

Introduction

Societies around the world expect schools to prepare children for excellence, both in the workplace and as good citizens. However, with the growing threat of school violence, teachers (Bosworth, Ford, & Hernandez, 2011), school administrators (Katz, Heisterkamp, & Fleming, 2011), legislators (Elliott, 2015), and parents (Scherz & Scherz, 2014) are worried about the safety and security of children. Violence in communities and schools became increasingly alarming as incidents of deadly shootings at Columbine, Virginia Tech, and Sandy Hook have been widely reported in the news (Nickerson & Martens, 2008; Levenson & Sterling, 2018; Kaiser, 2005). Researchers studying safety and security within the school parameters have presented the complexity of the phenomenon of violence and its impact on school environment (Ozer, 2005; Soliman, 2017).

Research has indicated that in order to understand school violence and various types of risks at school, it is imperative that we should recognize the meaning and characteristics of the school environment. There are many studies that investigated the nature and factors that contribute to school violence and school safety from the perspective of teachers, administrators and social workers (Soliman, 2017); however, few studies have attempted to gain parents' perspectives on school safety and school environment (Diaz-Vicario & Sallan, 2017). The importance of learning about parents' views stems from their involvement with the issue on different levels. For example, parents worry about whether their children are free from risk, pressure or dangers in school (Jonson, 2017). Also, parents whose children experience accidental injury are exposed to mental and emotional suffering (Hall, 2007). On the school level, violent child behavior negatively influenced communication with parents and interaction with teachers (Estevez, Mustiu, & Herrero, 2005).

Since parents perceive community violence as related to school safety, it is imperative to understand and gain the parents' views and ideas on how community and schools can advance safety (Hong, Voisin, & Lee, 2018). In order for the parents to achieve such a goal, it is expected that they be active participants in school activities to help facilitate a safe school environment. This also will increase their confidence and trust in the school administrators which ultimately will help in developing and implementing plans and procedures to create a safe environment (Vanderhoven, Schellens, Valcke, & De-Koning, 2014). Recognizing the importance of engaging parents in their children's safety and the need to understand how school climate influences school safety, this study presents a serious question: what are the factors that contribute to parents' views of school safety?

Literature Review

Due to the overwhelming research and findings on school violence, safety, and environment, this literature review will be divided into three

sections with a focus on linking concepts, ideas, and issues in a coherent and meaningful way. Accordingly, the literature review will present the following aspects: school safety, school social environment, and parental involvement.

School Safety

Similar to other systems of society, educational institutions are generally vulnerable to different types of threats, risks, and hazards. Examples include violence, bomb threats, illegal drugs, property crimes, cybercrimes, and vandalism. Additional threats can be fire, accidents, disaster, gangs, terrorism, infectious disease outbreaks, and the discharge of toxic substances (Purpura, 2014). Using a meta-analysis method Hong and Espelege (2012) noted consistency in research findings on the critical impact of bullying behavior on children at school. Specifically, the study found evidence to conclude that bullying behavior within the school environment represents a major source of risk to children that can cause suicide attributed to peer victimization as well as school violence (e.g., school shooting). A longitudinal study of 434 African American 12th graders of the risks to school environments identify numerous behaviors and conditions which include social and physical disorder, substance use, high-risk sexual activity, self-reported fear, and lowered academic performance (Furr-Holden, Lee, Milam, Johnson, Lee, & Ialongo 2011). The literature has examined safety in the school environment from the physical, emotional, and social points of view. Safety is conceptualized as the feeling of protection that people experience when they are in a place that is free of danger (Hundeloh & Hess, 2003). Studying violence within middle schools and its impacts on students, Staff and Kreager (2008) found that self-reported fighting increased the chance of school dropout.

The emphasis on the role and responsibility of educational establishments in promoting and securing safe and healthy work environments has been reflected in many forms (Saint-Legerl, Young, Blanchard, & Perry, 2010). For example, all schools, regardless of the children's age categories, are required to take action to facilitate positive and secure teaching-learning experiences. This should help in protecting students and teachers from various threats and risks (Diaz-Vicario, & Sallan, 2017). On the government level, the U.S. Department of Education has initiated the Safe Schools/ Healthy Students program and the Safe and Supportive Schools Program to reduce school violence and enhance positive school climate. Bradshaw, Koth, Bevans, Lalongo, and Philip, (2008) have assessed the utilization of Positive Behavior Interventions and Supports (PBIS) in a large randomized control trial in 37 elementary schools. The findings indicated the need for organizational health changes within schools as a means to support the PBIS as a prevention program.

These programs were based on the assumption that a good school climate is a protective factor against violence and aggression within school boundaries (Bradshaw, et al. 2008; Johnson, Waasdrop, Cash, Debnam,

Milam, & Bradshaw, 2017). According to these policies, schools are expected to make deliberate efforts to improve school climate and take steps in utilizing various resources such as school climate surveys, action guides, school drills, emergency plans and training programs (Konold, Cornell, Shukla, & Huang, 2017). Modzeleski, Mathews-Younes, Arroyo, Mannix, Wells, Hill, and Murry (2012) have noted that educational institutions are required by a number of policies to show commitment to safety and the reduction of violent behavior and other forms of threats. Ruby, & Doolittle (2011) found that a lack of effective behavior management is associated with more frequent student problem behaviors. School interventions that focus on creating a climate with clear positive behavioral expectations and establishing consistent consequences for behavioral violations, like the Positive Behavioral Interventions and Supports framework (Johnson, et al., 2017; Sugai & Horner, 2006), are important for reducing violence.

On another level, the Safe and Drug-Free Schools and Communities Act supports “programs that prevent violence in and around schools, mitigates the illegal drug problem, facilitates parent and community involvement in school challenges, and appropriates funds to local schools and higher education facilities victimized by violence or traumatic incident” (Purpura, 2014, p. 13). Accordingly, school districts are encouraged to develop prevention programs that emphasize the participation of numerous stakeholders, including students, teachers, administrators, parents, public safety agencies, civic groups, and businesses (Purpura, 2014). The National Center for Education Statistics (Robers, Kemp, Truman, & Snyder, 2013) identified a host of safety and security measures for schools, which include 1) controlled access and locked doors; 2) restrictions on student access to certain websites; 3) anonymous threat reporting; and 4) drug testing for students in extracurricular activities. Although there have been policies that encourage parents’ contribution to school safety planning and implementation, a lack of commitment and funds and the absence of realistic monitoring systems make it difficult for schools to apply such measures, leaving them to face the complexity of school safety on their own (Jonson, 2017; Purpura, 2014).

