

Social support and school adjustment among children and adolescents: A systematic review



Jinjin Niu^a  | Nellie Ismail^a | Muslihah Hasbullah^a

^aDepartment of Human Development and Family Studies, Faculty of Human Ecology, Universiti Putra Malaysia, Serdang, Selangor, Malaysia.

Abstract School adjustment is a crucial factor influencing the mental health of children and adolescents, and understanding it can help improve their well-being. Children and adolescents who receive more social support can effectively enhance their school adjustment. However, there are currently no systematic reviews on social support and school adjustment. Therefore, this study systematically reviewed all studies investigating the association between social support and school adjustment in children and adolescents. According to the PRISMA guidelines, articles published in academic databases (WOS, Scopus, EBSCO) were searched, and a total of 1,120 documents were initially obtained. This study focused on children and adolescents aged 6–17 years, with school adjustment as the outcome variable and social support as the predictor. 10 articles were extracted and included in this review study, and the articles were analysed comprehensively. The report contains nine articles that used structural equation modelling (SEM) for data analysis, most focused on older children, and one article that used parent and teacher ratings. Research has shown that children and adolescents need to feel higher levels of social support to facilitate their adjustment to school, and that support from parents, teachers and peers is positively associated with school adjustment. Although the studies were conducted in different countries and the significance of support from parents, teachers, and peers varied, they still demonstrated that children's and adolescents' school adjustment is influenced by the social support they perceive. This review provides insights for guiding the improvement of children's and adolescents' future mental health development, enabling children to feel more social support and thereby enhancing their ability to adapt to school.

Keywords: academic, family, peers, teachers, well-being

1. Introduction

The psychological well-being of children and adolescents is a current public issue of global attention. Adapting to new school contexts may be crucial for children and adolescents to gain self-worth and well-being (Lin et al., 2024; Zhao et al., 2023). School adaptation is defined as the dynamic process by which individuals adapt to the school system (Ladd & Birch, 2017). It is a complex multidimensional variable involving multiple dimensions of school life. School adjustment generally includes the following aspects: (a) social relationship adjustment, namely, peer relationships, teacher–student relationships, and social integration (Baker & Stryk, 1984; Zhang et al., 2023); (b) academic adjustment, such as academic performance, academic achievement, learning engagement, academic integration, etc. (Coplan et al., 2017; Granot, 2014; Lasarte et al., 2020); (c) personal adjustment, such as school social emotions, etc. (Granot, 2014); and (d) environmental adjustment, such as routine adjustment, school attitudes, school liking, school participation, school belonging, etc. (Azpiazu et al., 2024; Fang et al., 2025; Ladd & Birch, 1997; Liu et al., 2025). Studies have shown that while some children can adapt naturally to new environments, others struggle (Kang & Gim, 2022). Maladjusted children and adolescents typically exhibit negative and inadequate psychological indicators such as low self-esteem, low self-efficacy, low well-being, and depression (Bosman et al., 2018; Kim, 2023; Liu et al., 2022; Zhang et al., 2022). Therefore, focusing on the well-being and school adjustment of children and adolescents is crucial.

Good social relationships contribute to children's and adolescents' school adjustment. Research has shown that support from family, teachers, and peers/friends is a protective factor for children and adolescents in maintaining school adjustment (John et al., 2018; Lasarte et al., 2020; Monika & Sukma, 2021). Children's perceived social support (parental support, teacher support, and peer support) not only affects their well-being but also improves their ability to adapt to school life (Ciarrochi et al., 2017; McNamara et al., 2021; Monika & Sukma, 2021; Olana & Tefera, 2022; Ulmanen et al., 2022).

Moreover, family members are the most important emotional support for children throughout their lives, and their care and support help promote the psychological well-being of children and adolescents. The emotional connection between parents and children positively predicts perceived family support (Rodríguez-Fernández et al., 2020), and family/parental support can significantly predict school adjustment in children and adolescents (Azpiazu et al., 2024; Kiuru et al., 2016; Olana & Tefera, 2022). As guides for children's and adolescents' learning and caretakers' lives at school, teachers' support is



particularly important for children's and adolescents' academic achievement and school satisfaction (Abodunrin & Edim, 2024; Aldrup et al., 2018; Bosman et al., 2018; Siu et al., 2023). The majority of school environment variables can demonstrate the importance of teacher support for the future development of children and adolescents (Aldrup et al., 2018; Fang et al., 2025; Lasarte et al., 2020; Peng et al., 2025). Positive emotional connections between children and adolescents and their peers favour their academic satisfaction, engagement and achievement and thus their adjustment to school (Kim et al., 2021; Mpofu & Sefotho, 2023; Ozer, 2024; Worley et al., 2023; Zhao et al., 2023). Furthermore, research has shown that teacher and peer support are inherently correlated, so supportive teacher behavior helps children establish positive peer relationships (Gutiérrez et al., 2017). If an individual has difficulty adjusting to school and lacks support from family, peers, and teachers, they may exhibit more severe behavioral issues, including externalizing and internalizing problems (Chen & Yang, 2022; Demaray & Malecki, 2002; Kiuru et al., 2016; Song et al., 2019).

