

The Impacts of Climate Change on Persons with Disabilities: An Interdisciplinary Approach to Disability, Climate Change and Policy Studies

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The Impacts of Climate Change on Persons with Disabilities: An Interdisciplinary Approach to Disability, Climate Change and Policy Studies

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Abstract: The overall intent of this study is to address the impacts and expected impacts of climate change and disasters on persons with disabilities (PWD), while exploring international policies for resilience initiatives. As a portion of the overall study, this paper was motivated by the recent United Nations Human Rights Council (UN-HRC) (2019) resolution adoption on climate change and the rights of persons with disabilities, which urges governments to adopt a disability-inclusive approach when dealing with climate change strategies. The objective of this paper is to explore academia & research's role in adaptive capacity approaches to adopting the UN-HRC resolution through a multidisciplinary intersection of disability, climate change and policy studies. The objective is supported by empirical research, theoretical models, and inclusive strategies aimed to improve the safety and quality of life for PWD. This paper's scope is covered through the development of a resilience framework that includes vulnerability index: *exposure, sensitivity, and adaptive capacity* (Intergovernmental Panel on Climate Change [IPCC], 2008); and three sets of engagement: *theory, application, and praxis* (Cho, Crenshaw, & McCall, 2013). Ultimately, the paper's proposed framework will present an evidence-based, disability-inclusive resilience approach to addressing climate change aimed to influence public perception and policy decision-making. This paper is a tool for disability, climate change, and policy studies academics/researchers, and government officials interested in academia & research's contribution to resilience planning.

Keywords: Disability Studies; Climate Change Studies; Policy Studies; International Policy; Adaptive Capacity

Focus: Research/Theory Focus

Topic: Inclusion

Introduction

Academia, research and policy share a symbiotic relationship, in which all will influence the circular evolution of each practice. However, all share an ongoing problem of narrow, singular disciplines and goals. As thus, similar to how academia departments will focus primarily on one topic (i.e., climate change), state departments and policies will also perpetuate the same model of siloed departments (e.g., office of climate change). This type of singular

categorization often causes a barrier to collaboration and synergy, and will lead to the risk of fragmented solutions (Pears, 2019). As thus, it becomes important that policies aim towards a disability-inclusive social model theoretical consideration.

The problem is that in order for climate change resilience plans, policies, and frameworks to be successful it must be adopted, representative of all members of society, and include participatory aspects throughout planning stages (Lim, Spanger-Siegfried, Burton, Malone, & Huq, 2005). Moreover, researchers argue that in order to create a more collaborative, inclusive-resilient community, an interdisciplinary or multidisciplinary approach to climate change studies and disability studies is required through a scholarly-lens (Davoudi, 2012; Füssel, 2007; Mileti, 1999; Thomalla, Downing, Spanger-Siegfried, Han, & Rockström, 2006). Planning researcher Dennis Mileti (1999) identifies and calls to action the hazards community and the need for interdisciplinary approaches at a university-level that develop programs which “solves the real-world problems in linking hazards and sustainability” (Mileti, 1999, pp. 13–14). Furthermore, a multidisciplinary approach would also be beneficial to the field of academia and research as there is a lack of empirical research on disability & climate change from a disability-perspective approach, as well as, beneficial to policy and decision-makers as there is a lack of policies in disability-inclusive solutions.

Currently, the world is facing major global problems reflecting the need to dismantle outdated institutional policies, systematic structures or ideologies, and the reconstruction of inclusive evidence-based approaches for capacity building. Firstly, climate change is considered a *wicked problem*, “where defining the nature of the problem, or even the knowledge required to address the problem, is uncertain” (Friend et al., 2014, p. 10), thus unlocking the need to correct misconceptions and outdated rhetoric. Secondly, the first-wave of COVID-19 which has brought to light the social stigma, negative stereotypes, and biases embedded in institutions, thus reflecting the need for inclusive practices and policies to improve resilience plans. And lastly, the #BlackLivesMatter movement is a reflection of how outdated social structures and policies have affected, and oppressed, the Black community in the United States (U.S.) and across the world. The movement “affirm[s] our humanity, our contributions to this society, and our resilience in the face of deadly oppression” (#BlackLivesMatter, n.d., para. 5), and reflects how institutions and social structures driven without inclusivity leads to world-wide inequality.

