School-based Social Work Interventions: A Cross-National Systematic Review

Paula Allen-Meares, Katherine L. Montgomery, and Johnny S. Kim

Across the globe, social workers serve schools in a variety of capacities, providing services such as skills training; individual, group, and family counseling; crisis intervention; home visits; parent support and education; and advocacy for students, families, and school systems. To date, no synthesis of the literature exists examining tier 1 and tier 2 cross-national school-based social work interventions. Therefore, the purpose of this systematic review was twofold: (1) to identify tier 1 and tier 2 school-based interventions that involve social workers and (2) to examine the extent to which the interventions are efficacious with school-based youths. A computerized search with inclusion and exclusion criteria was conducted using several databases. Eighteen studies were included for the final sample in this review. Effect sizes were calculated for all outcomes to determine magnitude of treatment effect. Results indicated that most of the studies were conducted in the United States ($n = 14$) and half ($n = 9$) of the included interventions were tier 1. Many positive effect sizes were found. Interventions aimed to treat a variety of outcomes such as sexual health, aggression, self-esteem, school attendance, identity, and depression. More research is needed to determine the effectiveness of school-based social work worldwide.

KEY WORDS: *efficacy; intervention; schools; social work; systematic review*

As a profession, school-based social work has recognized the ethical need to offer school-based practitioners ways to critically appraise the research evidence and, therefore, be able to offer youths the most effective and evidence-based services to meet their needs (Powers, Bowen, Weber, & Bowen, 2011). Substantial attention over the past decade has been given toward the development; implementation; dissemination; and, in some countries, the mandate of identifying the most efficacious school-based practices to address the needs of the world's youths (for example, Franklin, Harris, & Allen-Meares, 2013).

In the past decade, much attention has been given to viewing school-based intervention through a three-tiered lens (compare Kutash, Duchnowski, & Lynn, 2006; Sugai, 2007). Researchers estimate that approximately 95 percent to 99 percent of school-aged youths can have their treatment needs met though tier 1 (universal) and tier 2 (selective) interventions (Stormont, Reinke, Herman, & Lembke, 2012). Tier 1 interventions are delivered to the whole school, usually in a classroom setting, by a teacher, social worker, or other professional, and approximately 85 percent of students do not need intervention beyond this level (Kelly, Montgomery, & Franklin, 2012). These interventions are intended to prevent the development of problem behaviors and may develop, for example, specific social behaviors in the classroom that are positively reinforced school-wide (Sugai, 2007). Schools implementing tier 1 interventions with fidelity have reported fewer disciplinary referrals and classroom problem behavior, as well as improved positive school climates (for example, Carr et al., 2002; Lewis & Sugai, 1999; Scott & Barrett, 2004). Tier 2 interventions are considered to be more intensive and are frequently delivered in a small-group setting; an estimated 5 percent to 10 percent of all school-age students are in need of tier 2 level interventions to be successful in the school setting (Lindsey & White, 2008). An example of a tier 2 intervention would be a therapeutic small group designed to intervene with a particular problem; such an intervention might be implemented by a school social worker, school psychologist, school counselor, or other behavioral specialists (Crone, Horner, & Hawken, 2004). It is estimated that only 1 percent to 5 percent of youths need intervention beyond tier 1 and tier 2 (Stormont et al., 2012). This level of intervention is known as tier 3 and offers intensive, individualized treatment. To date, however, no synthesis of the

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literature exists examining tier 1 and tier 2 cross-national school-based social work interventions. Therefore, the purpose of this systematic review was to identify tier 1 and tier 2 school-based interventions that involve social workers and examine the effectiveness of the interventions with school-based youths by calculating effect size estimates.

SCHOOL-BASED SOCIAL WORK

Being recognized as a profession in some countries for more than century (for example, the United States) and for some only for a few decades (for example, mainland China), school-based social work is a growing profession with approximately 50,000 practitioners (Kelly, 2008) employed in an estimated 43 countries (International Network for School Social Work, n.d.). Working to address the psychosocial, academic, and physiological needs of school-age youths, school-based social workers around the globe provide a variety of services, including, but not limited to, individual, familial, and group therapy; case management; teacher and classroom support; and children and family advocacy (Huxtable & Blythe, 2002).

