes. These findings further reinforce the interpretation that peer attachment contributes indirectly to adolescent personality development through psychosocial and emotional adjustment mechanisms rather than through direct influences on stable personality characteristics.

Recent empirical evidence further suggests that peer attachment may influence adolescent development through emotional regulatory mechanisms. Wang and Zhang (2026), in a large-scale study involving 12,099 adolescents, found that stronger peer attachment was associated with fewer difficulties in emotion regulation and better psychosocial adjustment outcomes. Their findings demonstrated that emotion regulation partially mediated the relationship between peer attachment and maladaptive behavioral outcomes, indicating that supportive peer relationships contribute to adolescent development by facilitating emotional security, adaptive coping, and emotional regulation capacities. This evidence further supports the interpretation that peer attachment contributes to adolescents' personality development indirectly through psychosocial and emotional adjustment processes rather than through direct influences on relatively stable personality traits.

Recent evidence further supports the indirect role of peer attachment in adolescent development. Doménech et al. (2026) found that secure peer attachment was negatively associated with expressive suppression and positively

associated with adaptive emotional regulation strategies among adolescents aged 15 to 18 years. Their findings suggest that supportive peer relationships contribute to emotional adjustment, social adaptation, and psychological well-being by facilitating healthier emotional regulation processes. The authors further argued that peer attachment functions primarily as a protective psychosocial mechanism rather than as a direct determinant of developmental outcomes. This finding supports the present study's interpretation that peer attachment may contribute indirectly to adolescents' personality development through emotional adjustment, social connectedness, and adaptive coping processes rather than exerting a direct influence on relatively stable personality traits.

Within highly structured residential educational settings characterized by institutional regulation and intensive teacher supervision, peer attachment may function primarily as a source of emotional support and social connectedness rather than as a dominant influence on core personality development. These findings suggest that peer relationships remain important socialization agents that contribute to adolescents' emotional and social development within residential school environments.

From a theoretical perspective, the findings support Adler's Individual Psychology, which emphasizes the importance of belongingness, social relationships, and interpersonal experiences in contributing to personality development. Teacher support, maternal parenting style, and peer attachment may therefore be interpreted as significant sources of social connectedness contributing to adaptive personality development among adolescents. Simultaneously, the findings are also consistent with Bandura's Social Learning Theory, which explains personality-related development through observation, imitation, and social reinforcement processes occurring within daily interactions with significant social agents. This interpretation is consistent with recent empirical evidence demonstrating that attachment relationships contribute to adolescents' resilience, coping, and social adjustment capacities, thereby reinforcing Adler's emphasis on social connectedness and interpersonal experiences in personality development (Godor et al., 2024).

This interpretation is further supported by recent longitudinal evidence demonstrating the importance of interpersonal relationships within educational settings. Saxer et al. (2025) reported that teacher-student and student-student relationships play critical roles in adolescents' emotional, social, and academic development by fulfilling fundamental needs for relatedness, belongingness, and social connectedness. Drawing upon attachment theory, self-determination theory, and ecological systems theory, the authors further argued that supportive interpersonal relationships within school environments function as important developmental resources that promote adolescents' psychological adjustment and well-being over time. These findings provide additional support for the present study's interpretation that teacher support and peer attachment constitute important socialization mechanisms contributing to adolescent personality development.

Recent meta-analytic evidence further supports the importance of social connectedness and interpersonal relationships in adolescent development. Davies et al. (2025), through a systematic review and meta-analysis involving 35,451 secondary school students, demonstrated that interventions targeting connectedness, belonging, and engagement significantly improved adolescents' academic, social, and emotional outcomes. The authors further concluded that environmental factors and interpersonal relationships constitute important mechanisms for fostering adolescents' psychosocial adjustment and developmental functioning within educational settings. These findings provide additional support for the present study's interpretation that teacher support, peer attachment, and parenting practices function as interconnected socialization systems contributing to adolescent personality development.

