

The Influence of Key Stressors and Support Systems on Student Behavior and Psychological Well-being in Kunming's Urban Primary Schools

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Na Liu

Rajamangala University of Technology, Thailand

Supot Rattanapun

Rajamangala University of Technology, Thailand

 <https://orcid.org/0009-0004-4513-0455>

Tubagus Darodjat

Rajamangala University of Technology, Thailand

Alan White

Rajamangala University of Technology, Thailand

Abstract

This study was to investigate the effects of key stressors and support systems on the behavior and mental health of primary school students in Kunming, Yunnan Province. In this study, 388 students from 5 schools were investigated by quantitative, random sampling and questionnaire survey. Data were collected and analyzed using descriptive and regression analyses. The results showed that stressors had a positive impact on the support system ($R^2=0.734$), and the support system had a significant impact on the behavior and mental health of primary school students ($R^2=0.825$). Stressors had positive effects on the behavior and mental health of primary school students ($R^2=0.719$), and the significance level was 0.05. These findings reinforce the importance of support systems in mitigating the negative impact of stressors on students and highlight the need for targeted mental health interventions in educational settings as well as optimizing the educational process. In line with sustainable development goals to continuously promote health and quality education for students, this study provides insights into development strategies to improve mental health and education quality in primary schools.

Keywords: Key Stressor, Support System, Good Health, Wellbeing, Education Quality

Introduction

With the continuous development of society, urbanization education keeps increasing the learning pressure of primary school students, and the overall fast-paced lifestyle and high academic requirements lead to increasing pressure. The researcher emphasizes that the speed of urban development in Kunming and parents' educational expectations lead to increased anxiety of students. The high demand for education and fierce academic competition in Kunming have brought a lot of invisible pressure to students.

Kunming, with its unique cultural heritage, is also imperceptibly shaping people's challenges and cognition of mental health in culture. Educational respect and cultural values sometimes hinder the attention and discussion of mental health within the family. While cultural perspectives can optimize educational structures, they can also influence early guidance for students who are facing mental health challenges (Rattanapun et al., 2018). The purpose of this study was to explore the effects of urban pressure, academic pressure

and cultural influence on the mental health of primary school students in Kunming city. The findings are intended to inform educators and policymakers on how to create a more sustainable and supportive educational environment that can improve student well-being and promote mental health awareness.

Research Objectives

- To study the impact of key stressors on the support system of primary school students in Kunming.
- To Explore the impact of the support system on the Behavior and Psychological Well-being of primary school students in Kunming.
- To analyze the impact of key stressors on the Behavior and Psychological Well-being of primary school students in Kunming.

Conceptual Framework

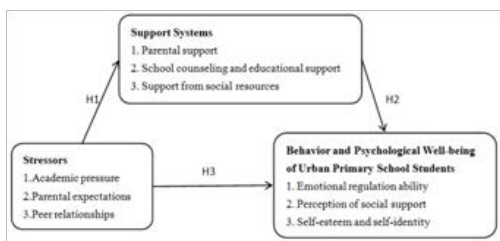


Figure 1 Conceptual Model

H1: Key stressors have a positive impact on the support system of primary school students in Kunming.

H2: The support system has a positive impact on the behavior and psychological well-being of primary school students in Kunming.

H3: Key stressors have a positive impact on the behavior and psychological well-being of primary school students in Kunming.

Research Methodology

This study uses a quantitative method to conduct surveys and data collection. The main purpose is to investigate the mental health of urban primary school students in Kunming, Yunnan Province. The questionnaire samples for this study came from five public primary schools in Kunming, Yunnan Province. [Yamane \(1967\)](#) chooses at random 388 participants based on gender, age, and grade level. Finally, data analysis and testing are carried out based

on the survey results, and reasonable suggestions are made for the results and findings of this study. This study is expected to complete data collection and data analysis reports.