School Environment and School Climate

There have been continuous efforts to develop, enhance and maintain safe school environments (UNHCR, 2007). This notion emphasizes the roles of community members including teachers, administrators and parents to communicate and collaborate in order to achieve such a goal (Conaway, 2014). Despite school administration’s focus and activities on promoting safe schools, such efforts may be undermined unless families, local groups, and organizations accept their roles, responsibilities, obligations, and duties towards safety in schools (Diaz-Vicario & Sallan, 2017; Eklund, Bosworth, & Bauman, 2015). In a

qualitative study of nine schools in Catalonia, Spain, Diaz-Vicario and Sallan (2017) have found the need to focus not only on student accidents, cases of school violence, and the risks of the teaching profession, but also to consider broader issues, such as promoting a safer and healthier school environment. The concept of safety has also been expanded, as several authors introduced socioemotional environment aspects that take place within the school environment. These aspects include a) the creation of a welcoming environment that is free of intimidation, b) the absence of violence or fear, c) the existence of an open and free climate, and d) the promotion of children's personal needs (Cornell & Sheras, 2006; Robers et al., 2013; Diaz-Vicario, & Sallan, 2017).

The relationship between school environment and school climate was documented. Ramsey, Spira, Parisi, and Robok, (2016) indicated that school climate incorporates many aspects of school environment and school life, such as a) facilities and buildings; b) students' demographics and their social characteristics; c) teachers, administrators, and staff; d) a school's policy, values, and regulations; and e) the types of interactions that take place among students, teachers, staff, and parents. Officially, the U.S. Department of Education (2013) considers school climate as "a multi-faceted concept that describes the extent to which a school community creates and maintains a safe school campus, a supportive academic situation including disciplinary, physical environment, respectful, trusting, and caring relationships throughout the school community" (p. 2).

Additionally, social climate, in particular, referred to how school environments can promote positive engagement and feelings of comfort among students (Johnson, et al., 2016). Accordingly, a positive view of the school environment can produce prosocial student behavior and reduced levels of peer aggression and misbehavior at school (Bradshaw, Waasdorp, & Johnson, 2015; Cornell & Huang, 2016). Konold, et al., (2017) indicate that positive school climate is reflected in a high disciplinary structure, supportive teacher-student relationships, and students' high academic expectations.

Parental Involvement

Parents' involvement in schools may be an indicator of a community's emphasis on education, which in turn reflects community demographics and cultural experiences. In the past, Lightfoot (2009) stated that one of the most effective ways to enhance the climate of schools is to involve parents in all levels of school life. This perspective implied that parents from all socioeconomic levels bring valuable insights and unique perspectives to schools, which serve to enhance home-school relationships, student behavior, and academic achievement. Taking a wider view, Ramsey, et al., (2016) indicate that community interest in education reflects the presence of a network of caring adults who interact regularly with students, including positive student-teacher relationships

and parental involvement. The impacts of such a network can be seen in lower levels of problem behavior and better academic performance among students (Osher, Sprague, Weissberger, Axelord, Keenan, Kendziora, Thomas, & Grimes, 2008). The importance of parents' participation in school life programs has been supported and documented in the Educational Reform under Title I program -1965. This policy encourages parents to become representatives in parent advisory councils (PAC). As the involvement in these programs grew, the focus on allocating funds to support all eligible families became obvious. However, these programs were not concerned with other issues, like school safety (Hedges, & Gibbs, 2006).

There is a body of research that emphasizes the benefits of parental involvement in schools (Seginer, 2006). McCoy, Smyth, Watson, & Damody, (2014) believe that various forms of parental involvement can all lead to the enhancement of school climate. The nature and the scope of parents' role in promoting school safety still unclear. Although parents participated in activities that involved their children, some parents wanted to assist in classrooms activities (McCoy, et al., 2014). In general, research found differences in the way students, teachers, and parents experience schools. For example, students and teachers consider school part of their daily routine; therefore, they have continuous engagement with the school environment. On the other hand, parents' experience with school tends to be intermittent and less structured. Ramsey, et al., (2016) state that parents' experiences with schools can have different forms: a) through parent-teacher conferences, b) through volunteer opportunities, or c) indirectly through their children's statements about their school and relevant behavior. When assessing differences between children's, teachers', and parents' experiences with schools, Waasdrop, Pas, O'Brennan, and Bradshaw (2011) indicate that parents' perceptions of safety was not found to be associated with student or staff perception. This may be due to the parents' limited exposure to school's events and experiences. Furthermore, studies found differences in perspectives among parents, staff, and students concerning other domains of school climate, such as academic emphasis, parental involvement, student-teacher relationships, and connectedness (Brand, Felner, Shim, Seitsinger, & Dumas, 2003).

Schools appeared to place great importance on establishing a welcoming school environment, where staff, students, and families feel welcome and like they are part of the community. Communication, dialogue, and participation are critical aspects, as they are expressed in schools' education projects and actions that foster sufficient levels of emotional and school safety (Walsh, 2000). On a different level, family contribution to school safety was also viewed through parents' participation in school committees and collective activities (Diaz-Vicario, & Sallan, 2017). Surprisingly, research about teachers' views on parental involvement has revealed reluctance on the teachers' part to involve parents in school matters. Such views stem from teachers' concerns that

parents' participation can turn into interference (Cullingford & Morrison, 2010). The assumption is that as parents become more active in schools, their presence and contribution will enhance the process and motivate children, teachers, and administrators to maintain positive environment, which will ultimately promote an effective school climate.

In summary, it was clear that school safety was a major issue that school administrators, teachers, policy makers and communities have to face and to prepare to deal with its content and consequences. While research findings highlighted the importance of parental involvement in schools, there has been a gap in establishing the linkage between parents' involvement and its effect on school safety. In order to understand what and how parents can contribute to school safety, this study is focusing on determining the factors that contribute to parents' perception and meaning of school safety, which ultimately will help cover such a gap.

The Ecological System Perspective on School safety

Our framework was based on the Bronfenbrenner (1979) ecological framework, which viewed parental involvement in three levels: microsystem, mesosystem, and macrosystem. At the microsystem level, parental involvement contains "a pattern of activities, roles, and interpersonal relations experienced by the developing person in a given face-to-face setting with particular physical and material features, and containing other persons with distinctive characteristics of temperament, personality, and systems of beliefs" (Seginer, 2006, p. 27). Additionally, parental involvement at the microsystem level contains five elements: school-focused parent-child interactions, home-based involvement, general parent-child interactions, general family relations, and parent's personal characteristics.

The mesosystem level of parental involvement includes activities that parents perform at school, which are intended to advance children's educational outcomes. These activities can include "participating in parent-teacher conferences and school meeting" (Bronfenbrenner, 1979, p. 29). According to Epstein and Sheldon (2002), parents' interactions with teachers and school staff contribute to reducing school absenteeism, higher completion of children's homework, and children having increased motivation at school. According to the ecological framework (Bronfenbrenner, 1979), parental involvement on the macrosystem level encompasses various aspects related to the community's characteristics such as: cultural and ethnic features, common belief system, social and economic resources, hazards, and lifestyle. The interrelation between school climate and parental involvement was conceptualized as a way to exchange ideas and values which ultimately would produce reciprocal impacts (Seginer, 2006).