Academic and scholarly research will often play a significant role in developing cities and policy. Through innovative approaches and data collection, researchers provide solutions to some of the major global problems. By adhering to academic & research standards, there is a layer of support and validation from peers, institutions, and government agencies, and oftentimes requirement for data to be open to the public, that will satisfy the often lack of transparency in policy making (Friend et al., 2014). By understanding the important role academia and research contribute to the adoption and implementation of the United Nations Commission on Human Rights resolution, the more forward-looking approach the resilience plan will be.

This paper will deconstruct and compare the 2019 United Nations Human Rights Council General Assembly’s resolution based on three emerging themes and subthemes:

1. *Identify* the risk & vulnerability within the need for multidisciplinary research (theme), through exposure, sensitivity and adaptive capacity (subthemes) (Engle, 2011).
2. *Compare* the UN-HRC resolution by interconnecting disability, climate change, & policy studies (theme), through disability climate change studies, and policy studies (subthemes).
3. *Develop* an academic/research disability-inclusive framework for countries (theme) through Cho, Crenshaw and McCall’s (2013) *three sets of engagement* analysis, discursive investigation, and intervention (subthemes).

The paper’s objective will be supported by empirical research, theoretical models, and inclusive practices aimed to improve the safety and quality of life for PWD. An overview of this paper is mapped in figure 1.

Figure 1. Resilience Framework: Academia/Research Adaptive Capacity - UN-HRC Resolution