The main data collection tool is a questionnaire, and the Likert scale is used to assess the impact of key stressors and support systems on primary school students' behavior and psychological well-being. The questionnaire focuses on three variables: *Key Stressors* 1.Academic pressure; 2.Parental expectations; 3.Peer relationships, *Support Systems* 1.Parental support; 2.School counseling and educational support; 3.Support from social resources, *Behavior and Psychological Well-being of Urban Primary School Students* 1.Emotional regulation ability; 2.Perception of social support. The questionnaire is divided into three parts for data collection.

The geographical scope focus on primary schools in Wuhua District, Kunming, Yunnan Province. This study addresses the key stressors, support systems, and behavior and psychological well-being. Due to time and logistical constraints, the study was time-limited, which presented obstacles. This brief period may only represent a snapshot of behavior and psychological well-being patterns, perhaps overlook long-term trends. Cultural differences are another constraint, the study concentrated on a specific cultural or regional context, which may have limited the depth and breadth of its analysis of impacting factors. Despite efforts to address cultural variables, some subtle or complicated cultural dynamics may go unexplored due to time restrictions and study priorities. Cross-cultural comparisons or broader analyses would reveal more about how these elements interact in different contexts.

A statistical software package was used to conduct descriptive statistics, reliability, validity, correlation analysis, variance analysis, correlation analysis and regression analysis in order to validate the research hypothesis and investigate the impact between variables.

Result

Table 1 Descriptive Analysis for Demographic Factors (N=388)

| Name | Variables | Frequency (f) | Percentage (%) |
|--------|--------------|---------------|----------------|
| Gender | Male | 165 | 42.53 |
| | Female | 223 | 57.47 |
| Age | 7-8 | 103 | 26.55 |
| | 9-10 | 138 | 35.57 |
| | 11-12 | 147 | 37.89 |
| Class | First grade | 35 | 9.02 |
| | Second grade | 32 | 8.25 |
| | Third grade | 65 | 16.75 |
| | Fourth grade | 83 | 21.39 |
| | Fifth grade | 53 | 13.66 |
| | Sixth grade | 120 | 30.93 |
| Total | | 388 | 100 |

The demographic analysis of the sample (N=388) highlights a higher proportion of female students (57.47%) compared to males (42.53%). Age-wise, the majority of participants are in the 11-12 age group (37.89%), followed by the 9-10 age group (35.57%), and the youngest group, aged 7-8, makes up 26.55%. This age distribution ensures a relatively balanced representation while slightly emphasizing older students.

In terms of grade level, the sixth grade accounts for the largest share (30.93%), followed by the fourth (21.39%) and third grades (16.75%). Lower grade levels, including first and second grades, have smaller representations at 9.02% and 8.25%, respectively. The demographic profile demonstrates a broad and diverse sample with notable concentration among older age groups and upper-grade levels, providing valuable insights into their academic and social experiences.

Variables Characteristics

Table 2 Key Stressors Descriptive Statistics (N=388)

| Key Stressors | Mean | SD | Meaning |
|---|-------|-------|---------|
| I think your current academic load is stressing you out | 3.941 | 1.125 | Agree |

| | | | |
|---|-------|-------|-------|
| My parents' expectations of my academic performance put me under pressure | 3.956 | 1.112 | Agree |
| I was troubled and stressed in my class because I had to maintain a relationship with my classmates | 3.920 | 1.119 | Agree |
| I feel a lot of pressure to perform with my peers | 3.884 | 1.139 | Agree |
| Students will have certain expectations and opinions of me because of my academic performance | 3.892 | 1.131 | Agree |
| Total | 3.919 | 1.126 | Agree |

The data showed that among the key stressors, the highest mean score (3.956) indicated that parental expectations were the most important stressor. This was closely followed by stress from academic workload (mean=3.941). On the other hand, the lowest mean score (3.884) was related to pressure to perform with peers, although it was still a notable stressor. The standard deviations ranged from 1.112 (parental expectations) to 1.139 (peer performance pressure), indicating that stressful experiences were relatively consistent across all items.

Overall, the total mean score of 3.919 and standard deviation of 1.126 indicated that students generally agreed with these stressors, highlighting the pervasive influence of academic demands, interpersonal relationships, and social expectations on their stress levels.