Few descriptions exist in the literature that have explained the roles of school-based social workers in various countries, and authors have noted that most knowledge must be gained through personal communication with social workers serving in a particular country (Huxtable, 1998; Huxtable & Blythe, 2002). In her conversations with school-based social workers around the world, Huxtable (1998) found that some countries, like Canada, employ mostly master's level (MSW) school social workers to provide services that are very similar to those in the United States. Other countries are somewhat different. For example, she found that school social workers in the United Kingdom are known to provide "educational welfare," with no national certification needed. Many primarily enforce school attendance, with only some school social workers offering services similar to those of Canada and the United States. In other parts of the world, such as in India, the need for school-based social workers is recognized; however, it is reported that these services are nearly nonexistent (Kumar et al., 2009). Despite differences, Huxtable (1998) explained that in almost all countries, school-based social workers seek to address behavioral, emotional, familial, and community-related needs in relation to students' education.

PREVIOUS REVIEWS

Several previous reviews examining the effectiveness of school-based social work interventions exist (compare Bailey-Dempsey, 1997; Franklin, Kim, & Tripodi, 2009; Kurtz, 1987), but, all of these reviews are based on intervention studies conducted in the United States. In addition, most reviews evaluated studies that lacked strength in research design, and authors frequently concluded by highlighting the need to conduct more rigorous evaluations. One exception was the meta-analysis conducted by Franklin et al. (2009). The authors included only the more rigorously designed outcome studies, and 21 articles met inclusion criteria; they revealed results around internalizing, externalizing, and academic-related outcomes. Researchers found a positive effect size for both internalizing and externalizing problems, and mixed results were reported for academic-related outcomes. This study was the first of its kind to use such methodological rigor to examine the efficacy of school-based social work practices conducted in the United States. As social workers continue to focus on the dissemination and implementation of efficacious or evidence-based practices, it is critical that the most rigorous studies are reviewed and appraised.

Despite this recent focus in implementing the most efficacious interventions, no empirical review of cross-national school-based services provided by social workers exists. Thus, this article seeks to address the following questions: (1) What tier 1 and tier 2 school-based interventions exist in empirical literature that involves social workers? and (2) To what extent are social worker–involved interventions effective with school-based youths?

METHOD

A computerized search through several databases (CINHAL, ERIC, MEDLINE, and PsycINFO) was conducted using the following keyword search terms: "school," and "social work*," and "effectiveness" or "outcome" or "evaluation." The use of the asterisk was to include all variations of the term "social work" (for example, social worker or social workers). This set of search terms was mirrored from Franklin and colleagues' 2009 meta-analysis of school social work interventions in the United States. The initial database search yielded 1,457 articles. The authors also searched through the Campbell Collaboration database for

additional studies, but none were found that met the inclusion criteria. To examine the most rigorous studies and to adequately address the research questions, we chose the following six inclusion criteria: articles had to have (1) been an experimental, quasi-experimental, or pretest–posttest design; (2) specifically identified the inclusion of a social worker in the intervention process (for example, social workers trained teachers or delivered intervention); (3) been reporting on an intervention that was delivered primarily during the school day and not solely after school; (4) been published before February 2012; (5) been published in a peer-reviewed journal article; and (6) investigated psychological, behavioral, and/or physiological health outcomes. Eighty-eight abstracts were identified as being potentially relevant for inclusion, and the full articles were examined for inclusion. Additional studies were excluded for either not meeting inclusion criteria or because they did not provide sufficient information to calculate effect sizes. Eighteen studies were included for the final sample in this review.

When not reported in the articles, effect sizes (Hedges' *g*) were calculated for all outcome measures using Comprehensive Meta-Analysis 2.0 software. Effect sizes are useful because they estimate the magnitude and direction of the treatment effect, thereby providing an estimate of the extent to which a treatment effect exists. Effect sizes were interpreted on the basis of classification by Cohen (1988), with 0.20 indicating a small effect size, 0.50 indicating medium, and 0.80 and above indicating large. All effect sizes are reported such that positive effect size estimates favor the school social work intervention. If a study provided a range of effect sizes for a particular outcome construct, then an average effect size estimate was calculated. When studies reported multiple follow-up points, the last follow-up point was selected to help calculate effect sizes, because many studies were interested in the long-term effects of the intervention.

