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Arts-Informed Research with Children and Youth in a Post-flood Community

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COMMON GROUND

Arts-Informed Research with Children and Youth in a Post-flood Community

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Abstract: The Alberta Resilience Communities (ARC) research project examines the lived realities of children, youth and their communities impacted by the 2013 Alberta flood, to inform and strengthen resilience, health and well-being in the context of disaster recovery. The 2013 Alberta flood is recognized as among the most severe and costliest disaster in Canadian history. A mixed methods approach was utilized to understand the unique experiences of disaster-affected children and youth on the journey to post-disaster recovery and resilience. This article shares the results of a "paint nite" research activity that used an arts-informed and community-based research method to engage children and youth. The arts-informed research approach served to enhance understanding of the post-disaster experiences of children and youth through an alternative process compared to more traditional dialogical research interview methods. In addition, the Child and Youth Resiliency Measure (CYRM) was administered during the activity to measure resiliency among research participants. This article discusses the effectiveness of arts-informed and community-based research as a means to engage children and youth in mixed methods research in collaboration with community partners. Implications for disaster recovery are also discussed.

Keywords: Arts-Informed Research, Disaster Recovery, Children and Youth, Community-Based Research

Introduction

On June 20, 2013, an intense weather system involving thunderstorms and heavy rainfall caused rivers in the southern half of the Canadian province of Alberta to overflow their banks. This resulted in catastrophic and unprecedented flooding, whereby thirty-two states of local emergency were declared. The Canadian Armed Forces were deployed to help evacuate 175,000 people, making the event one of the largest evacuations and costliest disasters in Canadian history (Mertz 2016). Numerous communities were flooded and completely evacuated, five fatalities occurred, and extensive damage was caused to homes, businesses, roads, and critical infrastructures due to this devastating natural disaster (Pomeroy, Stewart, and Whitfield 2015). The Town of High River, a rural community just south of the city of Calgary, Alberta was hardest hit by the flood. All 13,000 residents ordered by the government to evacuate were not allowed to return to their homes for several weeks (Geddes 2014).

The southern Alberta floods severely affected many individuals, families, and communities, especially children and youth. Recently, there has been an increasing awareness about the need to better understand the experiences of children and youth impacted by disasters. This vulnerable population faces unique challenges, including being at a disproportionate risk of serious harm, due to their dependence on adults; the various physical, psychological, and social factors related to their developmental stage; and a lack of adequate child/youth-centered resources available post-disaster (Kousky 2016). However, children and youth also have the capacity to be resilient in the face of adversity and can act as powerful catalysts for change and recovery in their families and communities in post-disaster environments (Drolet, Cox, and McDonald-Harker 2015).

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Resilience is defined as the "capacity to navigate to health-enhancing resources that nurture individual, relational, and community assets, as well as the capacity of individuals to negotiate with others for these resources to be provided to them in culturally meaningful ways" (Liebenberg, Ungar, and LeBlanc 2013, 131). Definitions of resilience also emphasize processes that occur at multiple systemic levels consisting of individual, family, relationships, community, and cultural factors interacting to produce positive developmental outcomes among populations experiencing significant adversity (Sanchez-Jankowski 2008).

Children and youth strengthened by their capacity to be resilient can play an important role in developing nuanced understandings of the impact of disasters on families and communities, especially as there is a growing awareness that disasters affect them in unique and important ways (Peek et al. 2016; Abramson et al. 2010). Evidence demonstrates that it is integral to incorporate children and youth voices in post-disaster recovery processes in order to ensure that their unique needs are met (Peek 2008). Unfortunately, researchers have often neglected to include the perspectives of children and youth in disaster research (Gibbs, MacDougall, and Harden 2013). The capacity for children and youth to play an integral part in post-disaster recovery is an important aspect of disaster management that warrants further exploration.

