# Disability and Place of Living: Experiences of Disability, Accessibility, and Inequality in Four Regions of Myanmar

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## ABSTRACT

This paper aims to understand how the experiences of disability such as peoples' sense of autonomy, their perceptions of day-to-day challenges, and access to public spaces, vary depending on the place they live, in the context of Myanmar. Informed by the social model of disability, we investigated how disabling experiences differ between those who live in Yangon, capital city of Myanmar, and peripheral areas, Mandalay, Ayeyarwady and Shan. We conducted focus group discussions and in-depth interviews with around 90 people with disabilities who had challenges in seeing, hearing, and physical disabilities like mobility to report the results. This paper finds that people with disabilities lead more independent lives, were better supported in carrying out day-to-day activities, and had more accessible services and spaces in Yangon than in peripheries. Two notable findings are: (1) accessibility is not just infrastructural, but also attitudinal, more enabling in Yangon than peripheries, and (2) people with disabilities who live in peripheries feel "home-incarcerated" due to infrastructural exclusions experienced in those areas.

# 1. INTRODUCTION AND BACKGROUND

Peoples' experiences of disabilities and how they survive and thrive (Stienstra & Lee 2019) significantly differ depending on their place of living (Vodden et al. 2015). In Myanmar, one of the least developed countries in the world, these differences not just concern with access to resources and economic development, but also to cultural life and sense of belonging in society (Hurulle et al. 2018). Although previous research has studied how poverty and underdevelopment shape disability in the global South, how the place of living shapes experiences of disability is less well known (Don et al. 2015; Scoones 2009). While disability is significantly under-researched as a development topic (Eide & Ingstad 2011), scholarship on disability in Myanmar is also under-researched (Fernando 2019).

One major social inequality highlighted in Myanmar based research is how most of economic development, resources, and social progress is concentrated to its capital city, Yangon (Sheehy et al. 2015, 2016). In Myanmar, 4.6 percent of its population report being disabled. The country's urban and rural differences are poignantly demonstrable through the differences between Yangon, and other population centres outside Yangon. These centres can be more correctly understood as peripheral regions of Yangon than rural areas. Although they are underdeveloped, their large populations are similar to large urban centres (populations of peripheral regions considered in this study: Mandalay = 1.727 million, Ayeyarwady = 6.185 million, and Shan = 5.824 million). For this reason, their development trajectory corresponds more to what is known as a "centre-periphery relation" in development studies (Kvangraven 2020).

However, it is unclear as to how people living in Yangon and peripheral regions experience disabilities, and how they survive and thrive depending on where they live. In this paper, using a social model of disability framework (Beckett 2006; Du Toit 2018; Oliver 1990), we explore how the experiences of disability such as peoples' sense of autonomy, their perceptions of day-to-day challenges, and access to public spaces, vary depending on the place they live, in the context of Myanmar. Underpinning this inquiry is the assumption that development trajectory of the place of living shapes the resources available to improve accessibility and inclusion, which in turn influence peoples' attitudes towards disability (de Haan 2017; Stienstra & Lee 2019; Vodden et al. 2015). To report the results, we used qualitative data from a larger study that examined how people with disabilities engage with the emerging network economy in Myanmar.

The following is a non-exhaustive summary of the disability research carried out focusing urban and rural issues. Research has consistently shown how access to resources for people with disabilities living in rural areas is significantly limited in comparison to those who live in urban areas, although most of this evidence is from developed countries. For example, Barton et al. (2015) use empirical evidence to demonstrate how the people with disabilities living in rural Australia possess poorer health outcomes with higher risk factors and have shorter live-spans, with higher levels of illnesses. Using evidence from Iran, Don et al. (2015) claim that although regulatory and legislative approaches have strived to bridge the urban and rural disparities, barriers that are largely dependent upon political economic determinants (such as the flight of capital, budgetary provisions for social welfare, etc.) continue to cause immense disabling experiences to the people with disabilities living in rural areas. Given the fact that 70 percent of the world's poor live in rural areas, it is assumed, in the context of evidence gaps, that many of the people with disabilities living in the rural areas are poor as well (Grech 2009, 2011).

