# Mindfulness Intervention with Homeless Youth

Kimberly Bender
Stephanie Begun
Anne DePrince
Badiah Haffejee
Samantha Brown
Jessica Hathaway
Nicholas Schau
University of Denver

ABSTRACT Objectives: Mindfulness-based interventions demonstrate promise in helping individuals cultivate awareness of risks, thereby decreasing likelihood of revictimization; however, mindfulness-based approaches with homeless youth have received little empirical attention. This mixed-methods study investigates a mindfulness-based intervention for homeless youth, investigating (a) quantitatively-to what extent is the intervention effective in increasing youths' mindfulness over time? and (b) qualitatively—in observing homeless youths' participation in the mindfulness groups, what strategies appear most helpful in engaging them in this mindfulness intervention and what challenges are encountered? Methods: Using a randomized experimental design, the current study pilot tests an intensive (3 day), skill-building intervention to train homeless youth (N = 97, ages 18-21 years) to practice mindfulness and avoid risks. Youths' mindfulness was assessed via standardized self-report instruments at baseline and postintervention (1 week post baseline for youth in the control condition). Results: Repeated-measures ANOVA results indicate that although no effect was found on total mindfulness, a significant effect was found for mindfulness subscales. Intervention youth improved in their observation skills significantly more than control youth (F[1] = 3.88, p < .05, partial- $\eta^2 = .05$ ). Qualitatively, certain intervention strategies (i.e., facilitating, personal sharing, teaching, and peer activation) demonstrated notable utility in actively engaging youth in mindfulness material, whereas challenges (meeting basic needs, a fight or flight instinct, and a generalized distrust of service providers) created challenges in implementing mindfulness skills. Conclusion: The intervention improved youths' attention to internal and external stimuli yet future iterations will need to continue to modify to meet the unique needs of this population.

**KEY WORDS**: mindfulness intervention, homeless youth, experimental design, victimization prevention

doi: 10.1086/684107

omeless youth represent a vulnerable population that, as compared to their housed counterparts, is more likely to have experienced physical and/or sexual abuse in their homes of origin (Keeshin & Campbell, 2011). Living on the streets exposes homeless youth to increased likelihood of experiencing robbery, physical assaults, and sexual victimization (Coates & McKenzie-Mohr, 2010; Whitbeck, Hoyt, & Ackley, 1997). Unfortunately, few interventions have been designed and tested to reduce victimization among homeless youth (Altena, Brilleslijper-Kater, & Wolf, 2010), leaving service agencies with limited empirical guidance for helping homeless youth stay safe on the streets.

Research with at-risk youth in the general population might help explain why homeless youth are at heightened risk for victimization and can identify useful prevention targets. Within the broad population, youth with histories of victimization have been shown to demonstrate attention and memory deficits (e.g., Cromer, Stevens, DePrince, & Pears, 2006; DePrince, Combs, & Shanahan, 2009; DePrince & Freyd, 1999), which might impair or reduce youths' ability to detect danger cues (e.g., DePrince, 2005; DePrince, Chu, & Combs, 2008; DePrince, Weinzierl, & Combs, 2009). This compromised ability to detect threat can influence the ways in which youth respond to their environment (Lazarus & Folkman, 1984). Youth might expect rejection and hostility from their peers or develop negative self-evaluations (Taylor, Sullivan, & Kliewer, 2013), which could distract them from identifying danger cues and increase their risk for subsequent victimization (DePrince, 2005). Research has suggested homeless youth with histories of childhood abuse are at increased risk for subsequent street victimization (Martijn & Sharpe, 2006), and many homeless youth have reported struggling with detecting dangerous situations on the streets (Bender, Thompson, Ferguson, Yoder, & De-Prince, 2015).

Mindfulness-based interventions are recognized in the broader literature as tools to help individuals cultivate awareness of the surrounding environments (DePrince, Chu, Labus, Shirk, & Potter, 2015; Hill, Vernig, Lee, Brown, & Orsillo, 2011). In the context of homeless youth living on the streets, the increased awareness of the environment gained through a mindfulness-based interventions could help decrease the likelihood for revictimization in potentially dangerous situations. However, mindfulness-based approaches with homeless youth have received little empirical attention. The current pilot study tested an intensive, skill-building, mindfulness-based intervention designed to train homeless youth to attend and respond to risks on the streets.

# **Background Literature**

Mindfulness is often defined as the process of intentionally attending to experiences in the present moment (Kabat-Zinn, 1990) and purposefully cultivating an ability to approach experiences in a nonjudgmental way (Bishop et al., 2004).

Mindfulness has the potential to train individuals to flexibly shift their attention between broad awareness and focused concentration during moment-by-moment experiences (Brown, Ryan, & Creswell, 2007); importantly, this ability to shift focus is a skill that has been shown to facilitate adaptive responses to mental processes that contribute to emotional distress and maladaptive behavior (Bishop et al., 2004). Several mechanisms have been identified that underlie how mindfulness might influence changes in behavior; specifically, attending to internal and external stimuli (i.e., observing), mentally labeling such stimuli (i.e., describing), attending to the individual's current actions (i.e., acting with awareness), abstaining from negative self-evaluation (i.e., nonjudgment of inner experience), and allowing thoughts and feelings to fluctuate (i.e., nonreactivity to inner experience; Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006). Moreover, consistent mindfulness practice might facilitate an individual's long-term tendency to be aware, nonreactive, and nonjudgmental of his or her experiences, thoughts, and emotions (Garland, 2013). Therefore, incorporating mindfulness-based techniques into interventions for at-risk youth might help promote youths' awareness of potentially dangerous individuals and situations and enhance self-regulation skills that are critical in detecting actual versus perceived harm.

The way in which individuals respond to stress associated with prior victimization is critical in understanding protective mechanisms underlying mindfulness practice (Taylor et al., 2013). Empirical evidence supports the idea that the practice of mindfulness can improve attention regulation, body awareness, emotional regulation, and changes in self-perspective (Hölzel et al., 2011), all of which are mechanisms that might underlie maladaptive threat appraisals and coping processes commonly associated with cumulative victimization exposure (Catterson & Hunter, 2010). In turn, recent evidence has suggested mindfulness-based interventions can reduce rates of assault and revictimization among individuals with victimization histories (DePrince et al., 2015; Hill et al., 2011). For example, Hill et al. (2011) investigated the effects of a mindfulness program on the probability of revictimization among college-age women who were victims of childhood sexual abuse. At the 2-month post-intervention follow-up, Hill and colleagues found that, as compared with their counterparts who did not receive the intervention, the women who took part in the mindfulness program were less likely to be assaulted. DePrince and colleagues (2015) integrated a mindfulness-based intervention (DePrince & Shirk, 2013) with a brief risk-detection curriculum (e.g., Marx, Calhoun, Wilson, & Meyerson, 2001) to teach adolescents about the role that attention to internal cues (e.g., feelings of fear) and external cues (e.g., situations, people) cues plays in noticing and responding to risk. The study sample included adolescent girls involved in the child welfare system who were at high risk for revictimization. Compared with their peers in a no-treatment group, the girls who received the mindfulness-based risk detection intervention were nearly 5 times less

*likely* to report sexual revictimization and 2 times *less likely* to report physical revictimization over the study period (DePrince et al., 2015).

