

Impacts of the 2013 Flood on Immigrant Children, Youth, and Families in Alberta, Canada

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Abstract

The 2013 flood resulted in devastating impacts for immigrant children, youth, and families in Alberta, Canada. This article presents the findings of the Alberta Resilient Communities (ARC) Project, a collaborative research initiative that aimed to better understand the social, economic, health, cultural, spiritual, and personal factors that contribute to resiliency among children and youth. The study findings indicate that immigrant children and youth resilience is tied to four main themes: 1) Constructive parental responses; 2) Effective school support; 3) Active involvement in/with community; and 4) Connections between disasters and the environment. Community influencer participants revealed flood recovery challenges experienced by immigrant families that affected their settlement and integration at the community level. Major themes include: (1) Loss of documentation; (2) Provision of temporary housing and accommodation; and (3) Rethinking diversity in disaster management. The study findings demonstrate that immigrants faced significant socio-economic impacts, trauma, job loss, and housing instability as a result of the flood and its aftermath. Challenges such as limited social ties within and beyond the immigrant community, limited official language fluency, and immigration status contributed to their vulnerability. Immigrant children and youth with positive support from their immigrant parents were found to be more resilient, integrated, and engaged in the community. Recommendations for disaster and emergency management agencies to address diversity factors such as immigration status, language, age, and culture that shape long-term disaster recovery experience are provided. Schools, immigrant parents, and community connections were found to play a key role in fostering immigrant child and youth resilience post-disaster.

Keywords: Child, Community, Disaster recovery, Diversity, Flood, Immigrant, Resilience, Youth

1. Introduction

Individuals, families and communities are increasingly affected by environmental disasters due to changes in the global climate system that contribute to more frequent and intense extreme weather events. Environmental disasters bring significant social, economic, and environmental impacts, which affect people's mental health and wellbeing. While a disaster may affect all members of a community, the impacts are experienced differently. There are various social forces that influence a person's vulnerability to disaster. Gender, race, age, culture, economic class, employment status, geographic location, and immigration status are among the diversity factors that need to be considered in understanding how individuals, families, and communities experience disaster. Social work research on disasters is particularly concerned with the social dimensions in relation to oppression, vulnerability, and marginalization in society, and how inequities may be amplified in the aftermath of disaster (Drolet et al., 2018a; Drolet, 2019). Research has demonstrated that people living in poverty are more likely to live in unstable or unsafe housing, with access to fewer resources during evacuation, response, and recovery, and with less political power and voice in times of disaster (Fothergill, 2017; Kulkarni et al., 2008).

In Canada, immigration policies attract approximately 300 000 immigrants on an annual basis,



which accounts for a significant portion of the country's overall population growth. Statistics Canada (2012) estimated that by 2031, nearly 46% of Canadians aged 15 and older would be foreign-born. There is a significant body of knowledge related to immigrants' settlement and integration experiences in Canada, which identifies numerous barriers and challenges experienced by newcomers. Economic challenges due to unemployment and under employment as a result of the lack of recognition of foreign work credentials and foreign education, language barriers, lack of affordable and accessible housing, social isolation due to limited social connections, racism and discriminatory practices, and limited resources and supports for newcomers to name a few (Drolet & Texeira, 2020; Kaushik & Drolet, 2018; Vu & VanLandingham, 2012). However, there is a paucity of research on the experiences of immigrants affected by environmental disasters. It is particularly important to consider how immigrant children, youth, and families experience disaster, and how diversity is taken into account in the recovery process. Children and youth are particularly affected by disasters because of psychological and social factors related to their developmental stage, life cycle, and structural vulnerabilities (Drolet et al., 2019). Disasters lead to severe disruptions in the community that impact family dynamics and routines, children's school attendance, access to healthcare and social services, loss of employment, increased stress, and trauma.

This article discusses the impacts of the 2013 floods on immigrant children, youth, and families from the perspectives of children, youth, and community influencers. The findings are drawn from the Alberta Resilient Communities (ARC) Project, a collaborative research initiative that aimed 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 after the 2013 floods (Drolet et al., 2019). The context of the 2013 floods in Southern Alberta will be discussed in the next section.

2. Context of the Study

The 2013 floods in Southern Alberta resulted in devastating impacts affecting social, economic, health, and environmental infrastructures. The flood was the result of heavy rainfall and thunderstorms, coupled with rapid mountain snowmelt that contributed to the overflow of rivers and flood conditions. Over 100 000 people were evacuated in the City of Calgary, and thousands of residents were displaced in the southern region of the province. Catastrophic flooding resulted in the full or partial evacuation of 32 communities, representing about 80 000 citizens, within a 15-hour period (Vroegop, 2014). The Town of High River (located 40 km south of Calgary) was among the worst affected with all 13 000 residents forced to evacuate. Immigrants, refugees, temporary foreign workers, and foreign workers, and their family members, including children and youth, were among those affected by the floods.