Research on school climate has been influenced by social-cognitive theory and the ecological model, which highlights the significant transactional processes at multiple levels that influence behavior

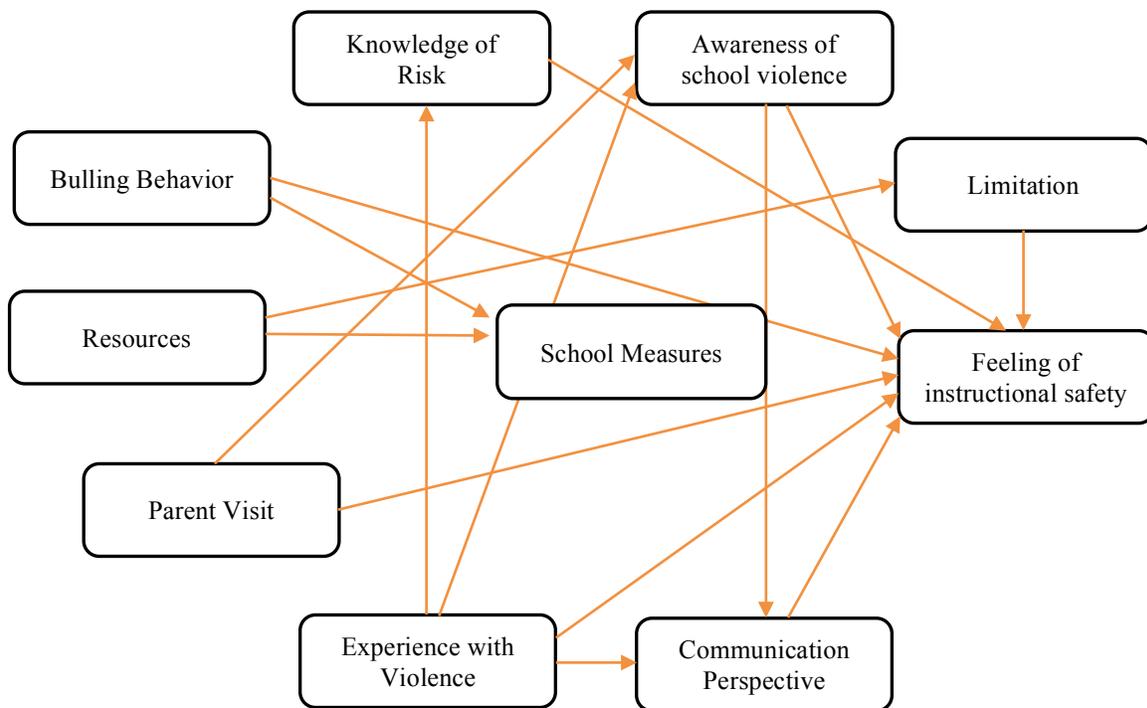
(Brookmeyer, Fanti, & Henrich, 2006; Bronfenbrenner, 1979). Additionally, social disorganization theory (Shaw & McKay, 1969) focuses attention on the influence of environmental conditions on an individual's decision to engage in crime or violence. Research using this theory has emphasized the role of structural characteristics of neighborhoods, such as low socioeconomic status, ethnic heterogeneity, and residential mobility. The disruption of any social organization like a school may lead to increases in crime and violence (Steenbeek & Hipp, 2011).

Methodology

This exploratory study utilized a survey method to test a model of factors related to parents' views on school safety. Based on the main study question a number of factors were identified based on existing empirical literature and reports on school safety and parental involvement in school life.

Study Model

Figure 1: Initial Path Model



Study Hypotheses

The initial model depicts a number of hypotheses that were drawn based on the empirical literature and the professional reports produced by educational organizations and institutions in the United States. For example, parental involvement in school life is viewed as a critical factor in insuring a level of safety that parents can perceive (Diaz-Vicario, & Sallan, 2017; Ramsey, et al., 2016). Similarly, parents who maintain open communication with schools' teachers, administrators and staff tend to have sense of confidence in the school environment and ultimately gain a sense of safety (Brand, et al., 2003). As far as risk behavior within the school such as bullying behaviors, studies have found evidence of the impact of such behaviors on the level of reactions that schools develop to control these behaviors (Hong & Espelage, 2012); however, the existence of these behaviors may influence parents' views of school safety (Demaray, Malecki, Secord, & Lyell, 2013). Furthermore, it is also expected that the availability of resources is critical for the school to develop and implement safety programs and procedures, therefore unavailability of resources may be considered an issue that increases safety limitations in schools (Usmen, Asce, Bardan, Jayyousi, 2002). With regard to parents' awareness and knowledge of school violence and experience with violence, studies found a level of influence of these factors on their feeling of safety (Al'Uqdah, Grant, Malone, McGee & Toldson, 2015).

Population and Sampling

Following the approval of IRB of the academic institution, the researchers contacted four school superintendents to acquire the approval to gain access to parents. A stratified random sample of eight schools was selected from four identified counties (Jackson, Wilmington, Franklin, and Union in the State of Illinois), as 2 schools from each county. The characteristics of the study population include one representative parent from each family regardless of age, gender or social status. Parents of children represented all school levels (elementary, middle and high schools) and resided in the four identified counties. The principal of each school selected days when parents would attend school events, such as a book fair, science fair or honor day. A convenience sample was obtained of parents who attended the event and voluntarily agreed to participate in the study. Those parents were instructed to go directly after the event to the school library to complete the survey. Participating parents completed and signed a written consent in order to be part of the study. No rewards or incentives were offered and confidentiality of responses was assured. A total of 402 parents participated in the study through the spring of 2016.

Participating parents consisted of 79 males (19.7%) and 315 females (87.4%), with only 8 missing information (2.0%). In terms of parents' ages, the mean was 38.48, with an SD 9.39. Variation in social status among parents by gender is as follows: single (female 67, 21.5% and male 8, 10.4%); married (female 203, 65.1%, and male 59, 22.5%); separated (female 8, 2.6%) and male 2, 2.6%); divorced (female 29, 9.3% and male 7, 9.1%), and widowed: (female 4, 1.3%, and male 1, 1.3%). Parents who live in rented apartment/homes numbered 133 (33.1%), and parents who own homes numbered 255 (63.4%). The average number of children for a participating family is 2.21, with a standard deviation of 1.1. Finally, in terms of income, there is a great deal of missing information, as 106 parents decided not to declare their family income; however, the average income of the other 296 parents showed an average annual income of \$17,920, with a standard deviation of \$3,062.19.