The descriptive statistics for existing support systems highlight key areas of support for students. The highest mean scores (4.003) are associated with parental assistance during learning difficulties and teacher support in resolving academic problems, indicating these are the most effective forms of support. Emotional support from classes or extracurricular activities follows closely (mean=3.997), reflecting the importance of school-based programs. Meanwhile, societal resources, such as community and non-profits, are also considered supportive (mean=3.956). The lowest mean score (3.925) pertains to general parental understanding, which, though still significant, suggests room for improvement. Standard deviations range from 1.026

to 1.137, demonstrating moderate consistency in responses.

Overall, the total mean score of 3.974 and a standard deviation of 1.092 indicate that students generally agree that they receive substantial support from parents, teachers, schools, and society, emphasizing the multifaceted nature of existing support systems.

Table 3 Existing Support Systems Descriptive Statistics (N=388)

| Support Stressors | Mean | SD | Meaning |
|---|-------|-------|---------|
| I feel that parents have given enough support and understanding in their studies | 3.925 | 1.135 | Agree |
| When I meet with learning difficulties, my parents can provide effective help | 4.003 | 1.026 | Agree |
| I think the teachers in the school are supportive enough to help students solve their academic problems | 4.003 | 1.080 | Agree |
| I find the school's counseling and after-school support helpful | 3.961 | 1.137 | Agree |
| I was able to get positive emotional support from classes or extracurricular activities at school | 3.997 | 1.087 | Agree |
| I feel that there are enough resources in society (such as community, non-profit organizations) to support me and my family | 3.956 | 1.088 | Agree |
| Total | 3.974 | 1.092 | Agree |

Table 4 Behavior and Psychological Well-being of Urban Primary School Students Descriptive Statistics (N=388)

| Behavior and Psychological Well-being | Mean | SD | Meaning |
|---|-------|-------|---------|
| I feel that I can manage and control my emotions well | 3.897 | 1.102 | Agree |

| | | | |
|---|-------|-------|-------|
| I maintain a positive mood in the face of stress or challenge | 3.948 | 1.089 | Agree |
| I feel I can get enough support from my parents, teachers or classmates | 3.938 | 1.045 | Agree |
| I feel confident in myself and my ability to handle any adjustment | 3.861 | 1.040 | Agree |
| I feel respected and recognized by my peers and family | 3.941 | 1.097 | Agree |
| Total | 3.917 | 1.075 | Agree |

The data shows that urban primary school students generally agree on their positive behavior and psychological well-being, with the highest mean score (3.948) reflecting their ability to maintain a positive mood under stress or challenge. This is closely followed by feeling respected and recognized by peers and family (mean=3.941) and receiving sufficient support from parents, teachers, or classmates (mean=3.938). The lowest mean score (3.861) pertains to students' confidence in handling adjustments, though it still indicates agreement. The standard deviations range from 1.040 to 1.102, signifying consistent responses across all items.

Overall, the total mean score of 3.917 and a standard deviation of 1.075 highlight that students perceive their behavior and psychological well-being positively, with emotional management, support systems, and self-confidence contributing to their resilience and overall mental health.

Reliability Analysis

Table 5 Cronbach's Alpha reliability Analysis of Key Stressors and Support Systems for Behavior and Psychological Well-being of Urban Primary School Students (N=388)

| Variable | Cronbach's Alpha Test | Number of Questions |
|---------------------------------------|-----------------------|---------------------|
| Key Stressors | 0.886 | 5 |
| Support Systems | 0.900 | 6 |
| Behavior and Psychological Well-being | 0.884 | 5 |
| Total | 0.890 | 16 |

Reliability analysis showed that all variables had strong internal consistency, with Cronbach's Alpha values exceeding the acceptable threshold of 0.7. Among all variables, support system showed the highest reliability ($\alpha=0.900$) among six questions, indicating that the measurement results of this construct were reliable. Key stressors ($\alpha=0.886$) and behavior and psychological well-being ($\alpha=0.884$)

were both measured with five questions and also showed high reliability.

