

Safety and Well-Being in Malaysia Primary Schools.

Marinah Awang^{1*}, Suzyanty Mohd Shokory², Dayang Rafidah M Syariff¹, Ramlee Ismail³, Suriani Abdul Hamid², Rosmini Ismail⁴ & Khalizul Khalid²

¹Department of Educational Management, Universiti Pendidikan Sultan Idris

²Department of Business Management and Entrepreneurship, Universiti Pendidikan Sultan Idris

³Department of Economics, Universiti Pendidikan Sultan Idris

⁴Department of Accounting and Finance, Universiti Pendidikan Sultan Idris

*Corresponding Author

DOI: <https://dx.doi.org/10.47772/IJRISS.2024.ICAME2421>

Received: 06 December 2024; Accepted: 11 December 2024; Published: 26 December 2024

ABSTRACT

This study investigates the relationship between student safety and student well-being in schools using Structural Equation Modelling (SEM). The sample survey method involves 923 primary school students in Malaysia. This study uses a quantitative approach by using cross-sectional data. Instruments were adapted from Malaysia Ministry of Education, 2002; Konu and Lintonen, 2006; Norlia and Sufean, 2006; Bradshaw, Waasdorp, Debnam and Johnson; 2014. The findings reveal a strong positive relationship between student safety and student well-being, with a direct effect of 0.99, indicating that safety improvements significantly enhance well-being. Student safety is influenced by six dimensions: student movement ($R^2=0.85$), school condition ($R^2=0.76$), learning environment ($R^2=0.60$), co-curricular activities ($R^2=0.77$), social management ($R^2=0.64$), and disaster management ($R^2=0.71$). Among these, school conditions and co-curricular activities are the most vital contributors. Student well-being is driven by four dimensions: school environment ($R^2=0.67$), social relationships ($R^2=0.87$), support ($R^2=0.42$), and health ($R^2=0.47$), with social relationships being the most influential. The model demonstrated good fit indices (CFI = 0.913, IFI = 0.913, TLI = 0.909, RMSEA = 0.058), confirming its robustness. These findings emphasise the critical role of fostering a safe and supportive school environment by enhancing school conditions, co-curricular activities, and social relationships. This study provides valuable insights for educators and policymakers to design targeted interventions to improve school safety and well-being.

Keywords: safety, well-being, school safety climate, students, primary schools.

INTRODUCTION

Safety and well-being in educational settings are integral to fostering an environment where students can thrive academically, physically, mentally and socially. School safety is a fundamental preventative measure designed to create an atmosphere in which children feel secure. This sense of security is crucial for effective teaching-learning, providing teachers and students with the confidence to engage fully in educational activities. A secure environment enhances academic performance and encourages students to commit more deeply to their school experience, as they are more likely to feel comfortable and free from disadvantages.

The importance of this issue is underscored by the efforts of organisations such as the World Health Organization (WHO), which has advocated for the health, safety, and education of younger generations for over a decade. According to the WHO's Global Health Estimates, more than 1.7 million children and adolescents aged 5 to 19 died in 2016 due to road accidents, drowning, self-harm, and diarrheal diseases (WHO, 2018). The prevalence of unintentional injuries, including falls, burns, cuts, and fractures, is alarmingly high among school-age children. WHO data show that accidental injuries are one of the leading causes of morbidity and mortality in this

age group globally, with 10-25% of schoolchildren reporting some form of injury annually. This figure is even higher in regions where safety protocols are not rigorously enforced (WHO, 2019). Falls are among the most common sources of injury within school environments. Data from WHO's Global Status Report on Road Safety reveal that children are also at high risk for road traffic injuries on their way to and from school. Children are frequently exposed to vehicular accidents in countries without safe pedestrian pathways or traffic regulations around schools. For instance, WHO estimates that in particular low- and middle-income countries, up to 15% of school-age children experience traffic-related injuries annually, many of which result in severe physical impairment or death (WHO, 2020).

Background Context of Safety and Well-Being

The effective management of safety and health in schools is crucial for fostering safe and healthy environments for both students and staff. Research indicates that robust safety and health practices contribute to improved academic performance, lower absenteeism, and enhanced mental and physical well-being among students (Mubita, Milupi & Kalimaposo, 2023). A positive school climate, which includes safety and well-being, is a crucial prerequisite for academic success. Research by Cornell (2010) has shown a significant relationship between school safety and students' academic performance. The work of Kutsyruba et al. (2015) and Makhtar (2018) further reinforces the connection between school climate, safety, academic achievement, and student well-being. These studies suggest that a positive school environment, free from bullying, victimisation, and violence, is essential for students to feel secure and perform well academically. Studies indicate that a safe environment is significantly associated with student learning and achievement (Bonny et al., 2000; Blum, 2004). Similarly, a study (Catalano et al., 2004) found a positive relationship between the physical environment of schools and student achievement, encompassing many other constructs such as stress, absenteeism, dropping out of school, involvement in social activities and crime. Likewise, trends in International Mathematics and Science Studies (TIMSS, 2019) found that in many countries, girls are more likely to perform better academically when they feel secure than boys. A systematically reviewed study on perceived school safety, focusing on its prevalence, influencing factors, associated mental health challenges, and cross-cultural findings concluded that on average, 19.4% of students reported feeling unsafe at school, with prevalence rates ranging from 6.1% to 69.1%. Factors influencing perceived safety included personal, school, and social elements. A lack of safety was linked to victimization and mental health issues such as depression and suicidal behavior. Conversely, higher perceived safety was associated with interventions like the presence of security personnel and fair enforcement of school rules (Mori, Tiiri, Khanal, Khakurel, Mishina & Sourander, 2021).

