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ABSTRACT

To understand the effects of school safety practices and strategies on the school environment, researchers have consistently investigated the perceptions of students and various school personnel concerning school safety. Yet school social workers, professionals commonly employed in today's schools to address the mental health needs of students, are often left out of the school safety discussion. Data were collected from 229 school social workers across the United States to examine: (a) school social workers' perceptions regarding the effectiveness of various school safety strategies; (b) differences in these perceptions based on student- and school-level variables; and (c) comments from participants regarding school safety in U.S. schools. The purpose of this article is to provide timely implications concerning school safety from a unique and unstudied perspective.

Increased media attention to school violence and student maladaptive behavior has resulted in the widespread implementation of school safety strategies in United States schools. Many of these strategies can have significant effects on students and school personnel; however, school social workers, professionals commonly employed in today's schools to address the mental health needs of students, are often left out of the school safety discussion. The purpose of this article is to contribute to the school safety literature by examining school social workers' perceptions towards school safety strategies used in U.S. schools and provide timely implications for school administrators and other professionals across the country.

The school social worker

School social workers provide several student- and system-focused interventions designed to address the needs of their students using a person-in-environment perspective (Franklin, Kim, & Tripodi, 2009; Frey et al., 2013). They are a critical component to the relationship between school, home, and community, often working directly with school personnel, parents and families, and community stakeholders (NASW, 2012; School Social Work Association of America [SSWAA], 2013). School social workers play a unique and important role as school personnel in that they can identify elements of the school environment that impede student success, advocate for the disadvantaged, and promote student achievement through their service delivery and coordination. Today, school social workers are among the leading mental health care providers for youth in United States schools

(Kelly et al., 2010a). Therefore, they have a vested interest in the policies and practices that shape their schools, such as those introduced through school safety initiatives.

School safety today

In recent years, researchers and the media at large have paid closer attention to violence and maladaptive student behaviors within U.S. schools. This increased attention is in part attributed to perceived increases in incidents of school violence and severe student disobedience. Researchers have indicated that severe misbehavior negatively impacts the well-being of students who display maladaptive behavior as well as student bystanders (Loukas, 2007). Maladaptive student behaviors also affect attendance rates, graduation rates, overall academic outcomes, and the perception of safety by students, staff, parents, and community (Loukas, 2007; Milam, Furr-Holden, & Leaf, 2010; Patton, Woolley, & Hong, 2011). As a result, school districts and policy makers have attempted to address the issue of school safety in a number of ways.

Preventative policies and practices designed to improve school safety, herein referred to as school safety strategies, come in a number of shapes and forms. Researchers have classified these strategies a number of ways (Cuellar, 2016; Cuellar & Theriot, 2016; Nickerson & Spears, 2007; Time & Payne, 2008). Nickerson and Spears (2007) provide the most parsimonious framework for classifying school safety practices. They assert that school safety strategies can be grouped into two categories based on their philosophical approach to addressing school violence: authoritarian and educational/therapeutic. The authoritarian approach assumes the use of authority to prevent school violence, often involving the deployment of police, the use of policy, or the application of security hardware in the school setting. Authoritarian strategies include safety measures such as metal detectors, security cameras, school policing, and zero-tolerance policies. Educational and therapeutic approaches aim to improve school climate by increasing communication between students and school personnel while promoting student connectedness. Educational and therapeutic approaches include preventative measures such as counseling, conflict resolution training, and peer mediation programs (Nickerson & Spears, 2007).

School safety and its effects on the school environment

All schools have their own unique school safety environment, which is made up of a number of strategies that are selected by the school's district and are being implemented simultaneously. These strategies have a number of effects on the educational environment they are intended to protect. One way to understand these effects across schools is to examine the known associations between school safety strategies and student and school personnel outcomes using the framework set forth by Nickerson and Spears (2007). Research has demonstrated that both authoritarian and educational/therapeutic strategies can have effects on school personnel as well as the school environment.

