Educators' perceptions of youth mental health: Implications for training and the promotion of mental health services in schools

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ABSTRACT

Background: School-based mental health practice holds promise in meeting unmet mental health needs of American children by expanding access to quality mental health care for hard-to-reach populations such as those in rural regions. The purpose of the present study was to address four specific aims: 1) To replicate findings from prior studies regarding educators' perspectives of mental health promotion in school; 2) To extend prior research by examining specific needs for mental health training; 3) To compare the responses between the educators in rural schools and urban schools within the same geographic and political context of a large Midwestern state; and 4) To explore similarities and differences of the educators' perspectives based on participants' roles including administrators, teachers and school mental health providers.

Methods: A total of 786 educators including 127 administrators in a large Midwestern state completed a one-time, anonymous online survey. Descriptive analyses were employed to explore the perspectives of educators regarding the current status of mental health promotion in school. Additionally, independent samples *t*-tests were run to examine the differences in the educators' perspectives based on region (rural vs. urban). Finally, one-way analysis of variance (ANOVA) was used to examine the differences in the educators' perspectives based on participants' roles.

Results: Results replicated previous findings, indicating a large percentage of educators reporting a high level of concerns for student mental health needs (93%) and the need for further training in mental health (85%). Mental health disorders, behavior management, and specialized skills such as social skills were identified as the top three areas of need for further training. While no differences were found between educators in urban and rural schools in other topics, significantly more respondents in rural schools (27%) reported that their schools hire mental health professionals as compared to urban schools (13%). The ANOVA results indicated that school-based mental health professionals and administrators are significantly more concerned about students' mental health needs than teachers ($p = 0.000$).

Conclusion: A majority of participants take students' mental health issues seriously and many feel that current resources and training opportunities could be expanded. An area of future research could be exploring current mental health trainings provided to educators and examine how their specific training needs are addressed. An important strategy to decrease mental health care disparity by geographic region may be statewide initiatives to increase the number of mental health professionals in rural areas. The discrepancy in the level of mental health concerns expressed by teachers and administrators may suggest a need for school-wide initiatives to foster shared commitments to promoting students' mental health across various staff roles.

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1. Introduction

Approximately, one in five children and adolescents in the United States experience mental illness at least once in their lifetime (Merikangas et al., 2010; O'Connell, Boat, & Warner, 2009). Youth mental illness is associated with poor academic performance, disrupted psychosocial development, lower rates of high school graduation, and increased health risks (Kataoka, Zhang, & Wells, 2002; Kessler et al., 2005; Mojtabai et al., 2015; Patel, Flisher, Hetrick, & McGorry, 2007). Despite these detrimental impacts, the mental health needs of youth in the U.S. often go unmet (Jensen et al., 2011). Reportedly, only half of all children with identified mental health needs receive appropriate care, even despite advances in early identification and timely engagement in treatment (Levitt, Saka, Romanelli, & Hoagwood, 2007). Thus, access to quality mental health care for youth continues to be an important topic in children's mental health research. Notably, children in rural areas are at a greater disadvantage due to the limited availability of qualified mental health professionals and other mental health resources

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in these geographic regions (Kelleher, Taylor, & Rickert, 1992; Lambert, Ziller, & Lenardson, 2009).

In an effort to address this lack of access, schools have been identified as an ideal point of entry to mental health care for children given the significant amount of time children spend daily in school due to mandatory attendance policies (Berzin et al., 2011; Splett & Maras, 2011; Weist, Evans, & Lever, 2014). Additionally, early prevention and intervention in schools (e.g., teaching positive behaviors) have been recognized as crucial for reducing future behavioral problems, which are often the precursors of psychiatric diagnoses in middle childhood or adolescence (Solomon, Klein, Hintze, Cressey, & Peller, 2012). Moreover, mental health programs operated in schools are effective for serving hard-to-reach populations such as children in rural areas or racial and ethnic minority children (Weist & Albus, 2004). With this recognition, school-based mental health practices have been steadily expanded in the U.S. for the past several decades (Kutash, Duchnowski, & Lynn, 2006; Lever, Chambers, Stephan, Page, & Ghunney, 2010; Weist & Albus, 2004).

The emerging consensus among mental health professionals in schools emphasizes that successful school-based mental health practice should be population-based, rooted in a public health model of prevention where mental health needs are addressed at the primary or universal (all children), secondary (at-risk children), and tertiary (children with identified mental health needs) levels (Atkins, Hoagwood, Kutash, & Seidman, 2010; Eber, Hyde, & Suter, 2011). The focus on population-based approaches necessitates multi-sector collaboration and school-wide implementation of mental health interventions, which has created important shifts in two areas within school-based mental health. First, teachers and school support staff are regarded as important mental health resources that have been traditionally underutilized (Atkins et al., 2010). Second, the role of school leadership is increasingly emphasized in leading the multi-sector and system-wide efforts to promote mental health of all children in school (Barrett, Eber, & Weist, 2013; Lean, 2010). The following sections discuss these two shifts in more detail and how these shifts provide a context and rationale for the current study.