Physical violence in school settings also poses a significant risk to student safety. WHO's Global Status Report on Preventing Violence Against Children (2020) documented that roughly 20-50% of schoolchildren globally experience physical aggression, including fights, bullying, and corporal punishment, which can result in physical injuries ranging from bruises to fractures. The commonness of injuries due to violence in schools is closely associated with environmental factors such as overcrowding, lack of supervision, and inadequate mental health support. For instance, in particular schools surveyed in low-resource areas, over 30% of children reported injuries resulting from bullying, and these experiences were strongly linked with depressive symptoms, anxiety, and lower academic performance (WHO, 2019).

However, incidents such as falls, trips, bullying, self-harm, and even violence, including school shootings like those in Parkland, Florida, and Santa Fe, Texas, have highlighted the need for vigilant safety measures. The number of school shootings in the United States has been steadily rising, with over 200 incidents reported in 2021 alone which is the highest number recorded in any single year to date (Center for Homeland Defense and Security, 2021). Notably, data indicate that school shootings in the U.S. account for approximately 60-70% of all school-related firearm incidents worldwide, underscoring the scale and specificity of the issue in this region (Katsiyannis et al., 2018). School shootings, while concentrated mainly in the United States, have also been reported in other countries, albeit at significantly lower rates. For example, Canada, Germany, and Russia have each experienced isolated but highly publicised school shooting incidents over the past two decades. In Germany, the 2002 Erfurt school massacre resulted in 16 deaths, marking one of the country's most tragic school shootings.

Similarly, in Russia, the 2021 shooting at a school in Kazan left nine people dead, drawing renewed attention to school security and the need for preventive measures in the region (Davies, 2021). Although such extreme events are not universal, their profound impact underscores the critical need for robust safety protocols.

Managing school safety includes addressing direct and indirect risks to children's health and security. Many institutions rely on administrative controls such as standard operating procedures, disciplinary codes, and health promotion programs to manage school safety. Some schools have even implemented more extensive security measures, such as installing thick fences and electric gates. Conversely, these practices can sometimes create a prison-like environment, which may inadvertently affect children's sense of security and well-being (Bracy, 2011; Jones & Hulsey, 2022). Although schools are deeply committed to ensuring safety and promoting a healthy environment, a delicate balance must be struck. Overzealous security measures can convey a message that schools are no longer safe, which may induce social anxiety among parents and the wider community. A recent study (Spector et al., 2020) examines the efficacy of physical security measures such as surveillance, school resource officers (SROs), and security technologies to prevent violence and crime. Increased use of surveillance technology, including cameras and metal detectors, is associated with both a reduction in incidents of violence and an increased sense of fear among students and staff. These mixed outcomes underscore the complexities of balancing physical safety with fostering a positive learning environment. As highlighted by WHO, ensuring school safety includes addressing both direct and indirect risks to children's health and security. This encompasses physical aspects, such as infrastructure safety (e.g., building maintenance, proper sanitation facilities, emergency preparedness), as well as social dynamics, including anti-bullying measures and mental health support systems. The WHO emphasizes that a holistic approach to school safety is essential to fostering an environment conducive to learning and development (WHO, 2021).

Student Safety and Well-being

Both school and student safety has always been a fundamental responsibility of educational institutions to take precautions to protect students from various potential hazards, such as environmental dangers, accidents, and, in rare cases, violent incidents. School safety ensures the built environment is designed to prevent accidents and reduce risks. Research has demonstrated that school infrastructure designed with safety in mind, including proper maintenance of facilities and attention to environmental factors, can significantly impact students' ability to focus and participate in learning activities (Cornell & Mayer, 2010). Security features such as secure entry points, adequate lighting, surveillance systems, and emergency preparedness protocols are vital for reducing incidents of violence and creating a sense of security among students and staff (Cowan & Vaillancourt, 2020).

However, focusing solely on physical safety without addressing the broader dimensions of student well-being can lead to incomplete solutions. Ultimately, determining the effectiveness of various safety measures remains a significant challenge. The lack of substantive data makes it difficult to fully articulate, synthesise, and implement the complex aspects of school and student safety and well-being. It is not merely about taking safety measures into account but also about understanding how these measures impact the cognitive, emotional, and physical development of children.

School Climate Theory

School Climate Theory focuses on the overall environment and atmosphere within a school, encompassing relationships among students, staff, and teachers and the norms, values, and structures that shape these interactions (Cohen et al., 2009). School climate is a multi-dimensional concept that includes physical safety, emotional security, inclusivity, and mutual respect. A positive school climate has been shown to support physical safety, emotional security, and a sense of belonging, all contributing to enhanced student well-being and ultimately revealing essential insights into how school environments impact students' academic performance, social-emotional development, and mental health.