Since nearly 70 percent of women with disabilities live in rural areas, research on the intersection of gender and the disabling rural barriers is also under-researched. Similarly, Samararatne et al.'s (2015) study of disability in Sri Lanka found that the disabled women particularly residing in rural areas are the most marginalized of all disability groups. They further claim that disabled women living in rural post-armed conflict areas face many vulnerabilities including various forms of gender-based violence.

Gething's (1999) earlier research provides a good overview about the differential way in which state services are provided to people with disabilities living in urban and rural areas. Gething (1999) observed that equality in access to up-to-date information, choices, and range of services among the urban and rural dwellers of disability are important parameters of social inclusion.

Gething (1999) concluded that disability in rural areas puts the people with disabilities in a "doubly disadvantaged" position. However, Maart et al. (2007) found contradictory evidence in South Africa to conclude that the sample of people with disabilities in the rural areas in general perceived fewer barriers within their environment than those residing in informal urban settlements. They hypothesized that this perception could be based on rural dwellers' lower expectations in comparison to those of urban dwellers.

Taub et al.'s (2009) found that environmental barriers, such as crowded social spaces, segregated seating, and inaccessible physical structures, hinder the social relationships of disabled women. They further claim that these barriers affect choices and opportunities to socialize and promote physical and social isolation. In this sense, it appears that public space is not only a matter of accessibility that concerns people with disabilities, but also a hub that nurtures social relationships (Persson et al. 2015). Furthermore, the relative lack of extensive research on the topic of urban and rural stratification of disabling experiences makes it difficult to assess how the quality of life differs between urban and rural dwellings.

## 2. RESEARCH DESIGN

The data for this paper was obtained from interviews of a larger field study conducted in Myanmar called "Towards a Networked Economy in Myanmar" (hereafter referred to as the "original study"). We analyzed 29 focus group discussions (FGDs) and in-depth interviews for the purposes of this paper. In total, around 90 individuals with disabilities participated in this study. Data was collected from four areas in Myanmar: Yangon (the capital), Mandalay, Ayeyarwady and Shan. These areas were selected if one of the two following criteria were satisfied: (1) having a large number of disabled individuals residing in the considered area, or (2) having a high percentage of people with disabilities in the considered state/region.

We focused on our research on people with visual, hearing, and physical/locomotor challenges, mainly because of recruitment challenges in engaging people with non-visible disabilities like developmental disabilities. This is also a main limitation of the study. The questions used to screen for the incidence of disability were the same as used in the 2014 Myanmar National Census. Given the study's time and resource limitations, only those individuals who self-declared as having several challenges in navigating daily life were included in the study. For example, for people with seeing difficulties, only those who said they cannot see at all without glasses, or those who had a lot of difficulty seeing without glasses, were included in the study. The sample comprised an approximately equal number of male and female respondents. Respondents also were equally distributed between each age category and each socio-economic category as per 2014 Myanmar National Census categories.

Three paired pilot interviews were conducted, after which the discussion guide used for interviews was amended. Seventeen FGDs were conducted, which included a total of 81 respondents. Efforts were made to keep the focus group participants homogenous in terms of type of disability, gender, socio-economic classification, and age, to allow the participants to engage in conversation with ease. The team also attempted to hold the FGD in accessible locations, which allowed participants' convenient mobility.

Twelve in-depth interviews were carried out in the four states/regions Engaging with our community partners in Myanmar including Myanmar ICT for Development Organization (MIDO), we learnt that due to inaccessibility of various public spaces, some people with disabilities in Myanmar tended to not move out of their homes very often. We then decided to probe this pattern among our respondents and included some participants who had spent the majority of their time at home in the three months preceding data collection into our sample.

All research participants voluntarily participated in this project. The recruitments were done by local community partners in the four regions, with whom we entered into confidentiality agreements to safeguard participants' privacy. The data management plan entails that data will not be publicized under any circumstance. Participants consented to have the conversations recorded, and to have their photographs taken.

The following measures taken to obtain consent for each type of disability:

1. Visual: The interviewer read the consent statement loud – slowly and carefully – to each participant in advance of the focus group. Any parts that an individual did not understand were repeated. If anyone was unable to sign the document, their consent was recorded with a thumbprint.