3. Disaster Recovery and Immigration

Globally, disasters are becoming increasingly common due to extreme weather events and the effects of climate change related to human activity. The social work literature on environmental disasters offers a unique perspective that addresses longstanding gaps in the



field that create space for the voices of those most often excluded in disaster research. Social work disaster research explores the factors that contribute to inequitable access to services and resources, advocates for recovery practices and methods that are collaborative and community-based, and contributes to community rebuilding with greater social capital, social cohesion, and resilience (Dominelli, 2015; Drolet, 2019; Drolet et al., 2015). Social workers act as direct service providers, political advocates, and policy makers, and may serve as a liaison between various community resources such as the provision of healthcare, housing, or school services.

Immigrant and refugees' settlement and integration are influenced by their pre-migration experiences and migration pathways, and the strengths that they bring with them. By considering the settlement and integration needs of immigrants and newcomers, an environmental disaster can present numerous challenges beyond meeting basic needs. For example, fluency in an official language is among the most significant challenges for newcomers, which affects employment, social participation, and access to resources and supports. Immigrant-serving organizations funded by the federal, provincial and municipal governments, and other groups, facilitate access to information on available services, programs, and supports. However, information may not be available in multiple languages besides English or French. Immigrant service users are often redirected to webpages, online resources, or applications without considering a service user's access to technology or computer proficiency.

Olivas (2008) discusses the political immigration discourses at the time of Hurricane Katrina in the United States of America (USA), which contributed to discriminatory treatment and differential access to disaster relief services and supports. Undocumented migrants and immigrants were required to navigate multiple institutions, systems, and organizations during an era of anti-immigration sentiment in America (Olivas, 2008). Multiple studies conducted in the aftermath of Hurricane Katrina in 2005 reported scarce social services and infrastructure for immigrant populations both prior to and after the disaster (Flaherty, 2011; Fussel et al., 2018; Reyes, 2010). Limited infrastructure to support immigrant populations thus render individuals particularly vulnerable to disasters. Asad (2014) found that following a disaster, vulnerable individuals are "especially dependent on the post-disaster institutional context for resettlement and recovery" (p. 284). However, despite the availability of immigrant-serving agencies, immigrants must interact with mainstream organizations in order to meet their diverse needs. The challenges experienced by immigrants trying to access mainstream services are raised in the literature in the Canadian context. For example, Francis and Yan (2016) reported that mainstream organizations often utilize a one-size-fits-all delivery model, that "do not take into account different needs" and "do not utilize culturally responsive tools to assess or address the needs of recently arrived children and youth, particularly refugees" (p. 82). As a result, service users may lose trust in formal institutions as they experience miscommunication or misdiagnosis. Feelings of isolation and social disconnection may be reinforced, and despite great need, services and supports may be underutilized. Service providers employed in mainstream social service agencies, government ministries, and health and community organisations have a responsibility to meet the needs of diverse populations (Drolet et al., 2018c). Research demonstrates that integration is a lengthy



process and requires a long-term commitment (Vineberg, 2012; Drolet et al., 2018c). Addressing the continuum of needs for newly arrived or longstanding community members is part of the process of building inclusive and cohesive communities (Drolet et al. 2018c).

Immigrant status, lack of status, or precarious status has the potential to manifest as additional barriers to access services. Reves (2010) explains "the immigration status of children and their families is the nucleus at which eligibility determination for all government services, including disaster preparation, relief and recovery intersect" (p. 457). In order to access services and programs, immigrants carry the burden of producing their proof of residence, identification, or immigration documents. However, as Reves (2010) indicates, these documents may have been damaged, destroyed, or lost during the disaster. Further, replacing such documents may be extremely difficult and costly if government buildings are shut down or destroyed or if papers and records were obtained in another country. In some instances, immigrant disaster evacuees avoided accessing services due to fear of negative implications on citizenship applications or welfare benefits (Alejanda, Collins, & Grineski, 2016; Fussell et al., 2018; Reyes, 2010). Similarly, undocumented immigrants may avoid emergency disaster relief centers and supports in fear of deportation. Numerous articles on immigrants affected by Hurricane Katrina demonstrate that one's immigration status determines not only eligibility for temporary relief and financial support for rebuilding, but determines entitlement to basic needs such as food and shelter (Fussell et al., 2018; McConnel, 2016; Reyes, 2010).

