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# REIMAGINING SOCIAL WORK INTERVENTIONS FOR CHILDREN'S MENTAL HEALTH AND ENVIRONMENTAL JUSTICE IN URBAN SLUMS

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## ABSTRACT

This study investigated the inter-linkages between environmental factors, mental health, and the social work role in Sammanthranapura, an urban slum community where people's lives are constrained by climate change. The research question is: How do these environmental factors impinge on the mental health of its residents, especially children, and how social work interventions can help address the challenges?. This mixed-methods approach was informed by conducting an art workshop with children aged 6-13 years old to investigate their perceptions about their environment. Artwork was subjected to thematic analysis, complemented by focus group discussions with children and separate interviews with teachers and parents. In conclusion, children in Sammanthranapura could have some constraints, by the unavailability of green space and a probable stressfully surrounded environment, which has been depicted through the artworks and focus groups. Such limitations quite correspond with the existing literature regarding negative mental health impacts of limited availability to nature. In that respect, a need arises to consider including children's voices into environmental decision-making. Environmental justice perspective interventions in social work are recommended in Sammanthranapura through community gardening, teaching regarding climate change and mental health, and art therapy. These could enhance mental well-being among children and build resilience among members of this community amidst this climatic shift. This paper adds to the emerging evidence on how social work contributes to promoting environmental justice for the improvement of child well-being in urban slums.

**KEYWORDS:** mental health, climate change, urban slums, social work, environmental justice

## Introduction

In turn, the urban slum communities are some of the poorest, characterized by very high density, inadequate geometric and structural order, inadequate provision of basic services, and considerable environmental hazards. These factors will then combine and influence the mental health and well-being of the residents of such slums. Climate change increases these challenges even more because additional stressors develop that include extreme heat events, increased pollution, and disturbances in natural ecosystems (Evans, 2006; Patel et al., 2010; Watts et al., 2015).

This study investigates the relationship between climate change-related environmental factors and the mental health status of the urban slum community, with the case study of Sammanthranapura in Sri Lanka. The slum of Sammanthranapura was originally formed in 1976 when people were forcefully removed from their residences due to infrastructural development in preparation for a major international summit (Alikhan, 2019).

While there were several studies on the negative impact of climate change on mental health from multiple angles, such studies became scant on what these subjective experiences would be from an urban slum community's perspective in any developing country. The present study tries to address this lacuna by resorting to a mixed-method approach to capture how environmental elements linked to climate change impact the mental health of both children and adults in Sammanthranapura. We also delve into the ways social work interventions can contribute to battling such issues for the sake of improving mental well-being in the community.

## Literature Review

### Mental Health, Climate Change, and Social Work in Sammanthranapura

Research on the consequences of climate change on mental health appreciation is on the increase. Indeed, this is a critical ecological origin for residents in urban slums whose environmental stressors often amalgamate. The so-called hallmarks of climate change, such as extreme heat events, have been associated with increased anxiety, depression, and even suicide ideation (Berry et al., 2010; Gasparrini et al., 2017). These are probably effects that would be

accentuated in highly concentrated urban centers, such as Sammanthranapura, where the general lack of green areas and poor ventilation could trap the heat, further raising thermal discomfort.

Besides heat, air pollution is also another important environmental stressor associated with climate change. Studies have found exposure to air pollution to be associated with various adverse mental health outcomes, such as depression, anxiety, and decline in cognition. As usual, urban slums, just like Sammanthranapura, are located very close either to industrial areas or main transportation routes, entailing an increased risk of very high exposure to noxious pollutants.

Lack of access to green spaces-a common feature of many urban slums-adds to the mental health concerns. Green spaces have been shown to offer a restorative function to mental well-being by reducing stress and promoting feelings of calmness and well-being. Limited access to such restorative environments in Sammanthranapura may be leaving them more vulnerable to adverse mental health impacts brought about by climate change.

Although volumes might have been written on climate change and mental health, it would be important to dig deeper into the experiences of an urban slum community. To date, studies have either focused on high-income settings or have been unable to capture the unique vulnerabilities of low-income residents in developing nations.

Social work is one of the professions identified with the mainstreaming of concern for mental health within communities. Social workers can provide individual and group therapy, link residents with mental health resources, and advocate for policies that promote psychological well-being. In the context of climate change, social workers may function as agents of change in collaborating with communities to devise ways of adapting and being resilient. This would then include the need for greener spaces, public education in mental health, and culturally adapted interventions that service their particular needs.

**Theoretical Framework**

Building on these basic tenets is the conceptual model of social-ecological models of health as presented by McMichael in 2013. It explains complex

relationships among environmental factors, social causes of health, and mental health in Sammanthranapura. Each of the theoretical frameworks embraces interconnected individual, community, and environmental elements as salient determinants in mental health. The guiding principles of the ecological systems theory were based on Bronfenbrenner & Ceci, 1994, in which the interaction of the individual and familial experiences influencing mental health through various pathways across the social and physical environment of Sammanthranapura will be explored.

