EXPLORING CHILDREN'S PERCEPTIONS OF SAFETY FROM BULLYING AND ITS CONNECTION TO THE BUILT ENVIRONMENT

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Abstract

How much have Malaysian cities become child-friendly places? The primary aims of this research are to examine children's perspectives on safety in both the school environment and the broader urban context and to determine whether elements of the built environment are among their safety-related concerns. A research investigation was carried out in the metropolitan regions of Kuala Lumpur and Selangor, focusing on a sample of five primary schools to assess the utilisation of different strategies to incorporate children aged 7 to 9. The study employed a variety of methodologies encompassing activities within the arts, communication, and literature. The examination consisted of three discrete indicators of safety, namely safety within educational institutions, safety on transportation routes, and safety within urban environments. Despite their limited cognitive abilities to discern between various safety components related to their physical environment, children can articulate their thoughts on safety concerning those in close vicinity, such as their friends and family members. It is fascinating that the children exhibit heightened proficiency in expressing their viewpoints on safety through artistic and literary modalities. In conclusion, our study has revealed that the built environment has a substantial impact on children's impression of safety inside both school and urban settings.

Keywords: Children's perception, safety, bullying, child-friendly places, built environment.

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INTRODUCTION

Children are regarded as the future of our nation and are entitled to equal opportunities to lead fulfilling lives. When considering the issue of safety, the well-being of children emerges as a primary concern, both within the confines of their homes and within the educational setting. The primary responsibility for protecting the safety of a child typically rests with the parents, teachers, or carers. This phenomenon can be attributed to the inherent capacity of children to independently recognise and assess their safety, gauge the degree of peril that poses a threat to them, and effectively safeguard themselves against potential dangers.

Children exhibit a deficiency in discerning between good and wrong, resulting in their vulnerability, which manifests in both physical and emotional safety. Wood et al. (2008) established a correlation between demographic characteristics, the built environment, social capital, and felt safety. The study conducted by the researchers' revealed variations in the perception of safety among the respondents. It was observed that individuals residing in well-maintained housing areas tend to see their surroundings as relatively safer.

The incorporation of safety aspects into the built environment can be observed throughout urban planning, as exemplified by Ebenezer Howard's Garden City and the New Urbanism movement. These approaches emphasise the need to ensure safety within the built environment. To what extent are safety needs and the well-being of children prioritised? This study considered approximately 598 children aged 7 and 9, hailing from five primary schools, actively engaged in a programme that spanned approximately three months. This programme was conducted prior to the onset of the COVID-19 pandemic in 2020.

LITERATURE REVIEW

Built environment – Prioritising safety for children

The correlation between bullying incidents and the specific locations in which they transpire is intricate and encompasses various dimensions. Bullying is a phenomenon that can occur in diverse contexts, and the characteristics of the environment can shape the occurrence, characteristics, and consequences of bullying actions. Gencer and Karagoz (2017) argue that it is imperative to establish secure environments for children that effectively address their needs, expectations, and wants. Undoubtedly, establishing a secure environment for the youth inside urban areas, with a specific emphasis on educational institutions, holds paramount importance. According to Norazman et al. (2019), the classroom environment must possess qualities of comfort, healthiness, and safety in order to facilitate academic pursuits effectively. This will

lead to a conducive and encouraging learning environment that, at the same time, discourages incidents like bullying. Poorly designed spaces, blind corners or isolated areas create opportunities for bullying to occur.

In addition, open and well-designed spaces can enhance visibility. It is important to evaluate several elements that contribute to the sense of safety among children within the school setting, as the quality of their learning environment significantly influences their behaviour and academic performance (Wahab & Sakip, 2017). In research by Francis J et al. (2022), common areas where bullying occurs include classrooms, playgrounds, and corridors. The other research by Francis J et al. (2022) also mentioned that participants identified specific school bullying locations such as the locker areas, bathrooms, corridors and built environment factors linked to bullying behaviour. Their research findings have policy and practice implications regarding the design of school-built environments to prevent bullying behaviour.

