

# AcE-Bs2025Bangkok



https://www.amerabra.org/

13th ASIAN Conference on Environment-Behaviour Studies
Al Meroz Hotel, Bangkok, Thailand, 04-06 Apr 2025

# Exploring the Impact of Parental Support on Life Satisfaction A Comparison of urban and rural contexts

Xing Li<sup>1\*</sup>, Lim Boon Hooi<sup>1</sup>, Ma Xiao<sup>1</sup>, Xuan Yinan<sup>1,2</sup>, Wang Shuai<sup>1,3</sup>, Liang Meiling<sup>4</sup>
\*Corresponding Author

Faculty of Education, Languages, Psychology & Music, SEGi University, Malaysia
 Communist Youth League Committee, Hebei North University, China
 English Department, Shanghai Civil Aviation College, Shanghai, China
 Guangdong Polytechnic of Science and Trade, Guangzhou, China

lilyxing00000@163.com, limboonhooi@segi.edu.my, 4374785@qq.com, xgxyxyn@163.com, Sherryworldleader@163.com, liangmeiling02@gmail.com Tel: +8613673692296

#### **Abstract**

This study explores the impact of parental support on adolescent life satisfaction, mediated by academic self-efficacy and interpersonal relationships, while considering urban-rural differences. A survey of 490 ninth-grade students from city of China (urban, n=243) and country of China (rural, n=247), China, was analyzed using Structural Equation Modeling (SEM). Results show that instrumental support ( $\beta$  = 0.404, p < 0.001) is more influential in urban settings, while emotional support ( $\beta$  = 0.288, p < 0.001) has a stronger effect in rural areas. These findings inform targeted interventions to enhance adolescent life satisfaction across socio-economic contexts.

Keywords: Parental Support, Academic Self-Efficacy, Life Satisfaction, Rural and Urban

eISSN: 2398-4287 © 2025. The Authors. Published for AMER by e-International Publishing House, Ltd., UK. This is an open-access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/). Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers). DOI: https://doi.org/10.21834/e-bpj.v10i32.6743

# 1.0 Introduction and Background

Adolescents' life satisfaction is increasingly recognized as a critical component of well-being and positive youth development, particularly in high-pressure educational environments such as China. Despite their strong academic performance in international assessments, Chinese adolescents consistently report lower levels of life satisfaction than their global peers (OECD, 2020). Prior research highlights the pivotal role of parental support in shaping adolescent mental health and life outcomes (Baig et al., 2021; Cadman et al., 2022; Qian et al., 2024). However, the impact of different types of parental support—namely, emotional and instrumental support—on adolescents' well-being remains underinvestigated, especially in non-Western contexts.

Furthermore, the mechanisms underlying this relationship have not been fully explored. Interpersonal relationships within the school environment and academic self-efficacy are two critical psychological pathways that may explain how parental support influences adolescent life satisfaction. Yet, few studies have integrated these mediating factors into a unified model.

Additionally, adolescents in urban and rural areas experience distinct socio-economic conditions, parental involvement, and school resources, which may moderate the impact of parental support. Existing research rarely examines these urban-rural differences systematically.

This study aims to develop a comprehensive model to examine how parental support influences adolescents' life satisfaction through the mediating roles of interpersonal relationships and academic self-efficacy and how these pathways differ between urban and rural contexts in China.

eISSN: 2398-4287 © 2025. The Authors. Published for AMER by e-International Publishing House, Ltd., UK. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/). Peer–review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers). DOI: https://doi.org/10.21834/e-bpj.v10i32.6743

To achieve this aim, the study sets out the following objectives:

- (1) To determine the effects of emotional and instrumental parental support on adolescent life satisfaction.
- (2) To investigate the mediating roles of interpersonal relationships and academic self-efficacy in this relationship.
- (3) To assess whether urban-rural context moderates these pathways between parental support and life satisfaction.

By addressing these objectives, the study contributes to a deeper understanding of how family, school, and environmental systems interact to shape adolescent well-being in contemporary China.

# 2.0 Theoretical Framework and Literature Review

#### 2.1 Theoretical Framework

According to Self-Determination Theory (Ryan & Deci, 2000), parental support fulfills adolescents' basic psychological needs for autonomy, competence, and relatedness, thereby enhancing their subjective well-being. In addition, Bandura's Social Cognitive Theory posits that academic self-efficacy—a student's belief in their own academic capabilities—serves as a crucial mediator between external support and internal motivation (Bandura, 1997).