Overall, the total Cronbach's Alpha value of 16 items was 0.890, confirming the reliability and consistency of the scales used to assess stressors, support systems, and student behavior and psychological well-being.

Hypothesis Test

Table 6 Hypothesis Test by Regression Analysis (N=388)

| Variable | Regression Weight | Beta Coefficient | R ² | F-values | P-value | Result Hypothesis supported |
|----------|-------------------|------------------|----------------|----------|---------|-----------------------------|
| H1 | KS--ESS | 0.857 | 0.739 | 1072.175 | 0.000** | Accepted |
| H2 | ESS--BPW | 0.906 | 0.821 | 1767.670 | 0.000** | Accepted |
| H3 | KS--BPW | 0.848 | 0.718 | 984.848 | 0.000** | Accepted |

H1: Key Stressors have a positive impact on the support system of primary school students in Kunming.

The results show that the regression weight is 0.857, the standardized coefficient is 0.739, the F value is 1072.175, and the P value is significantly lower than 0.05 ($P=0.000$), which indicates that key stressors have a significant positive impact on the support system students receive. . In other words, as students' stress increases, their demand for support resources from school and family increases significantly, indicating that stress drives the role of support systems to a certain extent.

H2: The support system has a positive impact on the Behavior and Psychological Well-being of primary school students in Kunming.

The regression weight reaches 0.906, the standardized coefficient is 0.821, the F value is 1767.670, and the P value is 0.000, which is extremely significant. This shows that the support resources provided by schools and society have a strong positive effect on students' mental health and behavioral improvement. Through an effective support system, students can receive adequate help in academic, social and emotional aspects, which is conducive to the improvement of their overall mental health.

H3: Key Stressors have a positive impact on the Behavior and Psychological Well-being of primary school students in Kunming.

The regression weight is 0.848, the standardized coefficient is 0.718, the F value is 984.848, and the P value is 0.000, which is highly significant. Results indicate that key stressors directly impact students' mental health and behavioral performance. As stress increases, students may exhibit more behavioral problems and experience more challenges with their mental health. This result shows that excessive pressure will weaken students' coping ability and then affect their psychological state.

Overall, the research results of hypotheses H1, H2 and H3 were all verified, indicating that key stressors and support systems have an important impact on students' behavior and psychological well-being.

Conclusion

This study collected 388 valid questionnaires from primary schools in Kunming to investigate the influence of key stressors and support systems on students' behavior and psychological well-being. Descriptive analysis showed that students' perceptions of stress, support, and well-being were generally above average, with moderate variability among individuals. The correlation and regression analyses confirmed significant positive relationships between key stressors, support systems, and mental health outcomes. Support systems were found to have the strongest impact on students' behavior and psychological well-being, and all hypotheses were supported, emphasizing the importance of support systems in fostering mental health.

In the foreseeable future, ongoing research could be used to investigate the long-term impact of key stressors and support systems on students' mental health, including the role of technology ([Rattanapun, 2021](#)) and digital interventions such as social media counseling teams, mobile mental health apps, chatbots, and AI deep counsellors, and online counseling in improving support systems, which could provide insights into how to improve and prevent future mental health school problems.

Discussion

Key Stressors have a Positive Impact on the Support System of Primary School Students in Kunming

The key stressors have a significant impact on the support system in many factors and aspects, and the diversified support system also has more or less impact on students' behavior and mental health. Key stressors can be divided into external factors and internal factors. The external factors are reflected in academic pressure or family problems, while the internal factors can include personal insecurity and the relationship between friends and peers, all of which affect students' behavior and mental health to a certain extent. To summarize the concept of support system, it can include healthy and stable emotions, effective help from family, friends and school. This research is also consistent with Bronfenbrenner's bioecological model of human development ([1979](#)), which focuses on what shapes the human development process and how it is structured through multiple social contexts and in broader ways. The study concluded that stressors, while challenging, can also prompt parents and teachers to increase their attention and support to students and improve their appropriate intervention and support systems. Through the study, we can understand the interaction between the main stressors and the support system, which has a better promoting effect on the cultivation of students' good behavior and healthy mind.