In the context of student safety, School Climate Theory emphasises the importance of fostering a school environment where students feel physically and emotionally secure. A positive school climate is one in which

students experience supportive relationships, inclusivity, and fair disciplinary practices, which can prevent conflicts and reduce incidents of bullying and violence (Thapa et al., 2013). A safe school climate encourages open communication and respect, allowing students to feel comfortable reporting issues related to safety without fear of retaliation or judgment.

School Climate Theory also highlights the role of teachers and staff in shaping students' perceptions of safety. When teachers demonstrate respect, provide guidance, and address student concerns proactively, students are more likely to feel valued and secure. Research has shown that students' perceptions of safety increase in schools where they have positive relationships with adults, feel a sense of belonging, and perceive the school rules as fairly enforced (Cornell & Mayer, 2010). This theory thus provides a framework for schools to assess and improve their climate, recognising that physical safety measures alone are insufficient without a culture of respect and support.

Research also connects positive school climate to improved student well-being, highlighting the role of supportive and inclusive environments in promoting students' mental health, social relationships, and academic engagement. For instance, Renshaw and Chenier (2018) conducted a study examining the impact of school climate on students' emotional and psychological well-being, using data from high school students across multiple districts. The study revealed that students who perceived their school climate as positive reported higher levels of life satisfaction, lower levels of stress, and fewer symptoms of depression. These findings suggest that a supportive school climate can buffer students from stressors and challenges, providing emotional stability that enhances overall well-being.

Gregory et al. (2010) investigated the association between school climate and student reports of safety and found that students who perceived their school climate as fair and supportive were less likely to experience or engage in aggressive behaviors. This study highlighted that schools with transparent rules and consistent enforcement foster a sense of trust and safety among students, reducing the likelihood of fear-based behaviors and increasing students' willingness to participate in school activities. This sense of fairness is especially important for marginalized student groups, who often face greater barriers to feeling secure and supported in school environments.

Further studies, such as that by Bradshaw et al. (2009), support these findings, demonstrating that students in schools with clear anti-bullying policies, positive teacher-student relationships, and inclusive practices report higher levels of safety and lower incidences of bullying. This underscores the importance of implementing policies and practices that promote a positive school climate as a means of enhancing safety and reducing fear among students. Schools that foster an open, respectful climate also provide students with a sense of control over their environment, contributing to a feeling of security that is essential for both learning and well-being.

As suggested by the previous studies there is an association between student safety and student well-being. The school climate encompassing both physical and psychological revealing the vital relationship between the two dimensions. This hypothesis aims to explore the relationship between these perceptions among the school children.

METHODOLOGY

This study uses a quantitative approach by using cross-sectional data. A sum of 923 samples were drawn from the total primary school population in Selangor, Malaysia. Respondents consists of primary school students in Year Four, Year Five and Year Six. Four types of primary schools are involved namely National Schools, Chinese National Type primary schools, Tamil National Type primary schools, and Religious Schools. Instruments were adapted based on previous studies (Malaysia Ministry of Education, 2002; Konu & Lintonen, 2006; Norlia & Sufean, 2006; Bradshaw, Waasdorp, Debnam & Johnson, 2014). The questionnaire was divided into three sections. Section A: Profile of Respondents, Section B: Safety Domain, and Section C: Well-Being Domain. There were six sub-domain listed under the safety domain. These include student movement (5 items), school environment (11 items), learning environment (7 items), co-curricular activities (4 items), social management (3

items) and disaster management (5 items). Nested under the well-being domain are the multiple and intersecting spheres of students' lives covering the school environment (21 items), student social relationship (29 items), potential and self-support (11 items), and personal health (11 items). A five-point Likert scale ranging from 1 Strongly Disagree to 5 Strongly Agree was used to allow respondents to answer all the questions for both domains. Data is analysed using IBM SPSS AMOS Ver.24.

RESULTS

Table 1 shows the analysis of respondents' demographic profiles. A total of 298 (32.30 per cent) respondents attend national primary schools, and 246 and 136 respondents attend Tamil and Chinese National Type Primary Schools, respectively. Additionally, 243 (26.40 per cent) respondents were from the Religious Schools type. Most respondents are from urban schools, with 59.50 per cent, compared to only 40.50 per cent of respondents from rural schools. Regarding gender, female respondents are higher at 61.80 per cent than males at 38.20 per cent. The distribution of respondents by year showed that most of the students were from Year 6 (603 or 65.30 per cent), followed by 249 (27.00 per cent) Year 5 students and 71 (7.70 per cent) Year 4 students.

