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School Safety

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Abstract: This paper reviews studies on school safety and safety precautionary measures in schools to safe guard the lives and properties in the school environment. To this end, the review is done under the following headings: theoretical framework; concept of safe school; relevance of the concept of safe school to health education; empirical evidences of studies on school safety. The primary responsibility of every Local Education Authority (LEA) is to ensure a safe and secure environment for students, staff and visitors. Specific actions that schools can take to increase school safety include ways to identify possible warning signs of students-at-risk and provide support to such students who do not feel that they belong in the school community. Working together, schools and community partners can focus their emergency planning using national guidance, including efforts to build a positive school climate to establish relations of trust and respect among students and staff in order to encourage them to share information about threatening behavior before an incident occurs. Students who do not feel safe at school stay home, and when students are not in school, they do not perform academically; it is therefore recommended that students' perception of safe school is vital for progress in the entire educational endeavour.

Keywords: safety; school; Invitational education; Local educational authority.

1. Introduction

Hardly a day goes by when we don't hear a news story about an incident that has happened in our schools. These incidents may range from a school bus accident to a student committed suicide, or from a sexual assault to a death in connection with a hazing. Schools have the choice to create and maintain safe schools or to return their institutions to safe, secure and effective places of learning. As caretakers of a community within a community, administrators of schools must deal with the effects of tragedies that occur both on and off school. Whether the immediate tragedy is suffered by a student, staff member or a large group of people, the rippling emotional trauma that occurs can have long-term effects on the school environment. The crisis reaction and its accompanying trauma is a unique experience shared by most victims. When individuals are victimized by violent crimes, they experience both a physical and emotional reaction. The severity of the reaction is affected by five factors: the intensity of the event; the suddenness of its occurrence; the duration of the event; the victims' ability to understand what happened; and the stability of the victims' equilibrium at the time of the event.

Although many schools are safe, others can be just as susceptible to crime and violence as other environments. According to the [US Bureau of Justice Statistics \(2002\)](#), seventeen children and teens were killed at school and five children killed themselves in the year ending June 30, 2002. Moreover, in a 2001 survey by the National School Safety Center (NSSC), more than 60 percent of high school boys and 15 percent of middle school boys said they could get a gun if they wanted to. At the same time, 69 percent of high school and 27 percent of middle school boys said they knew how to get drugs. Thirty percent of the kids reported being bullied. In what could be an ominous precursor to adult behavior, nearly a quarter of the students in another 2001 survey published by NSSC reported that they knew at least one student at their school who had been a victim of dating violence ([National School Safety Center, 2001](#)). There are no easy answers to the disturbing questions these statistics raise, but it is clear that collaboration between parents, educators, law enforcement, and crime prevention practitioners is essential. This collaboration will be better enhanced with adequate knowledge of school safety hence the contribution of this paper.

2. Theoretical Framework

This review on school safety is anchored on the invitational theory. This theory was co-propounded by Dr William Watson Purkey and Dr Betty Siegel of the International Alliance for Invitational Education (IAIE) in 1991 as a reaction to the classical educational practices used in schools. Invitational Education emphasizes the importance of internal knowledge in relation to external connections to the outside world and existing educational systems ([Zeeman, 2006](#)). A key feature of Invitational Education is positive self-concept developed through a school environment that leads to more productivity. Invitational theory aims to change the limited communication styles between school members ([Purkey, 1991](#)). A main tenant of 'invitational theory' is to revitalize schools and to

encourage students to want to go to school (Myers and Monson, 1992). Invitational Education is designed to create and enhance human environments that cordially summon people to realize their potential in all areas of worthwhile human endeavour (Purkey and Novak, 2015). According to Purkey and Novak (2015), Invitational Education asserts that organizations are never neutral. Everything and everybody either adds or subtracts from an existing culture. Invitational Education offers concrete, practice, safe, successful and democratic solutions for problems that routinely harm organizations and the people within them. Hattie (2015) meta-analysis of school improvement research states that Invitational Education is not 'niceness' at work, but an approach that places much reliance on the teachers and schools to make learning exciting, engaging, and enduring. Where there are school differences, it is these types of effects that are the most powerful. Hattie's research determined that many of the most hotly debated school reform efforts had little effect on school improvement, but those which provide in invitation to learn had the most profound effect (Hattie, 2015).