Prior to the current study, mindfulness interventions for preventing victimization among homeless youth had not been tested. Only two other studies have applied mindful practice with homeless youth, and those targeted outcomes other than safety (Grabbe, Nguy, & Higgins, 2012; Schussel & Miller, 2013). These studies found that homeless youth who participated in mindfulness-based interventions reported reductions in emotional distress and anxiety, positive changes in their sense of well-being and relationships, and improved expectations about the future (Schussel & Miller, 2013). These results indicated that mindfulness exercises can be useful in enhancing well-being among homeless youth, and might help facilitate the sharing of emotions in group settings. Although such studies offer an initial understanding of ways in which mindfulness-based approaches could be used to intervene with homeless youth, more rigorous designs are needed to determine the utility of this approach with this vulnerable, at-risk population (Grabbe et al., 2012).

The current study use a mixed-methods design to investigate an intensive mindfulness-based intervention—Safety Awareness for Empowerment (SAFE) designed to improve risk detection and prevent victimization among homeless youth. Adapted from work with at-risk youth (DePrince et al., 2015) for the current study with homeless youth, SAFE aimed to use mindfulness strategies to engage a sample of homeless youth. Although the long-term goal of this research approach is to develop curricula to increase the safety of homeless youth living on the streets (the effects of the pilot study on risk detection are described elsewhere; Bender et al., under review), this article focuses on the proximal outcome of mindfulness by examining two essential research questions. The first quantitative question asked whether a randomized controlled trial of the SAFE intervention would be effective in increasing youth mindfulness skills from pre- to posttest, relative to youth who did not receive the intervention. The second qualitative question focused on youth in the intervention to ask which of the strategies appeared most helpful in engaging homeless youth in mindfulness-based interventions and what challenges were encountered.

#### Method

## Sampling and Recruitment

Using purposive sampling, a sample of 97 street youth (ages 18 to 21 years) was recruited from a shelter for homeless youth that offered a short-term (40-day) stay, case management, basic subsistence items (e.g., food, hygiene supplies), and referral services. Human subjects' approval was received from the University of Denver Institutional Review Board. Recruitment and data collection occurred between September 2012 and August 2013.

To be eligible for study inclusion, youth had to be 18 to 21 years old, and able to provide written informed consent to participate in the study. Youth were excluded from the sample if they could not comprehend the consent form because of cognitive limitations (e.g., developmental delays or psychotic symptoms) or if they were visibly intoxicated or high at the time of the interview. In cases in which youth were under the influence of substances, the youth were told they could return at a later time when they could more competently answer interview questions. The research team recruit six cohorts of approximately 15 to 20 youth each, with recruitment occurring every 6 weeks to allow for turnover of youth staying at the shelter.

#### **Procedures**

Research staff introduced themselves to youth staying in the shelter, screened for age, explained the study aims and procedures, and secured written consent from youth who were interested in study participation. Researchers administered a 45-minute baseline interview. To account for variability in literacy skills, the interviewer read the questions and response options aloud to each participant, and then recorded the participant's verbal response. Youth received a \$20 gift card to a local food vendor to thank them for their participation. At the end of the baseline interview, participants were randomly assigned to the control group (n = 41), or the intervention group (n = 56); random assignment was carried out using an online random number generator and simple randomization methods. Participant flow through the study is depicted in Figure 1.

Youth randomly assigned to the intervention condition were invited to participate in the SAFE intervention, which is a 3-day, manualized, mindfulness-based, skill-building intervention. The SAFE intervention took place on-site at the shelter within a week following participants' baseline interviews. Participating youth consented to audiotaping of the mindfulness groups, and the audiotapes of the six groups were transcribed for qualitative analysis. Youth assigned to the control group received shelter-based services as usual, including case management services (e.g., resource referral, assistance with goal setting). At the end of Day 3 of the intervention (for the intervention group) youth completed a 15-minute postest interview assessing mindfulness scores. The control group youth completed the interview approximately 5 to 7 days after their baseline interview. After completing the posttest interview, treatment and control youth were compensated with a \$20 gift card for their participation.

A mixed-methods embedded design (Creswell & Plano-Clark, 2011) was used in which quantitative (i.e., baseline and posttest interviews) and qualitative (i.e., mindful group recordings) data were collected concurrently and then analyzed independently. The results from the qualitative strand are presented to enhance the interpretation of our quantitative results (Creswell & Plano-Clark, 2011). In particular, themes developed from our qualitative data analysis that explain the

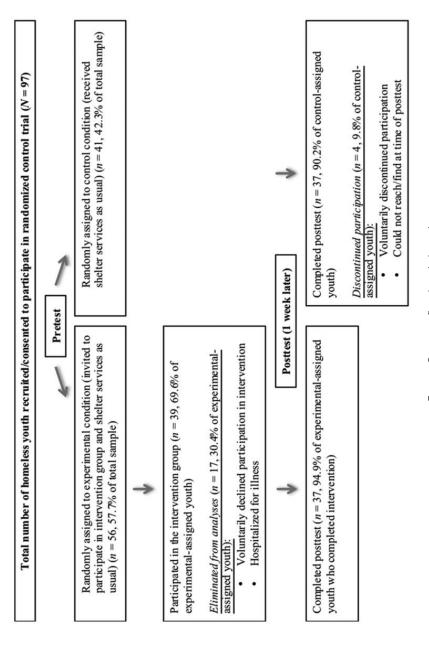


Figure 1. Participant flow-through the study

process by which youth engaged in the mindfulness intervention provide a supportive, secondary role to our quantitative data that examined the impact that SAFE had on improving youths' mindfulness over time.

#### SAFE Intervention

SAFE was adapted from mindfulness-based interventions tested with victimized youth at high risk for revictimization. Similar mindfulness interventions have drawn on research showing links between victimization and attention as well as risk detection problems (e.g., DePrince et al., 2008; DePrince, 2005; Marx et al., 2001; Wilson, Calhoun, & Bernat, 1999). Two previous 12-session interventions used mindfulness-based activities to teach youth to attend to internal and external cues regarding mood (DePrince & Shirk, 2013) and intimate partner violence (DePrince et al., 2015). For example, DePrince et al.'s 12-session, weekly group intervention used mindfulness-based activities to help youth attend to external cues (e.g., something in the environment) and internal danger cues (e.g., a youth's own feelings of fear) relevant to intimate partner violence and, once danger is detected, to respond effectively. The SAFE intervention made several key adaptations for homeless youth because these youth face danger from many sources, in addition to intimate partner violence. Moreover, homeless youth are often transient, and therefore, difficult to engage in weekly services, requiring adaptions in the delivery of the SAFE intervention. Curriculum content was adapted to address the diversity of dangers faced by homeless youth (e.g., finding safe places to sleep, relationship violence, danger on the streets) through examples and exercises. For example, risk-detection content was adapted to include examples relevant to street safety (e.g., meeting a stranger in the park). The overall curriculum structure was maintained, introducing the concept of mindfulness; focusing attention to internal, interpersonal, and environmental cues; and developing assertiveness skills, problemsolving skills, and strategies for asking for help. Instead of 12 weekly sessions, the curriculum format was adapted to a 3-day workshop consisting of 12 hours of programming (i.e., approximately 4 hours/day).

