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ORIGINAL PAPER

Supporting Children After a Disaster: A Case Study of a Psychosocial School-Based Intervention

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Abstract Children are among the most vulnerable groups during and after a natural disaster experiencing a range of stressors such as fear of death or loss of a loved one, the loss of a home and community, displacement to a strange neighborhood or school, and even separation from their family. This study, conducted in Tuscaloosa, Alabama, after a series of tornadoes struck the city in 2011, examines the Journey of Hope (JoH), a psychosocial program designed to help children cope with disaster related stressors. It employed a case study approach examining the program's impact through interviews with 5 social workers, 14 program facilitators and 30 child participants. Findings revealed that participating in the JoH helped children: articulate their feelings, process grief, regulate emotions such as anger and aggression, and gain knowledge on how to handle bullying behaviors in their school. This article builds on the literature supporting post-disaster psychosocial school-based interventions.

Keywords Children · Disaster · School-based intervention · Universal

Introduction

In the past 20 years there has been an increase in large scale natural disasters shocking the infrastructure of communities, displacing thousands of people, and threatening individual's sense of safety and security (Wadsworth et al. 2009). In the aftermath of these disasters it can take a long time to recover both physically and emotionally. During the initial response phase, those affected by the disaster are usually offered services for both their basic needs (i.e. food, shelter, clothing) and emotional needs (i.e. crisis counseling). In the longer term (3 months to 1+ years), however, many of the services have dissipated or are not easily accessible despite the fact that many individuals and communities are still in need of services (Hooks & Miller 2006).

Children are one of the most vulnerable groups during and after a natural disaster (Garrett et al. 2007; Kataoka et al. 2009; Walsh 2007). They may experience a range of stressors such as fear of death or loss of a loved one, the loss of a home and community, displacement to a strange neighborhood or school, and even separation from their family. Children who experience a disaster are also at risk for a host of mental health symptoms (Masten and Obradovic 2008). Commonly diagnosed disaster related psychological symptoms in children can include acute stress reactions, adjustment disorders, depression, panic disorders, post-traumatic stress disorder (PTSD), and anxiety disorders (Kar 2009; Vernberg et al. 2008; Weems et al. 2007). More general emotional consequences may include anxiety, nervousness, anger, depression, an increase in bullying, and other externalizing behaviors such as fighting at school and/or at home (Jaycox et al. 2006; Kataoka et al. 2003). While many of these reactions are normal and will subside over time, research has demonstrated the importance of healthy coping ability, reduction of risk factors, and the presence of protective factors to help children overcome the distress associated with the trauma (Peek 2008; Bonanno et al. 2007).

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There are numerous risk factors leading to emotional distress symptoms in children who have experienced a disaster. These factors may include greater exposure to the disaster, witnessing others in life-threatening situations, having family members die, injury, certain demographic factors (i.e. younger age and being female), preexisting risk-inducing characteristics of the child (e.g. temperament, previous anxiety or depression), the post-disaster recovery environment, child's psychological resources or lack thereof, parental distress and length of displacement (Cohen et al. 2009; Eksi et al. 2007; Kar 2009).

While risk factors may contribute to post-disaster mental health symptoms, protective factors can mitigate maladaptive trauma responses (Masten and Osofsky 2010; Walsh 2007). These factors include parental and social support, a sense of control, healthy coping responses, and social emotional skills such as self-regulation, positive peer interactions, attention and impulse control (Cohen et al. 2009; Sapienza and Masten 2011; Williams et al. 2008). Moreover, children with active coping responses have a greater ability to adapt after a traumatic event than those with poorer coping behaviors (Dempsey 2002; Rosario et al. 2003). There are a number of positive coping behaviors that can reduce the risk mental health issues after a disaster. Specific coping strategies can include positive thinking, emotional regulation, acceptance and emotional expression (Lengua et al. 2006; Wadsworth et al. 2009; Wadsworth et al. 2004).

School-based mental health interventions are one way to reach children after a trauma and mitigate post-disaster distress. They are one of the most common venues for practitioners to deliver mental health services to children targeting a wide spectrum of issues, and screening those who may be experiencing difficulties (Arthur et al. 2002; Atkins et al. 2010; Greenberg 2004; Hoagwood et al. 2001). While schools are a way to broadly reach all children, a recent study conducted by Rolfsnes and Idsoe (2011) found that most post-disaster mental health interventions are narrowly focused with the aim to treat children with diagnoses such as PTSD. Although these types of therapeutic interventions are appropriate for children with post-traumatic symptoms, more general psychosocial programming for children who are not exhibiting mental health symptoms may be appropriate to mitigate or prevent post-disaster mental health distress by enhancing coping skills and building protective factors after an emergency (Evans and Oehler-Stinnett 2006; Neria et al. 2008).