RESULTS

Of the 18 studies that met inclusion criteria, there were an equal number of tier 1 ($n = 9$) and tier 2 ($n = 9$) intervention articles (see Table 1). Just over half ($n = 10$) of the studies were conducted with middle and high school students. Most ($n = 14$) of the studies were conducted in the United States, with the remaining studies being conducted in Canada ($n = 2$), the United Kingdom ($n = 1$), and Israel ($n = 1$). Reflecting a substantial increase in school-based social work interventions, most ($n = 15$) of the studies were conducted in the 21st century. Overall, social workers primarily served as group facilitators or trained teachers to implement the intervention. The majority of the studies used either a pretest–posttest research design ($n = 8$) or quasi-experimental design ($n = 6$). Only four studies reported on the results of a randomized controlled trial (RCT) design. The majority of the interventions aimed to address behavioral, emotional, and/or mental health–related outcomes.

Tier 1 Results

Sexual Assault, Abstinence, and Sexually Risky Behavior. The majority of tier 1 interventions ($n = 4$) addressed issues that coalesced around sexual behavior and awareness. Kernsmith and Hernandez-Jozefowicz (2011) reported on the results of the First Step Peer Education Program with 343 high school students in the United States. This pretest–posttest design intervention was delivered by teachers who were trained by social workers. At three-month follow-up, the students had statistically improved attitudes toward sexual assault among both male and female participants. A medium effect size estimate ($g = 0.46$) was calculated for this outcome. Lowe, Jones, and Banks (2007) also used a pretest–posttest design and reported on the results of the Safe Relationships Program with 106 ninth graders in the United States. They found that participants reported having increases in knowledge of sexual activity, sexual crime, and sexual harassment between pretest and posttest. In addition, among students who revealed a higher tolerance for sexually inappropriate behavior at pretest, posttest results revealed a reduced tolerance (Lowe et al., 2007). However, a small effect size of 0.08 was calculated, which indicates very little treatment effect at posttest.

Kirby, Waszak, and Ziegler (1991) explored the impact of a school-based health clinic (SBHC) on the sexually risky behavior of middle and high school students in Dallas, Texas, through the use of a quasi-experimental design. The SBHC was staffed with a multidisciplinary team that included a social worker and a nurse. Using data from 4,489 visits to the clinic, researchers found that among the students who visited the clinic, males were less likely to have sex and postponed the onset of

Table 1: Studies Included in Empirical Review of Tier 1 and Tier 2 School-based Social Work Interventions

Citation	Intervention	Study Design	Sample Size	Outcome Variables and Corresponding Effect Sizes
		Tier 1 Interventions (universal)		
De Wolfe & Saunders (1995)	Stress Management Treatment Program	Quasi-experimental	88	Level of stress = 0.36 Social skills = 0.22 Self-esteem = 0.44
Fraser, Lee, Kupper, & Day, (2011)	Making Choices and Making Choices Plus	Quasi-experimental	443	Aggression = 0.12
Kernsmith & Hernandez-Jozefowicz (2011)	First Step Peer Education Program	Pretest–posttest	343	Attitudes about sexual assault, school connection = 0.46
Kirby,Waszak, & Ziegler (1991)	School-based clinics	Quasi-experimental	4,489 student visits	Sexual activity, contraceptive use, and pregnancy = NS Ever had sex, males = 0.30 Ever had sex, females = –0.13[a]
Lowe, Jones, & Banks (2007)	Safe Relationships program	Pretest–posttest	106	Knowledge and attitude toward sexual activity = 0.08
Sherr & Dyer (2010)	Project U-Turn	Pretest–posttest	372	Sexual knowledge and views = 0.49 Abstinence behavior = 0.51
Smokowski, Fraser, Day, Galinsky, & Bacallao (2004)	Making Choices	Randomized clinical trial	101	Aggressive behavior protective factors = 0.34 Aggression = 0.31 Peer acceptance = 0.05
Wade & Guo (2010)	School-based health center	Three waves of pretest–posttest	290	Health-related quality of life = 0.19
		Tier 2 Interventions (selective)		
Harris & Franklin (2003)	A cognitive–behavioral group intervention	Randomized clinical trial	85	School attendance = 0.47 Grade point average = 0.48 Problem-focused coping = 0.79 Social problem-solving skills = 1.00
Hilliard (2007)	Children's grief curriculum	Quasi-experimental	18	Type and severity of childhood grief symptoms = 1.66 Behavioral problems = 1.00
Larkin & Thyer (1999)	Cognitive–behavioral group counseling	Randomized clinical trial	52	Self-esteem = 2.75 Perceptions of self-control = 1.17 Classroom behavior = 1.84
LeCroy (2004)	Go Grrrls program	Quasi-experimental	55	Depression = 0.01 Body image satisfaction = 0.11 Peer esteem = 0.53 Seeking help = 0.31 Common irrational beliefs = 0.17