# 2.2 Parental Support and Life Satisfaction

Parental support is a well-established predictor of adolescent life satisfaction (Ramberg, 2021). Emotional support includes warmth, empathy, and encouragement, while instrumental support involves academic help and learning resources (Cheung & Pomerantz, 2011). However, the distinct effects of each support type remain underexplored, particularly in non-Western contexts.

# 2.3 The Mediating Role of Interpersonal Relationships

Positive teacher and peer relationships foster emotional security and school engagement. Emotional support from parents has been linked to stronger interpersonal relationships, which, in turn, enhance life satisfaction (Cavioni et al., 2021; Wentzel et al., 2015). Yet, such mediating effects have rarely been tested in collectivist cultures like China (Zhu et al., 2024).

# 2.4 The Mediating Role of Academic Self-Efficacy

Academic self-efficacy is crucial for motivation and life satisfaction (Guo et al., 2021a). While instrumental support is positively linked to self-efficacy—especially in academically demanding contexts—research seldom examines how both emotional and instrumental support operate through self-efficacy in the same model.

#### 2.5 Gap in Existing Reasearch

Despite increasing interest in parental influences on adolescent well-being, current research presents several limitations. First, many studies treat parental support as a unitary construct, overlooking the distinct mechanisms of emotional versus instrumental support. Second, while individual mediators, such as interpersonal relationships or academic self-efficacy, have been explored separately, their combined mediating effects are rarely modeled together. Third, the moderating role of environmental context, particularly the urban-rural divide, remains underexplored—despite evidence of stark contrasts in parental involvement, school quality, and psychosocial resources across these settings (Lv et al., 2018; Wang et al., 2019).

This study addresses these gaps by developing an integrated model that tests the mediating roles of academic self-efficacy and interpersonal relationships in the link between parental support and life satisfaction and examines how these pathways differ between urban and rural adolescents in China.

# 3.0 Methodology

# 3.1 Research Design

This study utilized a cross-sectional approach to investigate the associations between parental support, academic self-efficacy, interpersonal relationships, and life satisfaction among junior high school students in both urban and rural settings. Additionally, it examined how urban-rural differences moderate these relationships.

To ensure the accuracy and consistency of measurement instruments, a pilot study was conducted prior to the main research. This process involved pretesting questionnaires, expert evaluations, and statistical validation. Based on expert input, minor revisions were made to enhance clarity and cultural appropriateness. Exploratory Factor Analysis (EFA) was used to evaluate the construct structure, refining the scales by modifying or removing items with low factor loadings. The improved questionnaire, demonstrating stronger validity and reliability, was subsequently implemented in the main study.

# 3.2 Participants

The sample included 490 ninth-grade students, with 243 students from an urban school in Zhengzhou and 247 students from a rural school in Xinxiang. The participants were evenly distributed by gender (49% female, 51% male).

### 3.3 Data Collection

Data collection was facilitated by classroom teachers during regular sessions, with parallel provisions for home completion of online questionnaires through detailed guidance provided to both parents and students. Administered in Mandarin to ensure comprehension, the questionnaire implementation emphasized voluntary participation, requiring informed consent from all participants and their legal quardians prior to data collection.

# 3.4 Research Hypotheses and Conceptual Model Hypotheses

- H1a: Emotional support positively affects life satisfaction.
- H1b: Instrumental support positively affects life satisfaction.
- H2a: Emotional support enhances interpersonal relationships (peer and teacher-student relationships), which in turn increases life satisfaction.
- H2b: Instrumental support influences interpersonal relationships (peer and teacher-student relationships), which may contribute to life satisfaction.
  - H3a: Emotional support enhances academic self-efficacy, which subsequently improves life satisfaction.
  - H3b: Instrumental support enhances academic self-efficacy, which in turn improves life satisfaction.
  - H4a: Urban-rural differences moderate the relationship between emotional support and life satisfaction.
  - H4b: Urban-rural differences moderate the relationship between instrumental support and life satisfaction.