1.1. Underutilized human resources in mental health promotion in schools

Jensen et al. (2011) emphasize the key role of adults in identifying signs and symptoms of youth mental health issues and connecting them with the appropriate care. Their recognition of these important roles in mental health promotion parallels a core concept in the ecological paradigm emerging in the public health arena, which emphasizes identifying and maximizing the use of human and non-human resources that naturally exist in the environment. Based on this ecological paradigm, Atkins et al. (2010) suggest that mental health promotion in schools should focus on maximizing the use of change agents that are indigenous to the school context. They assert that maximizing indigenous resources will likely contribute to greater access to and the sustainability of mental health programs and interventions in school settings. Consistent with this ecological perspective, administrators, teachers, and support staff are regarded as important change agents in mental health promotion.

Efforts to maximize human resources within the school context for children's mental health promotion have faced several barriers. Most importantly, many teachers and support staff in schools do not feel confident in carrying out their roles in mental health promotion. For example, Walter, Gouze, and Lim (2006)'s study of elementary school teachers in an urban setting reported concerns about limited mental health training they had received and described a lack of confidence in handling mental health problems among their students. Other studies assessing teachers' perceptions and preparedness in addressing mental health issues of their students reported similar results in the U.S. and Canada (Frauenholtz, Williford, & Mendenhall, 2015; Froese-Germain & Riel, 2012; Reinke, Stormont, Herman, Puri, & Goel, 2011). Atkins et

al. (2010) suggest that an important strategy in maximizing underutilized human resources in school-based mental health promotion efforts is to provide support at each level within a multi-tiered intervention model by equipping educators with the knowledge and tools necessary to carry out their respective roles. Similarly, Jensen et al. (2011) stress the importance of developing a system to enhance adults' awareness and knowledge of youth mental health issues. Accordingly, multi-sector and multidisciplinary collaboration have been suggested as key to the successful implementation of school-based mental health services (Weist, Lowie, Flaherty, & Pruitt, 2001; Weist et al., 2012). Yet, recent research (Frauenholtz, Mendenhall, & Moon, in press) has noted that limited mental health literacy among educators might impede the effective collaboration among interdisciplinary teams. Thus, these studies collectively demonstrate a need for further training to enhance educators' abilities to effectively address students' mental health needs. However, a notable gap in prior research is that the specific training needs of school staff have yet to be identified. Thus, while further training has been noted as an important area to address for educators, there is little information available as to what specific training needs exist.

Exploring the perspectives of educators can provide an important insight in the efforts to accurately assess their readiness and identify their specific training needs related to mental health promotion in school. Furthermore, it is important to note that the majority of prior studies examining educators' perspectives of mental health promotion in schools was conducted in urban settings. This is a notable gap given evidence that suggests even greater disadvantages exist for rural children in regards to meeting their mental health needs compared to children in urban regions (Kelleher et al., 1992; Lambert et al., 2009). However, to date, little evidence is available pertaining to the perspectives of educators in rural schools and, to our knowledge, no study currently exists that has compared how the perspectives between educators serving rural and urban schools might differ. Thus, studies are needed to fill this gap by exploring the perspectives of educators in a sample where rural and urban schools are both well represented.

1.2. The role of school administrators in mental health promotion in school

Another area needing further study is the similarities and differences in the perceptions of mental health promotion in school among educators employed in various roles within schools. Previous studies assessing educators' perceptions and attitudes of mental health promotion have mainly focused on teachers and paraprofessionals who directly interact with students and their families. Although front-line school staff play important roles in mental health promotion, their influence on systemic and structural factors that impact the daily operation of schools is limited. Successful mental health promotion efforts in schools necessitate multi-sector efforts and interdisciplinary collaboration that require skillful management and effective leadership at the school and district levels (Lean, 2010; Weist et al., 2012). Weist et al. (2012) note that this collaborative effort can be disrupted by the marginalization of mental health goals in school settings as well as other issues related to resources and funding. Territorial competitions and duplicated roles among school staff and mental health professionals can also interfere with the effective collaboration necessary for mental health promotion in schools.

As Barrett et al. (2013) suggest school administrators play critical roles in promoting mental health access via developing infrastructure for multidisciplinary teams in schools and setting clear role definitions among professionals from multiple sectors. Resource allocation and the development of sustainable funding mechanisms are also important areas that require administrators' involvement. Thus, it follows that administrators' mental health awareness and knowledge are important factors for increasing opportunities to promote mental health intervention efforts in school settings. Moreover, administrators who are knowledgeable of mental health will likely be more effective in overcoming

barriers to successful mental health interventions by building infrastructure that allows for the sustainability of these efforts. For this reason, it is imperative to assess school administrators' perceptions of and attitudes toward mental health promotion in schools.