Current research suggests many common authoritarian strategies such as metal detectors, security cameras, and guards in schools are not effective methods in preventing school violence (Addington, 2009; Borum, Cornell, Modzeleski, & Jimerson, 2010; Casella, 2006; Cuellar, 2016; Garcia, 2003; Hankin, Hertz, & Simon, 2009). In fact, research has indicated the contrary, suggesting that the use of these strategies within the school setting can negatively impact students' perceptions of safety and might increase perceived fear among students, staff, and parents (Bachman, Randolph, & Brown, 2011; Schreck & Miller, 2003). Studies also suggest that restrictive school security measures have the potential to harm school learning environments because of the perceived climate it projects (Beger, 2003), which might be counterproductive to the environment school administrators attempt to create within their schools.

It has been noted that school personnel can earn the cooperation of students when they employ educational/therapeutic strategies such as using relationship building practices and working collaboratively as a team to solve student needs. Research supports this approach to discipline, as indicated in student perceptions of staff as trustworthy authority figures correlates with increased cooperative

behaviors and decreased maladaptive behaviors (Gregory & Ripski, 2008). Recent research suggests that a focus on more proactive approaches to student behavior (Bradshaw, Mitchell, & Leaf, 2011), and utilizing interdisciplinary supportive programming on campuses result in better outcomes for all students and school personnel (National Association of Social Work, 2012). From violence prevention programs and increased security presence on campus to zero tolerance policies, districts attempt to choose strategies and processes that will improve school safety, climate, and overall academic outcomes. Thus, the perceptions of students and school personnel regarding these strategies can help us understand their impact on the educational environment.

School social workers on school safety: Why their input matters

Typically trained in violence prevention (Astor, Behre, Wallace, & Fravil, 1998) and an ability to use research to inform practice (National Association of Social Work, 2012), school social workers have the tools to understand, develop, and implement school safety strategies that have minimal harmful effects on students and the school environment (e.g., Franklin et al., 2009). Therefore, school social workers are in a position where they can share a unique perspective concerning school safety strategies employed in their schools. Likely experiencing the effects of school safety strategies first hand through school environment practices and direct practice with their students, they can contribute to the growing knowledge of school safety in a way much different than the students they serve and other school personnel. However, school social workers' perceptions of school safety and security have not been adequately researched.

The present study

The purpose of this exploratory study it to use data from school social workers across the United States to meet the following objectives:

Objective 1: Develop two latent constructs representative of perceptions towards different types of school safety strategies for the purpose of exploring mean differences among constructs.
Objective 2: Explore what student- and school-level indicators influence school social workers' perceptions towards school safety strategies.
Objective 3: Identify themes in school social workers' qualitative responses concerning how to improve school safety in the United States.

Findings might help practitioners and administrators better understand their school's security environment and how school social workers perceive this environment's effects on students and school personnel. Such information has implications for the approaches school mental health professionals take in maintaining safe and nurturing educational environments for their youth.

Methods

Sample

Nonprobability purposive sampling was used to collect information from school social workers across the United States. Participants were recruited through the SSWAA, the largest professional school social work organization in the United States. The SSWAA is comprised of over 1,000 members across the United States. Participants were recruited from the SSWAA because this was the most feasible method of collecting data from school social workers across the country given the resources of this study.

Data collection

Cross-sectional data were collected in fall of 2016 via an anonymous electronic survey questionnaire that was initially distributed via the SSWAA eBell newsletter, a biweekly electronic bulletin distributed to all active members of SSWAA. One month after the survey was initially distributed via the eBell, a direct e-mail was sent to all active members of the SSWAA containing the survey description and link. The survey remained open to participant responses until one month after the final survey link was distributed. Participants were asked to think of only one school in which they were employed during the 2014–2015 school year by the following prompt: "Thinking ONLY of the school in which you spent most of your time at as a school social worker during the 2014–2015 school year, please answer the following questions." The purpose of this was two-fold. First, this approach was recommended by survey reviewers as a method of capturing information from only one school social worker per school, thus supporting independence of observations. Second, this approach asks participants to recall a full academic year (the 2015 academic school year). Quantitative data were collected to meet Objectives 1 and 2. Objective 3 was met by a single open-ended question that was analyzed qualitatively.

Instrumentation

The survey used in this study was part of a larger project concerned with investigating associations between school safety and school social work practitioners. It was designed to identify (a) demographic information of school social workers (gender, race, state of practice, education, licensure, etc.) and characteristics of the student body for which they work, (b) school social workers perceptions of specific school safety strategies, (c) extent to which school social workers engage in specific professional practices as outlined by the SSWAA's National Evaluative Framework for School Social Work Practice, and (d) school social workers perceptions of the protection of students' rights and arrest rates in their school.