(continued)

Table 1: Continued

Citation	Intervention	Study Design	Sample Size	Outcome Variables and Corresponding Effect Sizes
Mishna & Muskat (2004)	Interpersonal group treatment and mutual aid	Pretest–posttest	21	Internalizing behaviors = 0.29 Externalizing behaviors = 0.44 Self-concept, interpersonal relationships, and school attitude = 0.42
Newsome (2005)	Solution-focused brief-therapy groups	Pretest–posttest	26	Homework completion skills = 0.29 Classroom behavior = 0.50 Social skills = 0.67
Parton & Manby (2009)	Cognitive–behavioral and skills training group therapy	Pretest–posttest	38	Behavior rating = 0.26
Spencer, Brown, Griffin, & Abdullah (2008)	Group intervention focusing on intergroup relations	Three waves of pretest–posttest	86	Intergroup relations = 0.20 Critical social awareness = 0.14 Primary language = NS
Westhues, Hanbidge, Gebotys, & Hammond (2009)	Skills and Tools for Emotions Awareness and Management	Quasi-experimental	184	Emotional awareness = 0.38 Emotional expression management = 0.41 Self-esteem = 0.27 Academic performance = 0.39 Emotional awareness (number of body cues) = –0.71[a]

Note: NS = no significant difference reported and not enough information provided to calculate effect size.
[a]Favors comparison group.

intercourse by one year. Among females, however, results indicated that they were less likely to use contraceptives and reported higher rates of pregnancy (Kirby et al., 1991). Most of the effect sizes reported in the study, however, were nonsignificant.

The final study in this section investigated the efficacy of a sexual abstinence program, Project U-Turn, delivered to middle and high school–age youths in Miami, Florida, by means of a pretest–posttest design (Sherr & Dyer, 2010). The intervention was delivered by social workers to 372 students in a classroom setting, and the results revealed a significant reduction in the number of youths who reported having sexual intercourse. A medium effect size was calculated for both sexual knowledge views ($g = 0.49$) and abstinence behavior ($g = 0.51$).

Aggression. Two studies were conducted investigating the efficacy of a program entitled Making Choices (MC) on elementary school–age youths' aggressive behavior. The first RCT study was conducted with 101 third-grade students in a Southeastern state in the United States (Smokowski, Fraser, Day, Galinsky, & Bacallao, 2004). Results revealed that students in the experimental group had significantly lower scores on overt aggression, with a medium effect size estimate reported. They also found that the MC group had higher levels of peer acceptance, although the reported effect size estimate of 0.05 borders on no treatment effect for this outcome (Smokowski et al., 2004). The second study comprised 443 third-grade students in the United States and compared MC, MC Plus, and a control group (Fraser, Lee, Kupper, & Day, 2011). Participants in both the MC and MC Plus groups reported significantly lower levels of aggressive behavior when compared with the control group. There were no significant differences in outcomes between the MC and MC Plus group, and a small effect size estimate was reported for aggression.