In terms of scholarly contribution, this study extends current literature by integrating parenting style, peer attachment, and teacher support into a single quantitative model examining their relative influence on adolescents' personality traits. Unlike previous studies that frequently examined these variables separately, the present findings suggest that teacher support plays a significant role within residential educational contexts, while parental and peer influences remain important complementary socialization agents. Additionally, the focus on residential secondary school environments contributes locally grounded empirical evidence to the broader international literature concerning adolescent personality development within structured educational institutions. The findings are also consistent with recent evidence demonstrating that social support systems within educational environments contribute to adolescents' emotional adjustment through interconnected psychosocial pathways involving belongingness, social connectedness, and adaptive coping processes (Chen et al., 2025).

Nevertheless, several limitations should be acknowledged. First, the cross-sectional design limits causal interpretation and restricts the examination of personality development over time. Second, the use of self-report measures may introduce perceptual and social desirability biases despite efforts to ensure anonymity and confidentiality. Third, because the study focused exclusively on adolescents enrolled in residential secondary schools in Malaysia, the generalizability of the findings to other educational contexts may be limited. Accordingly, future studies are encouraged to employ longitudinal and mixed methods approaches to examine developmental changes in personality traits over time and to further explore the mechanisms through which social support systems influence adolescent personality development across diverse educational settings.

6. Conclusion

This study examined the relationships between parenting style, peer attachment, teacher support, and adolescents' personality traits within residential secondary school settings. The findings demonstrated that all three social environmental factors were significantly associated with adolescents' personality traits, although their contributions differed in magnitude. Teacher support emerged as the strongest predictor, followed by maternal parenting style and peer attachment.

These findings suggest that social support systems within family, peer, and school environments collectively contribute to adolescent personality development, with teacher support playing a significant role within residential educational contexts.

The findings support Adler's Individual Psychology and Bandura's Social Learning Theory, emphasizing the importance of social relationships, belongingness, and social learning processes in adolescent personality development. This study contributes to the literature by integrating parenting style, peer attachment, and teacher support within a single quantitative framework and provides empirical evidence regarding the role of multiple social support systems within residential educational environments in Malaysia.

Despite these contributions, several limitations should be acknowledged. The cross-sectional design limits causal interpretation, while the use of self-report measures may introduce perceptual bias. Future studies are encouraged to employ longitudinal and mixed methods approaches to further examine the developmental mechanisms underlying adolescent personality development within residential educational settings.

Conflict of Interest

The authors declare no conflict of interest regarding the publication of this article.

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8. References

- Adler, A. (1956). *The individual psychology of Alfred Adler*. Basic Books.
- Alom, J., Khatun, S., & Mukherjee, A. (2026). A Multivariate Study of Gender and Age Differences in Adolescent Quality of Life in Residential Schools. *J Adv Sport Phys Edu*, 9(4), 91-100. <https://doi.org/10.36348/jaspe.2026.v09i04.006>
- Armsden, G. C., & Greenberg, M. T. (1987). The inventory of parent and peer attachment: Individual differences and their relationship to psychological well-being in adolescence. *Journal of Youth and Adolescence*, 16(5), 427-454. <https://doi.org/10.1007/BF02202939>
- Azad, Y. (2024). The impact of social, emotional, and educational adjustment on academic performance among male and female residential school students. *International Journal for Multidisciplinary Research*, 6(1), 1-13. IJFMR240113060. <https://www.ijfmr.com/>
- Bačíková-Šlěšková, M., & Janovská, A. (2024). Is maternal and paternal parenting self-efficacy related to the parenting and early adolescents' adjustment? *Československá psychologie*, 68(5), 415-432. <https://doi.org/10.51561/cspsych.68.5.415>
- Bandura, A. (1977). *Social learning theory*. Prentice Hall.
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52, 1-26. <https://doi.org/10.1146/annurev.psych.52.1.1>

- Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. *The Journal of Early Adolescence*, 11(1), 56–95. <https://doi.org/10.1177/0272431691111004>
- Bleidorn, W., Hopwood, C. J., Back, M. D., Denissen, J. J. A., Hennecke, M., Jokela, M., Kandler, C., Lucas, R. E., Luhmann, M., Orth, U., Roberts, B. W., Wagner, J., Wrzus, C., & Zimmermann, J. (2022). Personality trait development across the lifespan. *Psychological Science in the Public Interest*, 23(1), 1–48. <https://doi.org/10.1177/15291006211030298>
- Briley, D. A., & Tucker-Drob, E. M. (2014). Genetic and environmental continuity in personality development. *Psychological Bulletin*, 140(5), 1303–1331. <https://doi.org/10.1037/a0037091>
- Bronfenbrenner, U., & Morris, P. A. (2006). The bioecological model of human development. In R. M. Lerner (Ed.), *Handbook of child psychology* (6th ed., pp. 793–828). Wiley.
- Chen, W., Huang, Z., Peng, B., & Hu, H. (2025). Unpacking the relationship between adolescents' perceived school climate and negative emotions: the chain mediating roles of school belonging and social avoidance and distress. *BMC psychology*, 13(1), 58. <https://doi.org/10.1186/s40359-025-02364-1>
- Costa, P. T., Jr., & McCrae, R. R. (1992). Revised NEO Personality Inventory (NEO PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual. *Psychological Assessment Resources*.
- Cuadri, C., García-Perales, J., Martínez, I., & Veiga, F. H. (2025). Relationship between parenting styles and personality in older Spanish adolescents. *Behavioral Sciences*, 15(3), 339. <https://doi.org/10.3390/bs15030339>
- Davies, C. A., Cordier, R., Graham, P., Littlefair, D., Speyer, R., & Melo, D. (2025). Interventions to improve connectedness, belonging, and engagement in secondary schools: A systematic review and meta-analysis. *Education Sciences*, 15(5), 582. <https://doi.org/10.3390/educsci15050582>
- Donoga, D. (2025). Navigating Teenage Motherhood: Challenges of Adolescent Mothers in Northern Samar, Philippines. *Journal of Interdisciplinary Perspectives*, 3(8), 923–929. <https://doi.org/10.69569/jip.2025.526>
- Elizondo-González, J. F., Malla, S., & Barros-Bustos, S. (2025). Multilevel determinants of school belonging: The moderating role of national safety climate. *Frontiers in Education*, 10, 1697010. <https://doi.org/10.3389/feduc.2025.1697010>
- Godor, B. P., van der Horst, F. C., & Van der Hallen, R. (2024). Unravelling the roots of emotional development: Examining the relationships between attachment, resilience and coping in young adolescents. *The Journal of Early Adolescence*, 44(4), 429–457. <https://doi.org/10.1177/02724316231181876>
- Israel, A., Brandt, N. D., Spengler, M., Göllner, R., Lüdtke, O., Trautwein, U., & Wagner, J. (2023). The longitudinal interplay of personality and school experiences in adolescence. *European Journal of Personality*, 37(2), 131–153. <https://doi.org/10.1177/08902070221134440>
- Kordi, A., & Baharudin, R. (2010). Parenting attitude and style and its effect on children's school achievements. *International Journal of Psychological Studies*, 2(2), 217–222. <https://doi.org/10.5539/ijps.v2n2p217>
- Laursen, B., & Hartl, A. C. (2013). Understanding loneliness during adolescence. *Journal of Adolescence*, 36(6), 1261–1270. <https://doi.org/10.1016/j.adolescence.2013.10.016>
- Lavy, S., & Naama-Golan, Y. (2022). The role of teacher–student relationships in students' well-being and academic outcomes: A review of recent research. *Educational Psychology Review*, 34(1), 325–349. <https://doi.org/10.1007/s10648-021-09636-3>