The Study Instrument

The instrument consisted of 10 variables represented in 84 items. The identification and the operationalization of the study's variables was based on existing studies and literature. There are five subscales that were adopted and modified to fit in the study instrument. These subscales include school environment and climate (National School Climate Center, 2015), school safety (Sprague, Smith, & Stieber, 2002), parental perception (National School Climate Center, 2008), bullying behavior (Comell, & Bandyopadhyay, 2010), and school resources and measures (U.S. Department of Education, 2007 & 2013). Five composite subscales were developed based on the study conceptual definitions: 1) feeling of instructional safety, 2) awareness of school violence, 3) parental experience with violence 4) communicating perspective and 5) perception of risk. The instrument was pre-tested on a convenience sample of 40 parents and some items were modified before the instrument was submitted for approval from the IRB.

The following variables were defined as follows:

1. *Feeling of Instructional Safety (INSTRSAF)*: This was a summated scale constructed from six items. These were Likert scale items that had to do with parents' general sense of their children's safety when within the instructional climate created by their children's teachers and, more generally, at the school. A five-option response scale for each item ranged from strongly disagree to strongly agree. The six items formed an internally consistent scale, Cronbach's alpha = .814, in which high total scores indicated that parents felt their children were safe and the instructional climate was good.

2. *Awareness of Bullying Behavior (AWARBUL)*: This was a single item, which read, "Some children act aggressively (bully) toward other children." This item had a five-option response scale that ranged from strongly disagree to strongly agree, in which high scores indicated that parents were aware of bullying in their children's schools. Parents' responses to this item appeared to have been influenced by school bullying awareness campaigns that took place over the years prior to data collection.

3. *Awareness of School Violence (SCHVIOL)*: This was a composite variable constructed from two items. These were Likert scale items that had to do with parents' awareness of violence at school, such as students bringing weapons to school or their children being attacked at school. A five-option response scale for both items ranged from strongly disagree to strongly agree. These items were summed to form a composite, in which higher values indicated greater awareness of school violence.

4. *Parent Visits School (VISIT)*: This was a single item, which read, "I visit my child's school often." This item had a five-option response scale that ranged from strongly disagree to strongly agree, in which high scores indicated that parents visited their children's school frequently.

5. *Communicating Perspective (COMPERSP)*: This was a composite variable constructed from four items. These were dichotomous items, having to do with whether the parent engaged in communication about violence with his or her children from various perspectives, such as the parent's perspective, child's perspective, and the media's perspective. These items were summed to form a composite, in which higher values indicated that more perspectives were included when communicating about violence.

6. *Experience with Violence (EXPVIOL)*: This was a composite variable constructed from two items. These were dichotomous items that had to do with whether the parent had been victimized or witnessed someone else being victimized. These items were summed to form a composite, in which higher values indicated that the parent had greater personal experience with violence.

7. *Knowledge of Risk (KNOWRISK)*: This was a composite variable constructed from three items. These were dichotomous items that had to do with whether the parent was aware of violence among friends, neighbors, and the community. These items were

summed to form a composite, in which higher values indicated that the parent had greater awareness of violence in the local community.

8. *Resources (RESOUR)*: This was a summated scale constructed from seven items. These were dichotomous items that had to do with whether the school provided various types of violence prevention training to school staff. The seven items formed an internally consistent scale, Cronbach's alpha = .915, in which high total scores indicated that parents were more aware of school training that covered various types of violence prevention.

9. *Schools' Measures (SCHMEAS)*: This was a summated scale constructed from 22 items. These were dichotomous items that had to do with whether the school applied safety practices, had plans for crises, had preventative programs, and involved parents. The 22 items formed an internally consistent scale, Cronbach's alpha = .849, in which high total scores indicated that the parents were more aware that the school applied various safety measures.

10. *Limitations (LIMITAT)*: This was a summated scale constructed from eight items. These were three-option items that had to do with the extent to which various factors limited the school's efforts to reduce or prevent crime. Each item had three response options: limits in a major way, limits in a minor way, and does not limit. The eight items formed an internally consistent scale, Cronbach's alpha = .907, in which high total scores indicated that parents felt that a large number of factors placed a greater limitation on the school's efforts to reduce or prevent crime.

Data Analysis

Several statistical techniques were used in this study, ranging from descriptive statistics to path analysis. Factor analysis was used to reduce dimensionality, and Cronbach's alpha was used to assess internal consistency. Path analysis was used to test the study model and assess the hypothesized relations among the study variables and especially their relations with feelings of instructional safety. Maximum likelihood estimation in Mplus Version 5.1 (Muthén & Muthén, 2009) was used to estimate the parameters in the path analysis model. The model chi-square, RMSEA (Steiger, 2016; see also Browne & Cudeck, 1993; Hu & Bentler, 1999), SRMR, and CFI were used to assess the fit of the model.

Results

Correlation values and descriptive statistics for the variables can be found in Table 1. Path models were used to investigate the study

hypotheses elaborated in the method section. Figure 1 shows the initial path model that was fit to the data. Upon examination of standardized residuals and modification indexes with attention given to appropriate theory, four more models were sequentially fit to the data. Each model added a new path. In Model 2 a correlation between LIMITAT and COMPERSP was added to the model because both variables have to do with awareness of violence and concern about prevention, but there is no reason to believe that one precedes or leads to the other. This missing connection contributed the greatest amount of model misfit, and adding just this single parameter resulted in both the RMSEA and the SRMR meeting Hu and Bentler's (1999) criteria. In Model 3 a direct effect of SCHMEAS on INSTSAF was added to the model because involvement of parents in school violence prevention activities may either help to reassure parents that their children are safe in school or, alternately, make them more aware of the potential for harm in school.

Table 1: Correlation Matrix with Means and Standard Deviations for Ten Variables

Variable	1	2	3	4	5	6	7	8	9	10
1 INSTRSAF	1									
2 AWARBUL	-0.086	1								
3 SCHVIOL	-.106*	-0.012	1							
4 VISIT	.224**	0.048	.109*	1						
5 COMPERSP	0.092	-0.099	-0.065	-0.015	1					
6 EXPVIOL	0.054	-0.001	-.154**	0.081	.121*	1				
7 KNOWRISK	.116*	0.011	-0.058	0.048	.151**	.331**	1			
8 SCHMEAS	-.250**	.192**	-0.096	-.168**	.173**	0.047	0.027	1		
9 RESOURCE	-.291**	0.100	0.014	-0.095	0.112	-0.054	-0.025	.603**	1	
10 LIMITAT	.218**	-.124*	-0.074	0.026	.133*	0.060	0.100	0.026	-0.074	1
M	11.0939	2.5567	6.7190	2.3048	3.3429	0.7700	0.8797	13.2634	6.0443	15.3822
SD	3.23449	1.10779	2.11941	0.97198	0.95031	0.81471	0.98764	3.20198	1.95265	4.87025

Adding this direct effect brought the ratio of the model chi-square to the degrees of freedom to less than three, indicating a more respectable fit. In Model 4 a direct effect of LIMITAT on SCHMEAS was added to the model because it is the limitations that are thought to keep the school from implementing the safety measures. This modification again brought substantial improvement, including CFI = .90. In Model 5 a correlation between COMPERSP and SCHMEAS was added to the model because the School Measures scale included items that had to do with helping parents to take action to prevent violence, and the Communicating

Perspective items had to do with parents taking preventative measures with their children at home. This modification brought the CFI value up to .918, in addition to respectable values for the other fit statistics. Following these four model modifications there were no other statistically significant changes that made theoretical sense.