Alberta Resilient Communities (ARC) Research Project

The Alberta Resilient Communities (ARC) research project investigates the impact of the 2013 southern Alberta flood on children and youth, and considers the role of community services providers in building resilience. The goal of the ARC project is to better understand the social, economic, health, cultural, spiritual, and personal factors that contribute to resiliency among children and youth while empowering them and their adult allies and communities to enact resilience building strategies (Drolet, Cox, and McDonald-Harker 2015). The project adopts child and youth centered research approaches to meet this goal and better understand their lived experiences. The ARC project is a collaborative initiative that brings together academic researchers, students, youth, community service providers, and government officials with a steering committee serving in an advisory role in order to carry out this community-engaged research project. This article discusses an innovative and creative approach to exploring the lived realities of children and youth (ages ten to sixteen) affected by the flood in the Town of High River, Alberta, using an arts-informed and community-based research approach. A "paint nite" was organized as an arts-informed research activity to engage children and youth in guided conversations about their flood experiences utilizing a qualitative interview guide and a quantitative questionnaire that measures resilience (CYRM).

Arts-Informed Research

"If you don't know where you are going, then any road will get you there. Rather than seeing inquiry as a linear procedure or an enclosing process, research acts can also be interactive and reflexive whereby imaginative insight is constructed from a creative and critical practice" (Sullivan 2006, 19–20). Arts-informed research can be used as a tool to explore other dimensions and experiences of individuals and communities through an alternative lens and different ways of knowing and acquiring knowledge. In recent years, arts-informed research has been recognized as a valid approach to gain understanding of diverse and complex human experiences through alternative processes and expressions (Guruge et al. 2015). As a result, this methodology is increasingly being used in the social sciences as a form of qualitative research. One of the primary purposes of arts-informed research is to "enhance understanding of the human condition through alternative processes and representational forms of inquiry, and to reach multiple audiences by making scholarship more accessible" (Knowles and Cole 2008, 6). Taking this approach to inquiry thus involves reshaping what "research" is understood to be, and opens doors for novel ways of exploring and understanding social phenomena. An opportunity to access and

represent different levels of human experiences and meaning is created by incorporating the inclusion of non-linguistic dimensions in research, which rely on other forms of expressive possibilities (Bagnoli 2009). As human beings we are engaged in the world around us, and through our experiences and interactions, we learn different ways of expressing and comprehending our realities. Therefore, utilizing arts-informed research is an approach to qualitative inquiry that invites a deep level of reflection, engagement, and accessibility for research participants.

An arts-informed research approach creates opportunities to deconstruct mainstream discourses about what research is and is not. It allows for the language that is typically used within academic research endeavors to shift and expand. It emphasizes inclusiveness and diversity in both processes and representations while paying "appropriate respect to both research participants and those who read or might be interested in reading research texts" (Knowles and Cole 2008, 4). Arts-informed research facilitates the possibility of establishing deep and genuine human connections by capturing different perspectives and expressions due to its expressive qualities. Indeed, arts-informed research refuels the passion behind what research is and creates opportunities for out of the box thinking. As a result, arts-informed research can give insights into unique ways of knowing that may only be rendered through art (Knowles and Cole 2008).

Arts-informed and arts-based research methods have been compared and contrasted in the literature. Arts-informed research shares many of the same concerns for integrity and quality as art-based research, such as the importance of the researcher's self-reflection throughout the process and being open to the creative process (Cole 2004). However, arts-informed inquiry varies in its accessibility for audience; whereas arts-based research can create art for the sake of standalone art pieces based in art training (Cahnmann-Taylor and Siegesmund 2008). Arts-informed inquiry does not produce artwork for this purpose; instead, "researchers are more concerned with the advancement of knowledge than aesthetically pleasing artifacts" (Shannon-Baker 2015, 37). Arts-informed research approaches allow for lived experiences, subjectivity, and memories to take on the role of agents in the construction of knowledge, often revealing important insights typically not recovered by traditional research methods (Cole and Knowles 2011). Arts-informed research brings together the systemic and rigorous aspects of scientific inquiry with the information of the arts and contributes to a more creative form of research.