Table 1. Demographic Profiles (n=923)

Item		Frequency (f)	Percentage (%)
School Type	Primary National Schools	298	32.30
	Chinese National Type Primary School	136	14.70
	Tamil National Type Primary School	246	26.70
	Primary Religious School	243	26.30
Location	Urban	549	59.50
	Rural	374	40.50
Gender	Male	353	38.20
	Female	570	61.80
Year	Year 4	71	7.70
	Year 5	249	27.00
	Year 6	603	65.30

The structural model detailed the relationships among all latent variables, including exogenous, intervening, and endogenous ones. Its validity was assessed using the factor loadings and Goodness of Fit (GOF) value or the model's feasibility test by evaluating the achievement of index suitability criteria and the cut-off values. The cut-off values are set to 0.50, according to Hair et al. (2019). The level of model fit for this study is assessed using Absolute Fit ($RMSEA < 0.08$, $GFI/AGFI > 0.90$), Incremental Fit ($CFI/TLI/NFI > 0.90$), and Parsimonious Fit ($\text{Chi-square/Degrees of Freedom} - \text{ChiSq/df} < 5.0$). The model's convergent validity was then tested by evaluating the factor loadings (positive, > 0.50 , not exceeding 1.0) and the Average Variance Extracted ($AVE \geq 0.5$). Construct Reliability (CR) of the instrument was also tested, with $CR > 0.70$. All these cut-off values follow the recommendations of Hair et al. (2019).

First, we analysed the factor loadings of the items in the measurement model. The analysis revealed that all

factor loadings exceeded 0.50, ranging from 0.61 to 0.93. Next, regarding the structural model, using the maximum likelihood procedure and variance-covariance matrices as input, we tested the hypothesised model with AMOS. Table 1 compares the indexes between the Confirmatory Factor Analysis (CFA) of the base model in Figure 1 and the fitted models in Figure 2. Although the initial model in Figure 1 provided a helpful starting point, it had an RMSEA value of 0.08, and all indexes, such as AGFI/GFI and CFI/TLI, were below 0.9. Only the ChiSq/df met the requirement of being below 5.0. Therefore, the base model had not yet achieved the standard model fit for the measurement model. This highlights the necessity of making modifications based on the modification index to achieve the suggested model fit values, thereby enhancing the robustness of the research findings.

Table 2. Confirmatory factor analysis (CFA) initial model and fitted model

	Fit Index	Recommended Value	Initial Model	Fitted Model
Absolute Fit	RMSEA (Root Mean Square of Error Approximation)	<0.08	0.08	0.06
	GFI (Goodness of Fit Index)	>0.90		
	AGFI (Adjusted Goodness of Fit)	>0.90		
Incremental Fit	CFI (Comparative Fit Index)	>0.90	0.82	0.91
	TLI (Tucker-Lewis Index)		0.81	0.91
Parsimonious Fit	ChiSq/df (ChiSquare/Degrees of Freedom)	<5.0	4.08	2.76

Figure 1 demonstrates the relationships between "Student Safety" and "Student Well-being," along with their sub-dimensions and observed variables. To achieve the model fit as in Figure 1, a few items were dropped from the variables of Student Safety, such as B1 from the dimension of student movement. Items B12 and B13 from School Condition, B34 and B35 in Disaster Management. Meanwhile, in Student Well-Being variables, items C16 and C19 from School Environment, five items from Student Social Relationship (C33, C39, C44, C45 and C46), and three items in Potential and Self-Support (C51, C55, C61).

The model fit indices indicate a good fit, with a relative Chi-Square (χ^2/df) of 2.622 (acceptable range <5), a CFI and IFI of 0.913 (≥ 0.90), a TLI of 0.909, and an RMSEA of 0.058 (≤ 0.08). The results reveal that "Student Safety" is strongly influenced by six sub-dimensions: "Student Movement" ($R^2=0.85$), "Student Condition" ($R^2=0.76$), "Learning Environment" ($R^2=0.60$), "Co-Curricular Activities" ($R^2=0.77R$), "Social Management" ($R^2=0.64$), and "Disaster Management" ($R^2=0.71R$). Each sub-dimension comprises multiple observed variables with high standardised loadings, such as $\lambda=0.93$ for "B6" under "Student Condition," indicating significant contributions.

"Student Well-being" is influenced by four sub-dimensions: "School Environment" ($R^2=0.67$), "Social Relationships" ($R^2=0.87$), "Support" ($R^2=0.42$), and "Health" ($R^2=0.47$). Among these, "Social Relationships" contributes the most, with observed variables like "C47" showing a solid loading ($\lambda=0.88$). The direct effect from "Student Safety" to "Student Well-being" is exceptionally strong (0.99), indicating that safety improvements almost perfectly enhance well-being. Observed variables such as "B5" (under "Student Condition") and "C47" (under "Social Relationships") play a critical role in shaping their respective constructs, emphasising the importance of these areas.

The results suggest that "Student Safety" is primarily driven by school conditions, co-curricular activities, and

social management. At the same time, "Student Well-being" relies heavily on fostering social relationships and creating a supportive school environment. Areas such as "Support" and "Health" show weaker contributions, highlighting potential areas for improvement. The findings underscore the importance of enhancing safety measures and interpersonal relationships within schools to foster students' holistic well-being.