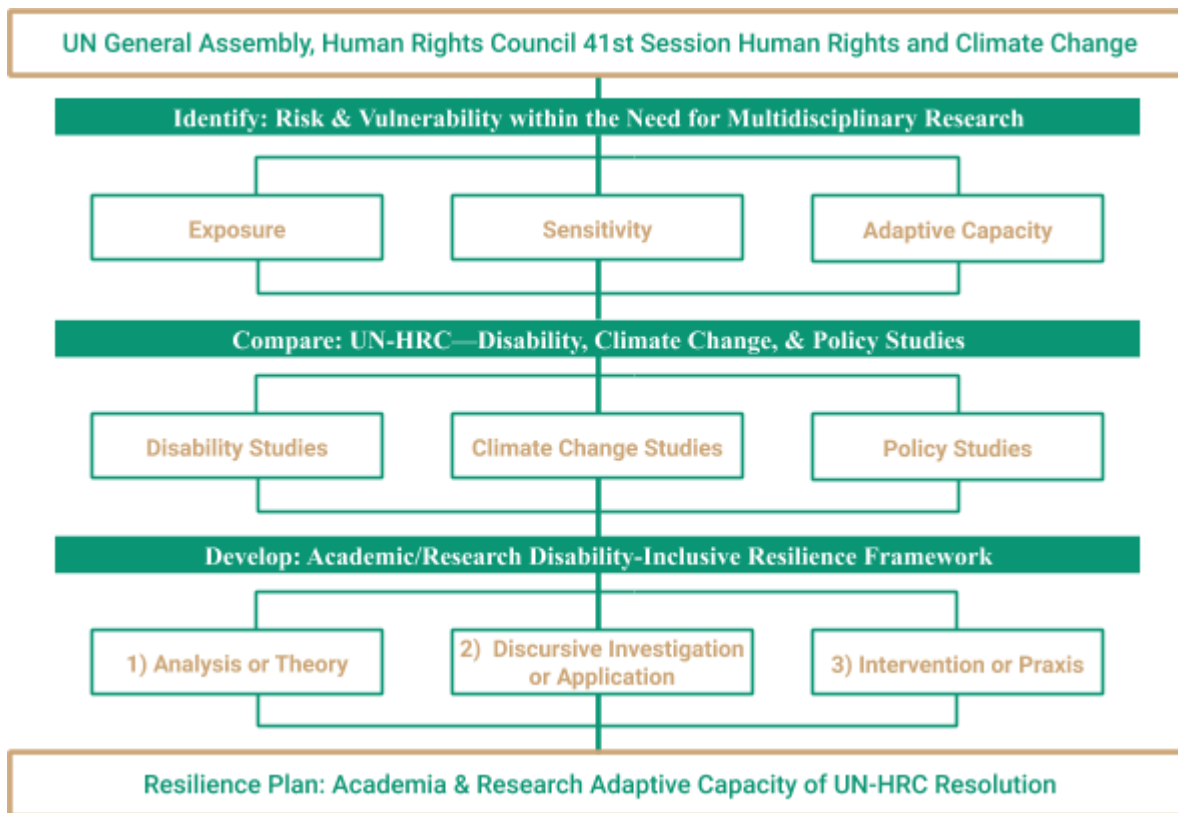


Figure 1 Image Description: Flowchart first-tier titled “UN General Assembly - Human Rights Council 41st Session Human Rights and Climate Change” to second-tier “Identify: Risk & Vulnerability within the Need for Multidisciplinary Research” which includes “Exposure,” “Sensitivity,” and “Adaptive Capacity.” Third-tier titled “Compare: UN-HRC - Disability, Climate Change, & Policy Studies” which includes “Disability Studies,” “Climate Change Studies,” and “Policy Studies.” Fourth-tier titled “Develop: Academic/Research Disability-

Inclusive Resilience Framework” which includes “1) Analysis or Theory,” “2) Discursive Investigation or Application,” and “3) Intervention or Praxis.” and last tier titled “Resilience Plan: Academia & Research Adaptive Capacity of UN-HRC Resolution.”

Identify Risk & Vulnerability Within the Need for Multidisciplinary Research

During a disaster all members in a community become vulnerable, however marginalized groups are greatly impacted in and after a disaster. And oftentimes the most significant key to overcoming vulnerability outcomes is the adaptive capacity to develop resilience and adapt to climate risks. To better understand vulnerability to climate change, the United Nations Intergovernmental Panel on Climate Change (IPCC) released a vulnerability index: exposure, sensitivity, and adaptive capacity (IPCC, 2008). This section will address all three elements, while further addressing the determinants and multidisciplinary research needs for all elements.

Exposure

*“Exposure is the extent to which the system is physically in harm’s way”
(Engle, 2011, p. 649).*

On a daily basis, persons with disabilities (PWD) face multidimensional inequalities — inaccessible infrastructure, non-compliant communications, poverty, non-PWD in government positions, health, etc.— which are severely exacerbated during and after disasters due to climate change. In addition, “disasters magnify a society’s cultural divides and socioeconomic gaps” (Kim, 2012, p. 53), and worst,” PWD are two to four times more likely to be injured or die during a disaster” (Real Emergency Access for Aging Inclusion for Disasters Act [REAAID] & The Disaster Relief Medicaid Act [DRMA], 2019, para. 1). Scientists have argued that the, “Two leading international bodies assessing the knowledge and impacts of climate change and the loss of ecosystem services —the Intergovernmental Panel on Climate Change (IPCC) and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)— have, thus far, done little to address the critical implications of climate change and biodiversity loss for disabled populations” (Kosanic, Petzold, Dunham, & Razanajatovo, 2019, p. 699). In order to develop a more disability-inclusive resilience plan, a better understanding of the impacts of climate change is needed.

Sensitivity

*“Sensitivity is how affected a system is after being exposed to the stress”
(Engle, 2011, p. 649).*

Worldwide, but especially as found in the developing countries, the numbers of persons with disabilities and aging have increased significantly over the decades. Further, over the past decades, climate change has increased the number of hazards and unnatural events (IPCC, 2008); which lead to disasters that are disruptive to human lives and communities. Rarely are

disability-inclusive resilience plans, procedures, or even considerations in place for the survival of the many marginalized communities across the globe. As such persons with disabilities (PWD) and those aging into disabilities, are often discarded or intentionally left behind during disasters or not included during the resilience planning stage.

Research findings have shown that people with disabilities are identified as the largest minority group; internationally 15% or over a billion people in the world were identified as having a disability (World Health Organization, 2018). Nationally, in the U.S., nearly 26% or 61 million people in the U.S. were identified as having a disability (Centers for Disease Control [CDC], 2018), in which the Centers for Disease Control and Prevention (CDC) based findings based on: 1) mobility, 2) cognition, 3) hearing, 4) vision, 5) independent living, and self-care. Moreover, by 2030, an estimated 20% or 70 million people of the population will represent the aging population, which means much of the aging population will move into the disability population because of age-related conditions (Center for Disease Control and Prevention [CDC] & The Merck Company Foundation [MCF], 2007). As it is, the Pew Research Center reports that disability becomes more common among the aging population, with 25.4% of Americans aged 65 to 74 and 49.8% of Americans aged 75 and older (Bialik, 2017). Unfortunately, much of the reported disability population —internationally and nationally— may lack a significant amount of uncounted or unidentified people with disabilities due to the social stigmatization of identifying with having a disability, cultural existence of the term disability, and access to persons with disabilities.