School adjustment is a complex process that encompasses different domains of competence, such as academic adjustment, social adjustment, emotional adjustment, school attitudes, school inputs, and other dimensions. Consequently, the intricacy of school adjustment necessitates a more thorough examination of the specific relationship between social support and school adjustment in children and adolescents. Systematic reviews contribute to a broader understanding of the relevant literature and identify gaps in research.

2. Objective

Currently, comprehensive systematic reviews examining the association between social support and school adjustment are lacking. Therefore, this study aimed to investigate the relationship between social support (parental support, teacher support, and peer support/classmate support) and school adjustment among children and adolescents. There were four objectives aimed at answering the following research questions:

Is there a correlation between social support (parental support, teacher support, and peer support/classmate support) and school adjustment among children and adolescents?

3. Method

This review is a systematic review and follows the steps of the PRISMA guidelines for systematic reviews (Page et al., 2021). Systematic reviews serve many important functions, as they can help researchers comprehensively understand research findings on a particular topic and identify priorities for future research (Rethlefsen et al., 2021; Sarkis-Onofre et al., 2021). PRISMA provides a structured approach that promotes transparency, reproducibility and scientific rigour (Sohrabi et al., 2021). Following the framework of PRISMA 2020, the relationship between social support and children's school adjustment can be explored comprehensively (Page et al., 2021). This study was conducted according to the following steps for the review: (a) define the research question, (b) select the database, (c) search for keywords, (d) extract data, (e) screen articles on the basis of inclusion and exclusion criteria, (f) screen articles on the basis of titles and abstracts, (g) screen articles on the basis of full reading, and (h) perform data extraction and analysis.

4. Systematic Review Process

4.1. Identification

In February 2025, the search was conducted in three databases, Web of Science, EBSCO, and SCOPUS, and relevant research was identified. After confirming the topic of the study, a search was conducted via Boolean operators. The study was based on the following keywords: ("School adjustment" or "school adaptation") AND ("Social support") AND ("children" or "child" or "Primary school student*" or "Primary school children" or "elementary school student*" or "elementary school children"). For all three databases, the advanced search feature was employed, the source category was restricted to Academic Publications, and only articles in English were considered. The initial search retrieved only a large dataset of potentially relevant articles, regardless of publication date. Figure 1 shows the flow diagram of the SLR.

4.2. Inclusion and exclusion criteria

The empirical studies utilized in this research were required to fulfil the following criteria: (a) the study was conducted on participants aged 6-17 years, (b) the outcome variable used in the study was school adjustment/school adaptation, (c) the predictor variable was social support (parental support, teacher support, peer support), (d) the study used longitudinal/cross-sectional studies and a quantitative research design, (e) only articles published between 2015 and 2025 were selected, and (f) only journal articles were selected.

For this study, we excluded studies that met the following criteria: (a) non-English publications, (b) studies that did not explore the relationship between social support and school adjustment, (c) studies with a sample that was mainly composed of participants aged 17 years or above or 6 years or below, and (d) articles that did not consider nonjournal papers such as dissertations and conference articles.