In the process of this study, we also learned from previous relevant studies, the study found that more nuanced methods were adopted. While much of their focus has been on how support systems can help reduce stress, this study explores the interrelationships between key stressors and support systems. Stressors

that challenge students academically not only affect their health, but also activate the surrounding support system, prompting teachers and parents to provide more guidance and emotional attention. This finding helps students and parents understand how support systems work, not only to relieve stress, but also to better understand the stressors themselves.

In the context of the city of Kunming, this study provides valuable insights into how local factors can improve student well-being. There are relatively few researches on educational psychology in Kunming, which provides a unique environment to study how cultural, social and economic pressures have an impact on students' behavior and mental health. By using Bronfenbrenner's model, this study takes into account both direct and broader environmental factors. Such as the role of family and school support in student development. This approach provides a more comprehensive view of how stressors affect students and highlights the importance of optimizing support systems. The findings provide practical recommendations for schools and policy makers in Kunming to help develop intervention plans to address stress caused by stressors. By creating a more supportive educational environment, this study could help improve students' mental health and academic performance.

The Support System has a Positive Impact on the Behavior and Psychological Well-being of Primary School Students in Kunming

This study draws on social support theory ([Cohen & Wills, 1985](#)) to explore the influence and function of support system on elementary school students' behavior and mental health. Social support theory mentions that positive social activities and providing students with good emotional values can effectively help students face pressure, improve bad behaviors and promote the positive development of mental health. In the process of research, it is found that this study is also consistent with some previous studies. First of all, [Imran et al. \(2022\)](#) mentioned how online support can effectively help students' mental health development. On top of this, this study not only discusses family support, but also discusses the support of partners and schools, so as to provide different perspectives to promote the formation

of students' behavior and mental health in a more diversified way. These forms can further optimize the understanding of parents, schools, society and other support systems on how to promote the healthy development of students.

In addition to social support theory, this study also attempts to integrate stress and coping theory to enable students to recognize how the perception and management of stress affects their mental health. Studies have shown that coping strategies supported by family, peer, school, and Internet can reduce student stress and many undesirable behavior problems. This also further illustrates the findings of previous studies, which highlighted the interconnectedness between stress and behavioral problems, through which research can be confirmed to be different from this study in that it emphasizes the role of coping mechanisms that can help students develop effective strategies to improve students' behavior and healthy physical and mental development.

This study provides a multi-dimensional and multi-dimensional approach for Kunming City Primary School to help students have normal behavior and healthy mind, which have not been more widely explained and paid attention to in previous studies, and by focusing on the correct participation of partners and schools and families, this study provides how different support systems can work together to improve students' mental health. By combining social support theory with stress coping theory, external support and internal coping are linked to improve the happiness of primary school students. The results of the study can provide valuable suggestions for Kunming schools and families to collaborate to create a multi-faceted and multi-dimensional support system, trying to meet the developmental needs of students from multiple perspectives.

Key Stressors have a Positive Impact on the Behavior and Psychological Well-being of Primary School Students in Kunming

Major stressors play an important role in shaping students' mental health. The trading model of stress ([Pearlin et al., 1981](#)) shows that stressors have both negative and positive effects, depending on how they

are managed and controlled. While many existing studies have linked stress to negative emotional outcomes, research on elementary school students in the city of Kunming presents a different perspective. This suggests that when moderate stress is combined with effective coping strategies, students can be motivated to adapt positively, a finding that challenges the conventional view that stress is harmful and provides a clearer understanding of how stress promotes personal growth and coping with challenges in a controlled environment.

This study is based on cognitive behavioral theory (CBT) and explores how stressors affect students' mental health and behavior. CBT refers to the connection between thoughts, emotions, and behavior, and the individual's interpretation of stress plays a key role in its formation. Developing healthy coping strategies when students cope with stress is more likely to exhibit positive behaviors and emotions, which is in stark contrast to earlier research that focused primarily on the harmful effects of stress on mental health, and by including CBT in the analysis, this study provides useful insights into how to manage stress to promote better mental health outcomes for students.