Adaptive Capacity

“Adaptive capacity represents the system’s ability to prepare for and adjust to the stress, mainly to lessen the negative impacts and take advantage of the opportunities” (Engle, 2011, p. 649).

Brooks and Adger (2005) and Engle (2011) emphasize the risk of climate change which ultimately leads to disasters that impacts all. The ‘impact all’ factor could also be the problem to adaptive capacity, as individual protections and prioritization leans more towards the decision-makers who socially construct the ideas, procedures, and policies (Brooks & Adger, 2005; Engle, 2011). On a national and international level, there are policies that have addressed people with disabilities. However, the development of policies is only the first start as the true adoption and integration in the community is the true reflection of the impact of the policy.

Disability rights: National policies

In the U.S., one of the most significant federal contributions to disability inclusivity and how it is represented within the United States is the passing of the 1990 Americans with Disabilities Act, a “civil rights legislation that prohibits discrimination and guarantees that people with disabilities have the same opportunities as everyone else to participate in the mainstream of American life ... [and to] participate in [s]tate and local government programs

and services” (United States Department of Justice and Civil Rights Division, n.d., para. 1). Since then, other contributing legislation that have been acted due to the impacts of climate change on persons with disabilities include: Post-Katrina Emergency Management Reform Act of 2007, Executive Order 12898 (1994) Environmental Justice in Minority Populations and Low-Income Populations, and others passed (Smith & Haines, 2018; United States Department of Homeland Security, Federal Emergency Management Agency, 2011). With the growing number of Americans with disabilities and increase of reported need for assistance, it becomes exceedingly more urgent and apparent that planners lead our federal responsibility to create more inclusive recovery planning and ultimately the goal to “‘building back better’ after a disaster” (Kim, 2012, p. 53).

Disability rights: International policies

On an international level, one of the most significant international contributions to disability inclusivity and how it is represented within international governments is the United Nations Convention on the Rights of Persons with Disabilities (UN-CRPD). Since 1946, the United Nations Commission on Human Rights has been the global forum for the negotiation of human rights based on a variety of vulnerable groups (Donnelly, 2003, p. 129). Serving not necessarily as a form of law, the foundation of the UN-CRPD was meant to influence laws in the participating countries through the ‘international bill of rights’ representing international human rights law, United Nations Universal Declaration of Human Rights; and refining political and social rights and economic and cultural rights.

Archibald Kaiser, Professor at Dalhousie University (2013) explains that on a global level, the CRPD reflects the new world consensus on PWD to define the needs, rights and understanding for PWD. This represents the responsibility of the rights to protection; rights to live in the community, right to health; right to work; right to an adequate standard of living; and the right to participation in political, public and cultural life. Another historical point to add is the significant, foundation contribution of the CRPD in the development of the 2019 UN-HRC General Assembly June 24, 2019 – July 12, 2019.

Compare: UN-HRC - Disability, Climate Change, & Policy Studies

On a multidisciplinary-level, all three fields —disability, climate change and policy studies— is needed; disability studies provide an in depth understanding of people with disabilities from a humanities perspective; climate change studies provide the scientific, technology, and engineering perspective; and policy studies provide community-level adoption and the resources needed. By addressing a critical shortage in the: 1) expansion of disability, climate change and policy studies, academics and researchers, 2) limited resources, and the 3) significant shortfall of participants from underrepresented communities; it is essential to provide participants with disabilities opportunities that allow them to tap into their, and communities’ fullest potential. As such, scholars and researchers contribute a vital role in guiding addressing

this gap of participation, which could ultimately lead to an advocacy approach to a disability-perspective solution. By involving persons with disabilities in the discussion, researchers also create a snowball effect of agents of change.

Friend et al. (2014) further argue that policy is better supported when academia and research contributes clear governance principles and theoretical models; ‘practice on the ground’ methods; advocacy-point of view; and neutral, less bureaucratic perspective; integrates the “complexity of socio-econological-political systems and process” (p. 10). This section will identify and compare cross-disciplinary theoretical models and contextualize the need to address each field’s greatest contribution to this framework.