However, few studies to date have examined the perspectives of school administrators and compared their perceptions to other staff such as teachers and school mental health providers. In one notable exception, specific to the problem of bullying which can result in mental health concerns for the children involved (see Barker, Arseneault, Brendgen, Fontaine, & Maughan, 2008; Reijntjes, Kamphuis, Prinzie, & Telch, 2010), Kennedy, Russom, and Kevorkian (2012) compared and contrasted the perceptions of bullying in school between teachers and administrators by surveying 98 teachers and 41 administrators serving 139 schools across Southern Florida. Their results indicated significant differences between teachers and administrators. For example, teachers were significantly more likely to believe that educators can play a part in preventing bullying and further development opportunities should be provided to staff in bullying prevention compared to administrators. In discussing these results, the authors emphasized the necessity of understanding the perspectives of teachers as well as administrators in order to generate insights in developing more effective policies and guidelines in bullying prevention through collaborative efforts. Similarly, further studies are needed to investigate differences across these roles in school settings specific to mental health given that mental health promotion in schools requires successful collaboration among all change agents in the entire school system including educators, school mental health providers and administrators.

1.3. The purposes of study

The purpose of the present study was to address four specific aims: 1) To replicate findings from prior studies regarding students' mental health needs in school, educators' level of confidence in addressing these needs, educators' perceptions of their need for further training regarding student mental health, and the availability of resources to address such needs; 2) To extend prior research by examining specific needs for mental health training; 3) To compare the responses regarding the aforementioned topics between the educators in rural schools and urban schools within the same geographic and political context of a large Midwestern state; and 4) To explore similarities and differences in the perspectives of mental health promotion in school based on participants' roles including administrators, teachers and school mental health providers.

First, we expected that our findings would replicate the results from the previous studies that explored similar topics, indicating a high level of students' mental health concerns, a lack of confidence in addressing students' mental health needs, a high level of expressed needs for mental health training, and a limited availability of mental health resources. Second, although we expected to extend prior research by identifying specific areas where further training was needed, no specific hypotheses were generated for this aim. Third, we expected that responses from the educators in rural schools would reflect significantly poorer preparedness to address student mental health concerns as compared to the educators in urban schools. Last, we expected for significant differences to emerge across different roles; however, given the lack of existing evidence in this area, no specific hypotheses were stated for which roles would significantly differ from one another

2. Method

2.1. Sample characteristics

After receiving human subjects approval from the sponsoring university, a one-time, anonymous online survey was distributed via Qualtrics, an online survey program, to educators and administrators affiliated with public schools in a Midwestern state in February 2015.

Recruitment occurred through several means including through contacting each superintendent in the state directly by email with a request to forward the survey link to district personnel and via several listservs available through the state's department of education (e.g., licensed teachers, school counselors). The number of recipients of the online survey link is unknown for several reasons. First, it is unclear how many superintendents distributed the link to district staff. Second, the size of the state department of education's listservs is presently unknown. Therefore, a total response rate could not be calculated. Informed consent was obtained via an Internet Information Statement at the beginning of the survey that described the purpose of the study. In this statement, participants were instructed that, by starting the survey, they provided their consent to participate.

A total of 786 educators and school administrators completed the survey. Overall, the study sample was 81% female, 92% White, non-Hispanic, and the average age was 45.5 years (SD = 11.1). This study sample is comparable to educator demographics across the state where most educators are female and White, non-Hispanic. Respondents included 296 school mental health providers (45%), 206 teachers and special education teachers (31%), and 127 administrators (superintendent or principal; 19%). Approximately, 16% of school staff reported being affiliated with an elementary school with 13% and 47% being employed at a middle and high school respectively. Approximately 24% selected more than one school level. About a half of respondents served in rural or frontier schools (n = 371) while another half worked in suburban or urban (n = 367) schools. Table 1 provides additional detail about participant characteristics.

2.2. Measures

For the purpose of the current study, a group of experts in the area of children's mental health, school-based mental health, and doctoral students with a clinical mental health background collaborated to develop a survey measure. Several focus groups with these stakeholders were held where current evidence from the school-based mental health literature was shared that describes best practices in this field of practice (see Kutash et al., 2006; Lean, 2010; Paternite, 2005; Weist et al., 2005). Based on this evidence and on the group members' expertise, sample items were generated. Final items were selected by this panel

Table 1
Participant characteristics.