The school-built environment encompasses various features that are associated with bullying conduct. These features include surveillance cameras, architectural design elements, aesthetic qualities, seating arrangements, and incidents of vandalism. The absence of conducive environments for student interaction may result in adverse social interactions. Educational institutions that possess the capacity to cater to the requirements of students by fostering a favourable ambience are more likely to promote collaboration and mitigate instances of antagonistic conduct. Therefore, it is imperative to establish an educational atmosphere that fosters respect, empathy, and positive relationships among students while designing and constructing schools.

In the Malaysian context, the government has to include building safety considerations in planning and building schools. However, there is a noticeable dearth of accessible empirical evidence about the prevalence of social spaces that are specifically meant to promote social cohesiveness and address incidents of bullying. While the primary objective of a school building may not explicitly prioritise social cohesion and the learning environment, it is imperative to include these features as a progressive approach in future school planning and development. According to Rapp-Paglicci L. et al. (2004), numerous preventative and intervention initiatives targeting bullying have predominantly concentrated on the interpersonal psychological dimensions of bullying while neglecting the essential environmental factors required to effect significant transformations in the issue. *Bullying* is a pervasive and enduring issue that has sparked apprehension for the protection of children. The existing body of research has predominantly concentrated on the interpersonal psychological attributes of both perpetrators and targets of bullying.

However, there has been a limited exploration of the typical settings or areas where bullying occurs. Migliaccio, T. et. al (2017) concur to this. This study discovered

that the location of schools plays a significant role, as it allows for identifying hotspots that vary in gender and grade. In order to enhance their ability to prevent and address instances of bullying, educational institutions should strive to identify specific areas within the school environment that are more prone to such incidents. By focusing their efforts on these identified hotspots, schools can implement targeted interventions and allocate resources accordingly. Additionally, schools must prioritise the education and training of school personnel, equipping them with the necessary knowledge and skills to address and intervene in bullying situations successfully. Ensuring the safety of students should be seen as the highest priority for schools. The active involvement of both teachers and students in safety programmes organised by various stakeholders constitutes a school-based intervention aimed at fostering safety awareness.

Safety awareness among children in schools should encompass various aspects, including the physical environment, personal well-being, and the surrounding vicinity of the school. There is a need for an improved emphasis on safety issues within the teachers' work. McDiarmid et al. (2022) suggest that the presence of hostile school environments might have detrimental effects on the mental well-being of kids. Furthermore, their study reveals a significant association between instances of bullying within the school setting and reduced levels of happiness among students.

Consequently, multiple strategies exist for intervening and enhancing student safety awareness inside educational institutions. Regarding the issue of bullying, an intervention strategy involves promoting student expression by encouraging them to articulate their thoughts and emotions about the concept of bullying and related matters. By employing this approach, children can articulate their experiences without the burden of speaking under duress, enabling them to elucidate the concept of bullying effectively.

In addition, this strategy can also serve as a means to depict safety in the school environment and the surrounding neighbourhood. Fekkes et al. (2005) posited that a potential technique for enhancing children's safety within educational settings involves promoting the active involvement of peers in addressing instances of bullying. The use of strategies that encourage children to actively intervene and advocate for victims of bullying has the potential to effectively mitigate bullying behaviours by fostering social support. Schools in Malaysia also offer assistance programmes, but their efficiency may vary. However, these programmes do not typically address the aspects of the built environment, as they primarily focus on verbal and physical bullying.

Furthermore, the scholarly works of Chin-Siang et al. (2018) and Kowalski et al.

(2013) have examined the phenomenon of bullying and have classified it into distinct categories, including physical bullying, verbal bullying, relational bullying, sexual bullying, and cyberbullying. Ensuring a sense of safety against the various forms of bullying through manipulating the physical environment is of utmost importance. According to Jamalsafri (2009), a lack of awareness and information among students can lead to erroneous interpretations regarding the phenomenon of bullying.