The SAFE intervention was administered in a group format, with 6 to 8 youth per group, and was delivered to six cohorts of youth that were recruited at approximate 6 week intervals. Each intervention cohort met for 3 consecutive days at a homeless youth shelter, and activities included group discussions, experiential exercises, and didactic components. Every group was facilitated by two leaders, one of whom was a female clinical psychologist who had several years' experience in mindfulness intervention, and the other was a male intern who had a master's in social work and personal experience in mindfulness but was new to professional mindfulness facilitation. Additional details regarding these group components are available from the authors upon request.

## Measures

498

Basic background variables and demographics were collected to describe the sample and verify group equivalence at baseline, including age, gender (0 = male, 1 = female, 2 = other), ethnicity (1 = White, 2 = Black, 3 = Latino, 4 = other), highest grade of school completed, number of days in past week slept on the streets, other service utilization at the host agency (e.g., GED, case management, job training; 0 = no, 1 = yes), transience (number of intercity moves since first leaving home), and length of time homeless (calculated as the number of months between the date the youth last left home and the interview date). In addition, qualitative data were drawn from transcripts of the recorded intervention sessions, which focused on introducing homeless youth to mindfulness.

For the dependent (outcome) variable of interest, the pre- and posttest interviews included a 21-item measure adapted from three psychometrically validated measures of mindfulness: the Kentucky Inventory of Mindfulness Skills (Baer, Smith, & Allen, 2004), the Freiburg Mindfulness Inventory (Buchheld, Grossman, & Walach, 2001), and the Mindfulness Questionnaire (Chadwick, Hember, Mead, Lilley, & Dagnan, 2008). The 21 items adapted for use in the current study were selected in response to confirmatory factor analyses conducted by Baer et al. (2006), which suggested that combining aspects of these extant measures more effectively captures the multifaceted nature of mindfulness across samples as compared with using any of the three measures as originally formulated. Each item was measured through participants' responses to a 5-point rating scale that ranged from never/ very rarely true ( = 1) to very often/always true (= 5). As also determined by Baer et al., the 21 items formed four subscales: observing, describing, acting with awareness, and accepting without judgment. In the current study, the internal consistency reliability coefficient for the overall mindfulness measure was ( $\alpha$  = .72). For the subscales, coefficients included observing ( $\alpha = .82$ ), describing ( $\alpha = .81$ ), acting with awareness ( $\alpha$  = .66), and accepting without judgment ( $\alpha$  = .80).

#### Results

# Sample Characteristics

Descriptive statistics (mean, standard deviation, frequency, percentage) were used to describe the sample, and bivariate analyses (t tests, chi square tests) were used to verify group equivalence at baseline. Complete data were obtained from 74 youth who participated in both baseline and posttest interviews. Approximately 70% of youth assigned to the intervention attended on Day 1 of the 3-day intervention and, of those attendees, 95% remained in the intervention through Day 3 and participated in posttest interviews. To assess group equivalence, baseline characteristics for this overall sample as well as for the intervention (n = 37) and control groups (n = 37) separately are displayed in Table 1. Although

 $\begin{tabular}{ll} \textbf{Table 1} \\ \textbf{Sample Characteristics at Baseline Interview ($N=74$)} \\ \end{tabular}$ 

	$\frac{\text{Total sample}}{(N = 74)}$			Intervention group		Control group	
			(n = 37)		(n = 37)		
	Freq	%	Freq	%	Freq	%	$X^2$
Gender							4.02
Male	45	60.8	19	51.3	26	70.3	
Female	27	36.5	16	43.2	11	29.7	
Other	2	2.7	2	5.4	0	0.0	
Race/ethnicity							9.63
White	31	41.9	13	35.1	18	48.6	
Black	15	20.3	9	24.3	6	16.2	
Latino	4	5.4	0	0.0	4	10.8	
Other	24	32.4	15	40.5	9	24.3	
Sexual orientation							4.09
Straight	57	77.0	30	81.1	27	73.0	
Gay/Lesbian	2	2.7	0	0.0	2	5.4	
Bisexual	11	14.9	4	10.8	7	18.9	
Other	4	5.4	3	8.1	1	2.7	
Current living situation							0.63
Homeless	51	68.9	25	67.6	26	70.3	
Housed	23	31.1	12	32.4	11	29.7	
Street victimization							
Direct vict.	38	51.3	17	45.9	21	56.8	3.33
Indirect vict.	51	68.9	20	54.1	31	83.8	9.54*
	Mean	SD	Mean	SD	Mean	SD	F
Age	19.0	0.8	19.0	0.9	19.1	0.8	0.99
Months homeless	15.2	20.0	16.6	22.1	13.7	17.9	0.38
Transience	1.4	2.2	1.5	2.3	1.2	1.8	0.39
Last grade completed	11.1	1.1	11.0	1.1	11.3	1.0	1.73
Nights on streets/week	0.3	1.0	0.4	1.3	0.1	0.5	1.25

 $\it Note.$  Intervention group characteristics include only those youth who participated in intervention.

<sup>\*</sup> p < .05

randomization was largely successful in creating comparable groups, control youth more often reported prior experiences of indirect victimization.

## Quantitative Results: Self-Reported Mindfulness

Repeated measures ANOVAs (2x2) were used to first compare intervention youth and control youth on improvements (i.e., from baseline to posttest) in overall mindfulness scores and then on each specific subtype of mindfulness (e.g., observing, describing, acting with awareness, and accepting without judgment). Traditional intent-to-treat analysis, which instructs researchers to treat all cases as randomized despite treatment adherence, is frequently used in intervention and prevention research (Atkins, 2009; Gross & Fogg, 2004; Lachin, 2000; Olsson, 2010). Although we had planned to use intent-to-treat analyses, approximately one-third of the youth assigned to the intervention condition did not receive any intervention. Informal interactions with youth who chose not to attend the intervention revealed these youth had conflicts with work, job training, or health/ mental health appointments. Because our first goal for this pilot study was to determine whether any preliminary effects on mindfulness could be detected to evaluate the fruitfulness of future research in this area, youth who had been assigned to the intervention but who were unable to attend any portion of the intervention were excluded from the analyses. Thus, the results represent a treatment on the treated analysis.