Variable names	Percent (n)	
Gender		
Male	19 (141)	
Female	81 (613)	
Race		
White	92 (720)	
Non-white	8 (48)	
Participant role		
Mental health providers	45 (296)	
Teachers (general and special education)	31 (206)	
Administrators	19 (127)	
Affiliated school level		
Elementary	16 (108)	
Middle	13 (87)	
High	47 (310)	
More than one	24 (158)	
Affiliated school region		
Urban/suburban	50.3 (367)	
Rural/frontier*	49.7 (371)	
Continuous variables		
Variable names	M	SD
Age	45.5	11.1
Years worked at the current school	17.9	10.7

Note. N = 786.
Frontier refers to sparsely populated areas isolated from services and major population centers (National Rural Health Association, 2008).

of experts. The total measure included a total of 53 items and took approximately 10 min to complete on average. Items included demographic questions and questions that measured a variety of topics related to mental health promotion in school. The items used in the present study focused on topics related to educators' perceptions of students' mental health needs ("How likely do you feel it is that you will encounter mental health issues in your work with student?"); a level of mental health training received ("I have received adequate professional development/training on mental health issues."); self-rated confidence to address students' mental health issues; ("I feel confident in my ability to recognize mental health issues among students."); the professional development topics to include in training efforts for educators (e.g., behavior management techniques); the availability of mental health professionals ("There are adequate resources in my school to assist students with mental health issues"); and the infrastructure and resources in their schools and communities ("My school has a clear plan to address mental health issues among students"). Further survey details are provided in the data analysis section that follows.

2.3. Data analysis

Descriptive analyses were conducted to assess educators' perceptions regarding a variety of topics related to the current status of mental health promotion in school. Independent samples *t*-tests, Pearson's chi-square and one-way analysis of variance (ANOVA) were used in the present study and described below.

2.3.1. t-Tests and Pearson's chi-square

Independent samples two-tailed *t*-tests were run to explore differences in the availability of mental health resources based on region (urban/suburban vs. rural/frontier). Participants were asked to choose from the following five response categories: urban, semi-urban, suburban, rural or densely settled rural, and frontier. Due to the low numbers of endorsements of semi-urban and suburban and the similarities across these categories as well as the similarities between rural and frontier areas of the state, the variable was transformed to have two categories and was coded as (urban/suburban = 0, rural/frontier = 1).

t-Tests were run on the following dependent variables: 1) MHmyjob (I see it as a part of my job to address students' mental health concerns); 2) MHImportant (It is important for school staff to understand mental health issues that students may experience); 3) MHTraining (I have received adequate professional development/training on mental health issues); 4) MHResources (I am aware of resources in my school that are available to assist students with mental health issues); and 5) MHPlan (My school has a clear plan to address mental health issues among students).

All items were rated on a 5-point Likert scale from "strongly disagree" (1) to "strongly agree" (5) or from "not concerned" (1) to "extremely concerned" (5). Pearson's chi-square was also used to explore differences in the availability of mental health resources based on region (urban/suburban vs. rural/frontier) on one dependent variable ("Do you currently have any professionals in the school who provide support for youth with mental health issues?"). The responses were coded as [yes = 0, no = 1].

2.3.2. One-way ANOVA

One-way ANOVA models were used to examine differences in perceptions regarding students' mental health needs based on participants' roles. The independent variable was participants' job title or their professional roles in their schools or districts, including school board member, superintendent, principal, classroom teacher, special education teacher, counselor/mental health provider, school nurse, classified staff, parent, and other. Participants were also asked to write the name of their job title in a text format, which was used to re-categorize the roles that were not included as response choices (e.g., assistant superintendent, assistant principal, school social worker). Due to again low

endorsements of several categories, the variable was transformed to have three categories and was coded as follows: [0 = administrators, 1 = mental health professionals, 2 = teachers (including special education teachers)]. Approximately 5% of the total sample that belonged to the "Other" category was excluded from the analysis because the primary aim in the present study was to compare meaningful roles to assess for significant differences. The "Other" category did not constitute a role that could be meaningfully compared to other known roles.

The ANOVA models were run across the five dependent variables; MHmyjob (I see it as a part of my job to address students' mental health concerns); MHImportant (It is important for school staff to understand mental health issues that students may experience); MHConcern (To what extent are you concerned about mental health issues among students?); School_Resources (Students need greater access to mental health services at school); and Community_Resources (Students and their families need greater access to mental health services in the community). Each question was rated on a 5-point Likert scale from "strongly disagree" (1) to "strongly agree" (5) or "not concerned" (1) to "extremely concerned" (5).