An arts-informed research approach facilitates community-based research by bridging academia and community through engagement in mutually accessible forms of expression that are inclusive of diverse populations. The process of engaging in arts-informed research activities creates spaces for new expressions and ways of communicating that produces important and useful qualitative research data. Nevertheless, there are also challenges that come with this approach. Arts-informed research is an emerging research approach within the qualitative paradigm. The non-linear and expressive nature of arts-informed research can appear messy, making the findings challenging to translate into concrete research outcomes (Cole and Knowles 2011). In addition, non-artist qualitative researchers who adopt an arts-informed approach to inquiry may find it necessary to develop technical skills as artists in order to skillfully engage with this research approach (Cole and Knowles 2011).

In relation to post-disaster research, "creating art after a disaster offers a way for children to make sense of their experiences, to express grief and loss, and to become active participants in their own process of healing" (Orr 2007, 351). Studies of conflict, war, and disasters demonstrate that children and adults can express themselves and enhance their resilience through play, work, and creative arts, even under exceptionally challenging conditions (Huss et al. 2015). Disaster recovery is a long-term process, and "stress in the aftermath can be prolonged for more severely exposed families, as parents cope with demands associated with recovery and reconstruction, such as rebuilding homes or relocating, as well as social disruptions and financial losses" (Felix et al. 2013, 111–12). The use of art is particularly useful and appropriate because "play and creative arts are the child's natural medium for self-expression; they allow trained adults to

determine the nature and causes of behavior; they allow children to express thoughts and concerns for which they may not have words; and they allow for the cathartic release of feelings and frustrations" (Frost 2005, 5). When studying art and incorporating it into research, it is important to remember that both art and research are, as Mahon (2000, 470) states, inseparable from "broader social contexts…and struggle over cultural meanings." There is an opportunity to creatively understand and examine specific aspects of human experience from new angles by adopting an arts-informed research approach (Knight 2014).

Methods

Arts-Informed "Paint Nite" Activity

In order to better understand the lived realities of children and youth affected by the 2013 southern Alberta flood, a "paint nite" arts-informed research activity was organized in collaboration with the Boys and Girls Clubs (BGC) of the Foothills in the Town of High River, Alberta. As a charitable organization, the Boys and Girls Club mission is "to provide a safe, supportive place where children and youth can experience new opportunities, overcome barriers, build positive relationships and develop confidence and skills for life" (Boys & Girls Club of the Foothills 2017). The "paint nite" activity was proposed by the BGC as a youth-friendly and youth-centered activity to generate knowledge on children and youth's post-disaster experiences in a fun, relaxed, comfortable, and familiar environment. Recruitment for the "paint nite" was led by the BGC in partnership with a community-based researcher. A poster was designed to recruit potential participants who were members of the Club. A letter of initial contact was shared with those who expressed an interest in the research activity, describing the details of the "paint nite." Parental consent and youth assent was sought in advance of data collection by having both the parent and the youth sign an informed consent form. The painting activity was organized on a weeknight for approximately two hours at the BGC where the participants normally meet. Fifteen youth participated in the event that took place in January 2017. Participants included children and youth between the ages of ten to sixteen years who were living in the flood-affected communities of High River, Okotoks, and the MD of Foothills and who were members of the Boys & Girls Club. Professional workers of the BGC were present and available to provide translation support (e.g., Spanish, Tagalog) for participants and their parents and/or legal guardians if required.

During the "paint nite" activity participants were invited to paint a canvas using a step-by-step approach with instruction provided by a professional artist. All of the painting supplies and materials were provided free of charge along with refreshments. The participants were invited to engage in conversations with the researchers about their experiences during the 2013 flood while they were painting. The conversations with the researchers were based on an interview guide designed for this purpose. Three researchers were present to engage in conversations with the participants and detailed notes were taken. The notes were compiled for thematic analysis. In addition to the guided conversations, a survey was administered during a break in the painting activity. The participants were invited to complete the Child and Youth Resilience Measure (CYRM), a quantitative survey questionnaire that measures resilience. The next section describes the CYRM in greater detail.