The following case describes a broadly accessible school-based intervention, the Journey of Hope (JoH), which is geared towards preventing distress through building protective factors, enhancing social and emotional skills, and increasing positive coping among children affected by a disaster. The Journey of Hope, which was delivered to children and early adolescents in Tuscaloosa, Alabama after an EF-4 tornado struck the city in 2011, is a psychosocial curriculum designed for and provided to children in the longer-term (3 months–1+ year) post-disaster recovery period. The intervention was delivered in Tuscaloosa because of the devastating impact the tornado had on the community. This tornado, one of the largest in recorded history, destroyed hundreds of homes and businesses, injured 1500, and killed 65 individuals (National Weather Service 2014). The disaster also displaced hundreds of families having a direct impact on many of the children living in Tuscaloosa. In response to the devastating impact of the storm, the charitable organization, Save the Children, responded by making the Journey of Hope program available to hundreds of children who were directly affected by the disaster.

The 8-session intervention composed of developmentally appropriate manuals was delivered in schools bi-weekly, providing children (k-5th grade) and early adolescents (6th–8th grade) general social and emotional skills to cope with and recover from an acute trauma such as a natural disaster. By examining this program as a case, the authors explore the impact of the program from multiple perspectives including child participants, school social workers, and program facilitators. The following case-study will examine the Journey of Hope through qualitative interviews with implications for the use and development of the program in future disasters.

Background of the Program

The JoH was originally created in response to a gang fight in 2007 at a New Orleans middle school. The fights were associated with the on-going distress children were experiencing from Hurricane Katrina. Many of the children had lost their homes, communities, and family members due to the storm. In response, a crisis counselor from the district reached out to Save the Children (SC), a charitable organization involved in hurricane Katrina recovery efforts. It was during that time that social workers from SC realized there was a gap in services for many of the children. In the initial aftermath of the storm, the city was inundated with agencies that provided mental health programming. Within a couple of years, however, those programs were no longer available to students because of cuts in funding and the perspective that Katrina was over. While the physical storm may have passed, the city was still in the process of rebuilding and many of the children were still experiencing the emotional storm of difficulties associated with the recovery.

In the absence of available programming, social workers at SC participated in discussion groups with the children

identifying addressing the general social and emotional needs they were experiencing. From those discussions the Journey of Hope was developed (Table 1).

The Journey of Hope in began in New Orleans in 2007 as a result of Katrina, however, it has expanded to a number of cities in need of post-disaster interventions such as in Christchurch, New Zealand after a 6.3 magnitude earthquake, in Tuscaloosa, Alabama, and Moore, Oklahoma, after a series of tornados in both areas, and in New York City and New Jersey after Superstorm Sandy. This case study is part of a larger mixed methods research project that was conducted in 2011, after an E-4 tornado struck Tuscaloosa, Alabama, devastating the city (NASA 2011). In response to the tornado, SC collaborated with Tuscaloosa city schools to provide the Journey of Hope programming to students.

The intervention consists of eight 1-h sessions which are delivered 1–2 times a week focus on interactive learning to build coping skills among youth who have experienced a disaster. Topics that are discussed in the program include: safety, fear, anxiety, anger, grief, bullying, self-esteem, and self-efficacy. During each session the topic is introduced followed by a discussion around the emotion, a cooperative game, a literacy component, an art based activity, and a mindfulness closing circle.

The child-centered approach of the JoH empowers children to have a voice on their personal experience with disaster related emotions such as anxiety, grief, anger, and aggression (Powell 2011). The facilitators provide psychoeducation on common reactions to various emotions, and information about positive coping strategies. Moreover, the utilization of social cognitive techniques encourage positive coping behaviors through interactions with peers and the facilitators (Bandura 1977). The participants are then able to mold their own positive coping techniques (e.g. how to effectively express feelings of anger) and learn coping mechanisms through other group members (Wadsworth et al. 2009). The JoH also attempts to help children and adolescents enhance protective factors such as positive internal (e.g. stress management, perceived social support) and external supports (e.g. friends, family, community members) to help process their feelings (Masten and Obradovic 2006; Stevenson and Zimmerman 2005).