2.3.3. Missing data

Missing data were addressed by using listwise deletion. The percentage of missing data was ranged from 11.5% to 16.4% on all variables. Although the percentage of missing cases is higher than 10%, beyond which the use of a listwise deletion method is not recommended due to potential bias (Bennett, 2001), *t*-test results indicated no significant differences between missing cases and others on the dependent variables for each analysis.

2.3.4. Assumptions

Dependent variables were not normally distributed and two of the dependent variables used in ANOVA (MHConcern, Community_Resources) violated the assumptions of homogeneity. Therefore, results should be interpreted with caution although the violation of normality is considered robust in ANOVA (Gravetter & Wallnau, 2008).

3. Results

3.1. Descriptive analyses

A fairly high percentage of participants (66.4%) agreed or strongly agreed that they are confident in recognizing signs of students' mental health issues (*n* = 480). Excluding mental health providers, the percentage went down to 59.9% (*n* = 180). Similarly, a number of respondents agreed or strongly agreed that they are confident in making referrals to school employed mental health professionals (74.4%, *n* = 534) and community mental health professionals (57.2%, *n* = 411). When mental health providers were excluded, the percentage went down to 65.8% (*n* = 231) and 38.6% (*n* = 136) respectively.

More than 96% respondents (*n* = 703) reported that they are likely or very likely to encounter students with mental health issues in their work, and approximately 93% (*n* = 679) reported being moderately or extremely concerned about students' mental health issues. Additionally, almost 97% agreed or strongly agreed that it is important for school staff to understand metal health issues that their students may experience. However, almost a half of respondents (*n* = 341) disagreed or strongly disagreed with the statement that they have received adequate mental health training, and 85% expressed a desire to receive additional training in mental health issues.

The type of training that the participants identified as needed was about mental health disorders (58%), behavioral management techniques (57%), specialized skill training (e.g., social skills, anger management skills; 52%), positive behavioral supports training (50%), understanding trauma (45%). Table 2 summarizes in more detail the areas of training needed as expressed by respondents.

Table 2

Areas of training need reported by participants.

Areas of training need	Percent (%)
Mental health disorders	58
Behavior management techniques	57
Specialized skills (e.g. social skills)	52
Positive Behavior Support (PBS)	50
Understanding trauma	45
Crisis management	45
Promotion of a positive school climate	43
Classroom management techniques	42
Wraparound services	39
Promotion of social competence	39
Suicide prevention and identification	38
Bullying prevention and intervention	35
Substance abuse prevention and intervention	32
Seclusion and restraint	15
Other	8

Note. $N = 786$.

Table 4

ANOVA results of the perceptions and attitudes based on roles regarding mental health issues.

DVs[a]	df	F	η^2	p	Observed power
MHMyjob[b]	2	38.215	0.112	0.000*	1.000
MHImportant[c]	2	1.648	0.005	0.193	0.348
MHConcern[d]	2	22.038	0.067	0.000*	1.000
School_Resources[e]	2	0.516	0.002	0.597	0.135
Community_Resources[f]	2	6.187	0.021	0.002*	0.891

* $p < 0.05$

[a] DVs: Dependent variables.

[b] MHMyJob: I see it as a part of my job to address students' mental health concerns.

[c] MHImportant: It is important for school staff to understand mental health issues that students may experience.

[d] MHConcern: To what extent are you concerned about mental health issues among students?

[e] School_Resources: Students need greater access to mental health services at school.

[f] Community_Resources: Students and their families need greater access to mental health services in the community.

Regarding mental health resources, only 19% agreed or strongly agreed that their school has adequate mental health resources available, and similarly, only 22% agreed or strongly agreed that their school has a clear plan to address students' mental health issues. Approximately, 80% reported that their school employs mental health professionals although the question did not specify how many mental health professionals are available or in what capacity they address students' mental health issues in their school. Over 92% agreed or strongly agreed that students and their families need greater access to mental health services in their communities while 89% agreed or strongly agreed that students need greater access to mental health services in school.

3.2. Independent t-test and Pearson's chi-square

According to the results from the *t*-tests, none of the dependent variables showed significant differences based on region. On the other hand, the cross tabulation results revealed that 27% of the educators serving schools in rural/frontier regions reported that they have no mental health professionals employed in their schools as compared to only 13% for those who serve schools in urban/suburban regions. Pearson's chi-square test indicated that this difference is statistically significant [$\chi^2 (1) = 20.197$, $p = 0.000$] as presented in Table 3.

3.3. One-way analysis of variance (ANOVA)

Table 4 presents the results from the ANOVA on the five dependent variables. MHImportant [$F(3, 635) = 1.737$, $p > 0.05$, $\eta^2 = 0.008$] and School_Resources [$F(2, 565) = 0.516$, $p > 0.05$, $\eta^2 = 0.002$] showed non-significant results while MHMyjob [$F(2, 607) = 38.215$, $p < 0.001$, $\eta^2 = 0.112$], MHConcern [$F(2, 617) = 22.038$, $p < 0.001$, $\eta^2 = 0.067$], and Community_Resources [$F(2, 564) = 6.187$, $p = 0.002$, $\eta^2 = 0.021$] showed significantly different responses based on respondents' role.