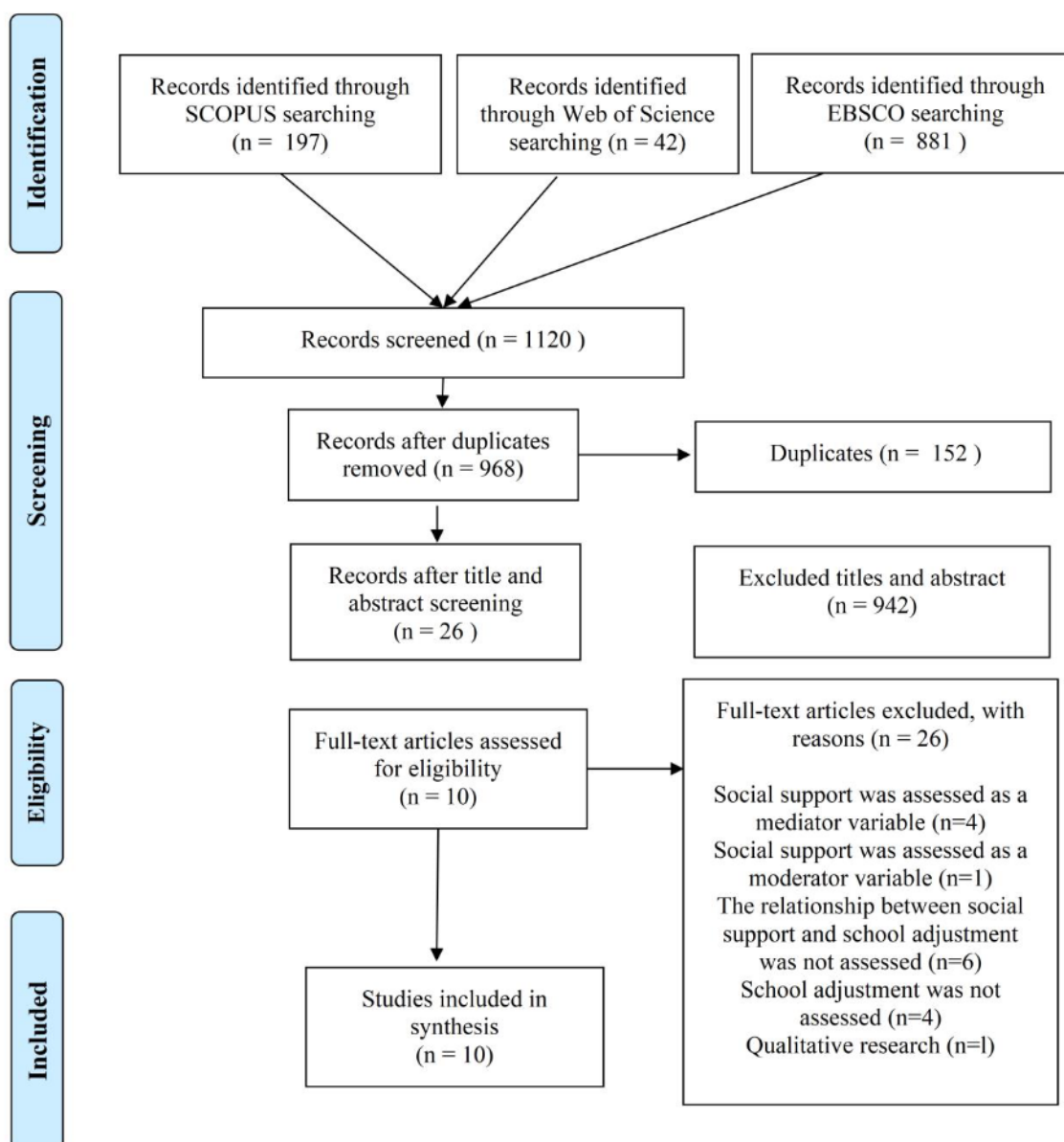


Figure 1 A flow diagram of the study.

4.3. Screening

Initially, 1120 articles were identified on the basis of keywords. Using Rayyan, a literature screening tool (Ouzzani et al., 2016), 152 articles were removed to identify duplicates. Titles and abstracts were reviewed to identify relevant studies, which produced 26 papers while 942 articles that failed to meet the inclusion criteria were excluded. Finally, a full-text search was performed, which resulted in 11 articles being selected. Among them, four studies that used social support as a mediating factor and one study that employed social support as a moderator were excluded. Six studies failed to evaluate the correlation between social support and school adjustment, four did not consider school adjustment as a dependent variable, and one was qualitative in nature. Every article underwent a quality assessment to verify the authenticity and reliability of the research findings.

4.4. Data extraction and synthesis

The included literature was critically evaluated and analysed, with the research focused on studies that directly address the research questions. Detailed information, including author, country, number of participants, age range, and mean age (see Table 1), was extracted for each study and entered into an Excel table. In addition, we recorded specific research findings and different research designs and data analysis methods.

5. Results

The sample sizes of the studies included in this systematic literature review ranged from 271 participants (Colomès et al., 2021) to 9,327 participants (Peng et al., 2025), and the respondents were children and adolescents aged 7–17 years. Four cross-sectional studies (Azpiazu et al., 2024; Azpiazu et al., 2024; Lasarte et al., 2020; Liu et al., 2025) and 6 longitudinal studies (Aldrup et al., 2018; Colomès et al., 2021; Fang et al., 2025; Kiuru et al., 2016; Peng et al., 2025; Ratelle et al., 2021) were included. Most of the studies were conducted in Spain and China, followed by Canada, Finland, Germany, Serbia, and Mauritius.

Table 1 Summary of the research on the relationship between social support and school adjustment.

Author (Year)	Country	N	Age Range	Research Design	Data Analysis	Association
Fang et al. (2025)	China	2502	13-15	Longitudinal	SEM	Teacher support (academic support, emotional support, and relationship support) significantly positively affects school adjustment among urban adolescents. The resiliency can partially mediate the relationship between the two.
Liu et al. (2025)	China	1167	12-15	Cross-sectional	SEM	Perceived social support predicts adolescents' school adjustment directly and indirectly through school belonging, in which physical activity moderates the first half of the pathway mediated by school belonging.
Azpiazu, et al. (2024)	Spain	1397	12-16	Cross-sectional	SEM	School environmental support (teacher support, peer support) directly and indirectly predicts school adjustment.
Azpiazu et al. (2025)	Spain	1397	12-16	Cross-sectional	SEM	Peer support directly impacted school adjustment, whereas family and teacher support protected school adjustment issues via self-concept and resilience.
Ratelle et al. (2021)	Canada	663	13-16	Longitudinal	SEM	Basic psychological needs explain the facilitating effect of maternal supportive behaviour on adolescents' school adjustment.
Colomès et al. (2021)	Mauritian	271	14-16	Longitudinal	SEM	Autonomy-supportive behaviors of parents and teachers have a unique and partially positive predictive effect on children's adjustment to school, through the fulfilment and frustration of basic psychological needs.
Peng et al. (2025)	China	1,874 (left-behind children) 7,453(non-left-behind children)	13-15	Longitudinal	SEM	School support effectively enhances the school adaptability of rural left-behind children; teacher support is better than environmental support in enhancing children's school adjustments.
Lasarte et al. (2020)	Spain	1468	12-17	Cross-sectional	SEM	Both teacher support and family support directly predicted two indicators of school adjustment (school engagement and school performance), while friend support indirectly determined school adjustment. Of these, teacher support had the strongest influence.
Aldrup et al. (2018)	Germany	5 th grade (3123) 8 th grade (2484)	11-15	Longitudinal	Multilevel modelling analysis approach	Social support and classroom management are also associated with overall school adjustment at the classroom level.
Kiuru et al. (2016)	Finnish	378	7-8	Longitudinal	SEM	For children with low maternal support, high positive teacher affect buffered the development of adjustment problems from 1st to 2nd grade.