The survey was reviewed through a three-stage process that allowed a number of practicing school social workers to provide feedback on its content. Reviewers were accessed through field education coordinators of a local university, who distributed a call for reviewers before the survey was finalized. The survey was reviewed by more than five practicing school social workers in the southeastern region. The final survey instrument contained 99 questions and took approximately 20 minutes for participants to complete. The survey was created and administered using Qualtrics survey software.

Variables

Information used in this study included school-level variables and participants' reported perceptions towards the effectiveness of various school safety strategies used in today's schools. The school safety strategies included in the survey were based on previous research and previous methods of operationalizing school safety strategies in United States schools (Cuellar, 2016; Ruddy et al., 2010; Time & Payne, 2008).

Independent variables

School-level data were collected using five ordinal indicators and one nominal indicator representing the student population the school social worker serves. These include the school setting (i.e., urbanicity; 0 = rural; 1 = suburban; 2 = urban), school size (i.e., student enrollment; 0 = 0–249; 1 = 250–499; 2 = 500–749; 3 = 750–999; 4 = 1,000+), percentage of minority students enrolled in the school (0 = 0%—24%; 1 = 25%—49%; 2 = 50%—74%; 3 = 75%—100%), percentage of socioeconomically disadvantaged students enrolled in the school (0 = 0%—24%; 1 = 25%—49%; 2 = 50%—74%; 3 = 75%—100%), and school education

level (0 = elementary; 1 = middle; 2 = secondary; 3 = other) of the school in which the school social worker spent most of their time during the 2014–2015 school year. For the school education variable, all "other" responses were recoded to classify the school's education level within the first three categories. For participants who reported working in schools that range across multiple education levels, the response was recoded to the highest possible educational category (e.g., if a participant reported K–8, their response was recoded to "middle"). Variables were dichotomized for use in mean comparison analyses.

Dependent variables

Two constructs were developed to represent perceived effectiveness of school safety strategies: authoritarian strategies and educational/therapeutic strategies. Twenty-two dichotomous (0 = no, 1 = yes) items indicated whether the school social worker perceived the given type of school safety strategy used in their school was an effective means of preventing school violence. It was hypothesized that 15 items comprise authoritarian strategies and 8 comprise educational strategies.

Qualitative data

The qualitative potion of the survey was a single open-ended question that utilized a flexible study design to allow the researcher to choose textual data found within the participants' answered for analysis. The prompt read as follows: "Please provide any comments you may have on school safety in your schools." There was no limit in how the participant could respond to the prompt.

Data analysis

To meet Objective 1, M*plus*7 was used to examine the factorial structure of the data using a Confirmatory Factor Analysis (CFA) approach (Muthén & Muthén, 1998-2015). CFA models were estimated using delta parameterization and weighted least square mean variance estimation (WLSMV) because observed indicators were binary. Unstandardized and standardized (STDYX) estimates are reported with their 95% confidence intervals, respectively. The STDYX output option in M*plus*7 was used to produce standardized coefficients, with the objective of standardizing the parameter estimates within the model and their standard errors using the variances of the continuous latent variables and the variances of the background and outcome variables for standardization (Muthén & Muthén, 1998-2015).

RStudio, a freely accessible computer programing language for statistical analyses and graphics, was used to meet Objectives 2 and 3 (The R Project for Statistical Computing, n.d.). For Objective 2, descriptive and frequency statistics were reported and mean scores in participants' perceptions towards school safety strategies were compared across student- and school-level indicators. For Objective 3, data from the qualitative portion of the survey were analyzed using a thematic approach, in accordance with guidelines for current practice (Charmaz, 2006; Creswell, 2013; Padgett, 1998). After compiling the qualitative responses, a coding system was then utilized to identify a word or phrase that was reported more than once within participant responses. The goal of this approach was to determine the most salient responses for reporting. Only themes with more than one response and the valid percentage of respondents that provided a response sharing the theme are reported.