Activities to promote protective factors, positive coping and group problem solving include: creation of skits and scenarios on how to effectively cope, cooperative games that promote healthy peer interactions, and discussion on positive ways to express emotions (Powell and Blanchet-Cohen 2014). For example, in the session on grief, the facilitators present the topic followed by a cooperative game, "The Sun Shines On," where each child has the opportunity to stand up and state a way they cope with grief and subsequently switch seats with any other person who also copes with sadness in a similar way. Examples that have been brought up in group are "talk to my friends", "let it out by crying" or "by telling my parent how I feel". After the game, the facilitators hold a group discussion on grief and sadness asking questions such as: "Why do people experience sadness or grief?"; "How does your body react when you are feeling sad or experiencing grief?"; "Who are the people, places, or things that make you feel better if you are feeling sad?" During the discussion the facilitators incorporate strategies to help the group members cope with grief such as: talk to an adult, write in a journal, or talk to someone they trust. After the discussion, each participant is provided a journal to write about a time they may have felt grief or sadness and who or what helped them feel better and what they did to cope with their feelings. The group then ends with a closing activity where each member is given the opportunity to state one thing they learned or liked from the group and anything they would like to see in the next session (Save the Children 2009).

A unique quality of the JoH program is its broad-based applicability to children and youth in schools who may not have a clinical mental health diagnosis, but still are in need of emotional support programming. Given the general emotions discussed in the program, the intervention is appropriate for the aggregate of students and not just those experiencing mental health difficulties. Considering that many of the youth who participate in the JoH have been exposed to a disaster, however, the program is facilitated by social workers who are equipped to respond to those who may exhibit extreme distress and need to be referred for more intensive therapeutic interventions.

The Case

Setting and Methods

The qualitative interviews, which employed an instrumental case study approach, explored the impact of the Journey of Hope intervention on children who experienced a tornado that struck Tuscaloosa, Alabama, in the spring of 2011. The instrumental case study is defined by Creswell (2007) as a method that examines an issue through one or more "cases within a bounded system" (Creswell 2007, p. 73). Case studies are often used in program evaluations to explore, explain or describe events in the contexts in which they take place (Yin 1994), and offer an understanding about strengths or gaps that may exist in the intervention (Crowe et al. 2011).

The epistemological roots of this case study are interpretivist. As Stake (1995) states, the interpretivist view attempts to understand the individual and shared social

Table 1 Journey of Hope sessions

Session	Topic	Content
1	Introduction: creating safety	1. Introduction
		2. Name game
		3. Establishing group guidelines
		4. Introducing the parachute
		5. Creating my safety folder
		6. Closing circle
2	Fear: understanding and coping	1. Check-in and introduction
		2. Parachute activity
		3. Literacy: book on coping with fear
		4. Art expression
		5. Closing circle
3	Anxiety: understanding and coping	1. Check-in and introduction
		2. Parachute activity: trust circle
		3. Literacy: creating a story
		4. Art expression
		5. Closing circle
4	Sadness: understanding and coping	1. Check-in and introduction
		2. Parachute activity: my sad little parachute
		3. Literacy: book on coping with sadness
		4. Art expression: sentence starters
		5. Cooperative game: freeze dance
		6. Closing circle
5	Anger and aggression: understanding and coping	1. Check-in and introduction
		2. Parachute activity: volcano
		3. Literacy: my angry story
		4. Art expression: anger manager
		5. Cooperative game: turn up the volume
		6. Closing circle
6	Bullying: understanding and coping	1. Check-in and introduction
		2. Parachute activity: disc flip
		3. Literacy: book on coping with bullying behaviors
		4. Art activity: being a friend
		5. Cooperative game: stone rescue
		6. Closing circle
7	Self-esteem and taking action	1. Check-in and introduction
		2. Parachute activity: my parachute game
		3. Literacy: poem on self-esteem
		4. Cooperative game: what you like about me
		5. Closing circle
8	Me, my emotions and my community	1. Check-in and introduction
		2. Parachute activity: farewell parachute
		3. Cooperative game: favorite game
		4. Art Activity: wheel of change
		5. Celebration
		6. Closing circle

meanings of the case. Interpretivism, therefore, seeks to identify the context and meaning of the case from different perspectives, while trying to identify both individual and shared social meanings (Stake 1995). This research sought to understand each individual child participant, social workers, and facilitators subjective experience but also took into account the shared meanings between the different study participants.

In order to complete the instrumental case study approach, the researchers employed the following steps as suggested by Stake (1995): (1) defining the case, (2) selecting the cases, (3) collecting the data, and (4) analyzing, interpreting and reporting the data. The research questions were based on the objectives of the Journey of Hope intervention, literature on post-disaster mental health issues children experience, and defining which groups were relevant for the qualitative interviews.