According to the advocates of the theory, there are five factors that affect the appeal of schools: people, places, policies, programs, and processes. Invitational theory claims that these five factors make schools more socially appealing and safe (Purkey and Schmidt, 1996) in the following ways:

- **People:** The most valuable component of schools is human resources, which mainly comprises managers, teachers and students. In addition, the importance that schools attach to family and environment cooperation increases its appeal.
- **Places:** A negative physical place affects school members negatively while comfortable and aesthetically pleasing features make schools more appealing. The entrance, classrooms, waiting areas, corridors, canteen, staff rooms, social and sports facilities and the overall environment of the school have direct effects on individual's health and safety in the school.
- **Policies for safety:** School policies consist of written or unwritten rules which regulate the continuous functions of individuals and the organization. Policies are often strong messages to school members about the importance of people, the development of skills, and the assuming responsibility. Schools with stricter, more negative rules and disciplinary principles lend toward an overall colder and more unfriendly environment which may be unhealthy and unsafe for the people.
- **Programmes for safety:** A good impression may be made on school members and the environment by developing school programmes that address human needs at large (including health and safety), instead of those that focus on narrow goals. Incorporating activities for families and the social environment into the school program, in addition to those geared towards students and staff safety; also make schools more socially appealing.
- **Processes in safety:** Another element that can make schools more appealing is the process used by managers to interact with the social environment and cooperate with other organizations. Processes include issues such as unity, democratic activities, cooperation efforts, guidance in ethics and human activities. More effective processes aim to develop the mutual interaction between the school, families and students. They include all procedures and plans that assist long-term and continuous family involvement.

These dimensions of invitational theory are based on four main assumptions, which give the theory its aim and direction. These assumptions are trust, respect, optimism and intentionality (Purkey and Novak, 2015).

- **Trust:** One of the main aims of invitational theory is to enable people to get to know each other better. Trust cannot be earned through single actions but a pattern of welcoming behavior. When there is a welcoming environment, each individual can do their best. Therefore, each individual deserves to be trusted as the highest authority of their own existence.
- **Respect:** The second assumption of the invitational theory is that people are talented, worthy and responsible, and that they should be treated accordingly. Sharing responsibilities with mutual respect is an indispensable component of a democratic environment. Respect may be displayed, formed and maintained through people's behaviors as well as policies, programs and processes. It may also be indicated by providing equal opportunities and equal sharing of power.
- **Optimism:** The third assumption maintains that people have endless potential in all areas of human existence. Humans are unique in that their potential does not have distinct boundaries. Being welcoming is not enough on its own; it is also necessary to be optimistic. School policies, programs, and process can be built on the premise that humans have untapped potential in all areas.
- **Intentionality:** The last assumption of the invitational theory is that development is most welcome when human potential is willfully planned through inviting people, places, policies, programs and processes. Welcoming is a willful action so as to offer something useful in the environment to fulfill human potential.

3. Concept of Safe School

Having the appropriate preventative and emergency plans in place is vital for any organisation, especially schools. These plans must also be reviewed and updated on a regular basis and should be practiced by both the educators and scholars. Improving and practicing safety drill procedures are one of the least expensive ways of

improving safety in schools. Yet, according to [Campbell \(2007\)](#) it is often a factor that is overlooked by school management.

[Stephens \(2004\)](#) states that a Safe School Plan is an ongoing, broad-based, systematic, and comprehensive process designed to create and maintain a positive and welcoming school climate, free of drugs, violence, intimidation, fear and diseases in which the successes and development of all children is nurtured. This plan is a comprehensive and joint activity that involves the entire community. [Prinsloo \(2005\)](#) opined that before a Safe School Plan can be established, a safe school team must be chosen, as they will be the driving force behind the plan. He went further to state that this team should consist of a wide variety of key individuals in the community. Some important key players include for example, educators, scholars, police officials, parents, health and welfare practitioners, business leaders, mayors and emergency response teams. The scholars should be at the heart of this process, as they will provide remarkable insight and direction to the safe school planning process ([Stephens, 2004](#)).