5.1. School adjustment and social support measurement

5.1.1. School adjustment measurement

Currently, there is no commonly used tool for school adjustment, and various studies use different questionnaires. Various studies measure school adjustment on the basis of different dimensions, and although the focus varies, they can all measure the school adjustment level of people of different age groups. Among the 10 articles, the instruments studied included dimensions such as academic adjustment, life adjustment, and emotional adjustment of children in school (Aldrup et al., 2018; Azpiazu et al., 2024; Colomès et al., 2021; Lasarte et al., 2020; Peng et al., 2025). Two studies used measures focused on children's social relationships, attitudes and school climate (Fang et al., 2025; Liu et al., 2025). The two articles used a combination of scales to measure school adjustment, namely, emotional involvement, school integration and academic performance, which were used as indicators (Azpiazu et al., 2024). One study considers school adjustment as prosocial and externalizing behaviour (Kiuru et al., 2016), and the other used a strengths and difficulties scale as a measurement (Aarø et al., 2022). This finding shows that school adjustment is not a single construct and that children and adolescents can measure it in various aspects of school life.

5.1.2. Social support measurement

The scales used to measure social support also differ, with most scales focusing on three or two sources of social support (family support/parental support/maternal support, teacher support, and peer/friend/classmate support) (Azpiazu et al., 2024; Azpiazu et al., 2024; Colomès et al., 2021; Lasarte et al., 2020; C. Liu et al., 2025). Azpiazu et al. (2024) used a measure of family and peer support via the Family and Friends Perceived Social Support Questionnaire (González-Ramírez & Landero, 2014; Azpiazu et al., 2024; Azpiazu et al., 2024; Lasarte et al., 2020). Two studies used the Perceived Parental Autonomy Support Scale (Mageau et al., 2015) to measure teacher and parent autonomy support (Colomès et al., 2021; Ratelle et al., 2021). Liu (2025) et al. used a multidimensional scale with 12 items of perceived social support (Zimet et al., 1988). The remaining studies selected single scales. All scales reported psychometric properties (internal consistency, reliability, and validity).

5.2. The relationship between social support and school adjustment

For the nine studies included in the review, SEM data analysis methods were used (Azpiazu et al., 2024; Azpiazu et al., 2024; Colomès et al., 2021; Fang et al., 2025; Kiuru et al., 2016; Lasarte et al., 2020; Liu et al., 2025; Peng et al., 2025; Ratelle et al., 2021). One study used a multilevel modelling approach (Aldrup et al., 2018).

Research has revealed a correlation between social support and school adjustment in children and adolescents, regardless of parental support, peer support or teacher support (Azpiazu et al., 2024; Azpiazu et al., 2024; Colomès et al., 2021; Fang et al., 2025; Kiuru et al., 2016; Liu et al., 2025; Peng et al., 2025; Ratelle et al., 2021). Furthermore, the results vary due to economic, environmental and sociocultural differences between countries. A study on the influence of social support (autonomous support from teachers and mothers) on school adjustment (academic adjustment, social adjustment, personal-emotional adjustment) among adolescents revealed that teachers' autonomous support could directly predict their school adjustment (Colomès et al., 2021). However, mothers' autonomous support is not directly connected (Colomès et al., 2021). A further study indicated that maternal support was negatively associated with externalizing difficulties and positively correlated with prosocial behaviour (Kiuru et al., 2016). Children gradually become more independent as they grow older, and it is not easy for them to feel supported by their mothers. Younger children, on the other hand, can perceive more family support.

Sex difference is a control variable for social support and school adjustment considerations. Among the articles included in this review, five studies used gender differences as an antecedent variable. Three of these studies reported opposite results, and two reported that boys' school adjustment ability was lower than that of girls (Kiuru et al., 2016; Peng et al., 2025). Another study revealed that boys perceive more support from teachers than girls do and that teachers give boys more opportunities to express their skills and autonomy, which allows boys to adapt better academically and personally (Colomès et al., 2021). Furthermore, the last study revealed less differences between boys and girls in terms of school adjustment (Ratelle et al., 2021). The studies originate from diverse groups of children and adolescents across various countries and regions, with findings that exhibit some variability.