Moreover, the term "bullying acts" can encompass both physical and psychological forms of bullying when one youngster engages in aggressive behaviour towards another (Bullock, 2002). According to Wang et al. (2012) and Bradshaw et al. (2015), it has been observed that cyberbullying is an extension of traditional bullying, wherein the acts of bullying have transitioned from physical spaces like schools to the online realm through the use of electronic devices. Therefore, this article focuses on correlating-built environment and perceived safety, explicitly examining the perceptions of bullying and the broader safety concerns within the school and the city.

Bullying in school – School children's perspective

Schools frequently serve as prevalent environments in which instances of bullying manifest. The presence of a hierarchical organisational framework inside educational institutions, the formation of groups, and the influence of friends all contribute to the establishment of an atmosphere where power differentials and social dynamics assume a prominent role in instances of bullying.

Bullying within educational institutions has various manifestations, including physical aggression, verbal harassment, social isolation, and cyberbullying. The incidence of bullying can be influenced by various factors within the school environment, including the prevailing school culture, the level of supervision provided by teachers and staff, and the effectiveness of anti-bullying measures. The present study incorporates a comprehensive description of bullying, encompassing various manifestations such as the use of threatening language, physical aggression, verbal abuse, derogatory remarks, social isolation, dissemination of rumours through online platforms, theft, instances of sexual assault or harassment, as well as retaliatory actions against the perpetrator.

Based on a study conducted by Rigby and Slee (1991), it has been observed that boys experience a higher frequency of bullying incidents compared to girls about gender. This phenomenon can be attributed to the fact that girls tend to exhibit higher levels of support for individuals who have experienced victimisation. The study additionally emphasised that there exists a notable decrease in instances of bullying as individuals grow older, despite the possibility of less supportive views towards victims. Intriguingly, Fekkes et al. (2005) conducted a study that similarly revealed a greater inclination towards bullying among guys compared to girls.

Nevertheless, the researchers asserted that boys engage in bullying behaviours characterised by direct physical aggression, such as punching or kicking. However, girls tend to employ more indirect methods, such as social exclusion or spreading tales, to perpetrate bullying. Instances of bullying in educational institutions encompass a range of behaviours, such as a perpetrator consistently issuing threats of physical harm to their target after school hours, disseminating a humiliating image of the victim, coercing peers to avoid sitting near the victim and subjecting the victim to verbal taunts that inflict emotional distress.

In contemporary society, other than physical bullying, a distinct manifestation of bullying has emerged, commonly referred to as cyberbullying. Cyberbullying refers to a type of bullying that involves the infliction of harm onto the victim using threatening or harassing behaviour facilitated by the use of technological platforms such as social media. Bullying that begins in the cyber world can have significant real-world consequences and can even spill over into physical spaces.

According to Shetgiri (2013), While it is improbable for incidents to occur in children under the age of 12 inside a school setting, there may still be isolated occurrences. This is due to the infrequent occurrence of primary school-aged children having personal social media accounts, as well as the comparatively limited autonomy granted to them in comparison to older students. Hence, this research acknowledges the constraint of cyberbullying.

The act of exerting dominance through aggressive behaviour is often perceived as a form of reciprocation known as bullying (Vanderbilt & Augustyn, 2010). According to Hymel and Swearer (2015), it has been suggested that bullies often exhibit characteristics of social incompetence, particularly among young individuals, as they tend to rely on physical aggression as a means of conflict resolution. Moreover, bullies have been classified as those who exhibit hyperactivity and impulsivity and face peer rejection, which in turn leads to academic challenges. These issues further contribute to increased stress levels, ultimately resulting in a more hostile home environment for them.

The development of bullying tendencies in individuals may originate from their familial background, although it is plausible that the educational setting can serve as a means to rectify such behaviour. Based on the findings of Stevens et al. (2002), it is evident that the various aspects of family functioning play a crucial role. Specifically, individuals who engage in bullying behaviour tend to perceive lower levels of cohesion, expressiveness, organisation, control, and social orientation within their families. Additionally, these individuals also report experiencing higher levels of conflict within their family units. This demonstrates the significance of implementing a prevention plan to influence bullies to cease victimising their targets inside the school environment.