No interaction effect was found from pretest to posttest for total mindfulness scores; however, a significant *group* × *time* interaction revealed that the observing subscale scores of intervention youth showed significantly greater improvement than the control youth (F[1] = 3.88, p = .05), with a partial- $\eta^2 = .05$ , indicating a moderate effect size (Cohen, 1988). Among intervention group youth, the mean scores for the observing subscale increased from 20.49 (SD = 5.73) to 22.23 (SD = 4.40), whereas the mean score for control youth declined from 21.30 (SD = 5.91) to 21.05 (SD = 6.56). No significant effects were found for other subscales (i.e., describing, acting with awareness, and accepting without judgment). See Table 2 for complete intervention effects.

# Qualitative Results: Analytic Approach

To address research questions about strategies that appear helpful as well as challenges in engaging homeless youths in mindfulness-based interventions, we selected a relevant section of the audiotapes for transcription and analysis; the relevant section captured the portion intervention groups devoted to introducing the concept of mindfulness, and represented approximately one hour in each of the six cohorts. Four coders analyzed the transcripts using qualitative methods of coding, classification, and meaning interpretation by applying a template approach (Crabtree & Miller, 1999). Template analysis allows for identification of

**Table 2** Intervention Effects (N = 74)

	Experimental Condition							
	Intervent	ion $(n = 37)$	Control					
Dependent Variable	Pretest mean (SD)	Posttest mean (SD)	Pretest mean (SD)	Posttest mean (SD)	F			
Total Mindfulness	69.00 (9.65)	73.82 (11.38)	70.24 (13.08)	72.92 (11.99)	.75			
Observing	20.49 (5.73)	22.23 (4.40)	21.30 (5.91)	21.05 (6.56)	3.88*			
Describing	13.30 (3.57)	14.62 (3.25)	13.65 (4.21)	14.37 (3.75)	.78			
Acting with								
awareness	22.68 (4.00)	23.79 (4.42)	22.51 (4.87)	23.76 (4.21)	.02			
Accepting without								
judgment	12.44 (4.82)	13.62 (3.48)	13.14 (4.57)	13.95 (4.59)	.20			

<sup>\*</sup> p < .05

segments of the data relative to prescribed areas of inquiry (Padgett, 2008), developing a priori codes to guide the analysis and identifying emerging themes (Miles & Huberman, 1994).

The qualitative coding was guided by a two-component research question: (a) What strategies appear most helpful in engaging youth in the SAFE mindfulness intervention? and (b) What challenges are encountered in engaging youth in SAFE? A priori codes of *intervention strategy, positive youth response*, and *negative youth response* were used to initially categorize material. An iterative process was then used to identify emerging codes within these broad a priori categories and group these codes into themes. After a final codebook was developed, four coders coded the transcripts with high rates (94%) of interrater reliability.

The themes emerging under the category of positive youth responses were instances of active engagement in the mindfulness material (e.g., youth asking or answering questions, encouraging one another, following directives, and providing examples during discussion). The themes emerging under the category of negative youth responses were used to identify challenges youth faced in engaging in mindfulness. The themes immediately preceding the active engagement theme were used to understand which strategies were helpful in engaging youth in the mindfulness intervention. For each intervention strategy, a percentage of time the activity engaged youth was calculated by dividing the number of times the intervention strategy preceded active engagement by the total number of

502

times that intervention strategy was used. The most prominent strategies are described below.

# Qualitative Results: Helpful Strategies in Engaging Youth in Mindfulness

**Facilitating interaction.** Group leaders led the youth in an interactive and processoriented discussion that involved asking youth questions to check on their understanding of mindfulness concepts, to prompt youth to elaborate on their ideas and perceptions of mindfulness, and to help youth to relate to other's comments. Analysis showed that 82% of the time facilitation techniques were used, the techniques were followed by active engagement from youth. Because mindfulness was new to most participants, youth connecting around a shared interest in mindfulness and developing a collaborative understanding of new concepts appeared key in engaging participants.

Personal sharing of challenges. The concept of mindfulness means many things to many people, and the practice of mindfulness requires honing and refining skills. Group leaders used personal sharing to acknowledge their own challenges in being mindful, to validate the experiences youth faced in their attempts at mindfulness, and to point out examples when mindfulness was personally helpful. During most instances (79%) when the group leader shared used personal sharing in the group, such sharing was followed by youths' active engagement. Youth engaged group leaders in give-and-take conversations in which the youth asked questions about instances when mindfulness was difficult, and leaders shared personal answers with the group. At times, group leaders related to the youth by spontaneously disclosing past experiences when they had used mindfulness to sense uncomfortable situations. For example, a group leader shared, "I've had a bad experience where I've walked into a class and everyone just looks at you and you have different ways that you could interpret that, right?" In personally relating, group leaders also replaced technical terms with informal language (e.g., "zone out") suggested by youth to operationalize mindfulness terms.

**Teaching concepts**. In teaching mindfulness, group leaders defined mindfulness concepts, provided examples, and used analogies to didactically guide youth and to apply mindfulness material to real-world examples. For example, a group leader guided the group to consider how mindfulness could be applied to negative thinking by saying,

There's another kind of autopilot in addition to the zoning out. Maybe you're going to a party, and you're sort of zoning out, but instead of just plain old zoning out, you're actually thinking about some negative thoughts. Like, "Oh, what if they don't like me . . ." and you think, or what we call ruminate, on these negative thoughts. So it . . . That's a different kind of autopilot, right? You're not necessarily zoning out from your environment but you're so focused on this tape player of negative thoughts that you're not really aware of maybe the positive things that could come out.

Nearly three-quarters of instances of teaching (74%) were followed by youth engagement. Because mindfulness was a foreign or vague concept for many youth, teaching allowed group leaders to provide concrete information, clarify, define, and establish a common language around mindfulness concepts described in the intervention. Notably, while teaching was an important tool, instances of teaching were rather brief, interspersed with interaction, facilitation, and connecting authentically with the youth.

**Peer activation**. Our analysis revealed that 78% of the time youth actively engaged with the material, their engagement prompted their peers to engage. Because youth might be apprehensive about mindfulness as a novel approach to "being" in the world, they seemed to look to their peers for endorsement and encouragement. On the surface, active engagement was manifested as youth asking and answering questions and encouraging one another (e.g., "go ahead" or "what were you going to say?"). At a deeper level, youth often engaged their peers by providing personal examples of times when they had "sensed danger," situations in which mindfulness would have helped a youth avoid danger, or recent events when they had successfully used one or more of the skills introduced in SAFE. For example, during a discussion about being mindful of personal thoughts, emotions, and physiological reactions to situations, a youth translated this material by saying, "If you just listen to your head and your heart and your gut, I say, and then make a decision. And be happy with that decision because your inner self is telling you." In another example, a youth processed how mindfulness skills could be used to become more aware in the moment and control reactivity:

Well, like, for me I would just like take a few deep breaths. Look down for a minute ... think. Like, "What should I do, what should I say?" And ... I would look up and say, "Can you please give me some moments so I could breathe and think for a minute?" And then I'll just calm down and just be cool.

Such instances of peer-to-peer discussion and application of mindfulness skills in the youths' own words seemed to foster increased attention and prompted other youth to engage more deeply.