Subsequent post hoc tests using the Bonferroni correction revealed that mental health professionals are significantly more likely to regard addressing students' mental health issues as a part of their job as compared to administrators and teachers ($p = 0.000$). Between the

administrators and teachers, administrators were significantly more likely to regard addressing students' mental health issues as a part of their job as compared to administrators and teachers ($p = 0.032$). In regards to the level of concerns related to student mental health issues, mental health professionals and administrators were significantly more likely to be concerned about students' mental health issues than teachers ($p = 0.000$). Last, mental health professionals ($p = 0.008$) and administrators ($p = 0.008$) were significantly more likely to believe that students and their families need greater access to mental health services in the community as compared to teachers. Table 5 presents means and standard deviations for each dependent variables based on Role.

4. Discussion

The aims of the present study were to: 1) replicate findings from prior studies regarding students' mental health needs in school, educators' level of confidence in addressing these needs, educators' perceptions of their need for further training regarding student mental health, and the availability of resources to address such needs; 2) extend prior research by examining specific needs for mental health training; 3) compare the responses regarding the aforementioned topics between the educators in rural schools and urban schools within the same geographic and political context of a large Midwestern state; and 4) explore similarities and differences in the perspectives of mental health promotion in school based on participants' roles including administrators, teachers and school mental health providers. Several interesting findings were found and will be discussed in turn.

First, the results from the descriptive analyses in the present study indicate that a majority of educators and administrators take students' mental health issues seriously and regard mental health topics as relevant to their jobs. As expected, the results from the present study comport with previous findings (e.g., Froese-Germain & Riel, 2012; Reinke et al., 2011; Walter et al., 2006) that suggest many educators do not feel that their previous training in mental health was adequate and expressed a need for further training. The effort to provide adequate

Table 3

Pearson's chi-square results of the availability of mental health professionals in schools by region.

		N	Region		Pearson's chi-square	df	p
			Urban/suburban	Rural/frontier			
MHPs employed	Yes	557	303 (87%)	254 (73%)	20.197	1	0.000
	No	139	46 (13%)	93 (27%)			
	Total	696	349 (100%)	347 (100%)			

Note. MHPs employed: Do you currently have any professionals in the school who provide support for youth with mental health issues.

Table 5
Perceptions regarding student mental health issues and resources based on role.

	MHMyJob[a]		MHImportant[b]		MHConcern[c]		School_Resources[d]		Community_Resources[e]	
	M	SD	M	SD	M	SD	M	SD	M	SD
Administrators	4.11	0.849	4.55	0.648	4.69	0.516	4.46	0.715	4.58	0.607
MHPs[f]	4.52	0.770	4.62	0.706	4.71	0.524	4.39	0.895	4.53	0.706
Teachers	3.87	0.889	4.49	0.847	4.34	0.824	4.36	0.789	4.33	0.785

[a] MHMyJob: I see it as a part of my job to address students' mental health concerns.
[b] MHImportant: It is important for school staff to understand mental health issues that students may experience.
[c] MHConcern: To what extent are you concerned about mental health issues among students?
[d] School_Resources: Students need greater access to mental health services at school.
[e] Community_Resources: Students and their families need greater access to mental health services in the community.
[f] MHPs: Mental health providers.

mental health trainings for educators and school staff is consistent with the ecological thinking introduced earlier, which emphasizes maximizing underutilized human resources in the effort to promote mental health in school (Atkins et al., 2010). These results suggest that indeed educators and administrators have a desire to bolster their school's ability to address mental health needs among students. Consistent with this framework, one mechanism for doing so is by providing more extensive training to school personnel to build their knowledge, awareness, and capacity to effectively address mental health in school settings. School administrators and stakeholders may consider adopting a variety of programs intended to increase mental health literacy for educators and have shown promising effects in increasing mental health knowledge among educators such as the Youth Mental Health First Aid (YMHFA) (Aakre, Lucksted, & Browning-Mcnee, 2016; Jorm, Kitchener, Sawyer, Scales, & Cvetkovski, 2010; Mendenhall, Jackson, & Hase, 2013) and Go-To Educator training (Wei and Kutcher, 2014).