- Lechner, C. M., Danner, D., & Rammstedt, B. (2021). How is personality related to educational attainment? *Journal of Personality and Social Psychology*, 121(4), 1044–1065. <https://doi.org/10.1037/pspp0000334>
- Longobardi, C., Prino, L. E., Marengo, D., & Settanni, M. (2021). Student-teacher relationships and adolescent socio-emotional development. *Frontiers in Psychology*, 12, 658882. <https://doi.org/10.3389/fpsyg.2021.658882>
- Malecki, C. K., & Demaray, M. K. (2002). Measuring perceived social support: Development of the Child and Adolescent Social Support Scale (CASSS). *Psychology in the Schools*, 39(1), 1–18. <https://doi.org/10.1002/pits.10004>
- McCrae, R. R., & Costa, P. T., Jr. (2008). The five-factor theory of personality. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality* (pp. 159–181). Guilford Press.
- Montecillo, M. J., Pejoto, J. L., & Moral, R. V. (2024). Belongingness matters: A qualitative exploration of peer acceptance and rejection among high school students. *Eureka: Journal of Educational Research*, 3(1), 93–100. <https://doi.org/10.56773/ejer.v3i1.51>
- Muntamah, B. S., & Pratama, M. F. (2025). Peer attachment with emotion regulation: The influence of affective and cognitive empathy as moderators. *Psikologia: Jurnal Pemikiran dan Penelitian Psikologi*, 20(1), 18–27. <https://doi.org/10.32734/psikologia.v20i1.19972>
- Muris, P., Meesters, C., & van den Berg, F. (2003). The strengths and difficulties questionnaire. *Personality and Individual Differences*, 35(4), 887–896. [https://doi.org/10.1016/S0191-8869\(02\)00341-3](https://doi.org/10.1016/S0191-8869(02)00341-3)
- Peng, B., Hu, N., Yu, H., Xiao, H., & Luo, J. (2021). Parenting style and adolescent mental health: The chain mediating effects of self-esteem and psychological inflexibility. *Frontiers in Psychology*, 12, 738170. <https://doi.org/10.3389/fpsyg.2021.738170>
- Peng, X., Zhou, H., Wang, Z., & Li, J. (2021). Parenting styles and adolescents' psychological well-being: The mediating role of self-esteem and psychological flexibility. *Journal of Adolescence*, 85, 102–112. <https://doi.org/10.1016/j.adolescence.2020.11.002>
- Pinquart, M. (2021). Associations of parenting styles with internalizing and externalizing problems. *Developmental Psychology*, 57(3), 336–349. <https://doi.org/10.1037/dev0001140>
- Podiya, J. K., Navaneetham, J., & Bhola, P. (2025). Influences of school climate on emotional health and academic achievement of school-going adolescents in India: A systematic review. *BMC Public Health*, 25(1), 54. <https://doi.org/10.1186/s12889-024-21268-0>
- Prinz, P., Stams, G. J. J. M., Deković, M., Reijntjes, A. H. A., & Belsky, J. (2009). The relations between parents' Big Five personality factors and parenting. *Journal of Personality and Social Psychology*, 97(2), 351–362. <https://doi.org/10.1037/a0015823>
- Roberts, B. W., Wood, D., & Caspi, A. (2006). The development of personality traits in adulthood. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality* (pp. 375–398). Guilford Press.
- Roorda, D. L., Koomen, H. M. Y., Spilt, J. L., & Oort, F. J. (2011). The influence of affective teacher-student relationships. *Review of Educational Research*, 81(4), 493–529. <https://doi.org/10.3102/0034654311421793>
- Rueger, S. Y., Malecki, C. K., & Demaray, M. K. (2016). Relationship between perceived social support and academic outcomes. *School Psychology Quarterly*, 31(1), 1–14. <https://doi.org/10.1037/spq0000145>
- Saxer, K., Schnell, J., Mori, J., & Hascher, T. (2025). The relationship between student well-being and teacher-student and student-student relationships: A longitudinal