## Methodology

The present study implemented a mixed methods research framework, incorporating both quantitative and qualitative data collection techniques to attain an in-depth comprehension of children's experiences (Creswell & Plano Clark, 2018). This methodological approach facilitated triangulation, thereby enhancing the overall validity of the results (Greene, 2007).

### Quantitative Aspect

A purposive sample was drawn from the local community center, with 30 children aged between 6 and 13 years. Through an art workshop, children's perceptions regarding their social environment were described vividly. Art materials were made available, complemented with prompts, which described experiences at home, school, and in the community. The art works were analyzed in terms of content post the workshop. First, an inductive approach was taken by analyzing each individual unit for emergent themes; afterward, codes were classified into more overarching thematic categories (Braun & Clarke, 2006).

### Qualitative Aspect

Following the interpretation of the art, another sample of children was taken up for the thematic focus group discussions (N = 15). There were semi-structured interview questions on social interactions, relationships, and challenges that the children were experiencing. In step two, interviews with teachers (N = 5) and parents (N = 5) of the same children from who the children had been sampled. This obtained the adult perspectives which involved the children's social experiences and the environments.

For both focus groups and interviews, informed consent was obtained from participants and guardians, with assent obtained from children. All data collection procedures adhered to ethical research principles, including confidentiality and anonymity (National Association of Social Workers, 2018).

## Data Analysis

Thematic analysis was conducted for both forms of qualitative data—that is, interviews and focus groups. The recordings were systematically broken down into codes to allow the emergence of themes inductively and iteratively by reduction within the same, as per Braun & Clarke (2006). Comparisons were then made with the convergences and divergences of the quantitative data from the art workshops with children's experiences, as further explained by Creswell & Plano Clark (2018).

## Findings

## Quantitative Findings

## Children's Artwork Analysis

At the workshop, analysis of children's art products identified many recurring themes, color palettes, and stylistic components. One obvious theme evident is that of little green space pockets (Figure 1). Many drawings show children playing in a concrete playground or surrounded by high-rise buildings with few trees and little grass. This may be particularly concerning for the children of Sammanthranapura, with findings by Kuo (2001) showing access to natural environments provided psychological benefits to children.

*Figures 1 and 2 - Children's drawing depicting limited green space (Source – Field Data 2023 ©Mitchel)*

*Figure 1* *Figure 2*

Another common motif was the application of brooding and somewhat depressing colors, more specifically, brown and gray. This can be seen as suggestive of isolation or a challenging environment. (Hays & Meredith, 2008). At the same time, a lot of the artworks were done using brighter and darker colors simultaneously which might point to both positive and negative developments in the lives of the children.

**Qualitative Findings**

**Focus Groups and Interviews**

It means the FGDs and interviews with children, educators, and parents offered rich data to discuss mental health and environmental issues in Sammanthranapura. All of them wish for playgrounds, parks, and time outside. Isolated even in their cities—there was this inference by the lack of greens in the pictures they painted.

Educators and caregivers raised this as a concern, indicating that less outdoor safe space to play and be with friends can lead to increased screen time and the potential to bring about mental health problems like anxiety and depression (Madden et al., 2018). Furthermore, adults elaborated on their own concerns for the unhealthy effects of traffic-related pollution on children's health.

**Integration of Findings**

Both these findings, strengthened by one another, make the larger canvas of children's experiences in Sammanthranapura complete. Children's drawings, analyzed as part of the environmental mapping process, showed how they represented the environment, with minimal green spaces, thus indicating that this is likely a stressful environment. Support for this came from the focus groups and interviews that brought to light children's desire for natural spaces

and adults' fears about how this type of environment was influencing their health.

*Figure 3 – Children's drawings with bright and dark colours (Source – Field Data 2023 ©Mitchel)*

The conclusions from this study are supported by triangulation. The artwork acted as a cue for the discussions in the focus groups, since children are able to say much more than they can put into words. Generally, the findings support the need for interventions that would improve their access to natural environments and support a more enriching atmosphere for children at Sammanthranapura.

**Discussion**

These results were further supported by the emerging evidence regarding the linkage of mental health and climate change. Lack of green space access, along with potentially alarming environments reflected in the drawings of children, is related to that in the study by Kuo (2011), which proved that exposure to natural environments reduces stress and improves mood. Interestingly, the fear-based arguments put forward by parents and educators regarding screen time and its implications for mental health have some reverberations in the

negative correlates reported by Madden et al. (2018) of constrained outdoor play.

The absence of green spaces in Sammanthranapura, in the context of a changing climate, is particularly distressing. Climate change is marked by a process of urban heat islands and a rise in air pollution-like phenomena. These, according to the Environmental Protection Agency (2021), might also be contributing factors to developing mental health problems, as identified, (Watts et al. 2015). This, therefore, points to the need to respond to these environmental limitations for the children's and community resilience in response to the changing climate.