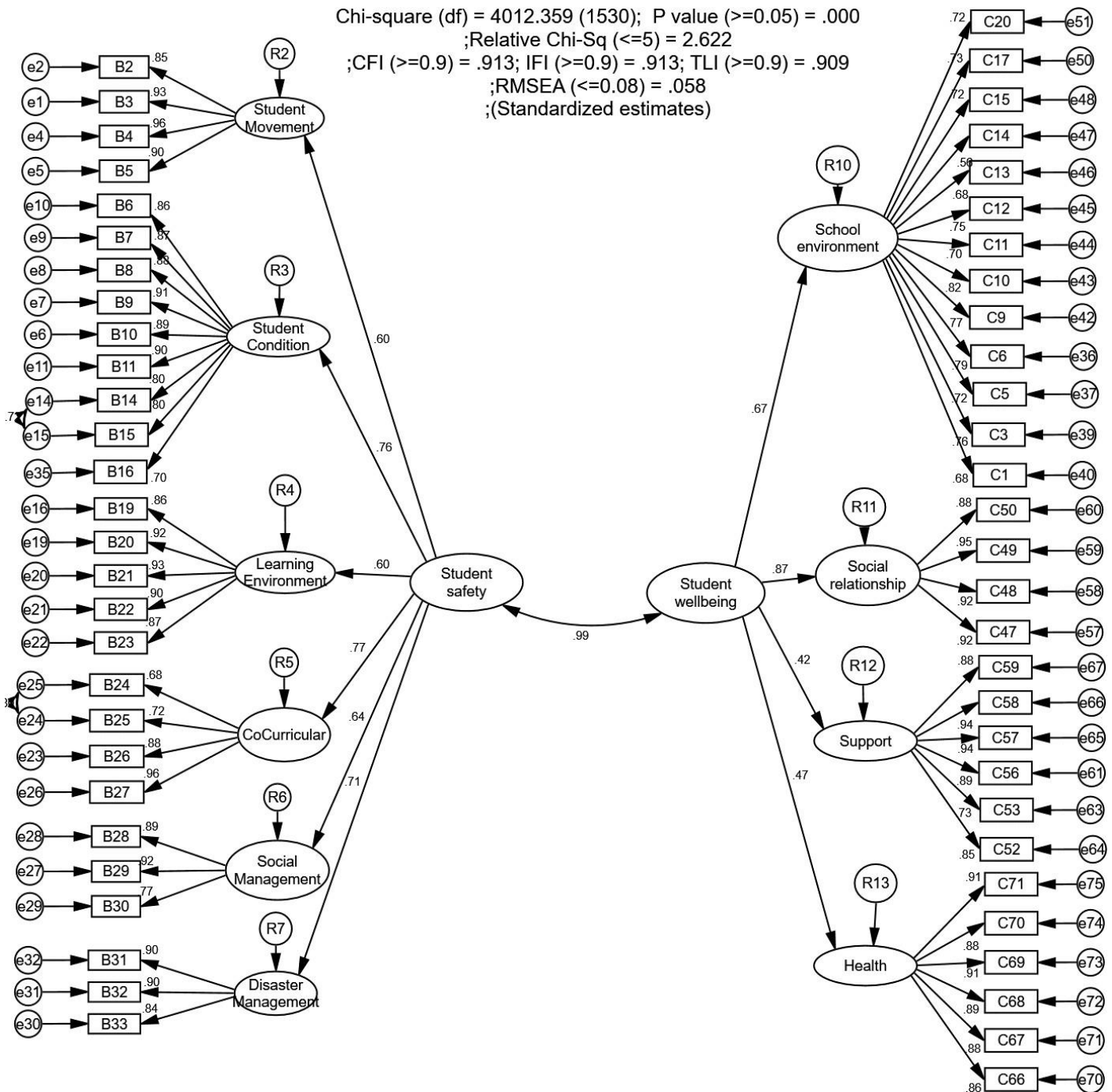


Figure 1: The standardised path between Student Safety and Well-being of the students

The components of student safety include student movement, school conditions, learning environment, co-curricular activities, social management, and disaster management. Specifically, the Student Movement component has a Composite Reliability (CR) of 0.84 and an Average Variance Extracted (AVE) of 0.47. In the Student Well-Being construct, the components are School Environment, Student Social Relationships, Potential and Self-Support, and Personal Health. The School Environment component has a CR of 0.7 and an AVE of

0.44, also meeting the required thresholds for reliability and validity. The CR values meet the requirements of > 0.6 ; however, the values of AVE are at 0.47 and 0.44, which is less than 0.5. However, according to Fornell and Larcker (1981), if the value of AVE < 0.5 : but CR > 0.6 , the convergent validity of the construct is still adequate.

Next, the Discriminant validity was assessed through the measurement model. Discriminant validity refers to how distinct a construct is from other constructs (Hair, Page & Brunsveld, 2019; Anderson & Gerbing, 1988). The heterotrait-monotrait ratio of correlations (HTMT) technique was used for this assessment. HTMT examines the ratio of between-trait correlations of indicators across constructs to the correlations of indicators within a construct. To establish discriminant validity between two reflective constructs, the HTMT value must be below 0.90 (Henseler, Ringle & Sarstedt, 2015). According to Table 3, the discriminant validity value between the two constructs are 0.71 (< 0.90). Thus, the model meets the discriminant validity requirement (Henseler, Ringle & Sarstedt, 2015).