According to [Stephens \(2004\)](#) a comprehensive Safe School Plan should include the following components, but are not limited to them: school crime reporting and tracking; public awareness and the community's perception of violence; curriculum focusing on pro-social skills and conflict resolutions; behaviour/conduct/discipline code; supervision (formal and natural); crisis management and emergency evacuation; attendance and truancy prevention; drug prevention; interagency partnerships; staff training; cultural and social awareness; scholar leadership and involvement; parent participation; involvement of senior citizens; special event management; crime prevention through environmental design; extracurricular activities and recreation (e.g. after school sport, debating clubs, dancing, art classes and many more); restitution plan (the scholar will compensate the victim in some manner for his/her misbehaviour), nuisance abatement (correcting a situation considered to be a nuisance, health and safety threats); school/police partnership; screening and selection of staff; violence prevention; school security; community service/outreach; corporate/business partnerships; protection of assets; media and public relations; health services; transportation; legislative outreach and contact; and evaluation and monitoring.

[Philpott and Kuenstle \(2007\)](#) stated that schools need to be prepared to deal with all types of risks that a school might face. They need to be ready and able to handle all crises, large or small. Knowing how to deal with a crises situation and what to do when a crisis occurs is what is the difference between 'calm and chaos', between 'courage and fear', between 'life and death' ([Philpott and Kuenstle, 2007](#)). The best time to plan is immediately – in the present time. A school with a crisis plan in place should be prepared to review, update, and practice it ([Philpott and Kuenstle, 2007](#)). The intensity and scope of a crisis can range from incidents that directly or indirectly affect a single scholar, to ones that can impact the entire community ([Philpott and Kuenstle, 2007](#)). They can occur before, during or after schools and can be either on or off school compounds.

[Campbell \(2007\)](#) observed that fear of a school crisis occurring is best managed by education, communication and preparation, rather than through denial. Firstly, school community members need to be educated on the plans for a crisis (human or natural). They are much more likely to accept a plan if they know and understand the rationale behind it. Secondly, communication with the school community members should occur, to converse about risk reduction and enhancing safety and emergency preparedness plans. All the community members should be involved.

Lastly, schools will need to prepare for both natural disasters as well as man-made acts of crime and violence. This is achieved by taking an 'all-hazards' approach to school emergency planning. This 'all-hazards' approach should incorporate emergency plans for all natural disasters (i.e. floods, fires, earthquakes, diseases etc.) and man-made acts of crime and violence (i.e. shootings, stabbings, theft, robbery, rape). It is necessary to have a crises plan with specific procedures and strategies for each possible crisis that could occur.

According to [Hill and Hill \(1994\)](#) each school's crises plan will be different and unique. Distinct features will determine the finer points of each plan. The schools will have to take into consideration the geographical area, problematic possibilities and other unique features such as the buildings' designs, staff to student ratios, the school's resources and the threats they face. In rural areas, schools might be isolated and be situated far away from police and medical services. In urban schools on the other hand, traffic congestions around the school may cause delays in critical medical services. Crisis Response Teams (CRTs) need to be established to effectively respond during and after a crisis and to minimize any number casualties and injuries that might be sustained.

4. Safety Measures in Schools

Physical security is that part of security that one is able to see. It is implemented as a security measure in order to ensure the safety of staff, students and property. When physical security measures are implemented in the correct and effective manner, it will ensure maximum protection. However, it is important to bear in mind that physical security only forms a part of a total integrated security system and should not be used on its own. According to [Lombaard and Kole \(2008\)](#) the purposes of physical security measures are to:

- **Deter** an intruder from entering the premises. In other words to discourage them from entering and cause them to abandon (discard) their efforts to enter;
- **Detect** the attempted entry or presence if an intruder succeeds in penetrating (i.e. getting through) the physical security barrier or measure in place;
- **Limit** the harm that can be done if an intruder manages to gain entry without being detected; and
- **Detain** the intruder by using silent alarm or alerting a security patrol (to respond).