### 3.5 Conceptual Model (Fig 1)

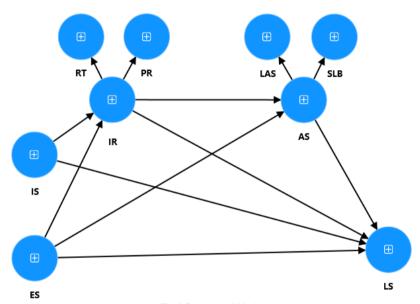


Fig 1 Conceptual Model

The corresponding table of abbreviations for each construct item is shown in Table 1

Table 1 Abbreviations corresponding to variables

Construct	Item Code			
IS	Emotional Support			
ES	Instrumental Support			
IR	Interpersonal Relationships			
RT	Teacher Relationships			
PR	Peer Relationships			
AS	Academic Self-Efficacy			
LAS	Learning Ability Self-Efficacy			
SLB	Learning Behavior Self-Efficacy			
LS	Life Satisfaction			

# 3.6 Instruments

The study employed validated scales to measure key variables, ensuring reliability and cultural relevance (see table 2)

Table 2 Questionnaire for each variable

Scale	Key Purpose & Content	Dimensions	Reliability & Validity	Main References	
Life Satisfaction Scale (BMSLSS)	Assess domain-specific life satisfaction among adolescents Uses 7-point rating (1=terrible, 7=delighted)		Internal Consistency : Cronbach's α Overall: 0.772 Construct Validity Overall : 0.631–0.730	Ye et al. (2014)	
Parental Support Scale	Measures perceived parental support 2 dimensions	Emotional Support	Cronbach's α: .78–.88	Zhang et al. (2012)	
	17 items, 5-point scale Uses 5-point rating	Instrumental Support		,	
interpersonal relationships Scale	Evaluates relationship quality or life satisfaction	Teacher	Cronbach's α Teacher: .88	Dommo et al. (1007)	
(e.g., Loso Happiness Questionnaire)	Requires cross-cultural adaptation Uses 5-point rating	Classmate	Classmate:.89	Damme et al., (1997)	
Academic Self-Efficacy Scale	Measures students' confidence in academic abilities	Learning Ability Self- Efficacy	Cronbach's α Ability:.820	Based on Pintrich & De Groot (1990), adapted by	
	Uses 5-point rating	Learning Behavior Self- Efficacy	Behavior:.752	Liang (2002)	

# 3.7 Limitation

This study acknowledges several limitations that may affect the interpretation of its findings. The cross-sectional design limits causal inferences, highlighting the need for future longitudinal research to establish temporal relationships. Furthermore, the findings are context-specific to the sampled regions, necessitating the inclusion of more diverse geographical and socio-cultural settings to enhance generalizability.

# 4.0 Findings

### 4.1 Descriptive Statistics

Descriptive statistics, including mean and standard deviation for key constructs, were computed (Table 3). A total of 490 valid responses were collected, with 51.02% male (n=250) and 48.98% female (n=240) participants. The sample was evenly distributed between urban (n=243, 49.59%) and rural (n=247, 50.41%) students. Most participants lived with both parents (47.14%), while others lived with a single parent (34.08%), grandparents (14.49%), or other relatives (4.29%).

Table 3: Sample Characteristics

Demographic Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	250	51.02
	Female	240	48.98
School Location	Urban	243	49.59
	Rural	247	50.41
Only Child	Yes	157	32.04
•	No	333	67.96
Living Situation	Both Parents	231	47.14
	One Parent	167	34.08
	Grandparents	71	14.49
	Other Relatives	21	4.29

#### 4.2 Reliability and validity

To evaluate construct reliability and validity, Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) were conducted. The EFA identified latent factor structures, while CFA confirmed the psychometric soundness of the measurement model. The Kaiser-Meyer-Olkin (KMO) test and Bartlett's Test of Sphericity assessed the dataset's suitability for factor analysis (Hair et al., 2013). As shown in Table 4, KMO values exceeded the 0.80 threshold, ensuring strong sampling adequacy, while Bartlett's Test of Sphericity (p < 0.001) confirmed data appropriateness for factor analysis.

Table 4: Factor Analysis Results

Measure	KMO Value	Bartlett's Test (p-value)	Factor Loadings (Range)
Parental Support	0.905	0.000	0.684 - 0.909
Interpersonal Relationships	0.955	0.000	0.691 - 0.828
Academic Self-Efficacy	0.960	0.000	0.724 - 0.818
Life Satisfaction	0.912	0.000	0.788 - 0.844

All constructs exceeded the 0.50 threshold for factor loadings (Fornell & Larcker, 1981), confirming convergent validity and reinforcing the structural integrity of the model.