While the components of Student Movement and School Environment demonstrate acceptable reliability and validity, the absence of CR and AVE values for other components necessitates further data to comprehensively assess Student Safety and Student Well-Being constructs.

Table 3. Reliability and Validity Analysis

Variables	Components	CR (>0.6)	AVE (>0.5)	Student Safety	Student Well-Being
Student Safety	Student Movement	0.84	0.47		
	School Condition				
	Learning Environment				
	Co-curricular Activities				
	Social Management				
	Disaster Management				
Student Well-Being	School Environment	0.7	0.44	0.71	
	Student Social Relationship				
	Potential and Self-Support				
	Personal Health				

Next, the hypothesis was tested, as shown in Figure 2. It illustrates the relationships between "Student Safety" and "Student Well-being," as well as their respective observed variables. The analysis reveals a strong positive relationship between "Student Safety" and "Student well-being" (path coefficient = 0.97), indicating that improvements in student safety significantly enhance student well-being. "Student Safety" is measured by six variables, with "School Condition" ($\lambda=0.77$) and "Social Management" ($\lambda=0.67$) contributing the most, while "Disaster Management" ($\lambda=0.45$) has the least impact. Meanwhile, "Student well-being" is influenced by four variables, with "Student Social Relationship" ($\lambda=0.83$) being the most critical and "Potential Self-Support" ($\lambda=0.21$) contributing the least. The R-squared value for "Student well-being" is 0.95, meaning 95% of its variance is explained by "Student Safety." Error terms indicate unexplained variance, with smaller values reflecting a better fit for some variables. Overall, the model suggests that enhancing school safety, mainly through improving school conditions and social management, is crucial for fostering student well-being, with

social relationships playing a pivotal role in well-being outcomes.

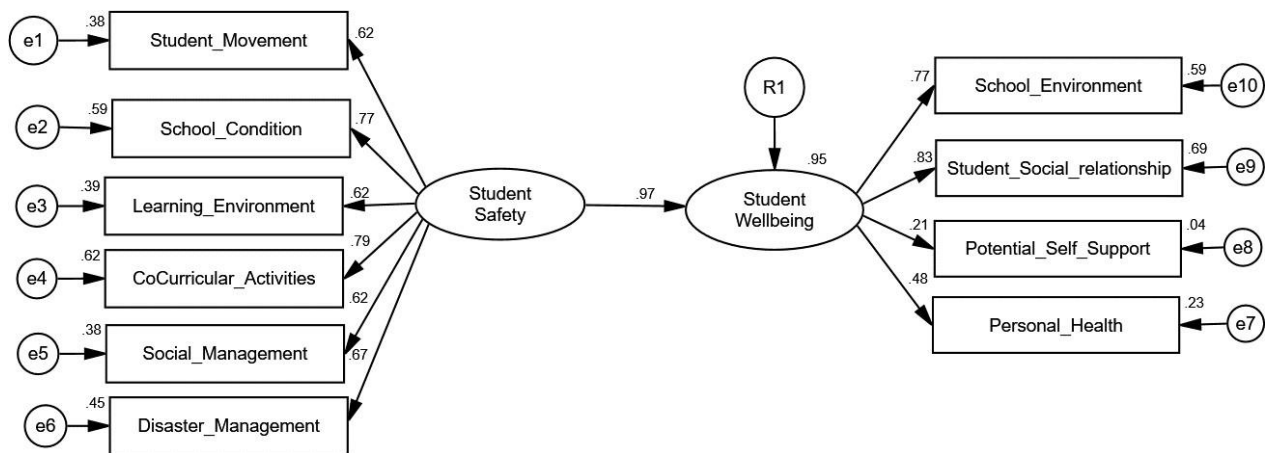


Figure 2: Hypothesis testing between Student Safety and Student Well-being

DISCUSSIONS

Safety and well-being in educational settings are critical for fostering an environment where students can thrive academically, physically, mentally, and socially. This study's findings align with existing research that emphasises the central role of school safety as a preventative measure to create secure learning environments. A secure atmosphere allows students to engage fully in educational activities, bolsters academic performance, and encourages more profound commitment to their school experiences. For example, World Health Organization (WHO) research has underscored the risks of accidents, violence, and other school hazards. The prevalence of unintentional injuries such as falls, burns, and fractures among children highlights the urgent need for safety measures that directly impact both physical health and emotional well-being. Addressing these issues prevents immediate harm and contributes to students' cognitive and emotional stability, enabling them to thrive.

The results from this study demonstrated that student safety has a significant direct effect on student well-being (path coefficient = 0.97). Among the sub-dimensions, "School Condition" and "Social Management" emerged as the strongest predictors of safety, reflecting the importance of well-maintained facilities and robust management practices. These findings corroborate previous research showing that well-structured school environments with adequate lighting, secure entry points, and clear safety protocols enhance students' sense of security (Cornell & Mayer, 2010). Additionally, the study highlighted that "Social Relationships" are the most critical factor for student well-being, further supporting School Climate Theory, which underscores the importance of fostering positive interpersonal relationships and a supportive school atmosphere. According to Christensen and Simovska (2023) children experience well-being as an embodied, multifaceted phenomenon embedded in the school context but also connected with their lives outside of school. The importance of relationships at school for well-being not just depending on teacher guidance but also safety and trust facilitated by the school staff. School facilities, workload, rhythms, time schedules and numerous transitions also play pivotal roles in student experiences of well-being.