There is a wide range of physical security measures that can be put into practice. They can be divided into three categories or so-called rings of security, consisting of the outside perimeter measures, inner middle perimeter measures and the internal measures (Lombaard and Kole, 2008). The outside perimeter measures are those measures that can be found outside of the school building normally the perimeter (first line of defense) of the premises such as signs, fences and other barriers (barricades), lighting, alarms and patrols (both humans on their own or accompanied by dogs) (Lombaard and Kole, 2008).

The inner middle ring (inside) measures are the security measures used within the boundaries of the facility and can include fences and other barriers (walls), alarms, lighting (often with motion detecting capabilities), CCTV external cameras, warning signs, doors, locks, burglar proofing on windows, security staff and access control systems (Lombaard and Kole, 2008).

Lastly, there are the internal physical security measures which are the ones that can be found within buildings such as alarms, CCTV cameras, turnstiles, windows and door bars, locks, safes, vaults, protective lighting and other barriers (e.g. security gate across a passage) (Lombaard and Kole, 2008).

Security aides are additional measures that can be used to assist in protecting assets. The following are seen as security aids: security dogs (patrol dogs, guard dogs and sniffer dogs); other animals such as horses, geese and ostriches; security equipment such as batons, pepper spray, raincoats, jackets, two-way radios, torches and pocket books; and motor cars, quad bikes, electrical patrol aids and boats (Rogers, 2009).

5. Technological/electronic Measures

Security technology, as an adjunct to physical security measures, can be excellent tools and a great contribution to the safety of pupils and staff in schools and in reducing the violence in schools (Green, 1999). They have, however, to be applied correctly within the school environment and be maintained after the installment, otherwise they will not be effective.

These various technologies can assist a school by providing information that would not otherwise be available, they can free-up manpower and they can, in-the-long-run, be cost effective for a school. Nevertheless, not all school security problems can be solved merely by implementing and making use of security technologies (Green, 1999). The aim of using security technologies is to reduce the opportunities to commit crimes or violence, to increase the likelihood that someone will get caught and to be able to collect evidence of some of the acts of violence being committed, thus making it easier to prosecute (Green, 1999).

There are various security technologies that can be implemented within a school. These could include closed circuit television (CCTV) systems, including the videoing and storing of video surveillance footage whether analogue or digital; intruder alarms; metal detectors or handheld detectors; x-ray machines and/or card reader systems (Lombaard and Kole, 2008). These security measures will assist in reducing the probability of occurrence and the impact that crime and violence has on the school environment (Green, 1999).

6. Policies and Procedures for Safety

Along with the other measures of safety the policies and procedures need to be in place at a school. Policies and procedures are a vital part of a security system at any institution. It sets guidelines and provides direction as to how situations should be effectively managed and handled (Mathe, 2008). The policy clearly states what the authority of the various people are and what the limitations or restrictions of those individuals are at schools. Policies are the goals and objectives that the organisation wants to achieve and therefore assist with the decision-making Procedures are the guidelines that inform everybody how the objectives in the policy should be carried out and provide the instructions on how security activities must be conducted (Mathe, 2008). Both security policies and procedures are relatively inexpensive measures that can be used to assist with the solving and reducing of crime and violence on school premises.

Good teaching is a prerequisite to creating a safe school. Rogers and Schoeman (2010) stated that 'Good teaching will make a better, more peaceful school where learners feel that their school is worth protecting' (p. 26). Good teaching starts with good lesson preparation. A good lesson has clear aims, instructions, explanations, and a variety of tasks. It is interactive and involves learners. Good teaching can impact on the quality of student life and can help create a safe school. If classroom teaching is good, learners get interested; and when they feel they are making progress, they participate in their learning and the school has fewer discipline cases (O'Meara, 2013). Creating a safe school requires a concerted effort. The management, teachers, and learners should be open and be able to seek assistance and to participate in school activities (Bryk and Schneider, 2003).