The Child and Youth Resilience Measure (CYRM)

When faced with adversity and risk such as a disaster, some children and youth will continue to persevere and survive while others may encounter barriers and difficulties throughout their experiences. However, measuring child and youth resilience is a challenge (Liebenberg, Ungar, and LeBlanc 2013). The CYRM was developed through a collaborative, international, and cross-cultural consultation in eleven different countries (Canada, United States, South Africa, China,

Russia, etc.) in order to reflect common resilience characteristics among children and youth while accounting for diverse social contexts across numerous cultures (Liebenberg, Ungar, and LeBlanc 2013; Ungar 2008). Given that Canada is a multicultural country, the CYRM is particularly useful because it has the capability of producing consistent results that reflect diverse cultural contexts. The CYRM-28 is a twenty-eight-item self-report questionnaire for children and youth from ages nine to twenty-three years designed to assess the resources (individual, relational, communal, and cultural) that are believed to enhance an individual's resilience. The questions reflect the multiple pathways and processes that are embedded in the varying contexts that require attention and understanding when studying resilience in youth populations (Ungar 2016).

Unlike many of the existing resilience measurement tools, which largely focus on individual characteristics of resilience, the CYRM-28 provides a social ecological understanding of resilience by incorporating and assessing three dimensions/factors of resilience, including: Individual (individual personal skills, individual peer support, and individual social skills); Relationship with Primary Caregiver (caregiver physical caregiving and caregiver psychological caregiving); and Context (context spiritual, context education, and context cultural) (Ungar 2016). The individual subscale reflects both personal and social factors and is assessed using eleven of the twenty-eight questions; the relational subscale measures the individual's relationship with parents or primary caregivers and is assessed using seven of the twenty-eight questions; and the context subscale measures spiritual, educational, and cultural factors related to the individual and is assessed using ten of the twenty-eight questions. The twenty-eight questions on the CYRM-28 correspond to responses based on a 3-point scale that include: 1 (*no*), 2 (*sometimes*), and 3 (*yes*). The *f*Scores on the CYRM-28 range from 28 to 84. Higher scores indicate increased levels of characteristics associated with resilience. Also, higher scores on each of the three CYRM-28 sub-scales (individual, caregiving, and context) indicate higher levels of characteristics associated with each of the subscales.

Ethical Considerations

Research ethics approval was obtained through the University of Calgary Conjoint Faculties Research Ethics Board prior to collecting data. Parental consent forms and youth assent was obtained prior to the "paint nite" activity by having both the parent and the youth sign an informed consent form. Parents and youth were also asked to sign a media consent form. There was no potential for coercion or undue influence as the "paint nite" was a voluntary activity made available free of charge to participants. Participants were advised that if and when they wished to end the research or certain aspects of the research, all data collected would be destroyed, and a debrief session would be provided to explain that termination has no impact on the participant's relationship with any community partner or any other institution. In addition, the confidentiality of the data was maintained by removing all identifying information. Photographs of the artwork created during the painting activity were captured through the use of an arts-informed research approach.

Findings

Lived Experiences of Children and Youth

A conversation guide was developed and utilized during the "paint nite" activity to learn about children and youth's experiences of the 2013 southern Alberta floods and the ongoing post-disaster recovery efforts. Some of the guiding questions included: What would I need to grow up well here in High River? Did you know what was happening when the flood occurred? What kinds of things are most challenging for you growing up here? Did the challenges growing up here change for you after the flood? Can you think of anything good that happened because of

the flood? The participants largely spoke about the challenges they faced as a result of the flood including evacuation, displacement, and the destruction or loss of physical infrastructure. However, they also spoke about the role and importance of social networks, particularly family and friends, in helping them to overcome the difficulties they faced in their everyday lives post-disaster.

When asked what someone would need to know to grow up well in High River, some of the responses included: "[W]ell if you wanted to move here, that's great, just make sure you don't buy a house that is close to the river." Other responses discussed a focus on preparedness for future disasters, such as, "you gotta [sic] just be prepared and always know what's happening," and "you should just make sure that you have the app, High River has an app and it has special warnings in case there is an emergency." Participants in the study were aware of new social media applications using technology to better prepare for disaster events in their community.