Other strategies associated with active engagement (albeit less often) included experiential activities (62%; structured activities requiring youth to practice aspects of mindfulness), empathetic responses (59%; the group leader validated and reflected participants' feelings) and humor (29%; the group leader made jokes to lighten the mood or used humor to relate to youth).

Qualitative Results: Challenges Encountered in Mindfulness

504

Priority for basic needs. Even though the youth recognized the overall value of mindfulness-based practice, their difficulty in using mindfulness techniques in everyday lives was evident. Youth discussed daily stressors related to their homelessness and lack of basic needs that made it difficult for them to focus their attention on internal, interpersonal, or environmental risk cues. Youth acknowledged their priorities included finding a place to stay and a meal to eat, and most regarded these tasks as unrelated to mindfulness practice. Group facilitators not only honored the real challenges youth face in meeting basic needs but also reframed basic needs to include safety and security. When youth began to conceptualize mindfulness as a tool for achieving safety (i.e., basic need and a fundamental right), they also began to more naturally develop an interest in learning and practicing mindfulness skills. However, an interest in mindfulness did not always translate into an investment in regular practice of new skills. Some youth suggested a certain level of situational and/or personal stability would be necessary for them to regularly practice mindfulness.

**Fight or flight instinct.** Youth identified current and past trauma as obstacles to mindfulness. Youth frequently discussed present dangers on the streets that led them to be "extremely reactionary" and drew them into "fight or flight mode" for self-protection. Many youth with long histories of exposure to violence had learned from such experiences to respond quickly to perceived threats; however, this instinctive reaction was viewed as counter to the mindfulness approach of paying attention to cues, interpreting reactions, and problem solving. Although youth could practice skills of observation, describing, and acting with awareness within the safety of group role-plays, they suggested real-world situations would likely require quicker responses because threats could "come out of nowhere."

Group leaders were required to demonstrate how mindfulness skills might help youth avoid and cope with crisis situations. Reframing the youths' recognition of a fight or flight situation as a first step in mindfulness helped youth connect their experiences with being mindful. Youth developed the capacity to recognize when they needed to quickly escape a situation by "tuning in" to their feelings, thoughts, and interactions that told them the situation was not safe. However, the utility of mindfulness was more evident when groups discussed how the ability to anticipate dangerous situations would help them *avoid* risk. Although many youth appraised threat as "coming out of nowhere," the SAFE mindfulness skills might help youth recognize danger cues well before they were in imminent crisis, enabling the youth to exit situations without harm or avoid high-risk situations altogether.

Youth recognized that their perceived threats were not always real. For example, one youth recalled being in a hypervigilant state of mind when, "... my case manager [while talking] ... quickly put up her hand and [I immediately] clenched

[my fist]" thinking that "she was going to hit [me]." Although an example of a youth's instinctual self-protection, this reaction prevented the youth from effectively observing, describing, and reacting mindfully to a nonthreatening situation. Other youth echoed similar sentiments and experiences, saying that their "mind is [often] in cruise control" or "slippin" especially when "remembering something [negative] that happened in the past." Clearly, a history of violence creates challenges for youth wishing to use mindfulness to differentiate safe from unsafe situations. Again, facilitators tied in the concept of mindfulness as a tool for assessing a situation for risk. The assumption was that if youth could become more comfortable and practiced in mindfulness techniques, then they would be able to develop greater awareness of physiological, cognitive, or emotional cues related to feeling unsafe. In turn, this increased awareness would allow youth to "step back" in the moment and observe whether their feelings were justified, and in situations where no risk was identified, choose not to act on those feelings.

Generalized distrust. Challenges to youths' adoption of mindfulness included difficulty using mindfulness skills to identify safe or healthy relationships for seeking help. Many youth described a consistent internal narrative that service providers did not really care about them, were fake, or untrustworthy, which led these youth to "intentionally shut out" potentially helpful services and persons. After years of being harmed or disappointed in relationships with others, many homeless youth generated stories of self-reliance in which they trusted only themselves and a small, highly select group. Although the group leaders introduced mindfulness skills as a means of sensing situations in which youth could feel comfortable, trusting, and able to seek help from safe individuals, the youth discussed a commonly held belief that most helping professionals could not truly be trusted. To address this narrative of distrust, group facilitators helped the youth learn how to label negative automatic thoughts about service providers, to question the evidence supporting their thoughts, and to elicit alternative thoughts. The facilitators regarded these discussions as a means of challenging youth to move forward by evaluating individual relationships with staff members rather than making sweeping characterizations.

#### Discussion

Although extant research has suggested mindfulness-based interventions hold great promise in reducing risk of victimization by helping individuals to heighten awareness of environmental cues (Hill et al., 2011), these interventions have rarely been the focus of empirical investigation with homeless youth. As such, this pilot study is a first step in addressing an important gap in the literature to provide initial testing of an intensive, skill-building intervention to teach mindfulness skills to homeless youth. Given the current study's focus on testing the inter-

506

vention delivery as adapted for homeless youth as well as program efficacy in teaching mindfulness skills to homeless youth, this study sets the stage for rigorous tests of mindfulness-based interventions targeted to homeless youth. Specifically, this study provides a foundation for rigorous evaluation of the impact of mindfulness-based interventions on increasing youths' attention to risks on the streets while bolstering their problem-solving skills toward avoiding such risks. Using a mixed-methods design, the current study used quantitative data to explore the extent to which the SAFE intervention was effective in increasing certain aspects of youths' mindfulness, and used qualitative data to investigate which engagement strategies were most helpful (vs challenging) toward in engaging youth in mindfulness training.

Quantitative analyses demonstrated that youth in the intervention group (relative to youth in the control group) reported significant improvement in their observation skills. Observation skills comprise one dimension of mindfulness, and emphasize attention to internal and external experiences in the present moment, which is essential to the developmental practice of mindfulness. The SAFE intervention focused on mindfulness as a means to prevent victimization (that is, mindfulness is approached as a means to help youth heighten their awareness of risk cues, and thereby, avoid victimization on the streets). This curriculum emphasis appears to have been effective in increasing homeless youths' selfreported capacity to attend to or observe present moment experiences. The foundation of mindfulness requires the individual to be aware of internal stimuli (i.e., inner thoughts, feelings, and sensations) in order to appraise his or her circumstances; in turn, this self-appraisal yields a clear awareness of external events (Garland, 2013). Given the timing of the posttest (i.e., immediately following the conclusion of the 3-day intervention), this positive finding suggests that observational skills are malleable in the short-term. Notably, the posttest assessment showed the intervention and control groups did not differ on the other dimensions of mindfulness (i.e., describing, acting with awareness, and accepting without judgment). The lack of between-group differences could suggest that additional time and practice are required to acquire skills in these dimensions. For example, refraining from self-judgment might involve complex cognitive tasks (e.g., noticing thoughts as well as evaluative judgments of those thoughts, and then holding that information in working memory to change the evaluative stance) that require a skill level beyond what is possible to acquire during a 12-hour intervention. Future research should consider including booster sessions as a way of reinforcing and furthering youths' practice and acquisition of additional dimensions of mindfulness.