7. Dilapidated Classrooms

School buildings are of vital significance to the teaching and learning process. A research carried out at the University of Georgia in 2000 found that physical conditions have direct positive and negative effects on teacher confidence, intelligence of personal security, feelings of efficiency in the classroom, and on the learning environment. In falling down schools' buildings, leaking roofs, over sun lights, and broken toilets are the offensive background for teaching and learning environment (Tanner, 2009).

Choi *et al.* (2013) found that appropriate classroom temperature is vital to the safety of both students and teachers. The age of the School's building also affects the performance of the teachers. The research study conducted in the US perspective found that the condition of the educational buildings hampers students' confidence and outcome, estimated that better facilities could lead to a 5.5% to 11% progress on standardized tests (Earthman and Lemasters, 2009). In another study of school building design and student learning, Duque and Weeks (2010) found that comfortable issues showed to have more effect on student confidence than did structural factors. Absence of fear was associated with schools that were air conditioned, enjoyed less external noisy environments, had less graffiti, and where classroom furniture and student lockers were in good repair. More recent reviews have consistently found relationships between building quality and outcomes (Bryk and Schneider, 2003; Duyar, 2010; Earthman, 2004).

The availability of water and sanitation facilities in schools has been shown to reduce diarrhea and hygiene related diseases amongst school children (Prüss-Üstün and Corvalán, 2006; Prüss-Üstün *et al.*, 2008). Although the importance of water and sanitary facilities for schools is acknowledged, in practice the sanitary situation in many schools is deplorable. Mahamah (2009) researching in Ghana and Moronkola (2017) researching in Nigeria affirmed that while efforts were made to provide sanitation facilities in schools it is often found that toilets and latrines are either absent or do not function properly; latrines are padlocked because children are not trusted to use them properly; International Water and Sanitation Centre in the Netherland (IRC, 2005) found that adolescents, specifically girls, do not attend school because appropriate sanitation facilities are lacking. If school sanitation and hygiene facilities are absent, or are badly maintained and used, schools can become a health hazard (Akbar, 2000). The lack of and/or poor maintenance of water and sanitation facilities in schools perpetuates the cycle of water-related illnesses and has debilitating effects on school attendance and children's potential to learn in school (Akbar, 2000).

8. Relevance of the Concept of Safe School to Health Education

Healthful school environment is concerned with the provision of an environment in the school conducive to healthy living and desirable health practices. It includes the emotional and the physical environment. The emotional environment in the school is exemplified by the type and quality of relationship existing between the students and staff. The physical environment is concerned with ensuring a clean and safe environment exemplified by the presence of water supply, refuse disposal, sewage disposal, quality of school buildings, and absence of harmful objects as well as vectors of disease agents. Effective learning can only take place in a school that provides a good standard environment. Day to day experiences in a good school environment should result in improved health knowledge, attitudes and safety practices (Higgins *et al.*, 2005).

9. Empirical Evidence

Oluremi (2015) evaluates school learning environment in Nigerian's primary schools. The study covers, classroom environment, provision of infrastructural facilities, teacher/pupils interaction in the classroom setting. Data were collected using a questionnaire tagged (CFV) 'Child friendly environment' from a population of 250 primary school teachers in Osun State in Western Nigeria and the results showed that 25% of the selected schools were not child friendly.