Other. The remaining three tier 1 studies investigated the impact of various outcomes. One study reported on the impact of SBHCs on both physical and psychosocial health-related quality of life (Wade & Guo, 2010). Social workers provided behavioral and mental health assessments, psychiatric referrals, and crisis intervention as a part of the health team at some of the sites. Researchers employed a pretest–posttest design with 209 youths in Cincinnati, Ohio, and Northern Kentucky and found that participants reported significant increases in both total scores and psychosocial scores associated with health-related quality of life (Wade et al., 2010). A small effect size estimate of 0.19 was calculated for the health-related quality of life outcome.

Stress management treatment was provided to 88 sixth-grade students in a classroom setting in the United States (De Wolfe & Saunders, 1995). Results from this quasi-experimental design revealed statistically significant improvements in participants' stress level ($g = 0.36$), social skills ($g = 0.22$), and self-esteem ($g = 0.44$).

The final tier 1 study included in this review was conducted by Yahav and Cohen (2008) with 255 ninth-grade youths in Northern Israel. Using an RCT design, the authors found that students who received the stress management and biofeedback intervention had small but statistically improved anxiety ($g = 0.26$), behavior ($g = 0.25$), and self-esteem ($g = 0.25$) scores. In contrast to the tier 1 interventions, several of the tier 2 interventions targeted youths with more specifically defined concerns.

Tier 2 Results

At-Risk Youth Interventions. The majority of tier 2 studies included in this review coalesced around offering interventions to students who were considered at risk and displayed one or more emotional, behavioral, learning, and/or psychosocial problems. Two of the interventions were based on cognitive–behavioral therapy (CBT). Larkin and Thyer (1999) used an RCT design with 52 first- to third-grade students in the United States and found that participants had significantly improved self-esteem, self-control, and classroom behavior, each with very large effect size estimates ($g = 2.75$, $g = 1.17$, and $g = 1.84$, respectively). Parton and Manby (2009) reported on the results of their pretest–posttest study with 38 middle school children from the United Kingdom and also found significant differences in participant's behavior, although the effect size was much smaller ($g = 0.26$). The authors did not report enough information to calculate effect sizes for the self-esteem outcome, which the authors reported improved slightly from pretest to posttest.

Westhues, Hanbidge, Gebotys, and Hammond (2009) investigated the efficacy of the Skills and Tools for Emotions Awareness and Management intervention conducted in Ontario, Canada with 164 first- through sixth-graders and found that

students significantly improved emotional awareness, emotional coping skills, expression management, self-esteem, and academic performance. Small to near-medium effect sizes were calculated for all outcomes with the exception of emotional awareness of the number of body cues, which had a large effect ($g = -0.71$) favoring the comparison group.

Newsome (2005) used solution-focused brief therapy (SFBT) group intervention with 26 seventh- and eighth-grade at-risk students in the United States. Through a pretest–posttest design, he found that participants reported improved social skills, classroom behavior, and homework completion. Small effect size estimates ($g = 0.29$) were calculated for homework completion skills, and medium effect size estimates were found for classroom behavior ($g = 0.50$) and social skills ($g = 0.67$). Finally, Mishna and Muskat (2004) investigated the efficacy of an interpersonal group treatment and mutual aid group intervention with 21 fifth- through 11th-grade students who had been referred for learning or psychosocial problems in Canada. Despite the small sample size, statistically fewer externalizing symptoms and overall behavioral problems were reported post-intervention. Effect sizes ranged from small for internalizing behaviors to near medium for externalizing behaviors and overall behavioral problems. In addition to risky behaviors, tier 2 interventions included in this review also sought to intervene with pregnant and parenting adolescents, youths who had experienced grief and loss, and female adolescents experiencing problems with body image and self-esteem.

Pregnant and Parenting Teenagers Interventions. Harris and Franklin (2003) conducted an RCT investigating the efficacy of Taking Charge with 85 ninth- through 12th-grade pregnant or parenting female adolescents in the United States to understand the extent to which group CBT would impact outcomes. Researchers found that students in the CBT group had statistically improved school attendance ($g = 0.47$), problem-solving skills ($g = 1.00$), problem-focused coping ($g = 0.79$), and grade point average ($g = 0.48$), reflecting medium to large effects.