METHODOLOGY

Research approach and design

The methodology used in this study involves utilising a mixed methodological approach, which has been deemed particularly appropriate for students between the ages of 7 and 9. A survey was conducted to employ a quantitative approach. Nevertheless, the dependability of the quantitative survey was ascertained through using qualitative data via the triangulation method.

Sample and sampling procedures

A sample of 598 students from five primary schools in Selangor and Kuala Lumpur was chosen. The criteria for selection were determined by considering various aspects, including the geographical location of the schools and previous cases that occurred at the school related to safety, such as bullying and road accidents, with advice from the district education department.

Research instrument and its processes

At the commencement of the programme, a scholarly discourse was conducted by an expert, elucidating the concept of safety and providing an introductory overview of the programme. The purpose of this initiative is to enhance individuals' understanding of safety and its various components, including linguistic, emotional, cyber, and physical aspects. The rationale behind this programme is to ensure that students possess a comprehensive understanding of all forms of bullying and the associated safety concerns.

Subsequently, smaller groups were established to facilitate enhanced participation among the programme participants. The designated group facilitators pose inquiries about the concept of safety, encompassing its definition, individual perspectives on school safety, safety considerations during transit to school, and safety within the urban environment.

The nature of the discussion was intentionally informal in order to avoid intimidating or frightening the children. The facilitator underwent prior training to prepare for posing questions. At the same time, the children themselves documented the outcomes of the discussions on a separate sheet of paper rather than relying on the facilitator to do so.

Following the talk, the facilitator provides each student with an additional sheet of paper to illustrate their perspectives on safety within the school and the broader urban environment. The guidelines regarding the drawing assignment are not explicitly defined, granting pupils the autonomy to depict subjects about either school safety or urban safety based on their concerns.

Analysis technique

The researchers separately accessed the drawings created by the students, with each researcher concentrating on a specific issue depicted in the drawings. The survey results were analysed using the statistical software SPSS, and the triangulation approach was employed to cross-validate the data and ensure the reliability of the project's findings. Figure 1 displays an art method utilised to obtain children's perspectives regarding the safety and places where it occurs.

Figure 1 Examples of Method to Get Children Responses About Safety and Places Where It May Occur
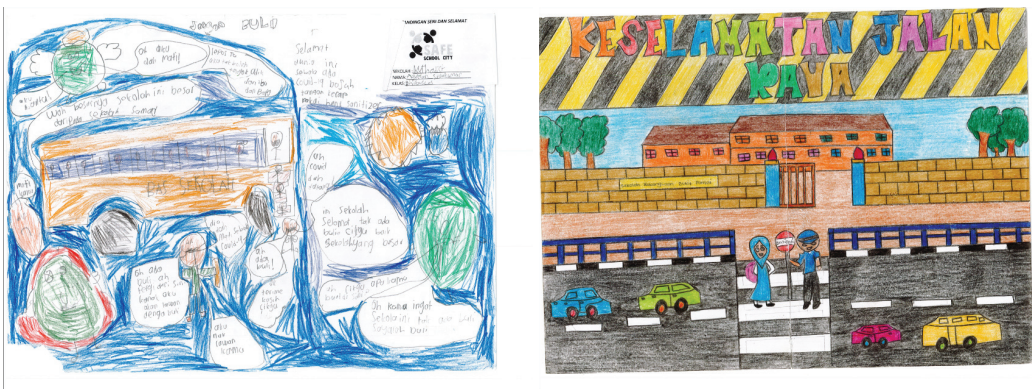

FINDINGS AND DISCUSSION

The findings are categorised into three primary areas based on the structured questionnaire. The first section of the analysis provides an overview of the demographic characteristics of the polled respondents. The participants' perspectives about the definition of bullying within the school context were analysed. Subsequently, the research also aimed to ascertain the participants' awareness of safety and the built environment.