Missing data analysis

Missing data analysis revealed 30 cases with missing data on all variables. These cases were deleted, leaving 232 cases with information from initiated surveys. Of these, three cases were deleted because participants worked outside of the United States during the 2014–2015 school year (i.e., Puerto Rico, Nigeria, and Canada). Missing data analyses were conducted on the final sample (N = 229), which revealed that approximately 44 cases (19.2%) had missing data on at least one variable, with approximately 88% of values present on all variables included in the study. To determine whether there were statistically significant differences between primary variables of interest and missing and nonmissing

values, factor scores were compared using t-tests to determine if participants who did not complete the survey (indicated by whether the participant reviewed the closing section of the survey) provided significantly different responses to perceptions of school safety strategies in their schools. These analyses revealed cases with missing data did not differ from those cases with full data on school safety or school social work practices information (i.e., participants who did not complete the entire survey did not work in schools with significantly different school security contexts and did not report differences in the practices they engaged in). Therefore, it was assumed data were missing at random (Little, 1988; Little & Rubin, 1989) and estimates reported for the structural models were generated using Full Information Maximum Likelihood (FIML) estimation on missing values (Muthén & Muthén, 1998-2015).

Results

Data from 229 school social workers were included in analyses. The majority of participants were female (93.7%) and White (88.5%). A large majority reported having a Master of Social Work degree (90.7%) and held a professional social work license (state-issued School Social Work Certificate—61.1%; Licensed Clinical Social Worker (LCSW)—36.2%; NASW Other—2.2%). Demographic information drawn from these data are consistent with that of previous surveys of school social workers in the United States over the past 20 years (Allen-Meares, 1994; Astor, Behre, Fravil, & Wallace, 1997; Kelly et al., 2010b; Kelly, Berzin, et al., 2010; Kelly et al., 2015). Over 91% of participants reported working in public school systems, and all states were represented except Oregon, Idaho, Montana, Nevada, Oklahoma, Nebraska, South Dakota, New Mexico, West Virginia, New Hampshire, and Vermont.

The majority of school social workers in this sample reported working in secondary schools (42.2%), followed by elementary schools (36.4%). There was a fairly even distribution of school social workers by school size and school setting. Over half of participants in this study reported working in schools in which over 50% of the student population was characterized by minority students. Over half reported working in schools where less than 50% of the student populations was characterized by socioeconomically disadvantaged students. The majority of the sample (91.8%) reported working in a public school system.

The most widely implemented authoritarian strategies were restricted school access (97.8%), surveillance cameras (85.6%), zero-tolerance policies (61.5%), and the use of school resource officers (57.5%). The least used authoritarian strategy was metal detectors (4.8%), followed by drug screens (12.2%) and the use of nonsworn police officers (27.9%). The most commonly used educational/therapeutic strategies were counseling (97.8%), programs that promote student connectedness (74.0%), and student mentoring (55.9%). The least used educational/therapeutic strategy was peer-mediation practices (32.3%), followed by conflict resolution programs (41.0%). Frequencies and valid percentages for items concerning participants' perceived effectiveness of these school safety strategies are in Table 1.

Objective 1

A confirmatory factor analysis (CFA) model was estimated in attempts to provide evidence of unidimensionality for the two hypothesized latent constructs. This was done with the objective of testing mean differences of these constructs across school-level variables. Results of the a priori CFA model estimating 67 parameter suggested relatively poor fit: $X^2(208) = 521.50$, $p < .05$; RMSEA = .082 (90% CI [.073, .091]); CFI = .959; TLI = .954; WRMR = 1.44. Four items were removed from the model due to low standardized factor loadings (<.40): perceptions towards counseling, restricted entry, surveillance cameras, and emergency alert systems.

A refined model was then estimated with 56 parameters, which exhibited acceptable fit to the data: $X^2(131) = 237.16$, $p < .05$; RMSEA = .060 (90% CI [.048, .072]); CFI = .986; TLI = .984;

Table 1. Frequencies and percentages[a] for prompt[b] concerning perceptions of school safety strategies (N = 229).