By defining the case, the research questions were carefully formulated to include: (1) Does participation in the Journey of Hope impact specific coping strategies, affect recognition and regulation, and (2) Does participation in the Journey of Hope influence participant's understanding and processing of emotions?

Sample

Following approval from the University of Texas Institutional Review Board, recruitment of children in Tuscaloosa, Alabama, took place. Inclusion criteria for eligibility in the study included: (1) children received parental consent, (2) children provided assent, and (3) children participated in the Journey of Hope program in the fall of 2011. Those who took part in the Journey of Hope in the fall of 2011 were recruited to participate in the interviews from recommendation by the school social workers, thus employing a non-random sample of study participants.

Three schools were included in this study due to their location in the highest impact areas of the tornado: one school was completely destroyed, two were damaged and all of the schools included students who lived in areas directly affected by the tornado. The interviews were completed in January and February, 2012. A convenience sample of all the school social workers who had experienced the JoH in their school and facilitators who implemented the program were also recruited to participate and provided consent to take part in the study. There was one child who did not to take part in the interview after recruitment and none of the social workers or facilitators refused to be interviewed.

The research team consisted of three University of Texas qualitative researchers engaged specifically for this project. The interviews and focus groups were conducted with multiple sources including with participants, school social workers and facilitators of the intervention. This allowed for the researchers to examine the JoH from different perspectives and to establish a holistic view of the intervention (Crowe et al. 2011; Stake 1995).

The sample consisted of ($n = 30$) students between 3rd and 6th grade who participated in the JoH intervention in the fall of 2011(5 focus groups of 4, and 10 individual interviews), ($n = 14$) facilitators (2 focus groups of 3, and 8 individual interviews), and ($n = 5$) (individual interviews) school social workers from the schools that received the JoH. The age of the child participants ranged from 8 to 12 years old with a mean age of 9.4, there were ($n = 18$) girls and ($n = 12$) boys, and the majority of the participants were African-American ($n = 26$).

The use of focus groups and individual interviews enabled the researchers to obtain a holistic view of the impact of the JoH by using two different forms of interviewing techniques. Focus groups allowed for group interaction enabling group members to build on each other's thoughts and ideas (Kamberelis and Dimitriadis 2005). Individual interviews enabled the researchers to obtain information independent of the potential group effect on the participants (Wilson and Howarth 2002). The interview schedule was semi-structured, meaning that it began with an interview guide, but those were followed up with probes based on the participants' answers. This allowed for the emergence of the participant's agenda rather than the researcher's sense of what is important. The interview schedule was adapted from a previous study completed in 2009 by the research team based on their experience and knowledge of the JoH curricula and the literature on children/adolescents, trauma, loss, and coping (Blanchet-Cohen and Nelems 2009). All of the questions and probes were open-ended to elicit the participants' beliefs, thoughts, and experiences in their own words. The interviewers were particularly careful not to use labels and descriptors that might lead or bias the responses.

The evaluative inquiries for the child participants revolved around the following: (1) what the students learned in the group, (2) what they felt was most and least beneficial from participation in the JoH, (3) what was the most important emotion discussed in the group, and (4) were there any feelings for which they still had difficulty coping. Related questions were asked of the social workers and facilitators, however, focused on: (1) What skills participants gained from participation in the JoH, (2) What kind of issues the children were exhibiting post-disaster, (3) How effective was the program in addressing those issues, and (4) what was the overall impact of the program? The interview guide for the participants can be seen in Table 2.