2. Hearing: At the time of reading the consent form, recruiters ensured that a person proficient in sign language was able to translate any participant questions and field team answers.

3. Physical: Written consent forms were provided, after having had the terms fully explained. Verbal consent was obtained from those who were physically unable to sign the document or provide a thumbprint.

According to ESOMAR global research (Hurulle, Fernando, & Galpaya, 2018)(Hurulle, Fernando, & Galpaya, 2018)(Hurulle, Fernando, & Galpaya, 2018) best practices for conducting research with people with disabilities were complied with by the, recruiters: (i) took into account the mental wellbeing of the person involved, when considering what subjects may or may not be considerately dealt with in an interview. (ii) ensured that a responsible caretaker (apart from the interviewer) remains close at hand while the interview is carried out, where necessary. Participants were given gift cards after each interview, as incentives in participating in this research. There are no direct benefits for participants in this research. Indirect benefits include contributing to knowledge creation on social inequalities related to disability, and documenting evidence on disability in a country where research in this area is significantly lacking.

## 3. KEY METHODOLOGICAL DECISIONS

The initial discussion guide used for the original study was designed to collect information about the day-to-day difficulties and barriers faced by the people with disabilities living in all the selected regions of Myanmar. We gathered information on four key domains: education, employment, transportation, and social networking and connectivity. These four domains were considered to represent the most elementary aspects of daily life for people with disabilities.

The main hypothesis guiding this paper is that the nature and degree of social barriers that give rise to disabling experiences are significantly higher in Mandalay, Ayeyarwady and Shan – the peripheral areas – than in the more developed and urban Yangon citypeople with disabilities people with disabilities (Don, Salami & Ghajarieh 2015; Gething 1999; Graham, Moodley, & Selipsky 2013; Maart et al. 2007; Taub, Mclorg & Bartnick 2009). This difference can be explained by various factors such as disparities in public space accessibility, prevalence of inaccessible public transport, disparities in public and private service provisions, healthcare disparities, differences in social attitudes, beliefs and values, differences in familial and community structures, and so on. We were not primarily interested in finding answers to a disparity found between urban and rural living. Rather, this paper aimed to establishhow various social barriers corresponding to the area of residence structure one's experiences of inclusion. Therefore, in coding the transcripts, emphasis was placed on highlighting the existence of disparities (if found) rather than striving to account for their determinants. In our analysis, most of these differences were foundin participants' experiences in the sphere of accessibility to public infrstructure, public space, and public transport.

The discussion guide used included questions on the basic demographic details of the participants and questions pertaining to four major domains of life of a disbled individual to better ascertain the main barriers and difficulties that they face in those domains. These domains were education, employment, transport, and social connectivity. These domains are not exhaustive by any means, as the initial study had confined its scope to these domains due to various constraints. Furthermore, questions concerning the participants' future aspirations, what they demand from the regulators, their family backgrounds and other probing questions were asked. We used the following pre-determined themes in analyzing data: 'demographics', 'nature of disability', and 'perceptions of day-to-day challenges', and 'public infrastructure, public space, and public transport'. At the same time, we acknowledged and included one more theme that emerged during analysis, which was not pre-determined: 'living independently'. In contrast to themes, codes were assigned inductively.

# 4. RESULTS

## 4.1. FAMILIES, LIVING INDEPENDENTLY AND LIFE EVENTS

Grossman and Magana (2016) conclude that family support systems are a key support that allows people with disabilities to live more independent lives. Breaking away from such support systems might suggest stronger freedom in terms of a person's sense of autonomy. However, external social support systems would be required for a person with a disability to live independently. The existence and character of such support systems might be different for urban versus rural residents (Naslund & Gardelli 2013).

Several Yangon respondents reported that they had more autonomous lives from their parents, either studying in a special-education school or engaging in private employment. For example, a 24-year-old masseur with a hearing disability based in Yangon described how he leads his life in the city:

> I don't live with my parents because I go to work. I used to live in the Mary Chapman School for the Deaf. However, I don't live there anymore. I rent an apartment and live alone.