**Challenges and Limitations**

These findings reveal specific issues in the Sammanthranapura community. Firstly, a lack of green spaces has been identified where children may gain a mental health benefit as a known generator of psychological health advantage through direct exposure to nature (Kuo, 2011). Then again, the presence of a stressful environment, based on the use of dark colors in the drawing, might increase feelings of anxiety and social isolation. These are only compounded by the potential negative consequences associated with more exposure that comes with more screen time than outdoor play.

Accordingly, this research is not without limitations. The chosen research design focused on one age group from one community, hence the generalization is limited. Also, for now maybe in the future combined with children's explanations and drawings to provide a more profound insight, the artworks will be solely interpreted.

**Future Research Directions**

Future studies on the mental health experiences of children from Sammanthranapura may also be desirable. Truly, this research may get to the impacts that interventions bringing access to natural environments will have in relation to experiences of children. The study will further examine the broader effects brought about by climate change regarding the mental situation within such communities, inclusive of adults and older people. Furthermore, it is relevant to learn about the perception of policymakers and urban planners toward what these challenges and opportunities are that have continued existing in realizing a greener and more inclusive community.

**Recommendations**

Based on the exploration of artwork by children, focus group discussions, and interviews with parents and teachers, some of the social work interventions that can be recommended to

These address environmental limitations and foster mental well-being in Sammanthranapura. These recommendations also take into consideration the input from all stakeholder groups for a real attempt to be impactful yet feasible in the community context.

**1. Community Gardening Projects**

**Rationale** - The children's artwork and focus group discussions highlighted a desire for more green spaces. Community gardening projects directly address this need, creating opportunities for children and families to connect with nature. Research by Abraham et al. (2010) demonstrates the positive impact of community gardens on mental health and social interaction.

**Implementation** - Social workers can collaborate with local organizations, schools, and community members to identify suitable locations for gardens or do gardening on the School premises in the community. Grant funding and

volunteer recruitment can be explored to support project development and ongoing maintenance. Educational workshops on gardening techniques can be offered to empower residents and ensure project sustainability.

**2. Educational Programs**

**Rationale -** Limited awareness about the connections between climate change, mental health, and access to nature was identified in the discussions. Educational programs can address this gap, empowering children and adults to advocate for change.

**Implementation -** Social workers can partner with schools and community centers to develop age-appropriate programs on climate change, its impact on mental health, and the benefits of spending time outdoors. Interactive workshops, guest speakers from environmental organizations, and educational materials can be incorporated to create engaging learning experiences.

**3. Art Therapy Workshops**

**Rationale** - The children's artwork served as a powerful tool for self-expression and may hold potential for deeper exploration of emotions related to their environment. Art therapy workshops provide a safe space for children and adults to process emotions and develop coping skills for stress and anxiety (American Art Therapy Association, 2023).

**Implementation -** Social workers can partner with licensed art therapists to offer workshops within schools or community centers. These workshops can incorporate various art modalities, creating opportunities for self-discovery and emotional expression alongside education on healthy coping mechanisms.

**Impact and Feasibility**

These recommendations hold significant potential for positive impact. Community gardening projects directly address the lack of green space, fostering social interaction and mental well-being. Educational programs

empower residents to understand the challenges and advocate for solutions. Art therapy workshops provide a safe space for emotional expression and coping skill development.

The feasibility of these recommendations is also promising. Collaboration with local organizations, grant funding, and volunteer recruitment can support project development and ongoing maintenance. Educational programs can be integrated into existing school and community center activities. Partnerships with licensed art therapists can leverage existing resources to offer art therapy workshops.

By implementing these recommendations, social workers can play a vital role in creating a more environmentally friendly and supportive community in Sammanthranapura. These interventions have the potential to not only improve children's mental health but also foster community resilience in the face of climate change.

**Conclusion**

This study employed a mixed methods approach to explore the connections between mental health, climate change, and the social work role in Sammanthranapura. The findings revealed that children in the community experience limitations due to a lack of green space and a potentially stressful environment, as evidenced by the artwork analysis and focus group discussions. These limitations resonate with existing research on the links between access to nature, mental well-being, and the negative impacts of climate change (Kuo, 2011; Watts et al., 2015). The study underscores the importance of incorporating children's voices into environmental decision-making processes.

The mixed methods design proved invaluable in gaining a comprehensive understanding of this complex issue. The children's artwork provided a unique window into their perceptions, complementing the data from focus groups and

interviews. This approach is crucial for social workers to effectively address the multifaceted challenges faced by communities.

The recommendations proposed in this study, including community gardening projects, educational programs, and art therapy workshops, hold significant promise for positive change. By fostering access to nature, promoting environmental awareness, and providing safe spaces for emotional expression, these interventions can enhance children's mental well-being and build community resilience in the face of climate change. Social workers play a vital role in advocating for these changes and working collaboratively with community members to create a more sustainable and supportive environment for all residents of Sammanthranapura. This study serves as a call to action for social workers to champion environmental justice initiatives and empower communities to thrive in a changing world.

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