Generally, the distribution of male and female students across all schools exhibits a comparable pattern, as depicted in Figure 2. The data not only ensures an equitable distribution of respondents based on gender but also accurately represents the gender mix as reported by the schools. Approximately 48.9 per cent of the respondents in School A and 43.8 per cent in School D are male students. Three other schools exhibited comparable findings, wherein a significant proportion of the participants were male pupils. School B had the highest percentage of male responses at 59.6 per cent, followed by School E and School C with 58.8 per cent, and 50.4 per cent, respectively.

Figure 2 Percentage of Respondents by Gender
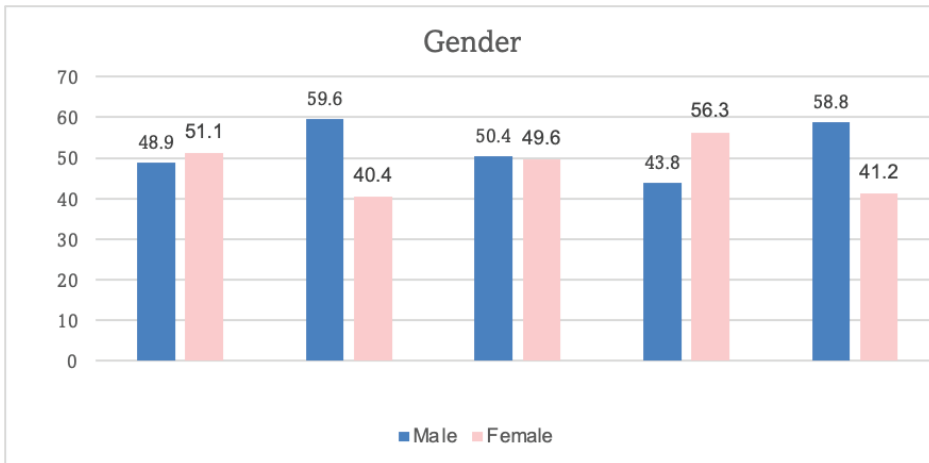
The students were questioned regarding their understanding of bullying and were asked to indicate their level of agreement or disagreement with eight distinct definitions of bullying, as presented in Table 1. The survey findings indicate that a significant proportion of the participants (51.2 per cent) acknowledged that bullying encompasses using intimidating language. In contrast, an even more significant majority (68.8 per cent) recognised physical aggression, such as hitting, as bullying. Additionally, a substantial percentage (68.9 per cent) of respondents identified insulting and making disrespectful statements towards others as constituting bullying behaviour. According to Bullock (2002), the concept of bullying encompasses instances where one child engages in physical or psychological acts of aggression towards another child. The study's findings revealed a noteworthy trend among the participants, as a significant proportion expressed disagreement regarding classifying specific behaviours as forms of bullying.

Table 1 Respondents' Opinion on the Definition of Bullying

Definition of bullying	Agree (%)	Disagree (%)
Threatening words	51.2	48.8
Act of hitting someone	68.8	31.2
Insulting or making disrespectful comments	68.9	31.1
Social exclusion	40.6	59.4
Spreading rumours on social media	30.7	69.3
Taking other people belonging	46.0	54.0
Sexual assault or harassment	30.2	69.8
Fighting back against a bully	19.5	80.5

N:598

Table 1 shows a majority of respondents disagreed with the characterisation of acts such as social exclusion (59.4 per cent), spreading rumours on social media (69.3 per cent), taking another person's belongings (54.0 per cent), engaging in sexual harassment (69.8 per cent), and retaliating against a bully (80.5 per cent) as constituting instances of bullying. One possible explanation is that the participants may have limited comprehension of bullying. According to Jamalsafri (2009), a lack of awareness and information among students might lead to erroneous perceptions of bullying.

Additionally, the association between the comprehension of bullying among children of primary school age and their age was examined using Cramer's V coefficient correlation. Table 2 illustrates that there was no statistically significant difference in the comprehension of bullying among the different age cohorts. According to Chua (2006), the range of the Cramer's V coefficient for all variables falls between 0.01 and 0.50, suggesting a weak to fragile relationship between them. Although the correlation coefficient of 0.358 suggests a weak link, there is evidence of a modest variance in the definition of bullying, specifically regarding physical aggression, within school A.