4. Methodology

The study adopted a mixed methods research approach to investigate the experiences and perspectives of children, youth, and community influencers after the floods in Southern Alberta. The study explored the lived experiences of children and youth in order to determine the ways that children demonstrate resilience, what factors and conditions are associated with resilience, and the resiliency strategies that can be utilized to help inform how children can best be supported by the key influencers in their lives. Interviews with children and youth (5-18 years of age) offered opportunities to contribute creatively in resilience-building activities, dialogue, and critical reflection about practices used to engage young people. An invitation letter and poster were used to recruit potential participants in the study, and these documents were sent to the parent or legal guardian to recruit the children and youth as participants in the study. A mixed methods research approach was adopted using quantitative measures, qualitative structured and semi-structured interviews, and art-based activities with flood-affected school aged children (5-18 years) and at least one parent/legal guardian for each child. Semi-structured interviews consisting of 66 open ended questions were used to obtain in-depth and detailed information about the child's overall flood experience as it related to the child: 1) as an individual; 2) family; 3) school; 4) peer; and 5) community. A total of 83 children and 83 parents were interviewed (total sample of 166) in Southern Alberta (from High River, Okotoks, Black Diamond, Bragg Creek, Foothills MD, and Calgary). The Child and Youth Resilience Measure (CYRM-28) was used to measure resilience among the participants; the results have been reported elsewhere (Drolet et al., 2018b). Interviews were transcribed by student research assistants and then uploaded and coded in NVivo 11.0.

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Comparisons were drawn across interviews to identify themes and meanings grounded within the data. The data was analyzed using Maxwell's (2005) and Miles and Huberman's (1994) qualitative analysis technique referred to as "descriptive" and "pattern" coding. Participants responses were open-coded to identify descriptive explanations of immigrant children, youth, and families' flood experiences. These open codes produced numerous concepts that were then organized into different categories including immigrant children and youth's flood experience and resiliency as it pertains to family, school, and wider community contexts. In-depth analysis of these open categories was then conducted to identify patterned relationships across these categories to determine similarities and differences in the themes. Responses were coded and examined to ensure coding reliability. In order to interpret the coded data, we utilized Burawoy et al.'s (1991) approach where arguments were constructed by creating an ongoing exchange between the data categories and existing sociology of environment and disaster theory, in order to build upon and expand the existing theory (Burawoy et al., 1991).

Interviews were conducted with community influencers who were service providers, social workers, mental health therapists, psychologists, teachers, community program managers and coordinators, childcare providers, newcomer settlement staff, and clergy members. A purposive sample of 37 key informants was obtained. Semi-structured interviews were used to learn about the key informants' experiences of working with children and youth in the post-flood recovery context, including the successes, challenges, and barriers that they may have encountered at the individual, organizational, and policy levels. Each interview was recorded and transcribed verbatim for analysis by two student research assistants. The transcripts were subsequently uploaded into NVivo 11.0 for analysis. Transcripts were coded and comparisons were drawn across interviews to identify themes and meanings grounded within the data. Thematic analysis was conducted and shared among the research team members to build consensus. NVivo 11.0 was used to organize the data and support the analytic process that allowed for collaborative reading, coding, discussing, and visualizing the emerging nodes and codes among the research team members. Ethics approval for the study was obtained from the University Ethics Board prior to recruitment and data collection, and an opportunity for participant withdrawal without any repercussions was made available to all participants according to the university's research ethics protocol.

5. Findings

The study findings indicated that immigrant children's resilience was tied to four main themes: 1) Constructive parental responses; 2) Effective school support; 3) Active involvement in/with community; and 4) Connections between disasters and the environment. The community influencer participants discussed a number of flood recovery challenges experienced by immigrant families that affected their settlement and integration at the community level. Major themes include: (1) Loss of documentation; (2) Provision of temporary housing and accommodation; and (3) Rethinking diversity in disaster management.



5.1 Constructive Parental Responses

It was interesting to note that children from immigrant communities were found to be more resilient due to constructive parental responses compared to non-immigrant families in the study. Most children perceived that their parents were supportive and reassured them positively about the disaster outcomes. Parents responded constructively to flood (less stress/anxiety/worry), engaged in a reciprocal response strategy of asking children about their emotional, psychological, and physical coping, and communicated openly and honestly with children. Parents encouraged their children to maintain a positive attitude by motivating them to attend church, say prayers, and participate in other rituals within their cultural and/or spiritual practices in the post-disaster context. One of the child participants shared:

Well I talked to them [family] about the flood and they kind of, they are like, 'It's okay, it's okay, everybody's okay.' And I'm like, 'I know, it's just sad, I lost everything,' and um they... they just— they were positive and helped me kind of like, 'We're okay, we can go do stuff, we can have fun.'...We made lists of pros and cons of things and then she [mother] was like, "okay, this is the pros, focus on the positives, focus on the pros, and look at this, look at what we're doing, you've gone to day camps, you've learned all this stuff, you've made some friends, you've learned new website things," stuff like that...My grandma made us a lot of food all the time. Indian food, samosa's and stuff. (Christine, 14 years old).