As can be seen in Table 2, each change substantially improved the fit of the model. It should be noted that employing these model modifications made the nature of this analysis strictly exploratory. The final model is shown in Figure 2. The final model fit was acceptable, $\chi^2(20) = 45.107$, RMSEA = .056, 90% CI[.034,.078], SRMR = .044, CFI = .918. However, due to the likelihood of the four model modifications capitalizing on chance relations in the sample, the model fit cannot truly be assessed without cross-validation with a new sample. Parameter estimates for the final model are shown in Table 3. These results for the parameter estimates for the final model will be explained and discussed in the next section along with their implications.

Table 2: Fit Statistics for Five Models

Model	Chi-square (df)	Difference chi-square (df)
Original model	96.848 (24)	--
Adding LIMITAT \leftrightarrow COMPERSP	77.865 (23)	18.983 (1)
Adding SCHMEAS \rightarrow INSTRSAF	65.425 (22)	12.440 (1)
Adding LIMITAT \rightarrow SCHMEAS	50.094 (21)	15.331 (1)
Adding COMPERSP \leftrightarrow SCHMEAS	45.107 (20)	4.987 (1)

Table 3: Parameter Estimates for the Final Model

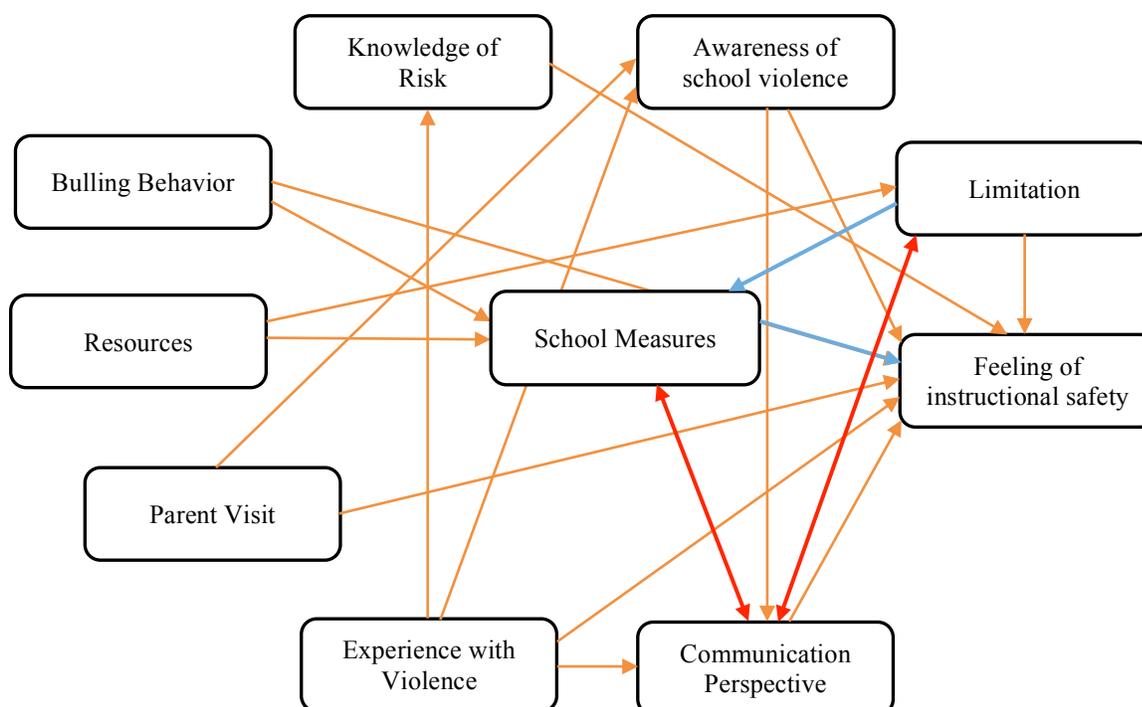
Parameter	Estimate	Standard Error	p
AWARBUL \rightarrow INSTRSAF	-0.160	0.149	0.281
SCHVIOL \rightarrow INSTRSAF	-0.086	0.075	0.250
VISIT \rightarrow INSTRSAF	0.634	0.170	0.000
COMPERSP \rightarrow INSTRSAF	0.175	0.151	0.246
EXPVIOL \rightarrow INSTRSAF	-0.054	0.224	0.811
KNOWRISK \rightarrow INSTRSAF	0.251	0.182	0.169
LIMITAT \rightarrow INSTRSAF	0.075	0.024	0.001
SCHMEAS \rightarrow INSTRSAF	-0.103	0.026	0.000
RESOURCE \rightarrow LIMITAT	0.404	0.114	0.000
VISIT \rightarrow SCHVIOL	0.266	0.112	0.018
EXPVIOL \rightarrow SCHVIOL	-0.378	0.138	0.006
SCHVIOL \rightarrow COMPERSP	0.009	0.025	0.725
EXPVIOL \rightarrow COMPERSP	0.200	0.070	0.004
AWARBUL \rightarrow SCHMEAS	0.172	0.255	0.499
RESOURCE \rightarrow SCHMEAS	1.019	0.091	0.000

LIMITAT → SCHMEAS	0.153	0.039	0.000
EXPVIOL → KNOWRISK	0.399	0.057	0.000
EXPVIOL ↔ VISIT	0.067	0.041	0.099
EXPVIOL ↔ AWARDUL	0.001	0.046	0.985
EXPVIOL ↔ RESOURCE	-0.276	0.133	0.038
VISIT ↔ AWARDUL	0.039	0.057	0.489
VISIT ↔ RESOURCE	-0.147	0.162	0.363
AWARBUL ↔ RESOURCE	0.369	0.185	0.046
COMPERSP ↔ LIMITAT	1.914	0.456	0.000
COMPERSP ↔ SCHMEAS	0.736	0.332	0.027
Residual variance(INSTRSAF)	11.290	0.796	0.000
Residual variance(SCHVIOL)	5.023	0.354	0.000
Residual variance(COMPERSP)	1.348	0.095	0.000
Residual variance(KNOWRISK)	0.866	0.061	0.000
Residual variance(SCHMEAS)	33.555	2.367	0.000
Residual variance(LIMITAT)	56.607	3.996	0.000

Discussion

This study presented a number of critical findings that relate to parents' views of school safety. Figure 2 summarizes the relations that were part of the study analyses.