When the flood occurred, one of the participants explained that "it was confusing at first, we had an assembly in the gym at school, and then buses arrived. We bused to Highwood School and then I went home with a friend." Another participant spoke about the transportation challenges, she said "getting around was difficult because the roads were closed and damaged. My friend's home was flooded and [they] had to move." Conversations with participants illustrate some of the ways in which children and youth were affected by the flood and subsequent evacuation. Some of the youth participants were evacuated from their school, and were unable to contact their parent(s) or family members.

In recounting the impacts of the flood, a participant stated that "lots of people had to sleep in the arena" and that "people had to stock up on a lot of things" such as the necessary items for an evacuation center like food, bedding, cots, and blankets. There was also some discussion surrounding the topic of their homes and schools and how many participants' homes and schools were destroyed or ripped down or had mold in them. Community members were displaced as a result of the floods, and one of the participants explained "people left, and some came back." Many buildings, homes, and infrastructures were damaged by the flood, affecting all community residents and participants either directly and/or indirectly. One of the participants explained that her bedroom was located in the basement of her home, and her family "lost the basement" due to the flood. This participant lost all of her belongings in the flood because her bedroom was located in the basement of the family home. In addition, several participants had friends who were directly affected by flood. The challenging nature of having experienced the flood and the aftermath of recovery was discussed in the conversations held during the painting activity.

When asked what they do when facing difficulties in their life, one of the participants replied "[I] try to ignore it, but it's hard to ignore it, so I do the best I can." Another participant explained that she engaged in "problem solving by talking" with her friends. Even though the floods took a huge toll on individuals and the community, some participants noted positive experiences such as creating good memories by staying together with family and friends, living with friends, going to a new school, enjoying all the new stores and buildings in their community, and making lots of friends. These findings demonstrate the role of social network in providing support to children and youth through their friends and relationships with others in the community.

The economic impacts of the flood were discussed by all study participants, and unemployment was identified as a recovery challenge that affected many individuals and families. One of the youth participants stated that "people lost their jobs." The flood was described as "an experience" and "a shock that it actually happened." Some participants stated that they "didn't know what a flood was" prior to the event. Further, the flood was described as "stressful" and "tiring" by youth. Participants were aware of another disaster event that took place in Alberta with the 2016 wildfires in Fort McMurray, Alberta. Participants reported that the wildfires made them feel "sad," "upset," and "shocked," and "they had to leave their house" and "[we] know what they're going through." Many families were directly responsible for the cleanup. It was reported in the conversations that youth who helped people during the flood said it made them feel "happy" and that it was "nice to help" others. This finding demonstrates that

children and youth can and do assist with post-disaster recovery processes, and that this contributes to their resilience post-disaster. Some participants explained that they were tired of talking about the flood by saying "not this again" or not remembering the flood very well.

Participants in the study were aware of disaster preparedness initiatives taking place in their community. One participant explained, "[A] lot of people are still okay, maybe 'cause we are thinking of new ways to make it better in case it happens again." The use of technology to improve preparedness is evident with the High River app that provides community members with a warning in the case of an emergency. Other initiatives include the creation of kits that contain clothes and first aid materials that people can just grab and go.

The study participants demonstrate their knowledge and understanding of all aspects of the flood, both negative and positive, and the impact of the disaster in their community. This understanding and experience from the perspective of children and youth has the potential to influence disaster management practices in recovery contexts. This is necessary given the diverse life experiences and perspectives of children and youth, and how to learn from children and youth's experiences to build resilience and to inform future practices. Children and youth bring new perspectives and understandings to post-disaster recovery, and there is a need to build upon their lived experiences to create better disaster preparedness in the future.