Another youth participant explained their family had to rebuild:

She [mother] says it's alright, she's gonna keep our family safe, same with my dad too, he's gonna keep us safe. Um, 'it's gonna be alright, we're not gonna back down from this, we're gonna get back up and rebuild the house.' Then after-- oh I don't know how after cause she started crying after cause it was all done then she was saying, 'It's alright, if we have another flood, we can just do it again and it will be all good.' (Nestor, 17 years old)

Prayers and rituals played a major role in building resilience and enhanced coping, as discussed by a child participant:

We like gathered around and we say some prayers and then we would share what we did and sometimes my sisters would fall asleep (laughing). And we did that with my cousins sometimes. And then we just shared our day and how it was and that was like a time to connect with our whole family...We always prayed for things. My family always prays for things we believe in that needs help. We pray for the sick, and the lonely, and the poor. We pray for someone who is in the hospital or someone who needs help, someone who is in danger. We pray for anyone who needs prayers for. (Lenu, 10 years old)

Constructive parental responses, positive reassurance, support, and prayers were found to be major contributing factors in building resilience and reinforced positive coping and enhanced communication skills among children in immigrant families.

5.2 Effective School Support

Effective school support, advocacy, and resources, all played a major role in building resiliency among children in immigrant families. Increased resilience among immigrant

children was found when schools (teachers, staff, principals) focused on and advocated for the needs of children; provided children with spaces to talk about their flood experiences and access necessary resources (counselors; story time; art activities); and tried to maintain a stable and integrative learning environment for children. Teachers were attentive to the health and well-being of children, acted as intermediaries between children and their parents by ensuring effective home and school communication in order to minimize barriers that may arise from cultural differences in the post-disaster context. The importance of effective school support is demonstrating by a child participant:

And then they [the school] had, like for people to deal with it I guess, people come in. They got the school counselor to put out a bunch of signs saying okay if you need to come talk about the flood, you can come talk to the school counselor. There was a lot of people that did, and I think that helped other people feel safe. (Christine, 14 years old)

Child participants spoke of new programs and initiatives that were brought into their school to provide them with support.

They had this new program [at school] called 'Friends For Life'... and it would like help you interact with other kids. An Educational Assistant would come to different classes and talk to them about their friendships and stuff. So, we had people to listen to when we were sad or lonely any day. (Odeh, 12 years old).

Child participants explained that they were asked about their feelings and could discuss their concerns with the school.

If we were sad, or something like that, they [the school] would just usually come and talk to us. They would ask us what we were sad about, and if it was about the flood and if we thought it was going to happen again...If we were a little bit worse, too worse or bad or sad, they would call our parents to see if we were okay and if we wanted to stay in school for the rest of the day or if they wanted to take us out for a little while for the rest of the day. So ya they would usually just talk to us and tell us if we wanted to go call our parents if we were okay. (Alicia, 9 years old)

Schools served as a platform for building resilience among children and provided spaces for children to share their ideas, get involved in different activities, and provided a strong sense of connectedness to self, family, and the community.

5.3 Children's Engagement and Integration with Community

Increased resilience among immigrant children was found when children were actively involved in disaster recovery in their communities, as opposed to being a passive presence in adult processes (such as helping others with basic needs, providing supports, and assisting with rebuilding efforts). Children's involvement in the community post-disaster facilitated and strengthened their integration, which led to increased social interactions and the building of relationships outside family and school, expanded their social networks, and contributed to community cohesion. A child participant discussed:

I felt really good [to help others] and like kinda proud of like me and of all the other



people, and students, and kids, because we were all helping each other, we were all sharing the stuff, we were all basically doing the right thing. (Alicia, 9 years old)

A youth participant spoke of the need to help others, and specifically their friends, in rebuilding their homes:

Cause everyone needs help in this town because everything-- lots of people lost their houses so we had to help them rebuild their house, help them with their car if they lost a car, help them with money, financial issues, stuff like that... Just seeing all of my friends coming back together after the flood so we could come back in to help each other at their house to fix it, to tear down the walls, to put the drywall up to help them. So, I helped lots of my friends to do that, to fix their houses. (Nestor, 17 years old)

Active involvement with community activities, services and programs enabled children to be engaged and integrated with the community.