Table 2 Interview guide

Participant	Semi-structured interview questions
Child participants	1. What did you do in the group?
	Probe-What did you talk about?
	2. What did you like about the group/program?
	Probe-What's your favorite activity?
	Probe-What's your favorite topic?
	3. What didn't you like about it?
	4. Do you think anyone else should participate in this group?
	Probe-Do you think any of your friends or family should participate in this program?
	Probe-(*If so*) *Why do you think others should participate in the program?*
	5. What did you learn?
	Probe: What, if anything, did you learn about yourself?
	Probe: What did you learn about other group members?
	6. Which topic was the most important to you?
	Probe: Are there any feelings you still have trouble with, if so can you talk about it?
	7. How comfortable did you feel sharing in the group?
	Probe: Did you talk a lot or a little
	8. Was there anything you didn't talk about that you think would have helped you?
	9. What if anything can be improved about the Journey of Hope program?
School social workers	1. Why did you or your school want the program?
	2. Do you know how many students have participated in this past year?
	(*How many students in the school total? Age, gender?*) *How were the participants identified/selected?*
	3. How would you describe the program?
	4. What are the issues that you are facing in your school and how do you think the program is addressing them?
	5. What impact do you think the program has had? (*probe: on the Individual kids, on their classmates the school?*)
	6. Ask about the following if the interviewee doesn't touch on them:
	What have the kids learned/what skills have they acquired?
	Do you notice any changes within the participants in terms of themselves or how they interact with others?
	7. Do you think that impact will last, despite this being a short program? (*probe: what kind of follow-up is happening, or you think could happen?*)
	8. What has the reaction been from teachers in your school to the program? Other students? Parents?
Facilitators	1. Which of the programs have you facilitated?
	2. In how many schools have you worked over the past year?
	3. What issues do you think the kids are facing in their schools and do you think the program is addressing those issues?
	4. What impact do you think the program has had on the kids?
	Probe: Can you provide any examples or stories?
	5. Over the course of the program, have you noticed any changes within the participants in terms of themselves or how they interact with others?
	6. Is there anything else you would like to share about the curriculum and your experience running the programs in Tuscaloosa City Schools?

Analysis

The interviews and focus groups were tape recorded and transcribed by research assistants assigned to the project. The analysis of the transcribed data involved the process of coding statements to elicit patterns and themes in the data. The coding included developing themes, breaking codes into subcategories reflecting the participants' conditions, interactions, strategies, consequences, styles while moving to increased specificity (Lofland and Lofland 1995; Strauss 1987). Ultimately, themes were identified by ideas that occurred repeatedly.

N-Vivo software was utilized as well as traditional manual coding when analyzing the data. The N-Vivo program, used to aid in the organization and analysis of the data, involves the coding of the data in "tree structures" at increasingly integrative levels. It also allows for specific word searches, juxtapositions, and frequency of words or

phrases. The combination of computer and traditional manual coding allowed for systematic and efficient analysis as well as time to reflect and think about the connections and themes. Even when using the computer as a means for analyzing qualitative data, the process is both creative and mechanical. Richards and Richards (1994) make the distinction between "textual level operations" (e.g., moving of the data) which are done by the computer, such as retrieving codes, and "conceptual level operations" (development of themes) done by the person. Ultimately, the researcher builds relations between the data and the themes.

Coding reliability was established by two researchers independently coding the participant, social worker and facilitator interviews; this combined effort generated 13 broad initial codes which included: games, feelings, natural disasters, drawing, bullying, safety, learning, anger, friends, trust, peer groups, learning about self, and sadness. The researchers then conducted more focused coding. The N-Vivo code tree was used to make the broad codes more specific. Next, codes were evaluated to see which were used more than others, less productive codes were omitted, and the most resonant ones were selected. Codes were collapsed, supported or dropped. Ultimately, the coding procedure proceeded until core categories emerged to the point of saturation (i.e., where further analysis does not elicit new themes).

Results

Specific themes from the participants, social worker and facilitator interviews indicated children were better able to articulate their feelings, process grief, felt the group was a safe place for self-expression, learned how to regulate emotions such as anger and aggression, and gained knowledge on how to handle bullying behaviors in their school. The following broad themes emerged from the rich, qualitative data with participants, school social workers and facilitators:

- Children expressed feeling better through coping mechanisms they learned from JoH including self-soothing, calming in moments of anger, talking with others about painful feelings (esp. sadness and grief), and choosing not to bully or learning how not to be bullied.
- Workers saw behavioral improvements such as healthier expressions of emotion, augmented verbalization of thoughts and feelings, and students utilizing more effective coping skills (such as talking rather than acting out angrily).

The following subtitled sections synthesize the themes that emerged from the qualitative analyses.

Affect Regulation

Child Participants

Affect regulation was expressed during the interviews with the youth, social workers, and facilitators. One child participant reflected, "I used to have really bad feelings before, but when the group happened I learned how to cope with some of it." The participants described that the group helped them learn there are a variety of reactions to emotions, and that there are both healthy and unhealthy ways to express them.

One of the most notable skills that children described learning in regards to affect regulation was anger management. They expressed relief at learning ways to avoid getting "out of control." For instance one child stated:

> You learn stuff, but you also have fun while you are learning and it's good to help people who get out of control with their anger like me. It helped me to learn how to control it more better (sic) and that's why I liked it (the group).