CYRM Results

A total of fifteen youth between the ages of ten and sixteen years completed the CYRM-28. Scores were entered into SPSS quantitative software, and the following scores were computed: total CYRM-28 score; total scores on the three CYRM-28 sub-scales (individual, caregiver, and context); mean scores on the three CYRM-28 sub-scales; total scores on the CYRM-28 sub-scale question clusters; and mean scores on the CYRM-28 sub-scale question clusters (see Table 1). Descriptive statistics indicate that the total mean CYRM-28 score was 72.3 (based on total of 84), with a standard deviation of 5.16. The lowest score was 62 and the highest score was 79. Although normative data for the CYRM-28 3-point item is still under development, a total mean CYRM-28 score of 72.3 (on a total of 84) is relatively high, therefore indicating that, overall, participants had high levels of characteristics associated with resilience.[2] These findings have important implications for understanding the ways that children and youth respond to disaster experiences, and the ways that they demonstrate high levels of resilience despite the trauma, difficulties, and challenges they face during and after a disaster. Indeed, this speaks to children and youth's immense strengths and capabilities to be resilient even when faced with the adversity that comes with experiencing a disaster.

The mean scores on the three CYRM-28 sub-scales indicated that the Relationship with Primary Caregiver sub-scale had the highest overall mean (2.70), with the Caregiver Physical Caregiving cluster having the highest mean of 2.87. This indicates that participants had high levels of characteristics associated with caregiving when it comes to their overall resilience, such as having their physical and psychological needs met by the caregivers in their life. In addition, it was found that the Context sub-scale had the lowest overall mean (2.47), with the Context Cultural cluster having the lowest mean of 2.43 indicating that participants had low levels of characteristics associated with context when it comes to their overall resilience. These findings have significant implications for understanding the important factors that contribute to resilience among children and youth impacted by disaster, suggesting that physical caregiving plays the most important role in assisting, supporting, and helping children to be resilient. This is particularly revealing in terms of the disaster context, as children and youth experience the

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[2] Normative data for the CYRM-28 5-point item indicate that the total mean CYRM-28 score for low-risk youth is 113.12 and 103.85 for high risk youth (on a total of 140). Thus, by way of comparison, a total mean CYRM-28 score of 72.3 (out of 84) on a 3-point item for disaster-impacted youth in our sample suggests that it is higher than normative data for the 5-point item.

destruction or loss of physical structures, belongings, and necessities for their day-to-day functioning, which can create a loss of stability and order in their lives. Yet, having a caregiver who provides physical caregiving and support in the aftermath of a disaster is an important determinant that can offset the instability caused by a disaster, and contribute to higher levels of resilience among children and youth. These results, derived from the administration of the CYRM-28 support the findings derived from the administration of the conversation guide during the "paint nite." They both point to the importance that children and youth's social networks, such as family and friends, have when it comes to increasing their recovery and resilience post-disaster.

Table 1: CYRM Scores

		N	Mean	Standard Deviation
Total CYRM SCORE (Score out of 84)				
		15	72.3	5.16
Mean Scores for 3 Sub-Scales (Scores out of 3)				
1) Individual		15	2.06	.216
i)	Personal	15	2.61	.220
ii)	Peer Support	15	2.57	.563
iii)	Social Skills	15	2.62	.265
2) Caregiver		15	2.70	.278
i)	Physical Support	15	2.87	.229
ii)	Psychological Support	15	2.64	.331
3) Context		15	2.47	.237
i)	Spiritual	15	2.47	.414
ii)	Educational	15	2.60	.387
iii)	Cultural	15	2.43	.301

Discussion

A growing body of research suggests that arts-informed and creative research approaches allow children, youth, and their families to express their experiences and perspectives in new ways (Fraser and al Sayah 2011; Checkoway, Pthukuchi, and Finn 1995). Professionals working therapeutically with trauma survivors have also adopted expressive interventions (Carey 2006). Indeed, expressive therapies, those that use art, music, dance/movement, drama, poetry/creative writing, play, and sand tray have been applied in psychotherapy, counseling, and rehabilitation for decades (Malchiodi 2005). It has recently been found that children and youth may require different forms of physical, social, mental, and emotional support than adults in disaster contexts (Peek 2008). There is growing interest in developing strategies for enhancing young people's resilience to disasters, helping them to prepare so that they and their families might respond and recover well when disaster strikes from a preventive lens (Ronan and Towers 2014).