To evaluate internal reliability, Cronbach's  $\alpha$  and Composite Reliability (CR) were analyzed. Cronbach's  $\alpha$  assesses the internal consistency of each construct, while CR measures the overall reliability of latent variables. As presented in Table 5, all values surpassed the recommended 0.70 threshold, confirming the strong reliability of the measurement scales used in this study.

Table 5: Construct Reliability and Validity

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Emotional Support	0.892	0.894	0.915	0.608
Instrumental Support	0.864	0.872	0.899	0.600
Peer Relationships	0.918	0.920	0.932	0.605
Relationships with Teachers	0.909	0.911	0.927	0.613
Learning Ability Self-Efficacy	0.937	0.939	0.946	0.615
Learning Behavior Self-Efficacy	0.920	0.922	0.934	0.612
Life Satisfaction	0.895	0.897	0.920	0.656

These results indicate strong internal consistency, confirming that the measurement items within each construct are reliable. Additionally, Average Variance Extracted (AVE) values exceeded 0.50, establishing convergent validity (Fornell & Larcker, 1981). This ensures that the constructs capture the variance of their respective indicators more effectively than error variance.

The results from EFA,and reliability assessments collectively confirm the robustness of the measurement model. This validation process ensures that the constructs used in subsequent hypothesis testing accurately reflect the theoretical concepts being investigated. Consequently, the study findings are based on a reliable and well-validated measurement framework, supporting the overall research validity and credibility.

## 4.3 Structural model and path coefficients

To evaluate the proposed relationships among parental support, academic self-efficacy, interpersonal relationships, and life satisfaction, Structural Equation Modeling (SEM) was employed. Hypothesis testing was conducted using bootstrapping with 5,000 resamples to assess the statistical significance of path coefficients. Bootstrapping is particularly useful in estimating indirect effects and ensuring robust results, especially when testing mediation effects. The results, presented in Table 6, provide empirical support for all hypothesized relationships, confirming the role of parental support in shaping adolescent life satisfaction through various pathways

Table 6: Hypothesis Testing Results

Hypothesis	Path Coefficient (β)	t-value	p-value	Supported?
H1a: Emotional support → Life satisfaction	0.232	4.569	<0.001	Yes
H1b: Instrumental support → Life satisfaction	0.116	2.352	< 0.001	Yes
H2a: Emotional support → Interpersonal relationships → Life satisfaction	0.084	4.115	< 0.001	Yes
H2b: Instrumental support → Interpersonal relationships → Life satisfaction	0.112	4.396	< 0.01	Yes
H3a: Emotional support → Academic self-efficacy → Life satisfaction	0.040	2.862	< 0.001	Yes
H3b: Instrumental support → Academic self-efficacy → Life satisfaction	0.045	3.148	< 0.001	Yes

The results indicate that both emotional and instrumental parental support significantly influence adolescent life satisfaction. Emotional support ( $\beta$  = 0.232, p < 0.001) exhibits a stronger direct impact than instrumental support ( $\beta$  = 0.116, p < 0.001), suggesting that emotional warmth and encouragement play a crucial role in enhancing life satisfaction. Additionally, interpersonal relationships and academic self-efficacy serve as key mediators, reinforcing the indirect pathways through which parental support affects life satisfaction. Specifically, instrumental support enhances interpersonal relationships ( $\beta$  = 0.112, p < 0.001), which in turn contributes to higher life satisfaction, and instrumental support facilitates academic self-efficacy ( $\beta$  = 0.045, p < 0.001), indirectly improving life satisfaction.

# 4.4 Moderation Analysis: Multi-Group Analysis (MGA)

To examine the moderating role of urban-rural differences, a Multi-Group Analysis (MGA) was conducted. The results revealed significant differences in the impact of parental support across urban and rural contexts (see Table 7).

Table 7: Multi-Group Analysis (Urban vs. Rural)

Path	Urban (β)	Rural (β)	Δβ	Significance
Emotional Support → Life Satisfaction	0.088	0.404	-0.316	<0.001
Instrumental Support → Life Satisfaction	0.288	-0.032	0.320	<0.001

The results indicate that instrumental support has a stronger effect on life satisfaction among urban students. This pattern indicates that urban adolescents may benefit more from practical academic assistance provided by parents, possibly due to the high academic expectations and competitive environments prevalent in urban educational settings. Emotional support is more critical in rural settings. This suggests that adolescents in rural areas rely more heavily on emotional parental support to derive life satisfaction, likely due to the relative lack of external psychological resources in such contexts.