The findings of this study have implications for educational practice and policy, especially in urban primary schools in Kunming, an area that has been understudied and limited before, providing valuable data that can guide schools in recognizing the potential benefits of stress. The study highlights important factors for equivocating students with coping skills and resilience building strategies, and schools can implement curricula that focus on teaching emotional regulation and problem solving skills that enable students to respond constructively to stress. In addition, this study highlights the role of support systems, such as family involvement and peer mentoring, in mitigating the negative effects of stress, by creating a supportive and nurturing environment, schools can improve student academic performance and mental health, providing a supportive and well-rounded aid to student development.

Recommendations

In order to improve the behavior and mental health of primary school students in Kunming,

several targeted solutions were put forward in the study. Through extracurricular activities or research organized by the school, families were actively encouraged to participate, and schools and parents cooperated with each other, so that parents could master ways to relieve students' pressure in the process of participation, and provide students with good emotional support. Organize group activities to cultivate students' cohesion and trust, support and cooperate with each other, and improve students' sense of security and confidence. This is followed by psychological classroom activities for school teachers, which can provide students with good emotional solutions, regular mental health checks, and ensure early detection and timely support for students who need help. The second is to adjust the academic burden, reduce homework tasks, happy class, happy education is necessary for students, reasonable arrangement of rest time, effectively relieve academic pressure.

Introducing healthy activity learning into the curriculum can improve students' intelligence and ability to cope with stress and encourage participation in extra-curricular activities, such as; Physical activity, art, and music provide healthy outlets for stress. In addition, open communication channels are also important, and anonymous communication systems can be chosen to allow students to express their concerns and worries without fear. Finally, through investigation and feedback, schools should regularly evaluate and improve the support system to ensure that the school's evaluation measures are effective, and change the way according to the different times of students, and timely update to create a good supportive environment for the growth of students.

Research Contribution

The study has important implications for educators, individual welfare and policy making. This study provides insights into the impact of major stressors and support systems on student behavior and mental health, urging schools to adopt timely intervention and family engagement programs. For students, it emphasizes how to deal with stress and through which forms can improve personal health development. In the process of intervention, schools

can use these methods to create a good educational environment and improve students' academic performance and happiness. Policy makers are encouraged to give priority to working with schools and families through social resources to provide a sound educational framework for strengthening educational practices and policy making.

The study is also aligned with the Sustainable Development Goals (SDGS). The first is to promote strategies to improve the mental resilience of urban children by addressing the mental health challenges of students, reflecting support for Sustainable Development Goal 3, good health and well-being. Second, quality education embodies Sustainable Development Goal 4 by exploring how support systems can reduce stress, foster inclusive and effective learning environments, and improve learning outcomes and lifelong learning opportunities. Finally, linking mental health and education, combining multiple dimensions and working together, can help create healthier, more supportive education systems.

Further Research

This study discusses the impact of major stressors and support systems on the behavior and mental health of primary school students in Kunming, providing valuable insights for educational development and policy formulation. Through the application of the ecological model of human development, the emphasis on the mutual support of family, friends and school environment can improve students' behavior and mental health development. The findings provide a strong support system and explain the importance of support systems, family involvement and peer support to mitigate the negative effects of stressors. In addition, the research also reveals the ways in which stressors lead to students' bad behaviors and emotional problems, emphasizing how to make strategies when facing stress. This study fills the gap of existing education research in Kunming primary school and lays a foundation for future timely interventions aimed at improving students' well-being, optimizing students' behavior and mental health.

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Author Details

Na Liu, Rajamangala University of Technology, Thailand, **Email ID:** 668080600020@mail.rmutk.ac.th

Supot Rattanapun, Rajamangala University of Technology, Thailand, **Email ID:** supot.r@mail.rmutk.ac.th

Tubagus Darodjat, Rajamangala University of Technology, Thailand, **Email ID:** tubagus.d@mail.rmutk.ac.th

Alan White, Rajamangala University of Technology, Thailand, **Email ID:** alan.w@mail.rmutk.ac.th