Variable	Responses	n (%) Agree	Disagree	N/A
Authoritarian strategies				
Metal detectors	209 (91.2)	36 (17.2)	55 (26.3)	118 (56.5)
Metal detector search of person	206 (89.9)	35 (17.0)	55 (26.7)	116 (56.3)
Emergency alert systems	216 (94.3)	187 (86.6)	8 (3.7)	21 (9.7)
Locked, controlled, or monitored gates	213 (93.1)	107 (50.2)	28 (13.1)	78 (36.6)
Fencing around school	210 (91.7)	83 (39.5)	39 (18.6)	88 (41.9)
Restrict entry/visitor check-in	224 (97.8)	197 (87.9)	25 (11.2)	2 (0.9)
Surveillance cameras	220 (96.1)	182 (82.7)	22 (10.0)	16 (7.3)
Dress code	212 (92.5)	90 (42.5)	55 (25.9)	67 (31.6)
Sworn law enforcement	217 (94.7)	133 (61.3)	27 (12.4)	57 (26.3)
Nonsworn police officers	208 (90.8)	87 (41.8)	33 (15.9)	88 (42.3)
Student property searches by law	209 (91.2)	107 (51.2)	25 (12.0)	77 (36.8)
Other student property searches	213 (93.1)	121 (56.8)	26 (12.2)	66 (31.0)
Drug screenings	206 (89.9)	50 (24.3)	43 (20.9)	113 (54.9)
Require clear backpacks	205 (89.5)	21 (10.2)	58 (28.3)	126 (61.5)
Zero-tolerance policies	212 (92.5)	71 (33.5)	94 (44.3)	47 (22.2)
Educational strategies				
Counseling	223 (97.3)	217 (97.3)	4 (1.8)	2 (0.9)
Anonymous student reporting	211 (92.1)	136 (64.5)	15 (7.1)	60 (28.4)
Student mentoring programs	215 (93.8)	151 (70.2)	9 (4.2)	55 (25.6)
Conflict resolution	214 (93.4)	131 (61.2)	8 (3.7)	75 (35.0)
Peer-mediation practices	210 (91.7)	106 (50.5)	17 (8.1)	87 (41.4)
Programs promoting communication	214 (93.4)	157 (73.4)	10 (4.7)	47 (22.0)
Programs promoting connectedness	215 (93.8)	180 (83.7)	9 (4.2)	26 (12.1)

[a]Valid percentages reported.
[b]Prompt read: "This school safety strategy is an effective method for keeping schools safe."

WRMR = .960. Modification indices revealed that two items had significant correlated error terms: perceptions towards programs that promote student connectedness and programs that promote staff–student communication ($r = .24$; 95% CI [.16, .32]; $p < .001$). Perceptions towards authoritarian and educational/therapeutic strategies were positively correlated ($r = .48$; 95% CI [.39, .57]; $p < .001$). Cronbach's alpha was assessed after confirming unidimensionality of the constructs, which revealed acceptable statistics for items representing authoritarian ($\alpha = .89$) and educational/therapeutic ($\alpha = .77$) strategies. Mean scores of the items representing each construct in the final model were then computed and used in subsequent analyses. Results of the model are in Table 2.

Objective 2

A series of t-tests were performed to determine mean differences in perceptions of school safety strategies across school-level variables. Results suggest that percentage of socioeconomically disadvantaged youth enrolled and percentage of ethnic minority youth enrolled are factors associated with school social workers' perceptions of school safety. Results of the t-test analyses are in Table 3.

Objective 3

Of the 229 school social workers who completed the survey, 56 participants (24.4%) responded to the prompt. Four themes emerged among the data: (a) concern over external threats to school safety; (b) school connectedness as an important consideration to improving school safety; (c) mental health care services as an important, but often underfunded, method of improving school safety; and (d) hardships faced by schools when determining school needs and what safety strategies are best suited to meet these needs.

Table 2. Results of confirmatory factor analysis model using school social worker perceptions of school safety strategies (N = 229).

Variable	Estimate	95% CI	STDYX	STDYX 95% CI
Authoritarian strategies				
Metal detectors	1.00	1.00, 1.00	.97	.94, .99
Metal detector search of person	1.00	.95, 1.04	.97	.94, .99
Locked, controlled, or monitored gates	.70	.61, .79	.68	.60, .77
Fencing around school	.63	.52, .73	.61	.51, .71
Dress code	.56	.45, .68	.55	.44, .66
Sworn law enforcement	.60	.49, .70	.58	.48, .68
Nonsworn police officers	.75	.67, .84	.73	.65, .82
Student property searches by law	.66	.55, 76	.64	.54, .74
Other student property searches	.69	.59, .78	.67	.57, .76
Drug screenings	.89	.83, .96	.87	.81, .93
Require clear backpacks	.97	.92, 1.02	.94	.90, .98
Zero-tolerance policies	.58	.46, .69	.56	.45, .68
Educational strategies				
Student mentoring programs	1.00	1.00, 1.00	.62	.52, .73
Conflict resolution	1.28	1.04, 1.52	.80	.74, .87
Peer-mediation practices	1.44	1.18, 1.71	.91	.85, .97
Anonymous student reporting	.98	.72, 1.23	.62	.50, .73
Programs promoting communication	.95	.73, 1.17	.60	.51, .69
Programs promoting connectedness	.85	.62, 1.09	.54	.42, .65