Other child participants described activities and the techniques they learned to help them regulate their anger such as being able to count down from ten to de-escalate, identifying what level of anger they were experiencing by using an "anger meter" and leaving situations where their reactions may escalate into a conflict. Students also identified the change in the way they managed their emotions such as anger from before to after participation in the group. One comment regarding the change in responding to conflict situations included: "Before I started this program I was always mad and getting on people's nerves and now I do that less and I'm like more happy now."
A second participant mentioned:

> I used to like just snap. Like let's say I'd get mad and then be mad over the whole weekend when someone would mess with me and I'd just snap on them but now I learned how to calm down my anger.

Social Workers and Facilitators

In addition to the participants expressing their increased ability to regulate their emotions in the group, both the social workers and facilitators noted student's increased ability to express their emotions after participation in the JoH. The facilitators stated that helping the children positively express their emotions was a core component of the

program. For example one facilitator mentioned that discussions in the program helped the participants:

> Really identify what it is that they're feeling instead of displaying it in an angry way, you know, letting it come out as rage or anger or aggression or whatever, then they can better cope with that–that, you know, emotion.

The school social workers also stated that they saw a change in the way the participants interacted after they took part in the program, and that they learned how to verbalize their feelings rather than act or fight when faced with a conflict. One social worker stated:

> I have noticed that they–they now can verbalize what they need to do. They don't always do it, but maybe more that they can verbalize and tell you what they should have done differently.

Grief

Child Participants

Another theme was that after involvement in the JoH participants were more equipped to process and manage feelings of sadness or grief. When asked about the most important topic discussed in the group one participant stated:

> With me it was the depression thing, because I am a really sensitive person and the smallest things get me down and everything….I learned how to get through everything and how to control how far the depression goes…

Participants also discussed specific strategies they learned to handle their grief or sadness. Some strategies the facilitators introduced in the group included: talking to an adult, writing it down in a journal, talking to someone you trust or saying what you are sad about out loud (Holleran Steiker and Powell 2012). One child mentioned that he learned sadness and anger are not mutually exclusive and he sometimes experiences both emotions at the same time. Furthermore, he discussed new coping strategies: "When you are sad you can breathe in and out and you can just punch a pillow and try to get the anger out."

Social Workers and Facilitators

Processing and normalizing sadness and grief was also a prominent theme that social workers and facilitators expressed when asked about what children gained from the JoH. One facilitator stated: "They were able to realize that everyone has these emotions…and it's okay to have these emotions, everybody does". The social workers also discussed that the children were able to relate sadness with the losses they experienced during and after the tornado. A social worker stated: "they could really relate with the grief issue…you know like when they had family members or a grandparent die."

Psycho-education

Child Participants

Psycho-education skill building was also a central theme associated with participation in the JoH. As summarized by a child participant, "We learned about bullying, sadness, happiness and feelings. That was my favorite part, feelings." During the interviews, participants consistently stated that they learned about different emotions through discussion and activities. When re-calling what she did in the group one participant stated:

> We talked about like different subjects for different sessions. Like one day we were talking about fear, another day we talked about safety, and another day we was talking about anger and how to cope with those, uh with skills. And we did activities to help us understand more on the subject and at the end of the day we would like discuss what we learned …

Another participant described in more detail how she employed strategies to handle feelings of fear and help others when they were scared in relation to the tornado:

> If we have thunderstorms or what not and I feel fear I learned to go into a place that feels safe…. Also, when I know that my niece is scared and she–she thinks that a tornado is coming, to make her feel less afraid I just held my hand out and she's okay.

Social Workers and Facilitators

It was also noted that psycho-educational skills taught in the JoH were transferable to the real-life setting outside of the group. For example, a facilitator stated: "I believe that they gained skills that they'll use later as they continue in school, and probably they gained skills for um, using at home and in the community as well." Social workers stated in relation to handling adverse situations that the children were now able to "deal with the difficult people in their life", and that children gained the ability to "cope with um, what they are living with (outside of school)".

Self-Expression

Child Participants

Self-expression was also considered an important part of the JoH. Children mentioned they felt a level of comfort in

the group which enabled them to be able to express and process how they were feeling, as reflected in this statement from a child participant: "we got to express our feelings and we got to trust that everything we said would stay in the group and it wouldn't go out, and none of it ever did…there was a lot of trust in the group."
Another child stated that self-expression translated outside of the group:

> I learned that not to let anyone get you down and do your always, and I mean like I dress really weird and I have like my own thing, and everyone kind of bashes on it, but I'm just like, "Hey I'm not gonna let that bother me. I'm gonna be myself. I'm gonna express how I feel and everything." And I've just gotten to that point where, "This is me, and I don't care what other people think."