6. Discussion

The maladjustment of children and adolescents in school contexts is a global problem, so the articles included in the review are from various countries. This systematic review confirms the inconsistent findings regarding the association between social support and school adjustment. While some studies report a significant positive association, others show a weaker association that must be significantly mediated to affect school adjustment.

Social support can sometimes affect children's and adolescents' ability to adapt to school through other environmental and psychological variables. For example, one report revealed a direct effect of social support and school adjustment (adjustment to routine, adjustment to the classroom, peer relationships, teacher attitudes and school attitudes), while school belonging acts as a mediator between them, highlighting the positive significance of children's different growth environments on their development (Liu et al., 2025). The majority of studies have used child and adolescent resilience as a mediating

variable, followed by basic psychological needs (Azpiazu et al., 2024; Colomès et al., 2021; Fang et al., 2025; Lasarte et al., 2020; Liu et al., 2025; Peng et al., 2025; Ratelle et al., 2021). Simultaneously, social support affects school adjustment via the dual mediating function of psychological variables.

In addition to establishing trust, teachers can increase children's confidence, increase their educational aspirations, and stimulate academic engagement, resulting in improved school adjustment (Paniagua et al., 2022; Peng et al., 2025). One study reported that family had the greatest influence on positive self-concept. Teachers and peers had the least influence. While teacher and peer support had substantial benefits, the indirect effect of self-concept surpassed that of peer support, implying that psychological elements play a crucial role in an individual's capacity to adapt to school. Social support influences school adjustment via psychological resilience and self-concept (Azpiazu et al., 2024). Specifically, social support from various sources can help children and adolescents attain emotional and psychological independence, which can improve their school adjustment, thereby enhancing their sense of well-being and promoting their future physical and mental health.

According to self-determination theory, children's and adolescents' need for autonomy and competence is related to their well-being (Guay, 2022). When children and adolescents perceive autonomy support from their mothers, they feel confident and competent in accomplishing school tasks and goals, which positively predicts their school adjustment (Colomès et al., 2021; Ratelle et al., 2021).

Moreover, two studies looked at specific groups of children and adolescents, focusing on left-behind children's and adolescents' school adjustment abilities. Both studies demonstrated the positive impact of teacher support (academic support, emotional support and teacher-student relationship support) on the school adjustment of disadvantaged children and adolescents in China (Fang et al., 2025; Peng et al., 2025). Left-behind children are a vulnerable group in the Chinese context. They lack love and care from their families, and their main source of social support is their teachers. Therefore, among the three elements of teacher support, emotional support from teachers has the most substantial influence on left-behind pupils, followed by relationship support and academic support (Fang et al., 2025; Peng et al., 2025). As seen, children and adolescents from disadvantaged groups show weaker school adjustment and have a greater need for social support from all sides.

6.1. Limitations and future directions of the study

During our examination of the link between social support and school adjustment, we identified research limitations and potential future directions from the systematic review. First, while most studies have shown a significant link between social support and school adjustment, the effect is tied to the child's background. For example, disadvantaged groups of children face more challenges in school adjustment than urban children do, making it harder for them to cope with school difficulties and increasing their need for social support. Second, the measurements of all 10 studies varied somewhat, with essentially no common scale or even a combination of scales being used, which led to different findings. Most research has concentrated on just one or two aspects of social support, while the criteria for assessing school adjustment also differ significantly. For example, studies on adolescents have focused more on the impact of social support on their academic aspects. In reality, children and adolescents require more emotional support, but they may also require more emotional and life support to better adjust to school. Finally, the studies focused on older children and adolescents. Most of the studies in this review were conducted with children and adolescents between the ages of 11 and 17 years, but fewer studies involved school-aged children, especially elementary school students.

These limitations highlight the need for research in this area as well as future research directions. There is a need for this study to consider more dimensions of school adjustment to improve its validity. In addition, the study population could consider younger children, including some from specialized backgrounds. In summary, to improve the school adjustment of children and adolescents, a series of programs should be designed to prevent school maladjustment in children and adolescents, as well as to intervene effectively in their maladaptive behaviors and guide them to adjust to the school environment.

7. Conclusion

This study carefully evaluated the association between social support and school adjustment in children and adolescents over the past decade. This review highlights the need to pay attention to and enhance the school adjustment of children and adolescents and investigates the varying effects of different types of social support on children and adolescents. A comprehensive evaluation of the literature demonstrates that high levels of social support can successfully improve school adjustment and mental health in children and adolescents. These findings demonstrate the beneficial impact of supportive social ties on the physical and mental well-being of children and adolescents. Increasing perceived social support via educational and psychological interventions can significantly enhance school adjustment.

Additionally, this review has some limitations. First, due to time and resource constraints, only English language articles were included in this systematic review. Although many studies came from different countries, many non-English papers were not included. Second, the search was limited to studies from the last 10 years, so some earlier studies were not included.

Ethical Considerations

This study is a systematic review and does not involve the collection of original human or animal data, so it does not require approval from an ethics committee. The review strictly follows the PRISMA guidelines to ensure transparency and reproducibility of the process and to evaluate the included studies fairly.

Conflict of Interest

All authors declare that there are no conflicts of interest.