Note. X^2(131) = 237.16, p < .05; RMSEA = .060 (90% CI [.048, .072]); CFI = .986; TLI = .984; WRMR = .960. All estimates significant at p < .001.

Table 3. Mean comparisons of school safety strategies by school-level characteristics.

	SES disadvantaged			Ethnic minority			School size			Urbanicity			Grade level		
Variable	>50% M (SD)	<50% M (SD)	t (d)	>50% M (SD)	<50% M (SD)	t (d)	>500 M (SD)	<500 M (SD)	t (d)	Other M (SD)	Urban M (SD)	t (d)	Other M (SD)	High M (SD)	t (d)
Authoritarian	2.11 (.51)	2.27 (.51)	2.26** (.14)	2.06 (.50)	2.28 (.50)	3.04*** (.21)	2.17 (.50)	2.19 (.53)	.30 (.01)	2.19 (.52)	2.15 (.51)	.63 (.03)	2.22 (.54)	2.12 (.49)	1.33 (.04)
Educational	2.19 (.38)	2.20 (.32)	.09 (.00)	2.19 (.37)	2.21 (.33)	.42 (.01)	2.22 (.35)	2.17 (.36)	1.05 (.04)	2.20 (.34)	2.18 (.38)	.31 (.00)	2.23 (.36)	2.14 (.35)	1.79 (.04)

Note. Cohen's d metric was estimated using $d = (M^1 - M^2)/SD_p$, where M^1 is the mean for one group, M^2 is the mean for the other group, and SD_p is the pooled standard deviation for both groups.
*p < .05. **p < .001.

The first theme concerns school safety as a product of relations beyond the student–school relationship. Four participants (7.1%) highlighted the importance of recognizing that parents, not just students, pose a unique threat to school safety that must be considered when planning and implementing school safety programs. For example, one participant stated:

> We are in very comfortable school setting, thankfully. We feel quite lucky and take our warm, welcoming environment very seriously. It could be much worse. Our biggest risk (keeping in mind that I am in an elementary school) is parents who come into the building either furious about something or who have protective orders that are supposed to prevent them from coming near their child. (School Social Worker A)

The second, and most common theme concerns the importance of school connectedness in improving school safety. Twelve participants (21.4%) mentioned the importance of promoting student connectedness and communication with school personnel. For example, one participant said the following in regards to school safety: "Student/staff relationship is the only factor that makes any significant impact" (School Social Worker B).

The third theme concerns the importance of increasing availability for mental health services to improve school safety. Seven participants (12.5%) mentioned the importance of improved mental health services for children, with some highlighting the need to increase funding for such programs. One response encompassed both:

> Budget cuts have taken away a lot of our mental health services which could potentially prevent [violent] behaviors. In rural areas, there are not a lot of resources. The school is the hub of the community. We need research-based mental health and medical services available for our students. We need funding to support our administrators. (School Social Worker C)

The fourth theme concerns the hardships school personnel might face in determining what safety strategies are best for their schools. Five participants (8.9%) mentioned that school personnel might face issues when balancing the need for safety with the protection of students' rights:

> It's difficult to find a balance between ensuring safety and violating rights. We still have to take off our shoes at the airport because of one incident. If schools were to follow that precedent, imagine the lines out the school door. We'd have to search or not bring in backpacks, sagging clothes, medications, phones, etc. (School Social Worker D)

While the majority of responses highlighted ways in which school safety could be improved, it is important to note that one participant stated that school safety and the use of authoritarian strategies was satisfactory in their school. This participant's responses suggest that the use of surveillance tactics and student searches are effective in reducing school violence: "I felt the school I spent the majority of time in last [school year] was the safest school in my county due primarily to the mandatory searches, uniforms and metal detectors" (School Social Worker E).