Loss and Depression Interventions. Hilliard (2007) investigated the impact of a social worker–implemented children's grief group intervention with 18 elementary-age children in the United States who had experienced some type of grief or loss. This quasi-experimental designed study revealed that students in the social work group had large treatment effects and significantly fewer behavioral problems ($g = 1.00$), as well as fewer types and lower severity of childhood grief symptoms ($g = 1.66$).

Body Image, Identity, and Intergroup Relations. LeCroy (2004) reported on the results of the Go Grrrls Program, designed to assist young girls with issues such as body image and self-esteem. Results of this quasi-experimental study with 55 students in the United States found that group participants had significantly higher levels of peer-esteem ($g = 0.53$), help endorsements ($g = 0.31$), and common irrational beliefs ($g = 0.17$) when compared with the control group. No differences regarding body image, self-esteem, and depression were found (LeCroy, 2004). Also focusing on outcomes associated with identity, Spencer, Brown, Griffin, and Abdullah (2008) investigated the efficacy of a group intervention focusing on intergroup relations among 86 eleventh-grade students who were seen as leaders in midwestern high schools in the United States. Using a pretest–posttest design, researchers found that participants had increased social awareness ($g = 0.14$) and intergroup relations ($g = 0.20$) at posttest.

DISCUSSION

The purpose of this systematic review was to investigate the treatment effects of tier 1 and tier 2 school-based social work interventions from the United States and abroad. The results of the review indicate that social workers have become increasingly involved in administering interventions that reveal promising empirical support with a variety of outcomes and populations. Below is a summary and discussion of the effect size results from the tier 1 and tier 2 interventions. More detailed information on the specific interventions can be found in the individual studies listed in Table 1.

Tier 1 Interventions

Sexual Assault, Abstinence, and Sexually Risky Behavior. The majority of the tier 1 interventions were related to sexual health and sexual assault prevention outcomes. The two interventions that provided the strongest effects were Project U-Turn (Sherr & Dyer, 2010) and First Step Peer Education Program (Kernsmith & Hernandez-Jozefowicz, 2011). In contrast to the other two less effective

programs (Kirby et al., 1991; Lowe et al., 2007), both more effective programs provided intervention with professionals who had been trained in the manualized treatments, offering several weekly sessions of intervention. From this review, it seems that manualized, weekly exposure for several weeks is needed to positively affect beliefs about sexually risky behavior and sexual assault. Both of these studies, however, used a pretest–posttest design, and additional research with stronger designs is needed to further determine efficacy.

Aggression. In addition, several studies examined interventions aimed at reducing aggression among elementary students. Although the operational definition of aggression varied by study, examples of aggressive behaviors analyzed in the studies are fighting, breaking things, harming others, bullying, and threatening peers. Known as a common risk factor for a variety of subsequent negative outcomes in adolescence and adulthood, aggressive behavior has become an important focus for prevention researchers (Barczyk, Montgomery, & Thompson, 2011). Both studies investigated the impact of MC, and reported small effect sizes. Similar to the more effective sexual health and sexual assault prevention studies, the manualized MC program is delivered over several weeks, once a week, in the classroom setting.

Tier 2 Interventions

At-risk Students. A number of tier 2 programs involved intervening with students who had been identified as at-risk, with some type of behavioral, learning, and/or emotional problem. The outcome most frequently improved by these tier 2 interventions was problem behavior. Problem behaviors are typically exhibited through externalizing behaviors (for example, acting out in class). Cognitive–behavioral group counseling (Larkin & Thyer, 1999; Parton & Manby, 2009), interpersonal group counseling (Mishna & Muskat, 2004), and SFBT (Newsome, 2005) demonstrated a range of small to very large effects on problem behaviors. Both CBT and SFBT have revealed promise with students in the school setting (compare Kavanagh et al., 2009; Kim & Franklin, 2009). Most of these interventions were delivered once a week for approximately eight weeks.