I wanted something like that I can do to help, because I didn't want to be sitting around, be watching TV, while something like that [flood] was happening. I learned that even as young as I was, that in some ways I could still have some way to help. I had little siblings and they didn't really do much to help, but I was still kind of able to help. If we probably didn't have like the flood, everyone would probably be like, to themselves. Like the same ... But now we're having way more public events ... Like just in light of the flood and how we were able to come together as a community, and ... were able to like help with the buildings ... how people are volunteering to help with the fridges and all the houses ... So, I think like closer because we're able to come together more with all the events that happened. (Odeh, 12 years old)

This type of involvement also generated as sense of stewardship and community service learning. Children were also able to learn about the importance of climate change, the relationship between environment and disaster, and what services are needed during post-disaster recovery.

5.4 Children's Learning: Protect the Environment and Be a Responsible Citizen

Being involved in community services and programs, children felt part of the community. Children learned about climate change and how personal actions and responsibilities are needed to keep the environment safe and act as a responsible citizen. According to a child participant:

I think it [environment] is important even before and after the flood because even if there wasn't any flood, we would still be able to take care of the environment. And even after the flood most of our environment got taken away and that makes it more believable that we should take care of it more...I think a way to protect the earth is by planting more, um recycling, using less trash, less waste, and composting. We should start having composters in everyone's houses. So instead of throwing your apples and bananas away, you can put it in your compost and start the ecosystem going again. (Lenu, 10 years old)

Similarly, another child participant explained how they understood the relationship between environmental degradation and disasters:

Cause of global warming... Cause we're polluting and stuff....It's like destroying the ozone layer and like it's messing up water and polluting it so that we can't drink it as



much...Ah humans...I think it's very important because the more we mess it up the more disasters are going to happen and then more floods are going to happen. (Stanley, 5 years old)

Children appreciated their parents and elder support in understanding their responsibilities towards their land, people and environment. One of the child participants stated:

My mom, she helped me take out the books on natural disasters she helped me learn things kind of like, oh you can take this out of it, and you can take this out... and yeah... I think my mom learned a bit more than me cause she's an adult and she likes knowing when everything is going to happen, at that time, and this is gonna happen and you have to make a schedule and stuff like that ...(Christine, 14 years old)

Children's active involvement brought positive outcomes, enhanced their coping and resilience, and assisted in post-disaster recovery within immigrant communities.

5.5 Loss of Documentation

The community influencer participants spoke about how many immigrants and temporary foreign workers lost their immigration and other important status documents due to the floods. Immigrant families struggled with replacing lost identity documents in the midst of a chaotic post-flood environment.

It's very time consuming and when you think about, it is one thing to lose a passport and then try to obtain different documents, but when you lose all of your identity documents and this is not your country of citizenship, it becomes very difficult to put all of those into place because they are all dependent on one another. So, to get your passport, you might need your birth certificate, well if your birth certificate has been flooded, how difficult is it for you to obtain your birth certificate? And to get your Permanent Resident card replaced, you need a passport and you need your birth certificate. So again, they are all linked in some way and there is a lot of letter writing to be done in terms of explaining why these documents could not be provided. (Community Influencer Participant)

The loss of documentation created difficulties for Temporary Foreign Workers (TFWs) who were unable to work, or find new employment, which resulted in financial challenges. TFWs are restricted to work for the employer listed on their work permit and cannot work for another employer without having a separate work permit. TFWs experienced psychosocial issues and increased vulnerability due to the loss of documentation post-flood. Community influencers discussed how they were challenged in their role as service providers to assist TFWs navigate their applications to replace their identity documents, passports, and work permits. One of the participants shared:

Especially with the TFWs, their papers are gone. Passports are gone, work permits are gone, some of the pertinent documents that are very important to their life are gone ... So, I have to coordinate with the Philippine embassy, with the Mexican embassy, you know, with immigration too to get their work permits or their lost passports. (Community Influencer Participant)

Community influencers explained that many immigrant families rented basement suites before the flood, and this increased their precarious status as they were most affected by the



floods and lost all of their belongings, including their documentation.

What we found was common was that a lot of our [immigrant] families were living in basement suites. Because they tended to be a little bit more affordable. And as you can imagine, anything below ground was filled [with flood water]. And so, we had a number of our immigrant families who had lost absolutely everything but most importantly passports, Permanent Resident cards, confirmation of permanent residency papers - basically all identity documents. (Community Influencer Participant)

The loss of documentation created additional challenges for most immigrant families and TFWs who suffered social and economic challenges in the post-disaster recovery process. The loss of housing and accommodations for many residents was a particular challenge that emerged as a theme in the data.