# 5.0 Discussion

This study examined how parental support, both emotional and instrumental, influences adolescent life satisfaction through the mediating roles of academic self-efficacy and interpersonal relationships, with a particular focus on urban-rural differences. The findings contribute to a nuanced understanding of these psychosocial processes in the Chinese educational context.

# 5.1 Direct Effects of Parental Support on Life Satisfaction

This study confirms that both emotional and instrumental parental support significantly influence adolescents' life satisfaction, aligning with prior literature emphasizing the critical role of familial involvement in shaping adolescent well-being (Baig et al., 2021; Ramberg, 2021). Notably, emotional support exerted a stronger direct effect than instrumental support. This supports the self-determination theory (Ryan & Deci, 2000), where emotional support fulfills adolescents' psychological needs for relatedness and security.

### 5.2 Indirect Effects Through Interpersonal Relationships

Interpersonal relationships significantly mediated the association between parental support and life satisfaction. Emotional support was more predictive of enhanced peer and teacher relationships, particularly in rural areas where external social resources are limited. These findings are consistent with Bronfenbrenner's ecological systems theory (1979), suggesting that parent-child interactions as proximal processes shape school-based relationships, which then contribute to emotional well-being (Roorda et al., 2011; Cavioni et al., 2021).

Instrumental support also improved interpersonal relationships but operated more strongly in urban contexts. This suggests that when parents provide academic help or structure learning routines, adolescents are better integrated socially at school, potentially due to improved academic confidence and peer recognition.

# 5.3 Indirect Effects Through Academic Self-Efficacy

The results revealed that both emotional and instrumental support enhance academic self-efficacy, which in turn boosts life satisfaction. However, instrumental support showed stronger effects on academic self-efficacy, especially among urban students. This supports Social Cognitive Theory (Bandura, 1997), which highlights how external reinforcement builds competence beliefs. The mediation role of academic self-efficacy corroborates findings from Chinese samples (Zhou et al., 2023; Han & Yuen, 2024), reinforcing the role of academic belief systems in adolescent well-being.

# 5.4 The Moderating Role of Urban-Rural Context

Multi-group analysis (MGA) confirmed that the type of support most effective for life satisfaction depends on regional context. Urban adolescents benefited more from instrumental support, likely due to intense academic expectations and resource availability. In contrast, emotional support was more influential among rural adolescents, who may rely on familial warmth to compensate for limited institutional and psychosocial services. This aligns with the support-resource matching hypothesis (Zhang et al., 2020) and adds evidence for the culturally grounded adaptation of social support interventions.

# 6.0 Conclusion& Recommendations

#### 6.1 Conclusion

This study provides empirical evidence that both emotional and instrumental parental support significantly enhance adolescent life satisfaction through distinct pathways, including interpersonal relationships and academic self-efficacy. The findings reveal that emotional support has a stronger direct effect on well-being, while instrumental support exerts greater indirect effects—particularly through enhancing academic self-efficacy. Urban-rural differences further moderate these relationships, emphasizing the importance of context-specific approaches. Together, these insights contribute to a deeper understanding of how family, school, and environmental systems interact to shape youth well-being in China.

### 6.2 Recommendations

Based on the findings, this study recommends implementing differentiated parental support strategies tailored to regional needs. Emotional support programs should be prioritized in rural areas to strengthen psychological resilience, while academic guidance initiatives should be emphasized in urban settings to enhance academic self-efficacy. Schools should foster supportive peer and teacher relationships through structured interventions, and policymakers are advised to develop context-sensitive frameworks that integrate family, school, and community efforts to promote adolescent life satisfaction.

# Acknowledgement

We extend our sincere gratitude to the participants of this study-the students, parents, and teachers who provided valuable insights. Special thanks to the research institutions and schools that facilitated data collection. We also acknowledge the support of our professor and peers for their constructive feedback and guidance.

# Paper Contribution to Related Field of Study

This research expands the literature on student life satisfaction by exploring the nuanced effects of parental support across different regional settings. Through the application of structural equation modeling (SEM) and multi-group analysis (MGA), it presents empirical evidence on the varying influences of emotional and instrumental support, emphasizing the importance of context-specific educational strategies. The findings offer practical implications for educators, policymakers, and researchers seeking to improve adolescent life satisfaction through tailored parental involvement and academic support initiatives.