Examining particular areas of need expressed by educators might also aid in developing or further refining content for mental health training programs for educators. For the present study sample, several topics emerged as important to address in future training efforts. Most participants chose understanding mental health disorders, behavior management techniques, and specialized skills such as social skills as the top three areas that require further training. These results are similar to a recent study by Reinke et al. (2011). Although a different methodology was used (e.g., narrative response), the top three areas of training needs expressed by educators in their sample included managing externalizing behaviors, recognizing and understanding mental health issues, and classroom management and behavioral interventions. The areas, similar to the present study's findings, suggest that further training in recognizing and identifying mental health issues may be a key way to advance mental health promotion, and as a result, the educational outcomes for students.

For example, children who present repetitive externalizing behaviors due to an underlying mental health issue might be subjected to unnecessary and ineffective disciplinary actions thereby negatively impacting their academic success by funneling them out of the traditional classroom setting. Likewise, students with internalizing behaviors might be academically underachieving or may develop more serious problems such as self-injurious behaviors or suicidal ideation. With further staff training, externalizing and internalizing problems could possibly be prevented with early identification and timely referrals. Educators who possess basic knowledge in recognizing signs of mental illness may be more likely to consult with mental health professionals or parents before problems become unmanageable. Thus, the present study findings might be useful for designing such training efforts to enhance educators' knowledge of mental health and classroom management.

Another area of training needed that was expressed by a large number of respondents was understanding trauma. In fact, over 65% of participants responded that they have encountered children who have been exposed to some type of adverse experiences often or all of the time. This result indicates that educators in present study often encounter children who have been exposed to adverse experiences and thus may benefit from further training on trauma-related topics. This finding suggests that educators see these topics as relevant to their work with students, which is important given recent literature that has found trauma exposure to negatively impact students' learning behaviors and overall school success (Delaney-Black et al., 2002; Goodman, Miller, & West-olatunji, 2012; Nadeem et al., 2014). Some scholars have suggested that trauma sensitive school initiatives emphasizing a systematic approach to supporting traumatized children to overcome difficulties caused by trauma exposure and succeed in school may be particularly useful (Cole, Eisner, Gregory, & Ristuccia, 2013). Numerous states, including Massachusetts and Washington, have led this important movement to develop the infrastructure necessary to transform schools' daily operation into being trauma-informed. Though more empirical evidence is needed to confirm the impact of these initiatives, it is an important area to explore in future research. Nevertheless, the present study's findings elucidate several key areas of expressed need to improve educator training efforts. Providing such training may ultimately impact a school's ability to address trauma-related mental health concerns.

The next research aim in the present study was concerned with differences between schools in urban and rural regions in the availability of mental health resources perceived by educators as well as the educators' perceptions of students' mental health needs and their preparedness in addressing them. Rural populations have consistently been subjected to a greater disadvantage due to the limited access points to quality mental health care in close proximity (Fox, Blank, Rovnyak, & Barnett, 2001; Merwin, Hinton, Dembling, & Stern, 2003; Smalley et al., 2010). Therefore, it was hypothesized that educators serving schools in rural areas would rate less favorably the availability of mental health resources in their schools. Although the *t*-test results did not support this hypothesis, it is important to note that approximately 65% of all participants disagreed or strongly disagreed with the statement that there are adequate mental health resources in their schools regardless of their regional affiliation. Thus, most respondents, regardless of region, indicated that resources were lacking in their schools. This finding suggests that further resource development across schools is needed to bolster school-based mental health.

Regarding the educators' perceptions about students' mental health issues and their preparedness to address them, none of the dependent variables showed significant differences based on region contrary to our hypotheses that educators in rural schools may report less exposure mental health training and in turn, less awareness of the importance of addressing students' mental health issues in school as well as less confidence to carry out those roles. This result may partly due to the self-report nature of the survey, which is based on participants' subjective perception rather than an absolute or objective measure of the actual condition. In fact, the chi-square results examining whether there are mental health professionals employed in their schools indicated a significant difference between urban/suburban and rural/frontier schools. This item, as a question seeking yes or no response, may be better in

soliciting responses based on the objective condition compared to other Likert-style questions.

As hypothesized, significantly more educators in urban/suburban schools reported that they have mental health professionals as compared to their counterparts. This result supports findings from previous studies (e.g., Kelleher et al., 1992; Lambert et al., 2009) that describe the shortage of mental health professionals in rural areas in the United States. The shortage of school mental health professionals is problematic especially in light of present study findings indicating that more educators feel confident in making referrals to school mental health professionals than to community mental health professionals. School mental health professionals can act as a liaison between educators and other school staff and community mental health professionals. Not only are they typically the first "go-to" people that non-mental health professionals in school can consult when students show signs of mental health issues, but they also have an important role in collaborating with leadership to create a school climate that is conducive to mental health promotion. Therefore, the availability of school mental health professionals could potentially have a significant influence on a school's efforts to address students' mental health issues. Contextual factors such as the availability of mental health resources in school and the larger community might indirectly affect educators' perceived capacity to act as mental health gatekeepers. Therefore, in addition to training educators and school staff to be more knowledgeable in mental health topics, a systematic approach such as increasing mental health resources in the region and hiring more school mental health professionals, along with the necessary financial provisions, may augment the effort to promote youth mental health.