Disability Studies - Social Model of Disability

Although the word disability is often used universally as a word that represents the medical categorization of a person, the word disability is seen differently among disability studies scholars and certain PWD. Through a social categorization, disability is seen as a culture (Annamma, Connor, & Ferri, 2013; Brown, 2002), that is often disproportionately affected by the lack of policy efforts protecting the impacts of climate change on persons with disabilities.

To further emphasize the need for a receptive, multidisciplinary approach to climate studies and disability studies, the ‘social model of disability’ (SMD) theory will be considered throughout this paper. Among disability scholars, and within the certain disability communities, the SMD argues that disabilities exist because of the barriers and inequitable access created by infrastructure, policies, social obstructions, lack of accommodations, and practices, rather than the individuals’ medical impairments —also known as the ‘medical model of disability (MMD) (Eyler, 2010; Shakespeare, 2006; Stough, Sharp, Resch, Decher, & Wilker, 2016). Other disaster researchers, such as Priestley and Hemingway (2007), have bridged the SMD with the social vulnerability theory of disaster, further conceptualizing the emphasis that within disasters the “pre-existing barriers and exclusionary social practices” have actually contributed an additional layer of vulnerability to the actual recovery process (Stough et al., 2016, p. 495). By acknowledging and integrating philosophical perspectives like SMD theory, the representation of the subcultures and PWD in climate change solutions; people with disabilities will be more receptive to the messages and support needed.

Climate Change Studies - Intergovernmental Panel on Climate Change

Through scientific findings, peer standardization, assessment and consensus of scientists from around the world, the “Intergovernmental Panel on Climate Change was established in 1988 to provide policymakers with regular scientific assessments on the current status of knowledge about climate change” (Intergovernmental Panel on Climate Change, n.d.b) ... “[and] the impacts and future risks, and options for adaptation and mitigation” (Intergovernmental Panel on Climate Change [IPCC], n.d.a). The IPCC was created by the World Meteorological Organization and the United Nations Environment Programme; which

currently has over 195 member countries and thousands of researchers from around the world that contribute to IPCC reports (IPCC, n.d.a.). And more importantly IPCC information is open and transparent review by experts and governments to ensure a diverse range of views and expertise. The IPCC is divided among three working groups and other task force including:

1. *Working group I*: The physical science basis of climate change - which “examines the physical science underpinning past, present, and future climate change” (Intergovernmental Panel on Climate Change, n.d.c).
2. *Working group II*: Climate change impacts, adaptation and vulnerability and working - which “assesses the vulnerability of socio-economic and natural systems to climate change, negative and positive consequences of climate change and options for adapting to it” (Intergovernmental Panel on Climate Change, n.d.d).
3. *Working group III*: Mitigation of climate change - which “focuses on climate change mitigation, assessing methods for reducing greenhouse gas emissions, and removing greenhouse gases from the atmosphere” (Intergovernmental Panel on Climate Change, n.d.e).

Among climate change scholars, and within the IPCC community, people with disabilities are often referred to as a vulnerable group or emphasis on health disparities. As thus, representing a more medical model of disability approach. More recently, other climate researchers, such as Gaskin et al. (2017) have interwoven SMD fundamentals in a systematic review of climate change vulnerability and adaptive capacity literature to identify common factors. Which includes 1) health disparities: personal factors and activity limitations; 2) personal factors, “female gender, uncoupled or living alone, nonwhite ethnicity, and low income ... and activity limitations and participation restrictions commonly included limited preparedness, difficulties...with evacuation, and difficulties reassembling individual accommodations and repairing or replacing adaptive equipment” (Gaskin et al., 2017, para. 16). The IPCC’s credibility and evolving influence within scholars and researchers serve as the influential entity that could lead to more disability-inclusive scientific research.

Policy Studies - United Nations Human Rights Council (UN-HRC) Resolution

The 2019 UN-HRC general assembly is significant as it is the first United Nations’ resolution that recognizes climate change with disabilities and other vulnerable populations. More specifically the 2019 UN-HRC general assembly states calls for action major humanitarian considerations, such as the: 1) change of practices of international foreign aid in financing; and 2) ‘transfer’ of technology and capacity-building for mitigation and adaptation, and the need to promote human rights and access for persons with disabilities. The UN-HRC (2019) resolution was built on other significant UN conventions, charters, agreements, etc. including human rights focusedⁱ and climate change focusedⁱⁱ.