- approach among secondary school students in Switzerland. *Education Sciences*, 15(3), 384. <https://doi.org/10.3390/educsci15030384>
- Shiner, R. L., & Caspi, A. (2012). Temperament and the development of personality traits. In M. Zentner & R. L. Shiner (Eds.), *Handbook of temperament* (pp. 497–516). Guilford Press.
- Shulman, S., & Nurmi, J.-E. (2019). Adolescent relationships and their developmental significance. *New Directions for Child and Adolescent Development*, 2019(166), 9–23. <https://doi.org/10.1002/cad.20306>
- Soenens, B., & Vansteenkiste, M. (2010). A theoretical upgrade of self-determination theory. *Developmental Review*, 30(1), 74–99. <https://doi.org/10.1016/j.dr.2009.11.003>
- Soenens, B., Vansteenkiste, M., & Van Petegem, S. (2021). Autonomy-supportive and controlling parenting. *Developmental Review*, 61, 100964. <https://doi.org/10.1016/j.dr.2021.100964>
- Soto, C. J. (2018). Big Five personality traits. In D. P. McAdams, R. L. Shiner, & J. L. Tackett (Eds.), *The handbook of personality development* (pp. 109–128). Guilford Press.
- Steinberg, L. (2014). *Age of opportunity: Lessons from the new science of adolescence*. Houghton Mifflin Harcourt.
- Suldo, S. M., Shaunessy, E., & Hardesty, R. (2009). Relationships among stress, coping, and mental health. *Psychology in the Schools*, 46(3), 233–246. <https://doi.org/10.1002/pits.20367>
- Van den Akker, A. L., Prinzie, P., & Asscher, J. J. (2021). Parenting and adolescent development: A meta-analytic review. *Journal of Youth and Adolescence*, 50, 1603–1621. <https://doi.org/10.1007/s10964-021-01439-3>
- Wan, S., Lin, S., Yirimuwen, Li, S., & Qin, G. (2023). The relationship between teacher-student relationship and adolescent emotional intelligence: A chain-mediated mediation model of openness and empathy. *Psychology Research and Behavior Management*, 16, 1343–1354. <https://doi.org/10.2147/PRBM.S399824>
- Wan, Z., Zhang, X., & Zhang, D. (2023). The relationship between teacher-student relationship and adolescent emotional intelligence. *Frontiers in Psychology*, 14, 1175643. <https://doi.org/10.3389/fpsyg.2023.1175643>
- Wang, D., Gong, R., Liu, C., Yang, K., Su, X., Chen, S., Ding, R., Xing, Y., Fu, J., Lin, X., Zhao, J., Tang, J., Chen, Q., & Li, X. (2026). The association between maternal and paternal parenting styles and adolescents' overall mental problem: A longitudinal study. *BMC Psychology*. Advance online publication. <https://doi.org/10.1186/s40359-026-04525-2>
- Wang, H., Xu, P., & Jiang, Y. (2024). Exploring the relationship between maternal gatekeeping with paternal parenting and adolescent aggression. *Behavioral Sciences*, 14(7), 517. <https://doi.org/10.3390/bs14070517>
- Wang, M.-T., & Degol, J. L. (2022). School climate and adolescent development. *Educational Psychologist*, 57(1), 1–17. <https://doi.org/10.1080/00461520.2021.2023141>
- Wang, Z. L., & Zhang, Y. L. (2026). Difficulties in Emotion Regulation Mediate the Association Between Peer Attachment and Problematic Use of Smartphone. *Brain and Behavior*, 16(2), e71224. <https://doi.org/10.1002/brb3.71224>
- Waseem, A., & Firdous, N. (2026). Maternal and Paternal Parenting Styles and Emotional Intelligence in Indian Adolescents: The Mediating Role of Self-Efficacy. <https://doi.org/10.22541/au.177430046.67247156/v1>
- Watts, R. E. (2012). Adlerian psychotherapy. In D. Wedding & R. J. Corsini (Eds.), *Current psychotherapies* (9th ed., pp. 82–111). Cengage.

- Wentzel, K. R. (1998). Social relationships and motivation in middle school. *Journal of Educational Psychology*, 90(2), 202–209. <https://doi.org/10.1037/0022-0663.90.2.202>
- Wentzel, K. R., Russell, S., & Baker, S. (2017). Emotional support and engagement. *Journal of Educational Psychology*, 109(7), 1041–1054. <https://doi.org/10.1037/edu0000183>
- Zhang, L., Jiang, Y., Xu, M., & Zaremohzzabieh, Z. (2026). Parenting style and interpersonal distress among adolescent Chinese boarding students: a serial mediation model via self-efficacy and social support. *International Journal of Adolescence and Youth*, 31(1), 2609495. <https://doi.org/10.1080/02673843.2025.2609495>
- Zimmermann, J., Woods, W. C., Ritter, S., Happel, M., Masuhr, O., Jaeger, U., Spitzer, C., & Wright, A. G. C. (2023). Personality development in adolescence. *Journal of Personality*, 91(3), 551–568. <https://doi.org/10.1111/jopy.12756>