The last research question in the present study explored differences in the perceptions of students' mental health issues and mental health promotion in schools based on participants' roles. The results from the ANOVA and subsequent post hoc tests indicated that mental health professionals and administrators are significantly more concerned about students' mental health issues compared to teachers. Additionally, mental health professionals and administrators were significantly more likely to believe that students and their families need greater access to mental health services in the community as compared to teachers. For both dependent variables, no significant difference was found between the responses of administrators and mental health providers. This suggests that school administrators in the present study appear to take students' mental health issues as seriously as mental health professionals do. This finding is important given that the full integration of mental health goals into schools' educational agendas requires a systemic multisector effort led by a leadership with a strong commitment and solid knowledge in the benefit of mental health promotion in school. Thus, it appears that school administrators in the present study may be supportive of mental health promotion in their schools and thus may be willing to allocate the resources necessary to do so.

Moreover, it was interesting that the administrators were significantly more likely to regard addressing students' mental health issues as a part of their job as compared to the teachers. This result was somewhat surprising considering the fact that teachers tend to engage in direct interactions with students more frequently than administrators; thus, it could be assumed that teachers may be more aware of students' mental health issues. One possible explanation for this finding might be that administrators may pay more attention to the systematic and structural issues that affect the whole school than teachers, and therefore, they may be more inclined to regard the issue of student mental health as an agenda that should be addressed at the administrative level. Conversely, teachers may feel like they do not have the ability to influence a school's response broadly to students' mental health concerns and therefore do not see it as an important part of their job. Consequently, this result may suggest that teachers may need further training to recognize the ways in which they can directly impact students' mental health, which is consistent with earlier findings on educators' expressed training needs. In order for the effective promotion of student mental health, schools must make mental health goals a shared agenda and move toward a whole-school approach as suggested by experts (e.g., Atkins et al., 2010; Barrett et al., 2013; Eber et al., 2011; Lean, 2010) in school mental health. Thus, this finding suggests that teachers may need more support and training to exercise their role in advancing this shared agenda.

4.1. Limitations

It is important to note several limitations. First, the present study relied on self-reports of educators and administrators, which bears the same limitations that are present in any analysis based on self-reports. A majority of items in the present study relied on respondents' perceptions rather than on objective measures of the actual status of activities designed to promote mental health. Nonetheless, their perceptions are an important dimension to consider given the significance of their roles in the effort to promote youth mental health in schools.

Second, the cross-sectional design of the present study and the samples drawn from one state limits its generalizability. It is likely that perceptions of students' mental health may change during the course of the year and thus longitudinal designs might be useful in future research. Longitudinal studies may also be useful to examine specific predictors of educators' perceptions, which could generate evidence useful for further refining knowledge of barriers to effective intervention and thus be used to enhance training efforts. Furthermore, it is likely that educators' perceptions may differ across different states, especially given the variation in political ideologies, availability of mental health resources, and attitudes toward and stigma related to mental health. Another important limitation was the demographic makeup with the sample, where the majority of the sample consisted of White females. Although reflective of the educator demographics of the region, it is possible that more diverse samples may hold different attitudes and perceptions regarding mental health. Last, the highest percentage of respondents worked in high school settings. Educators in elementary and middle school settings may feel differently about students' mental health and their roles in addressing mental health concerns. Future research would benefit from examining educator perceptions and mental health promotion in more diverse areas and with broader samples of elementary and middle school staff. There are likely important differences across school settings and may be differences across race, ethnicity, and gender worth exploring further.

4.2. Conclusion

Findings from the present study point to several ways in which the promotion of students' mental health may be enhanced. First, specific topics for training were identified that may be useful for improving educators' confidence in addressing mental health concerns among students. Second, differences across geographic region suggest that allocating more human resources in rural schools may contribute to the effort to meet mental health needs of rural children. Lastly, differences between school administrators and teachers further support the need for training to support teachers' abilities to exercise their important role in addressing students' mental health needs at school. Considering the many adversities today's youth face such as poverty, violence, and family disruption that can be detrimental to their mental health and healthy development, these findings offer some insight into improving a school's response to mental health needs. Administrators, teachers, paraprofessionals, and other school staff can play key roles in preventing further mental health problems, especially for at-risk youth, and promoting mental health through early identification and treatment. Therefore, understanding these key adults' perceptions regarding students' mental health issues and their perceived capacity to proactively engage in a mental health gatekeepers' role can make significant contribution to the effort to raise a healthy next generation.

Acknowledgments

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