Figure 2: Final Fitted Model



These findings can be summarized in the following topics:

The Parent's Role

As respondents in this study, the parents' own reported experience with violence was related to their reported awareness of violence in the local community and the variety of perspectives that they reported when communicating about violence with their children. Estevez et al. (2005) have emphasized the influence of parent communication with children and teachers on important adjustment with violence. Additionally, the results of this study are supported by Brand, et al.'s (2013) findings on the significance of parents' interaction with school staff and school administration in promoting safety in the schools. Parents' experience with violence had statistically significant direct effects on both their knowledge of risk, and their communicating perspective. The greater the parents' experience with violence, the greater their knowledge of risk, and their communicating perspective, while controlling for the effect of their awareness of school violence. These results match with other studies that expected that parents' knowledge of risk should generate a positive role for parents to train children to socialize with other children without being victimized (Omoyemiju, Ojo, & Olatomide, 2015).

Parental Awareness and Engagement and Violence at School

This study has presented new ideas to the literature which show that parents' visits to school has a direct impact on their experience with school violence. This argument was presented in the literature as schools where parents participate in volunteering activities showed lower level of school violence (Leneskie, & Block 2017). In particular, this study find that the more frequently the parent visits school, the greater the parents' reported awareness of school violence, while controlling for their experience with violence in general. Furthermore the study findings show that the greater the parents' experience with violence, the less the parents' awareness of school violence, controlling for how frequently the parent visits school. Although this latter result seems counterintuitive, it is possible that parents who have less experience with violence are more likely to exaggerate claims of violence in their children's school.

Perceptions of School Violence Prevention

The parents' perceptions of the school's limitations, resources, and preventative measures related to violence were closely associated with one

another. The school training resources had a direct, statistically significant effect on school prevention limitations. This actually was reflected in the literature in a number of studies that evaluated the impact of reduced and diminished resources on validity and the impact of school safety programs (Astor, Meyer, Benbenishty, Marachi, & Rosemond, 2005). Specifically, the findings of this study have shown direct effects of school training resources and school prevention limitations on the perceived schools' prevention measures, controlling for the parents' awareness of violent school behavior (i.e., bullying behavior).

Both variables measure parents' awareness of what is happening in their children's school, which means that parents who are more aware of those factors that limit a school's preventative measures may also be more aware of the preventative measures that are happening in the school. The findings also indicate a relationship between parents' perception of school training resources and parents' perception of schools measures. The literature was unclear about parents' views of the internal aspects of school life (Ramsey, et al., 2016). In this context, this study has found that the three different measures of the parents' perceptions of the internal institutional workings of the school may reflect parents' general awareness of what happens in their children's school.

Influences on Perceived Instructional Safety

Although these findings seem to follow existing research on parents' views of school safety (McCoy, et al., 2014), the study findings seem to add new dimensions and important factors related to parents' perception of safety. For example, the results of the study identified three variables -- parent visits school, parents' perception of school prevention limitations, and parents' perception of prevention schools measures -- that have significant direct effects on the parents' feeling of instructional safety. This means the more frequently the parent visits school, the greater the parents' feeling of instructional safety, when we control for the impact of 1) parents' awareness of bullying behavior, 2) awareness of school violence, 3) communicating perspective, 4) experience with violence, 5) knowledge of risk, 6) perceived school prevention limitations, and 7) perception of prevention schools' measures. Similarly, the greater the perceived school prevention limitations, the greater the parents' feeling of instructional safety, controlling for awareness of bullying behavior, awareness of school violence, parent visits school, and communicating perspective.

This result may seem counterintuitive, but it has already been observed, from other results, that the measure of perceived school prevention limitation may be more a measure of the parents' awareness of the institutional workings of the school than a measure of limitations of the

school. Thus, as the literature indicates (Hall, 2016), parents who are more familiar with the workings of the school may be more likely to feel that their children are safe there. Finally, the results of this study emphasize that the greater parents' perception of prevention schools measures, the less their feeling of instructional safety. It is possible that after controlling for other measures of the parents' awareness of the institutional workings of the school, the parents' knowledge that the school has taken preventative measures heightens their awareness of ways in which their children may be vulnerable at school.

Limitations

The use of a convenience sampling technique may have influenced the characteristics of the study population, with self-selection based on parents' desire to participate in a study on a very sensitive topic, such as school violence. Random sampling could have helped in advancing the generalizability of the study findings. Additionally, all variables are as reported by the parents. Thus, the effects of variables related to actions taken by school personnel should not be considered effects of the actions themselves, but rather of parents' perception. It is possible that all of the schools in the study took certain measures, of which only a portion of the parents sampled are aware. Additionally, due to the model modifications that were employed, the final model presented should be considered the result of exploratory analysis. Cross-validation of this model, with a new sample, is needed.

Implications and New Directions

Considering the critical issue of school safety within the context of the community and school environment, this study presents valid directions for research on the topic of school safety. The most recent studies on school safety phenomenon have recommended the use of the evidence-based approach to help understand the complexity, and the linkages between school safety, school violence and school environment. In particular, this study assumes that parents who are the legal guardian of school children have been searching for a role that helps the school promote safety and quality life for their children. However, the various models that have been tried were not based on science or empirical research findings, which tend to diminish their impact and value (Bradshaw, et al. 2008). Based on the findings of this study, it is important to establish agreement and consistency of the meaning of school safety and identify the factors that promote an unhealthy school environment. Therefore, using a comprehensive approach to study such a phenomenon should consider cultural, demographic and historical facts regarding the community. Accordingly, any solution should also consider the parents' views and perception toward school safety. In other words, new research

on the area of school safety should be utilizing not only state of the art methodology and appropriate theories, but also should be open to input from various stakeholders and interested individuals in the topic.

Based on the system and ecological perspectives, the school should be viewed as a unit that has valid interactions with numerous stakeholders and institutions. In other words, when developing safety programs, the need to identify resources and gain contribution (input) from many experts and expertise within the school (internal) and from the larger community (external) is an essential requirement. On the macro level, the school needs to seek funds and experiences from specific institutions to solidify its safety programs. This may require going beyond the written documents and policies that the school receives from different levels of authority to utilize creative safety programs that fit with the nature of the school, the socioeconomic characteristics and the culture of the community from which the teachers, the students and the parents are coming. In particular, parents can play a significant role in promoting safety. However, they have to be prepared and educated in order to understand safety programs. By enhancing the understanding of safety and what it means to the school and its constituencies, there will be meaningful dialogue on how safety programs can be developed and implemented and who should be responsible for what parts of the safety plans and activities.