A former sportsman now employed at the Ministry for Sports in Myanmar who uses a wheelchair to move around described how he owns his own house and lives with his spouse and son, leading a comfortable life. Although it appears that he spends most of his life confined to his house for reasons not probed, he is able to own his own house and live independently in Yangon, which proved to be a stark difference to rural dwellers:

> Me, my son and my wife. He is 13 years old. Now, he is going to attend eighth Standard. For me, there aren't [many] difficulties because I live with family and I spend most of my time at home.

However, the experience of leading an independent and autonomous life away from their parents is not common for the rural dwellers. Although a family-based support system is present for both urban and rural dwellers who have seeing, hearing, or mobility challenges, urban dwellers more often than not found it to be easier to transition to an autonomous lifestyle. As Grossman and Megana (2016) find, this difference can be largely due to better economic prospects found in cities. The case of one woman with a hearing difficulty, a broker from Yangon, shows a somewhat opposite story to that of the two participants described above. She had been married to another hearing challenged person with whom she lived independently in Yangon. However, after the death of her spouse, she decided to live with her family:

> We are four in the family. My husband passed away already. It has been twenty years now. Now, I live with my family. I have three siblings. I have a beauty salon. It is a private job. I married someone who can hear for me to communicate well.

On the other hand, the possibility of living independently outside of Yangon is greatly hindered due to various reasons, of which economic constraints are the strongest. A woman who had a hearing difficulty, who was desperately looking for a job in Mandalay, told us that she was forced to live with a relative: 'I am the only child. I couldn't pass 10th standard. I am now living with my aunty.'

In several instances, she recalled how, after she started to experience difficulties in hearing people with disabilities, her family members and close friends ignored them instead of serving as pillars of strength. As such, families are always not safe places for people with disabilities (Robinson & Graham 2019). For example, a male respondent who has a mobility difficulty living in Mandalay said that: 'My wife left me after I was a disabled. My son in Yangon is from my first wife. All my relatives in Myanmar left me alone and I am a person with no relatives.' Another person who had a seeing difficulty who lived in Shan submitted himself to a monastery to spend the rest of his life. His life is a testimony of a case where a once successful teacher, who was now disabled, encountered the harshest barriers for a people with disabilities in Myanmar society.

I used to be a tuition teacher in Northern Shan State. I was in [an] accident and I lost my leg and my [eye] sight. And there is no one who can look after me in my family. And I moved to Mandalay Phaung Daw Gyi monastery and they accepted me. Now I am a warden in Paung Daw Gyi Boy Hostel. All the kids look after the things I have to do. I don't have any other job. I have a son in Yangon and he supports me and one of my friend from Lashio support me, too.

The three preceding cases were of people with disabilities living in peripheral areas of Yangon who, after a sudden life-changing event (in most cases, acquiring their disability itself), were forced to submit themselves to live either with their extended family or, in the case of the teacher from Shan in a monastery. Earlier research that provides a closer comparison of the experiences of the people with disabilities living in urban areas with similar life events show that people with disabilities may have better supports in cities to grapple with life events and people with disabilities could continue to live independently (Gething 1999; Maart et al. 2007).

## 4.2. PERCEPTIONS OF DAY-TO-DAY CHALLENGES

We inquired into the daily challenges people with disabilities face and whether these perceptions differ depending on where they live. Our hope was that initial impressions would render visible some of the important differences between Yangon and peripheral areas. The reaction to this question by the first group of respondents from Yangon was quite similar to each other, in saying that they were more or less fine with their lives and were happy with it. For example, a group of younger respondents living in Yangon who had hearing difficulties, stated respectively:

'Everything is fine'; 'I don't have any difficulty. I am okay'; 'I am also okay. If a deaf person experiences a problem and show their ID, then they [general public] can know.'

A man with seeing challenges from Yangon said that although he was deprived of some comforts of life due to his impairment, he was still able to hire teachers to come to his house to teach him when he was young. He belongs to a higher income category. The details about income level allude to some of the primary differences between the disabling experiences between Yangon and peripheral living. The same person said:

Though I stayed at home, we hired some teachers from outside to teach me. I was able to learn until high school, but the difficulty was with mathematic subjects, that my teachers didn't know how to teach [to] the blind.