5.6 Provision of Accommodations and Temporary Housing

The floods damaged many homes and buildings, resulting in the evacuation of neighborhoods and communities. The loss of housing and accommodations created stress and upheaval for children, youth, families and communities. Emergency accommodations were provided in the disaster response, and over time, provincially funded and supported temporary housing was made available for approximately 1200 people, which included many immigrant and newcomer families. The community of Saddlebrook was created to provide temporary accommodation near the Town of High River. An interview participant explained:

A number of [newcomers] tended to have lived in the center of High River which was very flood impacted and so when you went to the emergency shelters, you would see [them]. Once Saddlebrook was created, and residents were able to move into the temporary community of Saddlebrook, you saw a lot of the immigrant population there as well and so, in terms of supports with housing and language and all of the things we would have provided anyway, we needed to provide those same things but under different circumstances. (Community Influencer Participant)

In order to access housing and accommodations, children and families went through multiple transitions in the post-flood environment. Living in emergency shelters and other people's homes created anxiety and stress among both children and parents. As one of the community influencers participants stated: "I think for children living in Saddlebrook in a temporary housing was an element of extra stress..." According to the participants, both children and families missed their safe spaces and experienced a lack of sense of security and connectedness to self, others and the environment. These factors were perceived as being a major contributor towards a sustainable recovery in the community. One of the community influencers explained:

I can't necessarily say that it is flood-related, but that integration piece has been a really big struggle, especially for children and older youth. What we saw here is that families and kids wanted to experience something normal... So, families just wanted to come and not necessarily talk about the flood, they just wanted something because their bedrooms weren't normal, they couldn't go to the library, they couldn't go to the parks. We were able to provide something ... (Community Influencer Participant)

Community influencers also expressed that there was no proper planning for assisting



residents with a smooth transition from shelter or evacuation centers which caused further upheaval, frustration and anxiety among marginalized and vulnerable populations.

We need to be aware of our at-risk populations and I think one of the really good examples is when we put people in temporary residence in Saddlebrook for example we didn't do transition planning for some of those at risk and vulnerable population. So, individuals that were homeless, came into Saddlebrook, received a room, received all their meals, received housekeeping services. But when Saddlebrook closed there wasn't as place for them to go or there weren't the supports around housing...We need to think about that level how do we support their needs? ... No effective planning in supporting people going back to a community that was still incredibly devastated. Poverty was a big thing for sure. If you add in financial issues on top of all the other trauma people are exposed to, it is much harder to take those next steps to find that desire and hope to engage in healthy actions again ... (Community Influencer Participant)

Participants explained that Saddlebrook created a new space for service providers to build meaningful relationships.

And eating with people at Saddlebrook, that doesn't sound very innovative but breaking bread together, you know, it kind of opens up conversations you don't have, out, in an office or in a more professional setting. (Community Influencer Participant)

Saddlebrook provided opportunities for immigrant families to come together as a community, where they could meet and connect with others who were living through the same experience despite the challenges.

... there were lots of complaints about the noise and the proximity to other people, and you know going to breakfast in your pajamas in a community setting isn't ideal right. So, there's lots about that wasn't convenient, but people talked about the opportunity ... to meet and connect with other people who lived through a similar event and to share that experience with others was a real gift. That sense of having built community and there were difficulties and struggles but there was also a working through what happened that I think was really helpful for a lot of people who would have previously been isolated and disconnected, I think [they] left that experience feeling connected to a community in a different way. (Community Influencer Participant)

The community influencers provided recommendations on how to better address diversity in disaster management specific to responding to the needs of immigrants and ethno-cultural communities, the final theme to be discussed in the next section.

5.7 Rethinking Diversity in Disaster Management

Community influencers spoke of the need to better address diversity in disaster management so that culturally and linguistically diverse populations are not overlooked or misunderstood. As stated by a community influencer participant:

Like different cultures, different diversities. You see different needs across the community ... vulnerable populations. (Community Influencer Participant)

This points to the need for an inclusive and integrated approach to disaster response and recovery, which could be developed in partnership with immigrant settlement agencies and ethno-cultural communities.