Specific Populations. In addition to serving youths who were identified as being at-risk, two additional studies included in this review sought to treat specific populations: pregnant and parenting adolescents (Harris & Franklin, 2003) and children who had experienced significant grief and/or loss (Hillard, 2007). Both of these studies revealed positive effects after youths had received eight weekly one-hour sessions. Harris and Franklin's (2003) CBT treatment, known as Taking Charge, revealed medium to large effect sizes with several outcomes: school attendance, grade point average, coping, and problem-solving skills. Because early pregnancy has been identified as a significant risk factor for school dropout, unemployment, repeated early pregnancies, and several other negative subsequent outcomes, providing efficacious intervention has been identified as an important endeavor (Harris & Franklin, 2008).

Hillard (2007) also reported very large effects with children who had experienced grief and/or loss. As children's grief is often manifested through behavioral problems, it's important to note that this manualized intervention revealed large effects for behavioral problem outcomes as well. In addition, the intervention had a very large effect on the type and severity of grief symptoms. Interventions like these need to be replicated with larger sample sizes and lengthy follow-up time points to determine long-term effectiveness.

Implications for School-based Social Work

School social work practitioners across the world are increasingly being expected to operate from an evidence-based practice (EBP) framework, implementing interventions that offer the best evidence to intervene with a particular problem (Powers et al., 2011). The findings from this review have important implications for school-based social workers attempting to operate from this framework. A more glaring implication is with regard to the absence of studies using rigorous experimental designs found outside of the United States. Despite significant advancements in globalization, access to EBP materials and data, and the substantial attention that has been given to the dissemination and implementation of EBPs, very few empirical data on school-based social work interventions are available from outside the United States. Further, there were no studies that met our criteria found from countries that have exhibited some of the highest needs (for example, developing countries; compare Allen-Meares & Montgomery, under review). Although the number of school-based

social workers have increased dramatically in recent years around the globe (Kelly, 2008), additional research is needed to determine both what types of interventions they deliver and how effective they are.

Social workers are uniquely equipped to intervene with at-risk youths in the school settings, because the field of social work emphasizes training and understanding of youths who are affected by severe poverty, abuse, neglect, and disabilities (see Allen-Meares, 2010). This review is (to our knowledge) the first of its kind to offer a review of empirical evidence of school-based social work interventions from international studies. Mirroring the social work profession, studies in this review targeted a variety of outcomes relevant to intervention with youths. Additional research is needed with larger sample sizes, replicated studies, longer follow-ups, and more rigorous treatment designs to establish the efficacy of school-based social work interventions. More research is also needed to assess programs outside of the United States. Because countries differ substantially with regard to the cultural and political contexts that influence the education system, it is unknown to what extent interventions developed in the United States are efficacious in other countries.

There are several limitations that warrant consideration in interpreting these results. First, we chose to include only published articles. It is possible that unpublished studies and dissertations offer insight that is contradictory to the findings in this review. Studies may also not have been included because they did not explicitly identify the use of a social worker in the training or delivery of the intervention. It is possible some studies may have included a social worker but did not explicity illustrate this fact in the published manuscript. Finally, the majority of the studies were conducted through quasi-experimental and pretest–posttest designs and were open to potiential threats to internal validity; likewise, causality cannot be confirmed.

Despite the aforementioned limitations, this article is important as a cross-national review of school-based social work interventions. Additional research is needed to understand the extent to which the interventions reviewed here can translate across country lines and to determine what changes need to be made to adapt promising interventions to meet the cultural and political needs of diverse nations. SW

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Paula Allen-Meares, PhD, *is chancellor, University of Illinois at Chicago.* ***Katherine L. Montgomery, PhD,*** *is a postdoctoral fellow, George Warren Brown School of Social Work, Washington University in St. Louis.* ***Johnny S. Kim, PhD,*** *is associate professor, School of Social Work, University of Denver, Denver. Address correspondence to Katherine Montgomery, School of Social Work, Washington University in St. Louis, St. Louis, MO 63130; e-mail: kmontgomery@utexas.edu.*

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