Finally, the broader implications of these findings suggest that while physical safety measures, such as disaster management and structural improvements, are essential, their impact is amplified when combined with efforts to improve the social and emotional dimensions of school life. As outlined in School Climate Theory, a positive school climate emphasizes the importance of inclusivity, respect, and emotional security in creating a nurturing environment for students. Studies such as Renshaw and Chenier (2018) have demonstrated that students in schools with a favourable climate experience lower stress level, higher life satisfaction, and reduced symptoms of depression. Similarly, Bradshaw et al. (2009) highlighted the role of clear anti-bullying policies and supportive

teacher-student relationships in enhancing safety and reducing student fear.

However, overemphasising physical security measures, such as surveillance technologies or fencing, can inadvertently create a prison-like environment, as Bracy (2011) and Jones and Hulsey (2022) highlighted. This underscores the delicate balance schools must maintain between enforcing safety measures and fostering a supportive, fear-free climate. Safety protocols must go hand-in-hand with promoting open communication, inclusivity, and mutual respect, as these factors significantly contribute to students' overall well-being and academic success.

This study also highlights disparities in the effectiveness of specific safety and well-being dimensions. While "Potential Self-Support" had the weakest impact on well-being, this points to a need for targeted interventions to empower students to take active roles in their development. The Shyness, reluctance, hesitation, and unawareness hamper to react in a safe way and may cause casualties. Safety awareness reduces the chances of accidents and injury happenings (Akhtar, Zafar, Shoukat & Naseem, 2022). Well-being is central to early intervention and prevention programs in schools. Well-being serves as both an indicator of potential mental health issues and an opportunity for early prevention to mitigate more severe disorders (Gunawardena, Voukelatos, Nair, Cross & Hickie, 2023). Similarly, the lower contribution of "Disaster Management" to safety suggests potential gaps in preparedness that schools must address. Tailored strategies, such as regular safety drills and enhanced disaster management training, could strengthen these areas, thereby contributing to a more comprehensive approach to student safety and well-being.

RECOMMENDATIONS

The study recommends the school management authorities for intervention to tackle the manifested problems by taking holistic approach for school community and appropriate changes in school policies, protocols and procedures. Management should bring clarity on school objectives in relation to safety and well-being among students. Schools should enforce safety measures and fostering a supportive and fear-free climate. In addition safety protocols needs to be openly communicated, inclusivity, and mutual respect, in order to promote students' overall well-being and academic success. Disaster management is another aspect that requires urgent attention. Disasters preparedness, emergency response programs, training and drilling are among those plausible actions can be taken.

FUTURE DIRECTIONS

The challenges related to school children, school teachers, and management are growing, further widening the research scope in school climate and well-being of the school community. The study identifies the potential areas for research such as a) school policy and school climate, b) managing risk in rural and urban schools, c) safety and well-being based on schools' category locations d) qualitative studies could employed in order to understand school children's perception on safety and well-being.

CONCLUSION

In conclusion, the findings reiterate that fostering a secure and supportive school environment requires a multifaceted approach. Efforts must integrate physical safety, such as infrastructure improvements, with social dimensions, including interpersonal relationships and inclusivity. Educators and policymakers must prioritise interventions that address safety and well-being, as these constructs are mutually reinforcing and vital for students' holistic development. Schools can help students achieve academic success and emotional and social well-being by creating safe, inclusive, and supportive environments, ensuring a positive trajectory for their overall growth. Despite these challenges, the prospects for safety and health management in schools are positive, with growing emphasis on health and wellness initiatives and increased investment in supportive resources, collaboration and communication among all stakeholders; students, staff, parents, community and Ministry of Education to address challenges and maximize the benefits of safety and health management in educational settings.

ACKNOWLEDGEMENT

This research was supported by the Ministry of Higher Education (MoHE) Malaysia through the Fundamental Research Grant Scheme [FRGS/1/2016/SS109/UPSI/02/2]