Table 2 Cramer's V Coefficient Correlation Between Bullying Understanding and Age

Definition of bullying	School A	School B	School C	School D	School E
Threatening words	.269	.102	.159	.099	.047
Act of hitting someone	.358	.071	.064	.159	.148
Social exclusion	.302	.152	.054	.095	.091
Spreading rumours on social media	.096	.144	.043	.081	.060
Insulting or making disrespectful comments	.260	.040	.174	.144	.170
Taking other people belonging	.200	.066	.105	.109	.143
Sexual assault or harassment	.199	.090	.034	.152	.027
Fighting back against a bully	.299	.071	.028	.095	.006

N:598

To verify internal data consistency, a revaluation of respondents' comprehension of bullying was conducted, employing four (4) instances of bullying activities. Table 3 illustrates that many participants agreed on classifying specific behaviours as constituting bullying. Specifically, 87.3 per cent and 82.9 per cent of respondents acknowledged that overt activities, such as making threats and intentionally excluding people, indicate bullying.

Table 3 Respondents' Understanding on Bullying

Example of bullying acts	Yes (%)	No (%)
Every day, X threatens to hit Y after school end	87.3	12.7
X told other students not to allow Y to sit next to them on the bus	82.9	17.1
X uploaded an embarrassing picture of Y online	88.6	11.4
X said, 'You are so funny!' to Y	44.4	55.6

N:598

Moreover, the findings additionally indicated that a significant majority of the participants, precisely 88.6 per cent, agreed with the notion that instances of bullying occur when a child shares a humiliating image of another individual on the internet. This observation aligns with the conclusions drawn by Wang et al. (2012) and Bradshaw et al. (2015), who posited that cyberbullying is an extension of conventional bullying, wherein the perpetration of such behaviours has expanded from physical school environments to the digital realm through the utilisation of technological devices. Contrarily, a significant proportion of participants, precisely 55.6 per cent, expressed disagreement with the notion that utterances such as 'You are so amusing' encompass bullying tendencies, as they might also be interpreted as complimentary statements.

The questionnaire also assessed the respondents' level of awareness regarding their safety, in addition to evaluating the presence of a secure learning environment within the school premises. According to the findings presented in Table 4, a significant proportion of the participants expressed a sense of insecurity when engaging in specific built environment conditions. The perception of safety in connection to the surrounding built environment pertains to the subjective assessment made by the respondents regarding the degree of security, ease, and potential hazards present in the physical locations they occupy. Multiple factors about the design, arrangement, and characteristics of the environment shape the perception. The highest percentage of respondents, 93.9 per cent, reported feeling uncomfortable when visiting a deserted playground alone. This was followed by 76.6 per cent of participants who felt unsafe when travelling to a grocery shop unaccompanied and 51.5 per cent who experienced a similar sentiment when using their school bus. According to the

research conducted by Gencer and Karagoz (2017), it is posited that the emotional well-being of children is significantly influenced by their affinity towards and sense of security within metropolitan environments.

Table 4 Perception of safety in relation to the surrounding built environment

Safety while travelling	Safe (%)	Unsafe (%)
I went to the grocery store alone	23.4	76.6
I went to a lonely playground alone	6.1	93.9
I took my own school bus	48.5	51.5

N:598

DISCUSSION

It was found that physical safety was the most concerning among 598 children, followed by verbal and social safety. Physical safety keywords like "Pukul", "Tolak", and "Tendang" are the most frequent words found under the category of physical. In contrast, words such as "Bodoh" and "Jahat" are associated with verbal categories. Not much information related to the built environment can be extracted from the survey findings. The result of the art activity best explains the student's concern about the built environment, like safety on the road and while crossing the road, as this action is much more accessible to express using art than physical safety, like pushing friends. The survey was intended to ask the children about their perception of safety at school and in the city. Cramer's' V is used as an analysis method to assess the relationship between variables with the age of the children. It is found that there is a weak relationship between the children's perceived safety and their age. Instead, there is no significant between 7 years old and nine years old.