Qualitative analyses revealed that facilitators sought to actively engage youth with mindfulness material using methods to help youth to understand, practice, and "buy in" to primary concepts of mindfulness. Because youth were unlikely to have had previous exposure to mindfulness concepts, the facilitators used an

array of strategies to help youth understand mindfulness concepts, which can seem vague or abstract when first introduced. Four strategies used by facilitators—facilitating, personal sharing, teaching, and peer activation—reflected the importance of explaining the terms used and providing real-world examples of when and how mindfulness could be implemented. Further, facilitator strategies revealed the importance of creating a shared group experience in which homeless youth could come together to learn and practice new skills. Creating such a shared experience might be particularly important in a population of youth with histories of victimization high rates of abuse (Keeshin & Campbell, 2011); therefore, cultivating a positive, supportive environment in which participants feel safe, comfortable, and unthreatened is critical to learning and practicing new skills (Reschly, Huebner, Appleton, & Antaramian, 2008).

The active engagement and involvement documented in the group processes highlight the promise of mindfulness group techniques with homeless youth and young adults. For example, homeless youth might be reticent to trust others while concurrently placing high value on relationships (Bender et al., 2015). This seeming contradiction suggests group formats that elicit peer activation might have particular utility for introducing mindfulness, which is often a new and foreign concept to homeless youth. Given the high rates of trauma and victimization among homeless youth—and the resulting memory and attention deficit disorders—engaging this population in services has been notable as an exceptionally difficult challenge, especially in programs that have used traditional group intervention techniques (Cromer et al., 2006; DePrince et al., 2009; DePrince & Freyd, 1999). Nevertheless, this study demonstrates support for use of traditional group techniques so long as thoughtful consideration is given to the ways in which group leaders engage youth in the process of conceptualizing, making sense of, and applying mindfulness material.

Although promising, mindfulness practice might not be easily integrated into the daily lives of homeless youth. Indeed, integrating mindfulness into these youths' lives will likely require persistent effort, particularly given the challenges noted in the qualitative analyses. Salient challenges were associated with incorporating mindfulness into youths' daily lives, suggesting that future study should test interventions that help them practice mindfulness using an approach that stresses longer-term mastery, intentionality, and building trust. Such conclusions could present a particularly daunting hurdle for a population such as homeless youth who have experienced myriad life challenges, making the achievement mindfulness goals more difficult.

Based on the challenges described by youth, several adaptations to mindfulness interventions are indicated to support the development and application of mindfulness-based skills. Specifically, offering booster sessions might be beneficial in cultivating a regular practice of mindfulness skills. Although youth reported they had difficulty using mindfulness when faced with daily stressors of

508

finding shelter and food, they actually had little time to practice their newly learned skills in real-world situations over the course of the 3-day intervention and before completing the posttest interview. Booster sessions aimed at practicing and integrating learned skills might help youth to develop awareness of their automatic responses that affect risk detection, which in turn, might enable youth to respond effectively in their environments. Many of the youth indicated they were frequently reactive in dangerous situations, and saw their reactivity as an obstacle to mindfulness. However, the ability to identify their natural physiological responses under threatening circumstances might be an indicator of the utility of mindfulness for this population. Future implementation of mindfulness interventions for homeless youth might need to explicate how youth can frame the tenets underlying mindfulness-based practice relative to their day-today lives in order for them to practice and apply these skills successfully. For example, the intervention could seek to help youth increase awareness of automatic reactions to threat cues (e.g., ignoring or minimizing those cues, or over interpreting threat in relationships), thus enabling youth to respond flexibly to situations in ways that maximize safety and enhance well-being. The challenge for facilitators and developers of the intervention curriculum is to develop concrete examples that help homeless youth recognize and understand the connection of mindfulness concepts with daily life and challenges of street life. For example, youth who cultivate the skill of noticing their automatic distrust of service providers might be better able to slow down and carefully gauge the trustworthiness of providers, ask for help, and appropriately seek services as part of problem solving.

Future iterations of the SAFE intervention will need several practical adaptations to better cultivate mindfulness among homeless youth. First, reframing and redefining mindfulness as it relates to homeless youths' daily lives is not only a critical revision but also one that must be addressed in the early stage of the intervention to establish a foundation on which youth can relate mindfulness to meeting their safety needs. In addition, beginning the intervention by emphasizing mindfulness as a means of promoting safety and reducing risk would provide more time and opportunities during the intervention for youth to practice their skills in identifying risky situations. For example, this type of enhanced skills practice could be accomplished by incorporating a guided imagery exercise in which youth imagine being in a stressful or unsafe situation and practice being mindful of their feelings, thoughts, and sensations. Youth can then be instructed to utilize relaxation techniques learned to help deal with stress-related reactions. Second, expanding on this intervention by assigning to use mindfulness between each session and bringing these real-world applications back to the larger group to debrief might help translate the utility of mindfulness skills beyond that of the confines of the intervention setting. Finally, strengthening youth-facilitator rapport might help to enhance youths' experiences and engagement with mindfulness materials. Specifically, facilitators can challenge youths' narratives of distrust for service providers. Although the youth expressed a general distrust of service providers, the youth also reported positive interpersonal interactions with the study's research staff. Therefore, using immediacy to address youths' dissonance regarding trustworthiness and asking youth to identify evidence to support their beliefs could help them realize that their distrust of providers might not transmit to every therapeutic situation, thereby aiding youth to become more aware of and savor positive helping relationships.

#### Limitations

Although this study demonstrated the feasibility of using a rigorous randomized controlled trial design with homeless youth seeking shelter services, the study sample was relatively small for the intervention (n = 37) and control (n = 37) conditions. Moreover, all participants were youth who presented at a homeless shelter seeking services. The study also narrowly focused on 18 to 21 year olds because this age group represented the majority of youth served by the host shelter. However, these limitation of the study sample prevents generalizing results to youth who do not seek services, youth outside a shelter setting, or to youth outside this age range. In addition, despite randomization, youth in the control condition had greater experiences of indirect victimization (compared with intervention youth), this difference might influence the control groups' outcomes regarding mindfulness. Furthermore, from the perspective of qualitative research, researcher bias is a possible limitation because several of the researchers worked directly with the intervention, and therefore, could have been biased in identifying instances of positive youth responses.

Although the fact that 30% of treatment-assigned youth did not attend the intervention is certainly a study limitation, the reasons the youth provided for not attending were generally related to scheduling conflicts and life challenges, such as jobs, school, hospitalizations, court appearances, or leaving the shelter before the intervention began. Although not ideal, the current study's retention rates met or exceeded those of prior studies with homeless youth (Karabanow & Clement, 2004; Leonard et al., 2003).