Funding

This study did not receive any special funding from external public, commercial, or non-profit institutions. All expenses were borne by the authors personally, and regular academic resources provided by their institution, Universiti Putra Malaysia, were used.

References

- Aarø, L. E., Davids, E. L., Mathews, C., Wubs, A. G., Smith, O. R. F., & de Vries, P. J. (2022). Internalizing problems, externalizing problems, and prosocial behavior—Three dimensions of the Strengths and Difficulties Questionnaire (SDQ): A study among South African adolescents. *Scandinavian Journal of Psychology*, 63(4), 415–425. <https://doi.org/10.1111/sjop.12815>
- Abodunrin, S. A., & Edim, A. A. (2024). Impact of family life and peer influence on social adjustment of adolescents with visual impairment in Kwara State, Nigeria. *New Trends in Psychology*, 6(1), Article 1.
- Aldrup, K., Klusmann, U., Lüdtke, O., Göllner, R., & Trautwein, U. (2018). Social support and classroom management are related to secondary students' general school adjustment: A multilevel structural equation model using student and teacher ratings. *Journal of Educational Psychology*, 110, 1066–1083. <https://doi.org/10/ggq4jd>
- Azpiazu, L., Antonio-Aguirre, I., Izar-de-la-Funte, I., & Fernández-Lasarte, O. (2024). School adjustment in adolescence explained by social support, resilience and positive affect. *European Journal of Psychology of Education*, 39(4), 3709–3728. <https://doi.org/10.1007/s10212-023-00785-3>
- Azpiazu, L., Ramos-Díaz, E., Axpe, I., & Revuelta, L. (2024). Social support, self-concept and resilience as protectors against school maladjustment during adolescence. *School Mental Health*. <https://doi.org/10.1007/s12310-024-09736-9>
- Baker, R. W., & Siryk, B. (1984). Measuring adjustment to college. *Journal of Counseling Psychology*, 31(2), 179–189. <https://doi.org/10.1037/0022-0167.31.2.179>
- Bosman, R. J., Roorda, D. L., van der Veen, I., & Koomen, H. M. Y. (2018). Teacher-student relationship quality from kindergarten to sixth grade and students' school adjustment: A person-centered approach. *Journal of School Psychology*, 68, 177–194. <https://doi.org/10.1016/j.jsp.2018.03.006>
- Charlot Colomès, A. A., Duchesne, S., & Boisclair Châteauvert, G. (2021). Autonomy support and school adjustment: The mediating role of basic psychological needs. *International Journal of School & Educational Psychology*, 9(sup1), S182–S200. <https://doi.org/10/gr6c58>
- Chen, L., & Yang, F. (2022). Social support and loneliness among Chinese rural-to-urban migrant children: A moderated mediation analysis of the roles of social competence and stress mindset. *International Journal of Environmental Research and Public Health*, 19(23), 15933. <https://doi.org/10/gr2sgv>
- Ciarrochi, J., Morin, A. J. S., Sahdra, B. K., Litalien, D., & Parker, P. D. (2017). A longitudinal person-centered perspective on youth social support: Relations with psychological wellbeing. *Developmental Psychology*, 53(6), 1154–1169. <https://doi.org/10/gjh2bz>
- Coplan, R. J., Liu, J., Cao, J., Chen, X., & Li, D. (2017). Shyness and school adjustment in Chinese children: The roles of teachers and peers. *School Psychology Quarterly*, 32(1), 131–142. <https://doi.org/10.1037/spq0000179>
- Demaray, M. K., & Malecki, C. K. (2002). The relationship between perceived social support and maladjustment for students at risk. *Psychology in the Schools*, 39(3), 305–316. <https://doi.org/10.1002/pits.10018>
- Fang, G., Xie, M., Zheng, C., & Wang, J. (2025). The impact of teacher support on school adaptation among Chinese urban adolescents: A moderated mediation model. *BMC Public Health*, 25, 545. <https://doi.org/10.1186/s12889-025-21758-9>
- Fernández-Zabala, A., Goñi, E., Camino, I., & Zulaika, L. M. (2016). Family and school context in school engagement. *European Journal of Education and Psychology*, 9(2), 47–55. <https://doi.org/10.1016/j.ejeps.2015.09.001>
- González-Ramírez, M. T., & Landero, R. (2014). Propiedades psicométricas de la escala de Apoyo social Familiar y de Amigos (AFA-R) en una muestra de estudiantes [Psychometric properties of the Family and Friends Social Support scale (AFA-R) in a students sample]. *Acta de Investigación Psicológica*, 4(2), 1469–1480. [https://doi.org/10.1016/s2007-4719\(14\)70387-4](https://doi.org/10.1016/s2007-4719(14)70387-4)
- Granot, D. (2014). Teacher-student attachment and student school adaptation: A variable centered and person centered analytical approaches. *American Journal of Educational Research*, 2(11), Article 11. <https://doi.org/10.12691/education-2-11-2>
- Guay, F. (2022). Applying Self-Determination Theory to education: Regulations types, psychological needs, and autonomy supporting behaviors. *Canadian Journal of School Psychology*, 37(1), 75–92. <https://doi.org/10.1177/08295735211055355>
- Gutiérrez, M., Tomás, J.-M., Romero, I., & Barrica, J.-M. (2017). Perceived social support, school engagement and satisfaction with school. *Revista de Psicodidáctica (English Ed.)*, 22(2), 111–117. <https://doi.org/10.1016/j.psicoe.2017.05.001>
- John, N. M., Page, O., Martin, S. C., & Whittaker, P. (2018). Impact of peer support on student mental wellbeing: A systematic review. *MedEdPublish*, 7, 170. <https://doi.org/10/gr8sbn>
- Kang, S., & Gim, G. (2022). The effect of mother's parenting behavior on child's adjustment to school: The mediating effect of child's self-esteem. In 2022 IEEE/ACIS 7th International Conference on Big Data, Cloud Computing, and Data Science (BCD) (pp. 353–359). <https://doi.org/10.1109/BCD54882.2022.9900617>
- Kim, J., Tong, Y., & Sun, S. B. (2021). The effects of peer parental education on student achievement in urban China: The disparities between migrants and locals. *American Educational Research Journal*, 58(4), 675–709. <https://doi.org/10/gr9dtv>
- Kim, M. (2023). Relationship between self-regulation ability, self-esteem and on school adjustment of children with ADHD symptoms: Mediating effect of social support. *Journal for ReAttach Therapy and Developmental Diversities*, 6(9s), Article 9s.