REFERENCES

1. Akhtar, M., Zafar, J., Shoukat, S., & Naseem, M. (2022). Shaping Behaviour as Proactive Approach for Awareness of Safety and Wellbeing Secondary Grade Curriculum. *Academy of Education and Social Sciences Review*. <https://doi.org/10.48112/aessr.v2i1.93>.
2. Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological bulletin*, 103(3), 411.
3. Blum, RW & Libbey, HP. (2004). Executive Summary. *Journal School Health*, Vol. 74, pp. 231 – 232.
4. Bonny, AE, Britto MT, Klostermann, BK, Hornung, RW, & Slap, GB (2000). School Disconnectedness: Identifying Adolescents at Risk. *Pediatrics*, Vol 106, pp. 1017 – 1021.
5. Borger, H. (2006). "OSH in Schools". *National Safety*, Vol. 77 No., 10, p. 36.
6. Bracy, L. Nicole. (2011). Student perceptions of high-security school environments. *Youth & Society*. 43(1) 365–395.
7. Bradshaw, C. P., Waasdorp, T. E., & Johnson, S. L. (2009). Overlapping roles of the school environment and school climate in bullying prevention and student well-being. *Journal of School Health*, 79(3), 138–146.
8. Bradshaw, C. P., Waasdorp, T. E., Debnam, Katrina J. & Johnson, S. L. (2014). Measuring School Climate in High Schools: A Focus on Safety, Engagement, and the Environment. *Journal of School Health*, 84(9), 593-604.
9. Catalano, RF, Haggerty, KP, Oesterle, S, Fleming, CB, & Hawkins, JD (2004). The importance of bonding to school for healthy development. *Journal School Health*, Vol. 74, pp. 252 – 261.
10. Center for Homeland Defense and Security. (2021). K-12 School Shooting Database.
11. Christensen, E., & Simovska, V. (2023). What Do the Experts Say? Children's Perspectives on Wellbeing in Schools. *Children, Youth and Environments*, 33, 39 - 62. <https://doi.org/10.1353/cye.2023.a903097>.
12. Cohen, J., McCabe, L., Michelli, N. M., & Pickeral, T. (2009). School climate: Research, policy, practice, and teacher education. *Teachers College Record*, 111(1), 180-213.
13. Cornell, D., & Mayer, M. J. (2010). Why do school order and safety matter? *Educational Researcher*, 39(1), 7-15.
14. Cowan, K. C., & Vaillancourt, K. (2020). Creating safe, supportive schools for all students: What you can do to prevent school violence. *National Association of School Psychologists*.
15. Davies, W. (2021). School shootings worldwide: Kazan shooting sheds light on global issues.
16. Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 18(1), 39-50.
17. Gregory, A., Cornell, D., & Fan, X. (2010). The relationship of school structure and support to academic achievement and school climate. *Educational Studies*, 36(2), 157–174.
18. Gunawardena, H., Voukelatos, A., Nair, S., Cross, S., & Hickie, I. (2023). Efficacy and Effectiveness of Universal School-Based Wellbeing Interventions in Australia: A Systematic Review. *International Journal of Environmental Research and Public Health*, 20. <https://doi.org/10.3390/ijerph20156508>.
19. Hair Jr, J., Page, M., & Brunsveld, N. (2019). *Essentials of business research methods*. Routledge.
20. Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the academy of marketing science*, 43, 115-135.
21. Katsiyannis, A., Whitford, D. K., & Ennis, R. P. (2018). Historical examination of United States intentional mass school shootings in the 20th and 21st centuries: Implications for students, schools, and society. *Journal of Child and Family Studies*, 27(8), 2562-2573.
22. Konu, A I. & Lintonen, T.P. (2006). School well-being in Grades 4–12. *Health Education Research, Theory & Practice*, Vol.21 no.5. pp. 633 – 642.
23. Kutsyuruba, B., Klinger, D. A., & Hussain, A. (2015). Relationships among school climate, school safety,

- and student achievement and well-being: a review of the literature. *Review of Education*. <https://doi.org/10.1002/rev3.3043>
24. Ministry of Education, Schools Division (2002). *Safe School Concept and Manual: Implementation Guide to Create a Safe School, Community and Family for Children*. Ministry of Education, Malaysia.
 25. Makhtar, N. K., Parasuraman, B., Zakaria, M. N., & Ismail, A. R. (2018). Safety culture and its contributing factor in the education sector in Malaysia. In *Advances in Intelligent Systems and Computing*. https://doi.org/10.1007/978-3-319-60525-8_47
 26. Mori, Y., Tiiri, E., Khanal, P., Khakurel, J., Mishina, K., & Sourander, A. (2021). Feeling Unsafe at School and Associated Mental Health Difficulties among Children and Adolescents: A Systematic Review. *Children*, 8. <https://doi.org/10.3390/children8030232>.
 27. Mubita, K., Milupi, I., & Kalimaposo, K. (2023). Management of Safety and Health in Schools: Benefits, Challenges and Prospects. *INTERNATIONAL JOURNAL OF SOCIAL SCIENCE AND EDUCATION RESEARCH STUDIES*. <https://doi.org/10.55677/ijssers/v03i4y2023-07>.
 28. Norlia Arshad & Sufean Hussin (2006). *Dasar Sekolah Selamat : Tinjauan Di satu Zon Bandar Raya Kuala Lumpur*. *Jurnal Pendidikan*. 26, 27-36
 29. Renshaw, T. L., & Chenier, J. S. (2018). The relation between school climate and student well-being: A comparison across cultures. *School Psychology International*, 39(4), 348–358.
 30. Thapa, A., Cohen, J., Guffey, S., & Higgins-D'Alessandro, A. (2013). A review of school climate research. *Review of Educational Research*, 83(3), 357-385.
 31. World Health Organization. (2018). *INSPIRE: Seven Strategies for Ending Violence Against Children*. WHO.
 32. World Health Organization. (2019). *Global School-based Student Health Survey (GSHS)*. WHO.
 33. World Health Organization. (2020). *Global Status Report on Preventing Violence Against Children*. WHO.
 34. World Health Organization. (2021). *Safe and inclusive schools: ensuring school safety and student well-being*. WHO