It is undeniable that all groups of populations are vulnerable to the impacts of disasters, yet the magnitude of evidence highlights that persons with disabilities are largely impacted by the loss basics of human rights and social stratification. As such, PWD are not only impacted by social disparities associated with having a disability, but are also impacted by having multiple layers of vulnerable identities and the disparities associated with those populations. These disparities include, but not limited to, barriers due to age, gender, health, physical, mental and cognitive status, culture, ethnicity, geography, education, insecurity and socioeconomic conditions.

UN-HRC: Who of disability-inclusive solutions

Through a disability rights perspective, the 2019 UN-HRC general assembly recognizes stakeholders as persons with disabilities, states, and duty bearers, and businesses. More importantly, the UN-HRC urges states to strengthen already existing policies and if none, implement policies aimed at increasing the participation of persons with disabilities in climate change solutions through ‘meaningful’ participation and hold’s leadership decision-making roles, locally, nationally, and internationally. Furthermore, this strategy addresses interdisciplinary or multidisciplinary challenges of difference in power status and inequality by PWD.

Another important ‘who’ that the UN-HRC addresses is the need from the United Nations Environment Programme, World Meteorological Organization, IPCC, United Nations Framework Convention on Climate Change and other stakeholders to provide studies in accessibility formats. More so, as it is important to provide critical research about research, it is even more important that people with disabilities are able to retrieve and are able to consume the information in a disability-friendly format (i.e., plain language, easy-to-read, international sign language and closed captioning).

UN-HRC: What of disability-inclusive solutions

Interdisciplinary studies generally occur in the center of two or more disciplines finding commonalities in problems that affect each discipline. The 2019 UN-HRC general assembly recognizes intersects climate change with: 1) negative impact on poverty eradication and human rights; 2) high rates of morbidity and mortality during emergencies; and 3) lack of resilience for a safe and adequate quality of life. All of which are problems that people with disabilities recognize and face on a daily basis. The resolution is able to bridge climate change and PWD commonalities in: poverty, human rights, mortality rate, and access (e.g. emergency support, food and nutrition, safe drinking water and sanitation).

Interdisciplinary Studies: Construct and Misunderstandings

Following the intersection of disciplines, interdisciplinary studies also allow for the reconstruction of terminology and usage within each discipline for a more collaborative approach. However, it is important to keep in mind the various challenges when there is a lack of

interdisciplinary or multidisciplinary approaches, for example, the lack of: 1) understanding of PWD within social structures, 2) awareness of disability culture, 3) ways PWD identify, 4) broad simplification of the word disability among non-PWD, 5) power status and inequality by PWD, and 6) ongoing need for fluidity (Kaijser & Kronsell, 2014; Winker & Degele, 2011).

Furthermore, although there are many factors related to disability and disaster, this paper is primarily focused on UN-HRC's resolution and its disability-inclusive reporting. This is especially important because as interdisciplinary researchers Kaijser and Kronsell (2014) recommends, it is best to focus on what factors may be relevant in a particular setting when addressing "vulnerability in relation to climate change ... while keeping in mind the bigger picture" (p. 422). As such, this paper will focus particularly on the UN-HRC's resolution to be used as a guide for interdisciplinary study needs.

Develop: Academic/Research Disability-Inclusive Resilience Framework

There is an urgency and great need for expertise in identifying "critical infrastructure and ecosystem resources" (Kim, 2012, p. 53) from a climate change studies perspective. In addition, to the need for social analysis (i.e., social, cultural, and economic structures) from a disability studies perspective. More importantly, because there is a lack of climate change research from social science and humanistic research (Kaijser & Kronsell, 2014), there is a need from an interdisciplinary studies perspective.

This section will develop an interdisciplinary approach through Cho, Crenshaw and McCall's (2013) *three sets of engagement*. This includes: *theory* (analysis); *application* (discursive investigation); 3) *praxis* (inventions) so that a foundation of intersectional research on climate change can be constructed (Cho et al., 2013; Kaijser & Kronsell, 2014).

Analysis or Theory

"An intersectional frame of analysis to a wide range of research and teaching projects" (Cho et al., 2013, p. 785).