- Kırşehir Ahi Evran University, & Gençtanırım Kurt, D. (2022). Effect of family, friends and school climate on school adjustment of middle school students. *International Journal of Progressive Education*, 18(2), 193–209. <https://doi.org/10.29329/ijpe.2022.431.13>
- Kiuru, N., Laursen, B., Aunola, K., Zhang, X., Lerkkanen, M.-K., Leskinen, E., Tolvanen, A., & Nurmi, J.-E. (2016). Positive teacher affect and maternal support facilitate adjustment after the transition to first grade. *Merrill-Palmer Quarterly: Journal of Developmental Psychology*, 62(2), 158–178.
- Ladd, G. W., & Birch, S. H. (1997). The teacher-child relationship and children's early school adjustment. *Journal of School Psychology*, 35(1), 61–79. [https://doi.org/10.1016/S0022-4405\(96\)00029-5](https://doi.org/10.1016/S0022-4405(96)00029-5)
- Lasarte, O. F., Díaz, E. R., Palacios, E. G., & Fernández, A. R. (2020). The role of social support in school adjustment during secondary education. *Psicothema*, 32, 100–107. <https://doi.org/10/gr55zw>
- Lin, S., Maria Gastaldi, F. G., Longobardi, C., & Fabris, M. A. (2024). Investigating the interplay of student-teacher relationships, general anxiety, and school adjustment among Italian primary school children. *Emotional and Behavioural Difficulties*, 0(0), 1–15. <https://doi.org/10.1080/13632752.2024.2345456>
- Liu, C., Sun, Z., Gao, Y., Chen, H., Lu, T., & Yan, J. (2025). The relationship between perceived social support and school adjustment in adolescents: The mediating role of school belongingness and the moderating role of physical activity. *Psychology in the Schools*. <https://doi.org/10.1002/pits.23444>
- Liu, Y., Huebner, E. S., & Tian, L. (2022). Chinese children's heterogeneous friendship quality trajectories: Relations with school adjustment. *School Psychology*, 37(5), 410–419. <https://doi.org/10/grtqn6>
- Mageau, G. A., Ranger, F., Joussemet, M., Koestner, R., Moreau, E., & Forest, J. (2015). Validation of the perceived parental autonomy support scale (P-PASS). *Canadian Journal of Behavioural Science*, 47, 251–262. <https://doi.org/10.1037/a0039325>
- McNamara, N., Stevenson, C., Costa, S., Bowe, M., Wakefield, J., Kellezi, B., Wilson, I., Halder, M., & Mair, E. (2021). Community identification, social support, and loneliness: The benefits of social identification for personal well-being. *British Journal of Social Psychology*, 60(4), 1379–1402. <https://doi.org/10/gkc3x7>
- Monika, R., & Sukma, D. (2021). The relationship of peer support with student self-adjustment. *Jurnal Neo Konseling*, 3(2), Article 2. <https://doi.org/10.24036/00426kons2021>
- Mpofu, E. S., & Sefotho, M. M. (2023). Homophilic social networks and school adjustment among primary school pupils: Results and implications from a Zimbabwean study. *Journal of Psychology in Africa*. <https://doi.org/10.1080/14330237.2023.2258009>
- Olana, E., & Tefera, B. (2022). Family, teachers and peer support as predictors of school engagement among secondary school Ethiopian adolescent students. *Cogent Psychology*, 9(1), 2123586. <https://doi.org/10/gr8sbf>
- Ouzzani, M., Hammady, H., Fedorowicz, Z., & Elmagarmid, A. (2016). Rayyan—A web and mobile app for systematic reviews. *Systematic Reviews*, 5(1), 210. <https://doi.org/10.1186/s13643-016-0384-4>
- Ozer, S. (2024). Social support, self-efficacy, self-esteem, and well-being during COVID-19 lockdown: A two-wave study of Danish students. *Scandinavian Journal of Psychology*, 65(1), 42–52. <https://doi.org/10.1111/sjop.12952>
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., ... Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*. <https://doi.org/10.1136/bmj.n71>
- Page, M. J., Moher, D., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., ... McKenzie, J. E. (2021). PRISMA 2020 explanation and elaboration: Updated guidance and exemplars for reporting systematic reviews. *BMJ*. <https://doi.org/10.1136/bmj.n160>