### References

Baig, T., Ganesan, G. S., Ibrahim, H., Yousuf, W., & Mahfoud, Z. R. (2021). The association of parental involvement with adolescents' well-being in oman: Evidence from the 2015 global school health survey. *BMC Psychology*, 9(1), 175. https://doi.org/10.1186/s40359-021-00677-5

Bandura, A. (1997). Self-efficacy: The exercise of control (pp. ix, 604). W H Freeman/Times Books/ Henry Holt & Co.

Cadman, T., Paul, E., Culpin, I., Sallis, H., Bould, H., & Pearson, R. (2022). Parental monitoring longitudinally associates with reduced risk of adolescent mental health problems. *Journal of Affective Disorders Reports*, 10, 100420. https://doi.org/10.1016/j.jadr.2022.100420

Cavioni, V., Grazzani, I., Ornaghi, V., Agliati, A., & Pepe, A. (2021). Adolescents' mental health at school: The mediating role of life satisfaction. *Frontiers in Psychology*, 12, 720628. https://doi.org/10.3389/fpsyq.2021.720628

Chen, R., & Zhou, L. (2021). Parental migration and psychological well-being of children in rural China. *International Journal of Environmental Research and Public Health*, 18(15), 8085. https://doi.org/10.3390/iierph18158085

Formell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. Journal of Marketing Research, 18(3), 382. https://doi.org/10.2307/3150980

Guo, M., Wang, L., Day, J., & Chen, Y. (2021a). The relations of parental autonomy support, parental control, and filial piety to Chinese adolescents' academic autonomous motivation: A mediation model. Frontiers in Psychology, 12, 724675. https://doi.org/10.3389/fpsyg.2021.724675

Guo, M., Wang, L., Day, J., & Chen, Y. (2021b). The relations of parental autonomy support, parental control, and filial piety to Chinese adolescents' academic autonomous motivation: A mediation model. Frontiers in Psychology, 12, 724675. https://doi.org/10.3389/fpsyg.2021.724675

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2013). Multivariate data analysis. Pearson Education Limited.

Lv, B., Zhou, H., Liu, C., Guo, X., Liu, J., Jiang, K., Liu, Z., & Luo, L. (2018). The relationship between parental involvement and children's self-efficacy profiles: A person-centered approach. *Journal of Child and Family Studies*, 27(11), 3730–3741. https://doi.org/10.1007/s10826-018-1201-6

OECD. (2020). Benchmarking the performance of China's education system. OECD. https://doi.org/10.1787/4ab33702-en

Qian, M., Jin, R., Lu, C., & Zhao, M. (2024). Parental emotional support, self-efficacy, and mental health problems among adolescents in hong kong: A moderated mediation approach. Frontiers in Psychiatry, 15, 1458275. https://doi.org/10.3389/fpsyt.2024.1458275

Ramberg, J. (2021). The association between parental support and adolescents' psychological complaints: The mediating role of a good school climate. Children, 8(7), 550. https://doi.org/10.3390/children8070550

Rueger, S. Y., Malecki, C. K., Pyun, Y., Aycock, C., & Coyle, S. (2016). A meta-analytic review of the association between perceived social support and depression in childhood and adolescence. *Psychological Bulletin*, 142(10), 1017–1067. https://doi.org/10.1037/bul0000058

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78. https://doi.org/10.1037/0003-066X.55.1.68

Wang, C., La Salle, T. P., Do, K. A., Wu, C., & Sullivan, K. E. (2019). Does parental involvement matter for students' mental health in middle school? School Psychology, 34(2), 222–232. https://doi.org/10.1037/spq0000300

Weiss, M. P., Rowe, D. A., Mims, P. J., & Farmer, T. W. (2023). There's no place like us: Beyond fidelity of implementation in rural contexts. *Journal of Emotional and Behavioral Disorders*, 31(2), 154–167. https://doi.org/10.1177/10634266231155856

Wentzel, K., Russell, S., & Baker, S. (2015). Emotional support and expectations from parents, teachers, and peers predict adolescent competence at school. *Journal of Educational Psychology*, 108. https://doi.org/10.1037/edu0000049

Zhu, X., Li, W., Hu, J., & Lin, X. (2024). Associations between parental involvement and externalizing problem behaviors among Chinese rural adolescents in the digital age. *Humanities and Social Sciences Communications*, 11(1), 1–15. https://doi.org/10.1057/s41599-024-04095-x