The experience of the peripheral-dwelling people with disabilities was significantly different from their Yangon counterparts described above. Several of the respondents who spoke about their hardships often compared their experiences with people with disabilities in Yangon. On many occasions, participants shared how their lives would have been different and much more enabling if they had the opportunity to live in Yangon. For example, a man who had a seeing difficulty living in Shan shared how the overall attitudes and culture of the community toward the people with disabilities in Taunggyi (the main township of Shan region) are much more hostile, as compared to Yangon's more welcoming and inclusive culture. He said:

In the beginning, it was difficult a lot. I cannot see things. Going around is not ok, but now I get used to it. I have to memorize the streets again. In everyday life, people think of us as disabled. It doesn't feel good. In Yangon, people understand our situation more. People in Taunggyi don't understand us a lot. I think they don't understand how to help us. I find they are a bit weak in showing directions to the blind. Some people laugh at us.

His disabling experience shows how the community in Yangon are much more accustomed to helping 'others' especially when they were people with disabilities. The same experience was felt by another man from Shan who was blind who said:

It's more challenging in the beginning. In Yangon, people already understand that we are blind if they see us with [a] blind stick. But here, only old people use [a] walking stick.

These experiences show how people with disabilities who live outside Yangon aspire to move to Yangon if they are given the opportunity to do so. Several other respondents shared with us the importance of coomunity support around them, especially when they on their own in public spaces. For example, a man from Shan who was visually challenged said: 'I can't see a little bit. I need help from people in new places, for example, crossing roads. But, people help me.'

The experiences of those who have hearing challenges in peripheral areas were not different either. For example, a woman from Mandalay expressed great frustration with the experience of not being able to communicate properly in public space:

> It's hard to communicate and find difficulties like this – the one who can hear and deaf people because they don't understand sign language and we don't understand the way they speak to us. If we have a translator, it will be okay.

This exclusion from 'normal' life one feels when being constrained from accessing public space, moving freely, and communicating with others is evened out with the help people with disabilities of their family members. For example, person with mobility difficulties from Ayeyarwady said:

> My sister accompanied and held me when I walk around. Because I don't use any artificial limbs. No. I go alone nowhere. Sometimes my friends fetch me to go outside.

However, as found in the experiences of most of the in-depth interview participants who had not gone out of their homes for the past three months (this was a recruiting criterion for some participants), the inaccessibility of the public space and the frustration felt therein had pushed them to remain at home most of the time. Overall, as succinctly emphasized by one woman from Shan who had a mobility difficulty, they 'struggle a lot' in areas outside Yangon and put themselves in a 'doubly disadvantaged' position.

## 4.3. ACCESS TO PUBLIC SPACE, PUBLIC INFRASTRUCTURE, AND PUBLIC TRANSPORT

The primary lens used to investigate how people with disabilities living in peripheral areas are 'doubly disabled' was to look at how their access to public space, infrastructure, and transport was different from that of their Yangon counterparts. Some participants occasionally described their relative comfort living in Yangon. For example, a person with a hearing difficulty from Yangon said, 'It is okay. Normal people support me in everything, such as when I ride my bicycle.' Future research could investigate whether gender (being male) and age (being relatively younger, aged 23) encouraged him to describe his comfort in this way.

In contrast to this experience, the residents from Shan, Mandalay, and Ayeyarwady had stories about their hardships resulting from living in rural areas and in areas that are underdevelopment. One person from Shan who had seeing difficulties, was quite vocal in comparing his disabling experience to the relative conveniences of living in Yangon. His statement registers a certain notion about how city life in Yangon would be better than their disabling experiences in the Shan region.

> In Yangon, to go to a certain place, we can manage it on our own. I have close friends, regular taxi drivers. We can also use buses. But, here [in the Shan region], they don't have taxi stand and [have few] buses. I just hear many of the places in Shan, but have never been there.

His claim that life would be easier in Yangon was not confined to the statements about convenient transportation. He further described how even the basic shopping experience that is extremely crucial for independent living is more inclusive for people with disabilities living in Yangon.