References

- *Al'Uqdah, S. N., Grant, S., Malone, C. M., McGee, T., & Toldson, I. A. (2015). Impacts of community violence on parenting behaviors and children's outcomes. *Journal of Negro Education*, 84(3), 428-441. DOI: 10.7709/inegroeducation.84.3.0428.
- *Astor, R. A., Meyer, H. A., Benbenishty, R., Marachi, R., & Rosemond, M. (2005). School safety interventions: Best practices and programs. *Children & Schools*, 27(1), 17-32. DOI: 10.1093/cs/27.1.17.
- *Bosworth, K., Ford, L., & Hernandez, D. (2011). School climate factors contributing to student and faculty perceptions of safety in select Arizona schools. *Journal of School Health*, 81(4), 194-201. DOI: 10.1111/j.1746-1561.2010.00579x.
- *Bradshaw, C. P., Waasdorp, T. E., & Johnson, S. L. (2015). Overlapping verbal, relational, physical and electronic forms of bullying in adolescence: Influence of school context. *Journal of Child & Adolescent Psychology*, 44, 494-508.
- *Bradshaw, C. P., Koth, C. P., Bevans, C. W., Lalongo, K. B., & Philip, J. (2008). The impact of school-wide positive behavioral interventions and supports (PBIS) on the organizational health of elementary schools. *School Psychology Quarterly*, 23(4), 462-473.
- *Brand, S., Felner, R., Shim, M., Seitsinger, A., Dumas, T. (2003). Idle school improvement and reform: Development and validation of a school-level assessment of climate, cultural pluralism and school safety. *Journal of Educational Psychology*, 95, 570-588. DOI:10.1037/0022-0663.95.3.570.
- *Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.
- *Brookmeyer, K. A., Fant, K. A., & Henrich, C. C. (2006). Schools, parents, and youth violence: A multilevel, ecological analysis. *Journal of Clinical Child and Adolescent Psychology*, 35, 504-514.
- *Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 136-162). Newbury Park, CA: Sage.
- *Comell, D. G., & Bandyopadhyay, S. (2010). The assessment of bullying. In S. R. Jimerson, S.M. Swearer & D.L. Espelage (Eds.).

Handbook of bullying in schools: An International Perspective (pp. 265-276). New York: Routledge, Taylor & Francis.

*Conaway, J. (2014). Public and school safety: Risk assessment, perceptions, and management strategies. Nova Science Publishers, New York.

*Cornell, D., & Huang, F. (2016). Authoritative school climate and high school student risk behavior: A cross-sectional multi-level analysis of student self-reports. *Journal of Youth and Adolescence*. DOI: 10.1007/s10964-016-0424-3.

*Cornell, D., Sheras, P. (2006). Guidelines for responding to students' threat of violence. Longman, CO: Sopris West.

*Cullingford, C., & Morrison, M. (2010) Relationships between parents and schools: A case study. *Educational Review*, 51(3), 253-262. DOI: 10.1080/00131919997498.

*Demaray, M. K., Malecki, C. K., Secord, S. M., & Lyell, K. M. (2013). Agreement among students', teachers', and parents' perceptions of victimization by bullying. *Children and Youth Services Review*, 35(12), 2091-2100. DOI: 10.1016/j.childyouth.2013,10,018

*Diaz-Vicario, A., & Sallan, J. G. (2017). A comprehensive approach to managing school safety: case studies in Catalonia, Spain, *Education Research*, 59(1), 89-106. DOI: 10.1080/00131881.2016.1272430.

*Elliott, R. (2015). The real school safety debate: Why legislative responses should focus on schools and not on guns. *Arizona Law Review*, 57(2), 523- 550.

*Eklund, K., Bosworth, K., & Bauman, S. (2015). Promoting safe schools for all students. In *Prevention Science in School Settings*, edited by Kris Bosworth, 307-333. New York: Springer.

*Epstein, J. L., & Sheldon, S. B. (2002). Present and accounted for: Improving student attendance through family and community involvement. *The Journal of Educational Research*, 95(5), 308-318. DOI: 10.1080/00220670209596604.

*Estevez, E., Mustiu, G., & Herrero, J. (2005). The influence of violent behavior and victimization at school on victimization at school on psychological distress: The role of parents and teachers. *Adolescence*, 40(157), 183-196.

- *Furr-Holden, C. D. M., Lee, M. H., Milam, A. J., Johnson, R. M., Lee, K. S., Ialongo, N. S. (2011). The growth of neighborhood disorder and marijuana use among urban adolescents: A case for policy and environmental interventions. *Journal of Studies on Alcohol and Drugs*, 72, 371-379.
- *Hall, E. M. (2007). Posttraumatic stress symptoms in parents of children with injuries. *Dissertation Abstract International: Section B: The Science and Engineering*, 67(9-B) pp. 5402
- *Hall, R. A. (2016). A case study: Feeling safe and comfortable at school. *Journal of Leadership and Instructions*, 15(2), 28-31.
- *Hedges, H., & Gibbs, C. (2006). Preparation for Teacher-Parent Partnerships: A Practical Experience With a Family, *Journal of Early Childhood Teacher Education*, 26:2, 115-126, DOI: 10.1080/10901020590955770.
- *Hong, J. S., & Espelage, D. L. (2012). A review of research on bullying and peer victimization in school: An ecological system analysis. *Aggression and Violent Behavior*, 17(4), 311-322. DOI: 10.1016/j.avb.2012.03.003
- *Hong, J. S., Voisin, D. R., & Lee, J. (2018). Urban African American youth and their caregivers; perceptions of school safety in Chicago. *Youth Violence and Juvenile Justice*, 16(2), 174-189.
- *Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A multidisciplinary Journal*, 6, 1-55.
- *Hundeloh, H., & Hess, B. (2003). Promoting safety: A component in health promotion in primary and secondary schools. *Injury Control and Safety Promotion*, 10(3), 165-171.
- *Johnson, S. L., Waasdrop, T. E., Cash, A. H., Debnam, K. J., Milam, A. J., M. & Bradshaw, B. (2017). Assessing the association between observed school disorganization and school violence: Implications for school climate interventions. *Psychology of Violence*, 7(2), 181-191.
- *Jonson, C. L. (2017). Preventing Journal of evidence-based research, policy and practice. *An International Journal of Evidence-based Research, policy and Practice*, 12(6), 956-973. DOI: 10.1080/15564886.2017.1307293.