Scholar and/or researcher are essential to both conducting research and disseminating information critical to the advancement of evidence-based research and best practices in the community. This relates to the first step of the *three sets of engagement*. This must be done through analyzing and understanding theories from each discipline, and highlighting the interconnectedness through the deconstruction of biases categorization (Winker & Degele, 2011) of SMD (disability studies), IPCC's 'Working group II: climate change impacts, adaptation and vulnerability and working group (climate change studies), and UN-HRC (policy studies).

Cutter (2016) mentions that, "More research effort should be placed on developing new ways to measure social dynamics, interactions, and social capital accumulation" (p. 754), a concept that any field forced on with marginalized groups have aimed to unlock. Although there

are a number of contradictory factors (i.e. subjective resilience measurements, vagueness of definitions, or emotion/feelings outcomes, dose gradient of impact) the best model of measurement would most likely be created on a case-by-case scenario. Meaning, there isn't necessarily a one fits all measurement approach to resilience measurement.

Discursive Investigation or Application

“As theory and methodology ... includes but is not limited to top questions and debates about the way intersectionality has been developed, adopted, and adapted within the disciplines” (Cho et al., 2013, p. 785).

The way disability, climate change and policy are presented and reported affects public perception and furthers the risk associated with community resilience. Scholars and researchers have a vital role to play on what they contribute and the way they present or report. Thus, it is critical that disability-inclusive terminology is used to set the standards of future publications. This relates to the second step of the *three sets of engagement*. This must be done through the collaboration and discussion between disciplines following the investigation and best practice from each discipline that was previously identified in the first step of the *three sets of engagement* and ultimately, the reconstruction of critical discourse to be applied to all disciplines.

For example, within climate change studies, the #NoNaturalDisasters online movement lead by the United Nations Disaster Risk Reduction (UN-DRR), that aims to change the media and research terminology of ‘natural disasters’ stating that “... whilst some hazards are natural and unavoidable, the resulting disasters almost always have been made by human actions and decisions” (#NoNaturalDisasters, 2019, para. 1). This is similar to disability studies’ SMD, in which the disability is created by human actions and decisions, and is further limited when scholars and researchers avoid first-person language or implications that PWD are helpless. A solution, an interdisciplinary approach that supports diversity, inclusion, and cultural linguistic competence; and builds capacity to address and reduce inequities and disparities.

Intervention or Praxis

“A wide range of phenomena, from society- and work-centered movements to demand greater ... As part of these efforts, scholars and activists illustrate how practice necessarily informs theory, and how theory ideally should inform best practices and community organizing” (Cho et al., 2013, p. 786).

When interdisciplinary approaches are constructed, there is a more innovative and synergistic way of approaching solutions to some of the world's greatest problems, as previously mentioned. However, it is important to keep in mind the various challenges that climate change studies face with no interdisciplinary approach. This relates to the third step of the *three sets of*

engagement. This must be done by taking discussions and critical discourse analysis and applying it to practice.

Following the significant impacts of COVID-19 on college campuses, the creation and improvement of resilience planning and assessment tools will be highly needed due to a forecast in the decrease of college enrollment, limited or decrease in resources, governmental support, etc. Within the context of the ‘higher education community’ there is great potential for department-level or school-level community-building that could occur through cross-campus, interdisciplinary or multidisciplinary collaboration. Which could be obtained through Sharifi’s (2016) critical review research, and the development of the six criteria for evaluating performance, “namely, addressing multiple dimensions of resilience, accounting for cross-scale relationships, capturing temporal dynamism, addressing uncertainties, employing participatory approaches, and developing action plans” (p. 629).

Future Research

The scope of this research paper had focused on multidisciplinary need for disability, climate change and policy studies, and further emphasis that scholarly research can be greatly contributed to 2019 UN-HRC resolution. The paper is limited as it provides a brief overview of the proposed resilience framework tiers. As thus, a more in-depth research and the implementation of can be further developed in each tier. Secondly, the 2019 UN-HRC resolution had stated that the next, 44th session of the United Nations Human Rights Council will continue to address disability-inclusive approaches as it relates to climate-change strategies. This is especially important, as it begins to urge for more climate change research, and the need for international agencies to provide progress on the UN-HRC resolution ‘intervention’ practices — as reflected in third step of the *three sets of engagement*— since 2019.