I think that if we were to share any knowledge we have gained, it has been in that preparedness piece. Making sure the community is prepared to support all the people in the community, not just the majority. Because it's the minority that ends up being the most challenging and the most significantly impacted. And so, we are very, very proud that we have been invited and included in a lot of the emergency preparedness that is going on within the community. That communication piece is incredibly important. (Community Influencer Participant)

Persons with limited official language proficiency often did not get the information they needed about disaster relief and their rights. Government and disaster recovery agencies failed to provide materials, interpreters or culturally appropriate services, for immigrant families trying to navigate the recovery system and resources. As explained by a community influencer:

[Immigrants] had a huge need because of vulnerable populations, cultural diversity, language barriers – there was a ton of need for them specifically. We've had a lot of different challenges and a lot of really interesting conversations about physical location, access to services, access to networks, different networks, vulnerable populations, language barriers, access to technology – not everyone has a smartphone or there was lots of door-knocking. It was like "how do I get access?" (Community Influencer Participant)

Service providers reported having limited resources such as interpreters and translators to facilitate communication, and many service providers explained that they were not adequately trained to respond to the cultural needs of immigrant populations. One of the service providers reported:

So, for example, at the emergency shelters, we did not have interpreters available at that time. We just were not mobilized or able and we have since put into place structures within the emergency response plan that incorporate areas that are specific to engaging and helping newcomers. (Community Influencer Participant)

The language challenges were further elaborated by another interview participant:

So, I think that's a lesson learned that some people really don't know what's going on and you need to keep track of that. Because they don't really have anybody that speak any other language other than English, so we are just lucky that we there to help them. But how about the other language groups? (Community Influencer Participant)

The study found that both immigrant families and service providers expressed feeling helpless and struggled to overcome challenges with the limited resources in the post-flood recovery period. A need for strong support and collaboration was also felt among the service providers to provide adequate assistance to affected immigrants and newcomers with respect to ongoing settlement and integration needs post-flood.

When I think about some immigrant families in town who I saw that came to Canada, who had established a life, you know they had clothes, they had furniture, they had cooking utensils, they were happy, they had connections and suddenly it was gone, and because they were renters they didn't even get to go and see what was salvageable because it wasn't their property. And people weren't allowed back in and not



understanding as well. I remember one Filipino family saying, "when we flood, we go and wash our stuff and we use it again and they won't let me in" and being very, very devastated by that. I spent all this time building up my resources and I finally had... and they were gone now, you know, and they won't let me in. (Community Influencer Participant)

The settlement and integration process was interrupted by the flood, and many immigrant families found themselves having to rebuild their lives in disrupted communities. Frustrations post-flood were highlighted by the community influencer participants who discussed the trauma experienced by immigrant families during the recovery process.

And seeing people angry with systems who weren't responding like they should have, for example, that was horrible. And this government dropped the ball big time and they re-traumatized people over and over again ... because it's not just the policy and procedures, that does have a social impact and emotional impact on people. The trauma was horrible and then to be told 'just do this and just do that'. That was one of the biggest failings - when you have somebody who is afraid of systems or they are an immigrant family or they don't understand what this means, so the pressure put on people was just inexcusable. It really did traumatize people over and over again and that's where a lot of people gave up. They abandoned things, they didn't know what else to do because the promises to support weren't there and they made it a really punitive process. And that definitely must change. (Community Influencer Participant)

The long-term recovery process was experienced as a period of instability, compounded by the lack of transitional supports and resources, which had an impact on immigrants' settlement and integration process after the flood.

6. Discussion

The research findings demonstrate that immigrants faced socio-economic impacts, trauma, job loss, and housing instability as a result of the flood and its aftermath. Moreover, challenges such as language, limited social ties within and beyond the immigrant community, and immigration status contributed to their vulnerability. Immigrants with limited capacity in an official language may not be able to access information in a disaster context, which can lead to confusion and isolation. Further, this can contribute to an increase in vulnerability of individuals and families (Nepal, Banerjee, Perry, & Scott, 2012). In the post-disaster context, it is important to take into account diversity, including specific characteristics such as age, language proficiency, immigration status, and the community culture (Drolet et al., 2018a). Immigrants' social networks and agencies can be a major asset in a disaster as they involve people with varying capacities who are helpful in connecting and providing proper guidance, information, and resources. Networks and agencies can potentially provide actionable information, such as a safe place to find shelter, transportation, provisions during and after the emergency period, and recovery assistance (Hilfinger Messias, Barrington, & Lacy, 2012). Disasters bring uncertainty, anxiety, loss and grief. While loss and grief are a universal human experience, the act of grieving is expressed through a wide range of social and cultural practices, norms and variations (Hooyman & Kramer, 2006; Rosenblatt, 2017b) and therefore must be a major consideration in all phases of disaster preparedness, planning and recovery

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efforts. In Canada, emergency management frameworks and practice models for responding to disasters must take diversity into account and avoid imposing rigid templates and timelines for recovery rooted in Western-centric perspectives.