- *Kaiser, D. (2005). School shootings, high school size, and neurobiological considerations. *Journal of Neurotherapy*, 9(3), 101-115.
- *Katz, J.; Heisterkamp, P.H.; & Fleming, W.M. (2011). The social justice roots of the mentors in violence prevention model and its application in a high school setting. *Violence Against Women*, 17(6), 684-702.
- *Konold, T R., Cornell, D., Shukla, K., & Huang, F. (2017). Racial/Ethnic differences in perceptions of school climate and its association with student and peer aggression. *Journal of Youth Adolescence*, 46:1289-1303.
- *Leneskie, E., & Block, S. (2017). School violence: The role of parental and community involvement. *Journal of School Violence*, 16(4), 426-444. DOI: 10.1080/15388220.2016.1168744.
- *Levenson, E., & Sterling, J. (2018). These are the victims of the Florida school shooting, CNN (February, 2018). Edition.cnn.com/2018/02/15/US/Florida-Shooting-victims-school/index.html.
- *Lightfoot, S. L. (2009). Toward conflict and resolution: Relationships between families and schools, *Theory Into Practice*, 20(2), 97-104, DOI: 10.1080/00405848109542936.
- *McCoy, S., Smyth, E., Watson, D., & Damody, M. (2014). Leaving school in Ireland: A longitudinal study of post-school transitions. The Economic and Social Research Institute, Dublin, Ireland.
- *Modzeleski, W., Mathews-Younes, A., Arroyo, C. G., Mannix, D., Wells, M. E., Hill, G., Yu, P., & Murry, S. (2012). An introduction to the safe schools/healthy students initiative. *Evaluation and Program Planning*, 35 (2): 269-272.
- *Muthén, L. K., & Muthén, B. O. (1998-2009). *Mplus User's Guide*. Fifth Edition. Los Angeles, CA: Muthén & Muthén.
- *National School Climate Center (2015) School Climate. Retrieved from: www.schoolclimate.org/climate/13/7/2015.
- *National School Climate Center (2008) Parent/Guardian Survey. Retrieved from: www.schoolclimate.org/themes/school-climate/assets/pdf/measuring-school-climate-csci/CSCiV4-2-sample-parent.pdf.
- *Nickerson, A.B.; & Martens, M.P. (2008). School violence: Associations with control, security/enforcement, educational/therapeutic approaches, and demographic factors. *School Psychiatry Review*, 37(2), 228-243.

- *Omoyemiju, M. A., Ojo, O. O & Olatomide, O. O. (2015). Parents and teachers' knowledge of violent disciplinary practices against school students in Oyo State, Nigeria. *British Journal of Guidance and Counselling*, 43(5), 530-545. DOI: 10.1080/03069885.2014.939943.
- *Osher, D., Sprague, J., Weissberg, R. P., Axelrod, J., Keenan, S., Kendziora, K., Thomas, A., Grimes, J. A. (2008). *Comprehensive approach to promoting social, emotional, and academic growth in contemporary schools Best practices in school psychology*, Bethesda, MD National Association of School Psychologists 12631278.
- *Ozer, E. J. (2005). The impact of violence on Urban adolescents: Longitudinal effects of perceived school connection and family support. *Journal of Adolescent Research*, 20(2), 167-192. DOI: 10.1177/0743558404273072.
- *Purpura, P. (2014). Threats and Hazards at Educational Institutions (pp. 11-18), In Fennelly, L. J. & Marianna, A. Perry (edit), *The Handbook for School Safety and Security: Best Practices and Procedures*. Butterworth Heinemann, Boston, USA.
- *Ramsey, C.M., Spira, A.P., Parisi, J.M., & Rebok, G.W. (2016). School climate: Perceptual differences between students, parents and school staff. *School Effectiveness and School Improvement: An International Journal of Research Policy and Practice*, 27, (4), 629-641. DOI: 10.1080/09243.2016.1199436.
- *Robers, S., Kemp, J., Truman, J., Snyder, T. (2013), *Indicator of school crime and safety: Washington, D.C.: U.S. Department of Education and Bureau of Justice Statistics*.
- *Ruby, A., & Doolittle, E. (2011). *Efficacy of School wide Programs to Promote Social and Character Development and Reduce Problem Behavior in Elementary School Children*. Report from the Social and Character Development Research Program. NCER 2011-2001. National Research for Education Research, U.S. Department of Education, Washington, D.C.
<https://files.eric.ed.gov/fulltext/ED512329.pdf>.
- *Saint Leger, L., Young, I., Blanchard, C., & Perry, M. (2010). *Promoting health in schools: From evidence to action*. Saint-Denis: International Union for Health Promotion and Education [IUHPE].

*Scherz, J.M., & Scherz, D. (2014). Catastrophic School Violence: A new Approach to prevention. Rouman & Littlefield Publishers Inc., Maryland, USA.

*Seginer, R. (2006). Parents' Educational Involvement: A Developmental Ecology Perspective, *Parenting*, 6(1), 1-48, DOI: 10.1207/s15327922par0601_1.

*Shaw, C. R., & McKay, H. D. (1969). Juvenile delinquency and urban areas. Chicago, IL: University of Chicago Press.

*Soliman, H.H. (2017). School social workers' perception of school climate: An ecological system perspective. *International Journal of School Social Work*, 2(1), 1-26. DOI:10.4148/2161-4148.1017.

*Sprague, J. R., Smith, S. G. & Stieber, S. (2002). Principle perception of school safety. *Journal of School Violence*, 1(4), 51-64.

*Staff, J., Kreager, D. A. (2008). Too cool for school? Violence. Peer status and high school dropout. *Social Forces*, 87(1), 445-471, DOI: 10.1353/sof.0.0068

*Steenbeek, W., & Hipp, J. R. (2011). A longitudinal test of social disorganization theory: Feedback effects of cohesion, social control, and disorder. *Criminology*, 49, 833-871.

*Steiger, J. H. (2016). Notes on the Steiger-Lind (1980) handout. *Structural Equation Modeling: A Multidisciplinary Journal*, 23, 777-781, DOI:10.1080/10705511.2016.121748.

*Sugai, G., & Horner, R. R. (2006). A promising approach for expanding and sustaining school-wide positive behavior support. *School Psychology Review*, 35, 245-259.

U.S. Department of Education (2013). Directory of federal school climate and discipline resources, Washington, DC. Retrieved from https://safesupportivelearning.ed.gov/sites/default/files/3_Appendix%201_Directory%20of%20Federal%20School%20Climate%20and%20Discipline%20Resources.pdf.

*U.S Department of Education (2007). ED School Climate Surveys. Emergency and Management. Retrieved from: <http://safesupportivelearning.edu.gov/edscls/measures>.

*UNHCR. (2007). Safe school and learning environment. Technical Support Section, Division of Operational Services, UNHCR, Geneva.

*Usmen, M. A., Asce, M., Bardan, S., & Jayyousi, P.E. (2002). Safety program guidelines for public school facility constructions. *Practical Periodical on Structural Design and Construction*, 7(2), 74-80. DOI: 10.10.61(ASCE)1084-0680

*Vanderhoven, E., Schellens, T., Valcke, M., & De-Koning, E. (2014). Involving parents in school programs about safety on social network sites. *Social & Behavioral Sciences*, 112: 428-436.

*Waasdorp, T. E., Pas, E. T., O'Brennan, L. M. & Bradshaw. C. P. (2011). A Multilevel Perspective on the Climate of Bullying: Discrepancies Among Students, School Staff, and Parents, *Journal of School Violence*, 10:2, 115-132, DOI: 10.1080/15388220.2010.539164.

*Walsh, D. (2000). Testimony submitted to the United States Senate Committee on Commerce, Science, and Transportation. Hearing on the impact of interactive violence on children. Available at: <http://www.senate.gov/Bcommerce/hearings/0321wall.pdf>.