Alex-Hart and Akani (2011) evaluated the availability of components of a healthful school environment in public primary schools in Bonny Local Government Area of Rivers State, Southern Nigeria. Using an evaluation scale, 20 public primary schools were assessed for the availability of the various components of a healthful school environment such as water supply, toilet facilities, school structure, and sitting comfort of pupils among others. Data was analyzed using SPSS version 11.0. The result revealed that seven (35%) of the schools had water supply within their premises, five (25%) of the schools had functional toilet facilities and all the schools practiced open dumping and burning as their only method of refuse disposal. By inspection, ten (50%) of the schools had strong walls and were well roofed; one (5%) of schools had no school structure, but had a shade made up of sticks with zinc roofing sheets. The remaining schools were at various stages of disrepair. Seventeen (85%) of the schools had adequate ventilation and good lighting. Seats were available for all pupils in eleven (55%) out of 20 schools. None of the schools had a food service area, safety patrol team or fire extinguisher. The main hazards reported were presence of snakes in thirteen (65%) of the schools and flood in twelve (60%) of schools. The total scores of the individual schools ranged from 8 to 37 points. No school had up to the minimum acceptable score of 52 points. They concluded that the environments of public primary schools in Bonny Local Government lacked basic amenities of water and sanitation and are generally unsafe.

Mahamah (2009) assessed the level of environmental sanitation and disease conditions among students on the campus of the University of Ghana, Legon. It was a cross-sectional descriptive study. Data for the study was obtained using both qualitative and quantitative study techniques. Qualitative data was collected using in-depth interviews, observation and physical inspection of sanitary facilities in the residential and lecture halls and the general grounds while structured self-administered questionnaires were administered to resident students in the traditional halls. All statistical analysis was done using statistical software packages of EPI Info (version 3.3.2) and SPSS (version 16.0). The study found that sanitation in the halls had improved tremendously with the outsourcing of janitorial services to private contractors. However, environmental sanitation and waste management in the University remained poor. Accommodation and Sanitary facilities in the traditional halls were inadequate despite

expansion in toilets and washrooms. About 80 percent of disease conditions reported in the University health institutions were linked to environmental sanitation, personal hygiene and overcrowding.

Mwale (2006) examined public primary school teachers' perceptions of the factors contributing to safe school learning environments. Twenty-eight primary school teachers from one public primary school in Malawi participated in the study. Data on teachers' perceptions and behaviors were collected through a survey. Frequencies and percentages were used to analyze the survey data on teachers' perceptions. The perceptions of teachers in the survey indicated that the school environment was generally positive for teaching and learning. However, there were some elements that could adversely affect school safety. For example, there were problems in maintaining some of the school facilities.

Choi *et al.* (2013) studied the relationship between indoor environmental quality (IEQ) in a set of university classrooms and students' outcomes, i.e., satisfaction with IEQ, perceived learning, and course satisfaction. Data collected from students (N = 631) of a Midwestern university were analyzed to test a hypothesized conceptual model by conducting a path analysis. Findings suggested that IEQ of the classrooms, such as thermal conditions, indoor air quality, acoustic conditions, lighting conditions, furnishings, aesthetics, technology, and view conditions, was associated with positive student outcomes.

It is important that schools have potable water to avoid contracting water and sanitation related infections. However the majority of schools in the developing countries, especially rural ones do not have water and sanitation facilities on the school compounds culminating in school children getting infected with sanitation related diseases. In a study of the effect of hand hygiene on illness rate among students in university residence halls, Ejemot *et al.* (2008) confirmed that hand hygiene using alcohol gel sanitizer decreases the incidence of upper respiratory illness among students living in university residence halls, improve illness and absenteeism.

10. Conclusion

This paper will therefore conclude with a remark from the former president of America, President Barrack Obama which he made on the 16th of December, 2012 thus: 'This job of keeping our children safe, and teaching them well, is something we can only do together, with the help of friends and neighbors, the help of a community, and the help of a nation'. The current level of crime and violence in our schools is unacceptable. The challenges that schools face in developing and maintaining safe, positive climates for learning are complex, but schools must remain safe havens in communities for students and their families. When schools are the centers of their communities, students, parents, and entire neighborhoods benefit. Therefore all hands must be on deck to ensure that schools are sanctuaries for teaching and learning and free of crime and violence. Violence and trauma in schools and communities can affect students' overall health and well-being as well as their educational outcomes. All children should grow up free from fear and violence.

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