These mixed responses suggest that school social workers prioritize school safety and find that the best approach to improving safety might be through promoting student–student and staff–student connectedness and increased availability of mental health services in today's schools. However, perceptions of school safety and "what works" vary by social worker, as indicated in this sample.

Discussion

Participants primarily perceived emergency alert systems, restricted entry or visitor check-in, and surveillance cameras as effective authoritarian strategies used in their schools. A considerable percentage of school social workers also identified sworn law enforcement; student property searches conducted by school personnel other than law enforcement; and locked, controlled, and monitored gates as being effective in keeping schools safe. Educational strategies were primarily favored by school social workers, with counseling reported as being the most effective of these strategies in preventing school violence, followed by programs that promote connectedness and communication. The majority of the respondents felt confident that these school safety measures were effective in keeping schools safe. This suggests that school social work practitioners favoring these strategies perceive them as having some measure of success, likely through personal experience or their knowledge of the practice's application.

Conversely, a considerable percentage of participants perceived zero-tolerance policies, requiring clear backpacks and dress codes, metal detectors and the use of metal detector searches on students, and fencing around schools were ineffective in keeping schools safe. This suggests that school social work practitioners disapproving these strategies perceive them as having some negative effect on the educational environment in which they work. Moreover, school social workers employed in schools in which socioeconomically disadvantaged or minority youth make up over half of the student body perceive authoritarian strategies as less effective than those working in schools where the same populations makes up less than half of the student body. This suggests that, from the perspective of school social workers in this sample, authoritarian strategies might have a particularly detrimental affect on students already facing societal and economical disadvantages. School administrators, teachers, and other school personnel can use this information to improve programs and practices within their schools.

Social workers have a vast knowledge of evidence-based practices that aim to improve student success from a behavioral and mental health perspective (Franklin et al., 2009). With this in mind, school social workers can address many of the emerging themes in the qualitative analysis. First, school social workers can be involved in developing policy regarding school safety and best practices in education. With such involvement, practitioners can advocate for the availability of evidence-based mental health services in schools and promote their use when addressing student- and school-level safety needs. Moreover, school social workers might help identify safety and security needs and

assist school personnel in balancing the implementation of school safety practices with promoting student connectedness and a positive educational environment conducive to student learning. Finally, school social workers are capable of developing and implementing practices that can promote student connectedness (Creswell, 2013). Based on the qualitative findings of this study such practices might help schools promote and maintain safety, particularly in schools that might rely on the use of authoritarian strategies.

Investigating the association of school social work perceptions of why zero-tolerance policies are ineffective and the overall performance and success of students in such environments should be considered. As suggested in previous research, zero-tolerance policies, often facilitated by school police or other security personnel (Essex, 2003; Stader, 2002), are argued to compromise students' rights and increase student dropout rate and their involvement in the criminal justice system (APA Zero Tolerance Task Force, 2008). Such associations might explain why a considerable percentage of school social workers in this sample perceive zero-tolerance policies as ineffective in keeping schools safe. School administrators and other professionals must consistently evaluate the need for zero-tolerance policies and attempt to rationalize their use with data-driven reports. Caution for the potential ramifications of authoritarian strategies can assist administrators, policy-makers, and health care professionals in improving their educational environment.

Analyses also suggest practitioners employed in schools serving large percentages of socioeconomically disadvantaged or ethnic minority youth perceive authoritarian strategies as less effective in preventing school violence. This is potentially problematic, as research has demonstrated that larger schools characterized by minority and socioeconomically disadvantaged youth tend to rely on authoritarian strategies (Gastic & Johnson, 2014; Irwin, Davidson, & Hall-Sanchez, 2013; Kupchik, 2010; Kupchik & Ward, 2014; Nickerson & Spears, 2007; Servoss & Finn, 2014). From the perspective of school social work practitioners, these strategies might be marginalizing an already disadvantaged student population, as current research demonstrates socioeconomically disadvantaged and minority youth face increased dropout and arrest rates from school misconduct (APA, 2012). Practitioners and administrators can improve their school context by assessing the need for authoritarian strategies and implementing educational and therapeutic strategies in their place, where applicable. The third theme from the qualitative results suggest administrators and policymakers must consistently evaluate their needs to determine costs appropriate for securing their schools. If educational strategies are found to be more effective, schools must consider allocating finances to their development and implementation. This is critical to schools serving disadvantaged communities, as replacing authoritarian strategies with educational processes can potentially improve academic performance and potentially reduce dropout and student-police involvement (Bradshaw, Mitchell, & Leaf, 2011). As suggested by the second theme, educational processes that promote student relationships and improve staff–student communication might be the most effective method for reducing school violence.