- Paniagua, C., García-Moya, I., & Moreno, C. (2022). Adopted adolescents at school: Social support and adjustment. *Youth & Society*, 54(3), 419–441. <https://doi.org/10.1177/0044118X20977033>
- Peng, S., Li, Z., Ai, J., Liu, J., Shi, J., & Liu, H. (2025). A study on the mechanism of school support to improve school adjustment of rural left-behind children—Analysis based on CEPIS (2013–2014) data. *PLOS ONE*, 20(3), 1–24. <https://doi.org/10.1371/journal.pone.0317459>
- Ratelle, C. F., Duchesne, S., Litalien, D., & Plamondon, A. (2021). The role of mothers in supporting adaptation in school: A psychological needs perspective. *Journal of Educational Psychology*, 113(1), 197–212. <https://doi.org/10.1037/edu0000455>
- Rethlefsen, M. L., Kirtley, S., Waffenschmidt, S., Ayala, A. P., Moher, D., Page, M. J., Koffel, J. B., Blunt, H., Brigham, T., Chang, S., Clark, J., Conway, A., Couban, R., de Kock, S., Farrah, K., Fehrmann, P., Foster, M., Fowler, S. A., Glanville, J., ... PRISMA-S Group. (2021). PRISMA-S: An extension to the PRISMA statement for reporting literature searches in systematic reviews. *Systematic Reviews*, 10(1), 39. <https://doi.org/10.1186/s13643-020-01542-z>
- Rodríguez-Fernández, A., Antonio-Agirre, I., Ramos-Díaz, E., & Revuelta-Revuelta, L. (2020). The role of affect-communication and rule setting in perceived family support and school adjustment. *European Journal of Education and Psychology*, 13(1), Article 1. <https://doi.org/10/gh65qt>
- Sarkis-Onofre, R., Catalá-López, F., Aromataris, E., & Lockwood, C. (2021). How to properly use the PRISMA statement. *Systematic Reviews*, 10(1), 117. <https://doi.org/10.1186/s13643-021-01671-z>
- Siu, O. L., Lo, B. C. Y., Ng, T. K., & Wang, H. (2023). Social support and student outcomes: The mediating roles of psychological capital, study engagement, and problem-focused coping. *Current Psychology*, 42(4), 2670–2679. <https://doi.org/10.1007/s12144-021-01621-x>
- Sohrabi, C., Franchi, T., Mathew, G., Kerwan, A., Nicola, M., Griffin, M., Agha, M., & Agha, R. (2021). PRISMA 2020 statement: What's new and the importance of reporting guidelines. *International Journal of Surgery*, 88, 105918. <https://doi.org/10.1016/j.ijsu.2021.105918>
- Song, C., Fu, Z., & Wang, J. (2019). Social support and academic stress in the development of psychological adjustment in Chinese migrant children: Examination of compensatory model of psychological resilience. *Child Indicators Research*, 12(4), 1275–1286. <https://doi.org/10/gr42dj>
- Ulmánen, S., Soini, T., Pietarinen, J., Pyhältö, K., & Rautanen, P. (2022). Primary and lower secondary school students' social support profiles and study wellbeing. *The Journal of Early Adolescence*, 42(5), 613–646. <https://doi.org/10/gr8scn>
- Worley, J. T., Meter, D. J., Ramirez Hall, A., Nishina, A., & Medina, M. A. (2023). Prospective associations between peer support, academic competence, and anxiety in college students. *Social Psychology of Education*. <https://doi.org/10/gr8sbd>
- Zhang, B., Li, X., Zhang, H., Huang, J., & Xiong, W. (2023). Study on psychological capital and school adaptation of urban left-behind children in China. *Journal of Education and Educational Research*, 5(2), Article 2. <https://doi.org/10.54097/jeer.v5i2.12548>
- Zhang, Y., Jiang, B., Tan, D.-L., & Lei, T.-T. (2022). The relationship between perceived discrimination and Chinese migrant children's school adjustment: A moderated mediation model of identity conflict and grit. *Journal of Pacific Rim Psychology*, 16, 1834490922110168. <https://doi.org/10.1177/1834490922110168>

- Zhao, S., Liu, M., Chen, X., Li, D., Liu, J., & Liu, S. (2023). Unsociability and psychological and school adjustment in Chinese children: The moderating effects of peer group cultural orientations. *Journal of Cross-Cultural Psychology*, 54(2), 283–302. <https://doi.org/10.1177/00220221221132810>
- Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale of perceived social support. *Journal of Personality Assessment*, 55(1), 30–41. <https://doi.org/10.1037/0022-006X.55.1.30>