# **Implications**

Despite the limitations, the study findings offer several implications for practice. Given the high rates of street victimization experienced by homeless youth (Ensign & Santelli, 1998) which encompasses physical (Ensign & Santelli, 1998) and sexual assault (Whitbeck et al., 1997), it is quite promising that the SAFE intervention was effective in increasing the youths' observation skill—a core mindfulness skill—with a brief 3-day manualized intervention. Mindfulness skills are theoretically and empirically relevant to victimization prevention (Hill et al., 2011; De-Prince et al., 2015). Although SAFE demonstrated positive intervention effects on

510

this proximal outcome, future research should examine the intervention effects on distal measures of victimization.

Additional research is needed to determine whether modifications to mindfulness interventions (e.g., toward longer-term, longitudinal designs) might translate to improvements and sustainability of mindfulness skills among homeless youth. The results of the current study add much-needed empirical evidence to the sparse body of research and intervention strategies that aim to improve the safety and life outcomes of homeless youth. These results suggest that, at a minimum, homeless youth can and will engage in mindfulness training offered in a shelter setting. Further, among youth who attended the intervention, the vast majority (97%) stayed for the duration, suggesting that intensive formats are a hold promising approach for delivering this type of intervention.

Considering our findings that homeless youth might have difficulty in applying mindfulness concepts and skills in their daily lives, future research should consider the addition of booster sessions to help youth continue to apply skills learned in a mindfulness group format. In addition, researchers should explore alternative formats for booster sessions, such as offering the sessions remotely. Booster sessions and initial programs of longer duration will need to better address the components of mindfulness (e.g., mentally labeling stimuli, increasing an individual's awareness of his or her actions, and abstaining from negative self-evaluation) by expanding the curriculum to include content on teaching youth to put emotionally triggering experiences into words, to decenter from mental events without overidentifying thoughts or feelings, and to apply self-regulation processes when faced with potential threat (Duncan, Coatsworth, & Greenberg, 2009). Arguably, further refining and improving aspects of the SAFE intervention could have great utility. Continued refinement of through future iterations of could ultimately help homeless youth to develop a heightened awareness of risk, and thereby, help them to experience safer, healthier life trajectories through important skill acquisition.

## **Author Notes**

**Kimberly Bender** is an associate professor in the Graduate School of Social Work at the University of Denver.

**Stephanie Begun** is a doctoral student in the Graduate School of Social Work at the University of Denver.

**Anne DePrince** is a professor and department chair of the Department of Psychology of the University of Denver.

**Badiah Haffejee** is a doctoral student in the Graduate School of Social Work at the University of Denver.

Samantha Brown is a doctoral student in the Graduate School of Social Work at the University of Denver.

**Jessica Hathaway** is a master's student in the Graduate School of Social Work at the University of Denver.

- **Nicholas Schau** is a doctoral student in the Graduate School of Social Work at the University of Denver.
- Correspondence regarding this article should be sent to Dr. Kimberly Bender, University of Denver, 2148 S. High Street, Denver, CO 80208 or via e-mail to kimberly.bender@du .edu

#### References

- Altena, A. M., Brilleslijper-Kater, S., & Wolf, J. L.M. (2010). Effective interventions for homeless youth: A systematic review. *American Journal of Preventive Medicine*, 38, 637— 645. http://dx.doi.org/10.1016/j.amepre.2010.02.017
- Atkins, D. C. (2009). Clinical trials methodology: Randomization, intent-to-treat, and random-effects regression. *Depression and Anxiety*, 26, 697–700. http://dx.doi.org/10.1002/da.20594
- Baer, R. A., Smith, G. T., & Allen, K. B. (2004). Assessment of mindfulness by self-report: The Kentucky inventory of mindfulness skills. *Assessment*, 11, 191–206. http://dx.doi.org/10.1177/1073191104268029
- Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment*, 13, 27–45. http://dx.doi.org/10.1177/1073191105283504
- Bender, K., Thompson, S. J., Ferguson, K., M., Yoder, J., & DePrince, A. (2015). Risk detection and self-protection among homeless youth. *Journal of Research on Adolescence*, 25, 352–365. http://dx.doi.org/10.1111/jora.12123
- Bender, K., DePrince, A., Begun, S., Hathaway, J., Haffejee, B., & Schau, N. (under review). Enhancing risk detection among homeless youth: Effects of a randomized clinical trial. *Journal of Interpersonal Violence*.
- Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., ... Velting, D. (2004). Mindfulness: A proposed operational definition. *Clinical Psychology: Science and Practice*, 11, 230–241. http://dx.doi.org/10.1093/clipsy.bph077
- Brown, K. W., Ryan, R. M., & Creswell, J. D. (2007). Mindfulness: Theoretical foundations and evidence for its salutary effects. *Psychological Inquiry*, 18, 211–237. http://dx.doi.org/10.1080/10478400701598298
- Buchheld, N., Grossman, P., & Walach, H. (2001). Measuring mindfulness in insight meditation (Vipassana) and meditation-based psychotherapy: The development of the Freiburg Mindfulness Inventory (FMI). *Journal for Meditation and Meditation Research*, 1(1), 11—34. Retrieved from http://pdf.smmr.de/pdf.php?menuid=21&downloadid=19&reporeid=30
- Catterson, J., & Hunter, S. C. (2010). Cognitive mediators of the effect of peer victimization on loneliness. *British Journal of Educational Psychology*, 80, 403–416. http://dx.doi.org/10.1348/000709909X481274
- Chadwick, P., Hember, M., Mead, S., Lilley, B., & Dagnan, D. (2008). Responding mindfully to unpleasant thoughts and images: Reliability and validity of the Southampton Mindfulness questionnaire (SMQ). *British Journal of Clinical Psychology*, 47, 451–455). DOI: 10.1348/014466508X314891.
- Coates, J., & McKenzie-Mohr, S. (2010). Out of the firying pan, into the fire: Trauma in the lives of homeless youth prior to and during homelessness. *Journal of Sociology and Social Welfare*, 37(4), 65–96. Retrieved from http://www.wmich.edu/hhs/newsletters\_journals/jssw\_institutional/institutional\_subscribers/37.4.Coates.pdf
- Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). Hillsdale, NJ: Erlbaum.