Participants also mentioned other ways they express their emotions outside of the group. They mentioned talking out their feelings with others or expressing them through other mediums such as journaling or drawing. One participant stated:

> We talked about different ways you can be safe and, um, how your could keep like when you—how you feel sometimes, how your feel like you can let it out sometimes you feel better. So we talked about different ways (to express emotions) like you could have a diary or you could just talk it out to yourself or stuff like that, or you could call a friend and talk with them.

Social Workers and Facilitators

Both facilitators and social workers explained that the group was a safe place for the children to "relax" and "let their worries or fears just kind of go out of the window". One facilitator said that participation in JoH was an outlet for children to verbalize their experiences:

> We've given them permission to be able to verbalize and to express themselves in a different way I think opens up a new opportunity for them, opportunity for them to begin to develop in a different way.

The school social workers also explained that feeling like they were in a safe setting for self-expression was valuable to the participants. One social worker mentioned:

> I think that's one of the major components to the program itself, and creating a safe environment for the children so they know that it's okay to come talk to someone to express how they feel and that it's not going to be a laughing matter or it's not going be something that everybody's going talk about when they leave the room. Um, so, and I think that they lack that at home, some of them.

Bullying

Child Participants

Gaining knowledge about bullying was a final theme expressed by the participants, social workers and facilitators. Specific feedback regarding bullying behaviors included:

> We learned how to stop bullying and then we said some words. We stood up and we said, "Leave me alone, I'm not having it." We was practicing to a bully and if our friends are getting bullied, it's good to help them out or get help, and we learned it's about the whole group is like the back-up, the person who watched the person who helps, and the bully.

Social Workers and Facilitators

The facilitators also noted that the participants became proactive about standing up to bullying behaviors. In fact, one of the facilitators mentioned that the discussions and activities in the bullying session assisted in a situation outside of the group:

> We talked about bullying that day and they (two girls from the group) actually went to the counselor, sat down and talked, and their moms came in, um, that next day, um, and, um, and they were able to get with the other girls. They brought it up in session and we stressed–stressed, you know, talking with someone, trying to work it out, and they did go to the counselor.

Discussion

In this case study, participants shared their experiences with the Journey of Hope (JoH), a broad-based post-disaster psychosocial intervention. Themes emerging from the data included: ability to process grief, increased psychoeducational skills, affect regulation, self-expression and enhanced ability on coping with bullying. The discussion elucidates how themes that emerged from this data relate to the existing post-disaster literature.

The findings from the case study revealed that participants, social workers and facilitators felt that building affect regulation skills was a valuable component of the JoH. Those involved in the study explained that children participants were better able to express difficult feelings

such as anger, and learned positive ways to cope with these emotions. This finding is particularly notable given that behavior issues in children tend to escalate after disaster exposure, and being able to manage emotions such as anger is a protective factor against future mental health issues (Lodewijks et al. 2010; Masten and Osofsky 2010; Sapienza and Masten 2011). There has also been little research on broad-based post-disaster interventions relation to helping children gain these emotional regulatory skills. This finding, therefore, can help inform future studies on widely accessible school-based programs that build social-emotional skills (La Greca and Silverman 2009; Neria et al. 2008; Pfefferbaum et al. 2014; Silverman et al. 2008).

Many of the children recalled the importance of learning about different feelings discussed in the JoH. Psycho-education is used widely in post-disaster settings to help individuals learn about common reactions in order to help normalize their emotions (Pfefferbaum et al. 2014). This approach is often employed because it can help empower individuals with knowledge about normal reactions to trauma, but also serve as a screening mechanism for those who are experiencing more intensive psychological symptoms (Young et al. 2006). Interventions that target psycho-educational skill building have also been shown to reduce risk of future mental health pathology (Grant et al. 2003). By exploring their emotions, the intervention appeared to help the participants not only understand their feelings, but express them more effectively.

In terms of learning about self-expression, participants stated they were able to express themselves in the group which also translated outside of the JoH group. According to Corey et al. (2013), in order to facilitate an effective group, it is essential to create an environment where group members are able to identify and talk about their feelings and experiences. They need to feel that others understand what they are experiencing and connect with other group members (Corey et al. 2013). When children are able to express themselves and communicate about their feelings they have an increased capacity to cope with the event (Lutz et al. 2007). Participants, social workers and facilitators all stated self-expression was an important component of the JoH because the children were in a safe place to process their emotions in the group, which had the potential to transfer to an increased capacity to express their feelings outside of the group. This finding also indicates that the JoH groups served as a microcosm for the students to discuss universal experiences after the disaster in a safe setting.