Conclusion

Identified as the largest minority group, people with disabilities is a growing identity with a growing need for international and national services. Due to the complexity of the ‘disability’ construct and identity within societies, in order to best represent people with disabilities when addressing climate change is through a *resilience framework* representative of all members of society that includes participatory aspects throughout the planning stage (Lim et al., 2005). The paper’s objective adheres to the need to explore academia and research’s role in adaptive capacity approaches to adopting the UN-HRC resolution through a multidisciplinary intersection of disability, climate change and policy studies. The proposed “Resilience Framework: Academia/Research Adaptive Capacity - UN-HRC Resolution” framework (see figure 1) is one possible tool towards collaboration through the lens of disability-perspectives and evidence-based approaches.

The proposed framework supports the deconstruction of the UN-HRC’s resolution and the reconstruction of the three emerging themes and the steps associated with each theme:

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1. *Identify the need for multidisciplinary research: exposure, sensitivity, and adaptive capacity* (Engle, 2011).
 2. *Compare the UN-HRC resolution by interconnecting: disability, climate change & policy studies.*
 3. *Academic/research disability-inclusive resilience framework: theory, application & praxis* (Cho et al., 2013).

This paper represents a small step to the author's bigger picture goal to ensure that people with disabilities are not seen as victims or identified as special needs. But to conceptualize how improving social-environmental factors and other disability-inclusivity approaches helps humanity to adapt to safer, more equitable, inclusive, and universal designs that could be beneficial for both persons with and without disabilities.

Author Note

The development of this paper occurred by the author as a graduate student in the University of Hawai'i at Mānoa, Department of Urban and Regional Planning (DURP) from 2018–2020. As thus, the author received critical feedback from scholars in these fields in the following courses: 1) “Seminar in Disaster Management and Humanitarian Assistance,” Fall 2018, with Dr. Karl Kim executive director of National Disaster Preparedness Training Center; 2) “Climate, Energy & Food,” Fall 2019, with Dr. Makena Coffman, DURP chair & chair of the Honolulu Climate Commission; 3) and “Hazards and Resilience,” Summer 2020, with Dr. Ghimire Jiwnath, DURP assistant specialist (Department of Urban and Regional Planning [DURP], n.d.).

In addition, the author presented this paper at the Pacific Rim International Conference on Disability & Diversity (PacRim) on March 2, 2020, Honolulu, Hawai'i as a poster presentation. Due to the social-economic determinants faced across disciplines, many of the discussions with participants —scholars, researchers, professionals, practitioners, advocates— were able to relate to the paper's objective and framework. In addition, prior to the conference, the presenter promoted her presentation to #PacRim2020 conference stakeholders and within the Association of University Centers on Disabilities (AUCD) network, in which she received similar interest and reinforcement for the need for intersectionality between disability, climate change, and policy. Following the PacRim conference, the author received two requests from editors representing international journals —focuses on business, and humanities— to submit a proposal to publish the paper's framework. Overall, the positive responses from scholars, researchers and practitioners, represent a need for further research and implementation in this type of multidisciplinary resilience framework.

Author



Genesis Leong is a public information specialist at the Center on Disability Studies, University of Hawai‘i at Mānoa (UHM), and was recently the assistant editor/journal manager of the *Review of Disability Studies Journal: An International Journal*. She is the program & call for proposals coordinator for #PacRim2020, a position that proceeds her 15-years of experience in organizing projects & events throughout the University of Hawai‘i System. Her studies are focused on the interdisciplinary approach to disability studies & disaster planning studies, and is currently enrolled in the University of Hawai‘i at Mānoa, Department of Urban & Regional Planning, Disaster Management & Humanitarian Assistance program.

Image Description: Photo of Genesis Leong

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Endnotes

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- ⁱ *Human rights focused* (i.e., Charter of the United Nations; Universal Declaration of Human Rights; the International Covenant on Economic, Social and Cultural Rights; International Covenant on Civil and Political Rights; Convention on the Rights of Persons with Disabilities; Convention on the Rights of the Child; Convention on the Elimination of All Forms of Discrimination against Women; and the Vienna Declaration and Programme of Action).
- ⁱⁱ *Climate change focused* (i.e., Paris Agreement under the United Nations Framework Convention on Climate; Intergovernmental Panel on Climate Change).