Table 5 presents the findings about children's perceptions of safety within their immediate residential vicinity and the broader urban environment. The findings indicate that the art activities and survey results reveal the presence of dangers in transportation and urban areas. Several factors contribute to the challenges children face in their daily commute to school. One such factor is the concern for their safety while walking to school. Objective variables do not exclusively determine the impression of safety among individuals but are also shaped by personal experiences, cultural background, and individual sensitivity. When the built environment is designed with a specific emphasis on safety considerations, it can create environments that not only effectively mitigate tangible threats, but also cultivate a feeling of security and comfort among those who inhabit them.

Table 5 Majority Children Feel Unsafe to Be Alone but Not Really While Travelling on A School Bus

Safety in neighbourhood and in the city	Safe (%)	Unsafe (%)
I went to the grocery store alone	23.4	76.6
I went to a lonely playground alone	6.1	93.9
I took my own school bus	48.5	51.5

N:598

Furthermore, the children's mobility within the neighbourhood poses further difficulties in their journey to school. A more comprehensive understanding of all possible outcomes can be achieved by enhanced triangulation, as depicted in Figure 3.

Figure 3 Thematic Map Showing Components of Safety for A Child
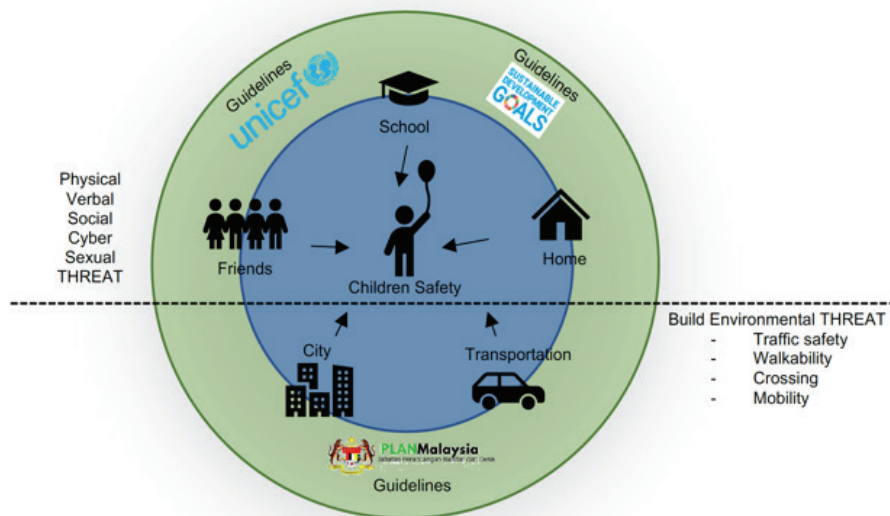
CONCLUSION

In summary, there needs to be more prioritising the well-being and significance of children within the context of the built environment. The findings indicate that there is no significant relationship between the age of the children included in the study and their impression of tangible safety. Additionally, it was determined that engaging children in art and literature activities is the most effective technique for eliciting their perception of safety. The significance of safety is greatly amplified when considering the emotional well-being of children, as art and literature serve as effective mediums for expressing their emotions. In addition, all relevant stakeholders must prioritise enhancing the school's scope, particularly the teachers' involvement. The study's results unveiled a notable pattern among the participants, as a considerable portion expressed dissent with categorising specific behaviours as instances of bullying. The realisation of the objectives of the UNICEF Child-Friendly City initiative can be attained via the active engagement of all relevant stakeholders.

CONTRIBUTION AND IMPACT

The research has made a significant contribution to the comprehension of how children between the ages of 7 and 9 view safety and their ability to assess the extent to which our schools and cities adhere to the standards set by the UNICEF Child Friendly City initiative. The study reveals that behaviour changes, increased awareness, and social education have significant implications as a result of the research.

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