- Crabtree, B., & Miller, W. (Eds.) (1999). Doing qualitative research (2nd ed.). London, England: Sage.
- Creswell, J. W., & Plano-Clark, V. L. (2011). Choosing a mixed methods design. In J. W. Creswell & V. L. Plano-Clark (Eds.), *Designing and conducting mixed methods research* (pp. 53–99). Thousand Oaks, CA: Sage.
- Cromer, L. D., Stevens, C., DePrince, A. P., & Pears, K. (2006). The relationship between executive attention and dissociation in children. *Journal of Trauma & Dissociation*, 7, 135—153. http://dx.doi.org/10.1300/J229v07n04\_08
- DePrince, A. P. (2005). Social cognition and revictimization risk. *Journal of Trauma & Dissociation*, 6, 125–141. http://dx.doi.org/10.1300/J229v06n01\_08
- DePrince, A. P., Chu, A. T., & Combs, M. D. (2008). Trauma-related predictors of deontic reasoning: A pilot study in a community sample of children. *Child Abuse & Neglect*, 32, 732—737. http://dx.doi.org/10.1016/j.chiabu.2007.10.006
- DePrince, A. P., Chu, A.T., Labus, J., Shirk, S.R., & Potter, C. (2015). Testing two approaches to revictimization prevention among adolescent girls in the child welfare system. *Journal of Adolescent Health*, 56, S33—S39. http://dx.doi.org/10.1016/j.jadohealth.2014.06.022
- DePrince, A. P., Combs, M. D., & Shanahan, M. (2009). Automatic relationship-harm associations and interpersonal trauma involving close others. *Psychology of Women Quarterly*, 33, 163–171. http://dx.doi.org/10.1111/j.1471-6402.2009.01486.x
- DePrince, A. P., & Freyd, J. J. (1999). Dissociation, attention and memory. *Psychological Science*, 10, 449–452. http://dx.doi.org/10.1111/1467-9280.00185
- DePrince, A. P., & Shirk, S. R. (2013). Adapting cognitive-behavioral therapy for depressed adolescents exposed to interpersonal trauma: A case study with two teens. *Cognitive and Behavioral Practice*, 20, 189–201. http://dx.doi.org/10.1016/j.cbpra.2012.07.001
- DePrince, A. P., Weinzierl, K. M., & Combs, M. D. (2008). Stroop performance, dissociation, and trauma exposure in a community sample of children. *Journal of Trauma & Dissociation*, 9, 209–223. http://dx.doi.org/10.1080/15299730802048603
- Duncan, G. L., Coatsworth, J. D., & Greenberg, M. T. (2009). A model of mindful parenting: Implications for parent-child relationships and prevention research. Clinical Child and Family Psychological Review, 12, 255–270. http://dx.doi.org/10.1007/s10567-009-0046-3
- Ensign, J., & Santelli, J. (1998). Health status and service use: Comparison of adolescents at a school-based health clinic with homeless adolescents. *Archives of Pediatrics & Adolescent Medicine*, 152(1), 20–24. http://dx.doi.org/10.1001/archpedi.152.1.20.
- Garland, E. L. (2013). Mindfulness-oriented recovery enhancement for addiction, stress, and pain. Washington, DC: NASW Press.
- Grabbe, L., Nguy, S. T., & Higgins, M. K. (2012). Spirituality development for homeless youth: A mindfulness meditation feasibility pilot. *Journal of Child and Family Studies*, 21 (6), 925–937. http://dx.doi.org/10.1007/s10826-011-9552-2
- Gross, D., & Fogg, L. (2004). A critical analysis of the intent-to-treat principle in prevention research. *Journal of Primary Prevention*, 25, 475–498. http://dx.doi.org/10.1023/B:JOPP.00000 48113.77939
- Hill, J. M., Vernig, P. M., Lee, J. K., Brown, C., & Orsillo, S. M. (2011). The development of a brief acceptance and mindfulness-based program aimed at reducing sexual revictimization among college women with a history of childhood sexual abuse. *Journal of Clinical Psychology*, 67(9), 969–980. http://dx.doi.org/10.1002/jclp.20813
- Hölzel, B. K., Lazar, S. W., Gard, T., Schuman-Olivier, Z., Vago, D. R., & Ott, U. (2011). How does mindfulness meditation work? Proposing mechanisms of action from a conceptual and neural perspective. *Perspectives on Psychological Science*, 6(6), 537–559. http://dx.doi.org /10.1177/1745691611419671

- Kabat-Zinn, J. (1990). Full catastrophe living. New York, NY: Delta.
- Karabanow, J., & Clement, P. (2004). Interventions with street youth: A commentary on the practice-based research literature. *Brief Treatment and Crisis Intervention*, 4, 93–108. http://dx.doi.org/10.1093/brief-treatment/mhh007
- Keeshin, B. R., & Campbell, K. (2011). Screening homeless youth for histories of abuse: Prevalence, enduring effects, and interest in treatment. *Child Abuse & Neglect*, 35, 401–407. http://dx.doi.org/10.1016/j.chiabu.2011.01.015
- Lachin, J. M. (2000). Statistical considerations in the intent-to-treat principle. Controlled Clinical Trials, 21, 167–189. http://dx.doi.org/10.1016/S0197-2456(00)00046-5
- Lazarus, R. S., & Folkman, S. (1984). Stress, appraisal, and coping. New York, NY: Springer.
- Leonard, N. R., Lester, P., Rotheram-Borus, M. J., Mattes, K., Gwadz, M., & Ferns, B. (2003). Successful recruitment and retention of participants in longitudinal behavioral research. AIDS Education and Prevention, 15, 269—281.
- Martijn, C., & Sharpe, L. (2006). Pathways to youth homelessness. *Social Science & Medicine*, 62, 1–12. http://dx.doi.org/10.1016/j.socscimed.2005.05.007
- Marx, B. P., Calhoun, K. S., Wilson, A. E., & Meyerson, L. A. (2001). Sexual revictimization prevention: An outcome evaluation. *Journal of Consulting and Clinical Psychology*, 69, 25–32. http://dx.doi.org/10.1037/0022-006X.69.1.25
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Beverly Hills, CA: Sage.
- Olsson, T. M. (2010). Intervening in youth problem behavior in Sweden: A pragmatic cost analysis of MST from a randomized trial with conduct disorder youth. *International Journal of Social Welfare*, 19, 194–205. http://dx.doi.org/10.1111/j.1468-2397.2009.00653.x
- Padgett, D. K. (2008). Qualitative methods in social work research (2nd ed.). Los Angeles, CA: Sage.
- Reschly, A. L., Huebner, E., Appleton, J. J., & Antaramian, S. (2008). Engagement as flourishing: The contribution of positive emotions and coping to adolescents' engagement at school and with learning. *Psychology in the Schools*, 45, 419–431. http://dx.doi.org/10.1002 /pits.20306
- Schussel, L., & Miller, L. (2013). Best self-visualization method with high risk youth. *Journal of Clinical Psychology*, 69, 836–845. http://dx.doi.org/10.1002/jclp.22019
- Taylor, K. A., Sullivan, T. N., & Kliewer, W. (2013). A longitudinal path analysis of peer victimization, threat appraisals to the self, and aggression, anxiety, and depression among urban African American adolescents. *Journal of Youth Adolescence*, 42, 178–189. http://dx.doi.org/10.1007/s10964-012-9821-4
- Whitbeck, L. B., Hoyt, D. R., & Ackley, K. A. (1997). Abusive family backgrounds and later victimization among runaway and homeless adolescents. *Journal of Research on Adolescence*, 7, 375—392. http://dx.doi.org/10.1207/s15327795jra0704\_2
- Wilson, A. E., Calhoun, K. S., & Bernat, J. A. (1999). Risk recognition and trauma-related symptoms among sexually revictimized women. *Journal of Consulting and Clinical Psychology*, 67, 705–710. http://dx.doi.org/10.1037/0022-006X.67.5.705

Manuscript Submitted: October 30, 2014 Revision submitted: March 6, 2015 Accepted: March 15, 2015 Electronically published: October 6, 2015