The "paint nite" activity discussed in this article highlights how an arts-informed and community-based research approach facilitated child and youth engagement in an expressive and creative activity while sharing their flood-related experiences. The painting activity provided an opportunity for self-expression, active participation, and use of imagination while reflecting on lived experience. Through the painting activity, a space was created to engage participants in conversation about their flood experiences and a survey was administered. The community-based nature of ARC project's research was a critical element in the research design. Partnering with a respected non-profit organization in the community who had developed long-term relationships with the children and youth participants facilitated their recruitment and engagement in the research. Since flood recovery is ongoing, it was important for the research team to collaborate with an agency that played a supportive role in the community during the recovery process and was working to meet the long-term needs of children and youth through targeted programming. The BGC is committed to sustained child and youth engagement, and the "paint nite" research activity aligned with the organization's overall goals and objectives.

The mean scores of the CYRM-28 show that the Relationship with Primary Caregiver sub-scale had the highest overall mean (2.70), with the Caregiver Physical Caregiving cluster having the highest mean of 2.87. Overall, the scores indicate that participants had characteristics associated with caregiving that contribute to their resilience. The participants were members of the BGC, and were linked to social supports in their community, which may contribute to the resilience scores. The Context sub-scale had the lowest overall mean (2.47), with the Context Cultural cluster having the lowest mean of 2.43. These findings indicate that a caregiver who provides physical caregiving and support in the aftermath of a disaster is an important determinant that can offset the instability caused by a disaster, and contribute to higher levels of resilience among children and youth.

A purposeful mixed methods approach was adopted to better understand child and youth experiences in a comprehensive manner in the study. While arts-informed research can facilitate the creation of space for meaningful conversation, there are limitations with this methodology. First, the data reflected what the participants' wished to convey in conversation, and may not have necessarily answered the research questions. A small number of participants when asked about the flood replied by saying "not this again." It can be a challenge for researchers to capture "meaning" through process-based research given that personal narratives are subject to interpretation by researchers. A limitation of the arts-informed approach is that some participants may not perceive themselves as creative or artistic and may not be interested in participating in an art activity. While the group format of the research and the fact that the painting was led by an artist facilitator rather than being self-directed provided a concrete structure for the activity, the highly structured format may not have been best suited to each participant's needs or preferences. At the same time, however, it is likely that participants were drawn to a "paint nite" because they found an art activity attractive. Although the CYRM-28 is a validated measure, it shares the same limitations as other forms of quantitative research. Because there is no baseline for resilience, it is not possible to determine from the score whether or not an individual can be labeled as being "resilient."

The "paint nite" activity is one of many research activities under the umbrella of the ARC project. Strategies for building child and youth resilience in post-disaster contexts continue to be explored in the project streams. A variety of additional research activities with children, youth, and community service providers are ongoing and therefore the results presented here are exploratory in nature rather than conclusive. Future research could examine how the arts contribute to community regeneration in post-disaster contexts.

Conclusion

This article presents an arts-informed and community-based research approach adopted in the Alberta Resilient Communities (ARC) research project to engage children and youth affected by

the 2013 flood in southern Alberta. A "paint nite" was organized to enhance understanding of children and youth's experiences of the flood and the ongoing recovery processes. Diverse methods of engaging children and youth in research have successfully been demonstrated in a number of research studies. Through a partnership with a non-profit social services agency in the Town of High River, it was possible to engage children and youth in data collection. The CYRM was administered during the "paint nite" activity, and the scores demonstrated characteristics of resilience associated with caregiving. It is imperative for social science researchers and disaster managers to develop age-appropriate strategies that facilitate child and youth engagement in all phases of disaster recovery and associated research initiatives. An arts-informed and community-based research approach, such as the one presented here, undertaken in partnership with local community organizations presents a promising pathway for ethically engaging children and youth in post-disaster recovery research.

Acknowledgement

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