Often there is a negative effect on children's education post-disaster that is likely due in part to the parent's shift away from investment in their children's education as they have other stresses to deal with (Deuchert & Felfe, 2015). It was interesting to note that most immigrant children who received positive support and reinforcement from their immigrant parents were found to be more resilient, integrated, and engaged in the community. Immigrant parents played an important role in supporting their immigrant children and enhancing their social-emotional competencies to cope during difficult situations and enabling post-disaster recovery. The research findings reported from the study are consistent with other research studies that demonstrate immigrant children tend to be stronger and more resilient as compared to children living in the same community for longer periods (Vezzali, Cadamuro, Versari, Giovannini, & Trifiletti, 2015). There is empirical support that effective parental support and positive family functioning have an impact on children's reactions (Gil-Rivas et al. 2004; Kronenberg et al. 2010). Hafstad, Haavind, and Jensen (2012) found several strategies described by parents affected by the 2004 tsunami in Southeast Asia, as watchful waiting, careful monitoring of children's reactions, and a sensitive timing when providing support. These strategies served as an aid for the parents in determining the needs of their children. Some of the support strategies included re-establishing a sense of safety, resuming normal roles and routines, and talking to their children.

The research findings in this study show that schools were found to be a major support for immigrant children. Schools created safe spaces for integration, provided a sense of inclusion, and worked to incorporate activities that met the cultural needs of immigrant children and families. Most studies have found that schools contribute to children's resilience following a disaster (Osofsky & Osofsky, 2018; Weems et al., 2017). Schools are a primary site where children spend most of their daytime hours, and schools can provide a sense of connectedness, safety, and security. The school infrastructure can accommodate the basic needs of students by providing resources such as meals and clothing. In schools, students can connect with and access mental health and social service supports such as counsellors and social workers when available. However, Reyes (2010) found in his study that many immigrant children were enrolled in school without consideration for the student's English language learning needs or special education, and these students demonstrated limited English proficiency, below grade level math and reading, and required additional services and supports (p. 447). Reves (2010) and other studies concluded that teachers, administrators, counsellors and social workers were not adequately trained to understand or respond to student grief and loss, language and social needs or immigration experiences and needs (Al-Makhamreh, Spaneas & Neocleous, 2012; Owen & English, 2005). While schools can provide a safe and protective platform for children and youth, it is critical to identify and address their psychosocial needs effectively and efficiently. School-based programs and parental support can serve as major protective factors that can help children cope post-disaster. Often immigrant parents and caregivers of children and youth are taxed with other worries pertaining to issues surrounding financial



challenges related to the rebuilding process, and general future uncertainty. Engagement with school and other additional support from parents and community provided to children through social interactions in schools and other activities have the potential to build on and strengthen their protective factors and resiliency (Nastasi et al., 2011). It was also noted that engagement with community activities and integration helped immigrant children to learn about their roles and responsibilities towards climate change and the importance of environmental safety. These activities further enhanced their own sense of civic engagement and stewardship towards the community.

7. Conclusion

Disaster management must proactively engage immigrant communities in planning for all phases of a disaster: preparedness, response, and recovery to ensure adequate post-disaster recovery among immigrants. Strong partnerships are needed between immigrant-serving agencies, community organizations, and disaster and emergency management agencies in order to connect immigrants and newcomers to essential resources. Immigrant-serving agencies, religious organizations, community health centers, worker centers, and other community-based groups can be vital sources to connect newcomers with alert systems, to provide adequate guidance and information, and to strengthen social networks to avoid isolation and sense of insecurity among immigrant families and children. Action plans to equip communities with knowledge and skills to prepare for disasters are needed rather than just responding after the disaster event (UNICEF, 2008). Disaster preparedness and planning should include interpreters in evacuation centers for translation and information for emergency documents. Schools and other recreation programs in the community must attend to and address the diversity and cultural needs of immigrant children and ensure inclusivity to facilitate empowerment in the post-disaster period. Practitioners are advised to develop a variety of web-based resources, infographics, workbooks on child resilience, and fact sheets for children, families, and service providers in multiple languages. Immigrant families face various challenges in the aftermath of disaster, and it is critical for agencies working with immigrant families to understand and to appreciate their diverse needs. Disaster and emergency management agencies need to address diversity factors such as immigration status, language, age, and culture that influence immigrant experiences in long-term disaster recovery. Parents and schools can play a strong role in children resiliency and therefore, need supportive programs and services to enhance capacity building and knowledge mobilization to empower children as knowledge producers and agents of change.

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