Researchers should take steps towards better understanding why a considerable percentage of school social workers in this sample perceive zero-tolerance policies as being an ineffective means of preventing school violence. Detailed research and evaluations on the true impact of authoritarian strategies on educational outcomes of children are limited. Addington (2009) indicated that authoritarian based security measures decreased student's perceptions of being safe at school and increased fear of students, staff, and the community. Additionally, authoritarian processes have been found to negatively impact school climate and overall learning environment of the children within those settings (Beger, 2003). In contrast, evidence that more educational approaches to security assisted in improving the climate and learning environments was identified by Bradshaw, Mitchell, and Leaf (2011), but longitudinal and detailed information about subject academic outcomes across schools was never conducted. Additional research on the possible correlations between certain school security processes, and the employment of school-based social workers and their professional responsibilities would also be appropriate for future work.

There are schools that do an excellent job employing more student-centered interventions that prove to enhance student success and outcomes (Bradshaw, Mitchell, & Leaf, 2011); however, researchers should also determine possible characteristics of schools that employ specific types of school safety strategies, and look at how school social workers are employed and their function within these schools. Very limited information is available on specific school-based characteristics, whether or not school social workers are employed in these specific schools, and/or the school–social workers practice functions within these school settings.

Limitations

Although this study adds to the extant research on school personnel's perceptions of school safety practices, there are some noted limitations. First, the sample size for the number of parameters estimated in the CFA is less than desirable (Bentler & Chou, 1987). These analyses must be replicated using a larger sample with which representativeness can be determined. It must also be determined why certain authoritarian and educational items did not hold up in the a priori model. For example, while counseling was nearly constant and present in over 97% of schools, it is possible that emergency alert systems, surveillance, and restricted school access did not load on the authoritarian construct because they are not authoritarian by nature. It is likely that these practices do not purport the same authority as school policing and relative functions do in schools. Perceptions of participants in this sample suggest that these strategies do not hold an authoritarian nature similar to that of the strategies that remained in the model.

Another major limitation is the convenience sampling method used. Researchers should consider probability sampling techniques from a national-level sampling frame to improve sample representativeness and accuracy of the results. Another limitations is in relation to the sample process used for this work. A convenience sampling procedure was utilized due to the ease of implementation, and in an attempt to obtain a larger sample in a brief period of time. Due to this convenience sampling process, there were 11 states not represented. The lack of responses within these 11 states may skew the national view of school social workers and their perceptions of school safety. Additional research in this area, with a larger sample size inclusive of all 50 states would be beneficial to future research. It would also benefit future researchers to build on the presented analyses with the objective of identifying possible associations between school security policies where zero-tolerance is used and student outcomes when compared to other schools with more educational processes in place.

Conclusion

School safety procedures and security personnel will continue to play a role in today's schools. Therefore, research must take steps toward understanding the implications of utilizing both educational based security processes and more authoritarian processes. This study evaluated the surface level perceptions of school social workers, as they evaluated what security measures were deemed most effective within today's schools, and compared mean differences of these perceptions based on school-level characteristics. This study provides insight into what future researchers, clinicians, educational administrators, and policymakers should be reviewing when determining best practices for security programming within public education. Further research is needed to better understand the impact that authoritarian security strategies have on student outcomes, both behavioral and educational, in comparison to more education focused security measures within schools. If future findings indicate what we assume will be true, based on preliminary findings about school climate being linked to student outcomes, then authoritarian practices should be employed with caution and moreover replaced with more student focused and educationally driven security processes when appropriate. Future studies should also focus on the concept of identifying specific school-based characteristics that enhance or deter from student

functioning, while also investigating the use of mental health care across schools as it relates to school security and safety.

Competing interests

There are no financial or vested interests of which the reader should be aware.

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