As expected, children who participated in the JoH expressed that the intervention helped them process emotions relating to sadness and grieving. They were able to do this through talking about losses and learning about common ways people grieve. This is a notable finding considering prevalence rates of depression post-disaster have been estimated to be as high as 30 percent in children and adolescents (Kar and Bastia 2006), and programs that address grief and loss can have a lasting effect on children's adaptive functioning (Salloum et al. 2009; Wolmer et al. 2005). While there are a variety of therapeutically-based selective/indicated interventions targeted for children who are experiencing grief symptoms, the JoH is, to our knowledge, one of few broadly accessible interventions that addresses grief processing (Pfefferbaum et al., 2014).

Another notable finding of this case study was that the JoH helped child participants cope with bullying in their schools. This is an important finding because when the JoH was originally created bullying was not part of the curriculum. After the pilot sessions, the creators realized the need to add this component to the intervention because of the overt bullying behaviors presented in the groups. While some research has explored the incidence of bullying and peer victimization after a disaster, more is needed on the association of these behaviors and disaster exposure (Terranova et al. 2009). It has been well documented that bullying can have a long-term impact on children's emotional well-being (Arseneault et al. 2010; Smokowski and Kopasz 2005; Williams and Alexander 2009). Children exposed to disasters experience difficulties including adjusting to new settings and changes to their home and community, and this stress may influence peer interactions (Terranova et al. 2009). The Journey of Hope only has one session that directly discusses bullying, however, the curriculum takes an interactive approach teaching cooperative games and promoting healthy peer interaction which may have an impact on peer victimization outside of the group. In future studies, the impact of the JoH on coping with bullying experiences should be more closely examined.

Limitations

There are a number of important findings to this study. Some limitations, however, must be noted. Considering the convenience sampling method, there is possibility of a selection bias towards those who had a favorable view of the intervention. The researchers attempted to correct for a possible selection bias by interviewing a wide variety of students, social workers and facilitators.

Another major limitation was the first author of this article was one of the creators of the intervention. The study, therefore, may not be free from bias given the researcher's desire to find the JoH a useful worthwhile intervention. To address this, the researcher worked with two other researchers to conduct the interviews and one other coder who were not as involved in the intervention utilizing thorough qualitative methods (triangulation of

data, group observations, and field notes) to remain as objective as possible and minimize bias. A final is the lack of generalizability given the small sample size, was limited to a post-tornado setting (as opposed to other types of disaster) and that it was only conducted in one geographical region. Future research in different settings would help further inform the impact of the JoH.

Implications

While there are certainly limitations to this study, this research illuminates the perspective of those that have had the unique experience of surviving a natural disaster. This study, which was part of a larger mixed methods research design, supports the efficacy of the Journey of Hope intervention (Powell and Thompson 2014). It builds on the knowledge base of social work practitioners and researchers on the value and contributions of a school-based post-disaster curriculum to help youth adapt and cope with the difficulties a disaster can bring.

This case study brings light to the importance of more generalized school-based interventions for the aggregate of youth who have experienced a disaster. While there is a breadth of research supporting more targeted therapeutic interventions for children who are exhibiting mental health symptoms such as PTSD following a disaster, little has been studied on the impact of preventive interventions for the wider population in the longer term recovery phase (Silverman et al. 2008). Considering natural disasters have significantly increased over the past 20 years, and recovery can take months to years, it is important to address interventions not only in the immediate aftermath, but also over the longer-term (International Monetary Fund 2012; Leaning and Guha-Sapir 2013). While current policies support more targeted therapeutic interventions for youth with mental health diagnoses, the findings from this study indicate it is worthwhile to examine broad based supportive interventions such as the JoH.

Conclusion

Natural disasters have a powerful impact in which cities, families and children must adjust and recuperate both physically and emotionally. The study reveals that participation in the JoH intervention helped youth not only gain knowledge on emotional responses commonly experienced after a disaster, but also understand how to express and process their feelings. The intervention addresses the longer term issues, beyond the emergency first aid and bandages. JoH attends to the most basic and intrinsic needs for safety and security, as well as reactions to powerfully traumatic losses via deaths, dislocation, and varied responses by family members in times of acute stress (e.g., depression, aggression, anger). While this research begins to examine the impact of a widely accessible post-disaster psychosocial program, further research is needed in this area.

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