> Shops are different. In Yangon, you can easily buy, but here if you want to buy certain stuff, you have to go to city center and then you face the difficulties I mentioned.

As reported by many of the other participants too, the man from Shan stated that the attitudes of the public towards the people with disabilities are significantly different in Yangon. It was

continuously reported that people in Yangon treated them with much affection and tolerance, in contrast to their experience in more rural and underdeveloped areas. He noted that the attitudinal and material inaccessibilities in Shan demotivate him to go to the city centre in Taunggyi (in Shan). In a similar experience, another visually challenged man from Shan voiced out how people in Shan expect the people with disabilities to have a family member or a friend accompanying them, when they move out of their homes, highlighting the ableist culture at hand:

> [They] think we always have someone to help us all the time. When going out, we have to remember the road conditions and if I go to the same place twice, I can recognize the road. But now roads are busier. Whether I remember or not doesn't matter. It is not just safe.

Although this paper does not focus on the social attitudes of the community toward people with disabilities, it is nevertheless important to note them. As described by a number of participants, the community has an important role in making the public space accessible for people with disabilities. This at least means that accessible and inclusive public space does not confine its reach to material infrastructure, but it also included how communities support, uphold, and participate in everyday level inclusion through their 'accessible attitudes'. One Shan resident with a seeing difficulty said that 'in Yangon, people understand our situation more, people in Taunggyi [Shan] don't understand us a lot.' Another Shan resident, blind, said that 'in Yangon people already understand that we are blind if they see us with blind stick. But here, only old people use walking stick' adds nuance about how community perceptions about disability shape social inclusion in these communities.

Many Yangon residents claimed that they 'are fine' when leaving their homes without the help of any person, which corresponds to a relative development of accessible public infrastructures such as roads, walking paths, pavements, crossings, and public transport options such as buses. In contrast, peripheral residents insisted that they frequently needed and anticipated the help of random people on the road to assist them. Many rural people with disabilities confirmed this fact. For example, a visually challenged person from Shan said, 'I need help from people, getting on and off the buses.' While he explained how the blind stick is not at all sufficient for a visually challenged person to get along the busy and unorganized rural streets:

> Going to city center and super markets and crossing roads is not ok just with the blind stick. We always need someone to help us. I ask my nearby friend to tell me about the post.

In a slightly different fashion, hearing-challenged people not only required the assisting person to guide them across the streets, as the visually challenged people do, but they inevitably are forced to impose upon the assisting person to translate the information they require either to put in sign language or to write them down on the notebooks that a hearing-challenged person frequently carries. The experience becomes complicated further when the concerned disabled person must travel to a different city. This was best captured by the narration of one hearing challenged woman:

> We mostly go with our family. It is not safe to go alone but okay to go with family. When we went to [Mandalay], we went around the city [in group] for safety purpose. We need someone who can translate, if not we need ball pen and paper and map. We also need phone. If we don't know where we are going, we can just show the address from our phone to someone. We have a look map when we never been to there to make sure we are on the right place or not.

Hence, similar to the visually challenged people, the hearing impaired, too, require a person to assist them, especially in peripheral areas. As one hearing challenged person puts it: 'My friend comes and takes me. I don't remember streets. Mother never allows to go out alone.'

As anticipated, the largely inaccessible public space and public infrastructures force the poorer people with disabilities to remain inside their houses (Shakespeare 2016). As discussed later, this proves to be a much more precarious disabling experience, even comparable to incarceration:

I don't go anywhere so I don't have any difficulty. It's been years that [I don't go outside]. But when I wore an artificial leg at the age of 13, I went outside all the time. I feel regretful now. But now, I can't go.

This 'home-incarceration' is further exacerbated by the fact that many of the assistive technologies (AT) and devices are not freely available in the rural areas in Myanmar, or more precisely areas outside Yangon. To purchase such ATs, one must travel to Yangon, as testified by a person with a locomotor disability: 'As my parents are not alive, when they're alive, my dad bring me to Yangon and changed the artificial leg whenever my artificial leg was damaged.' It appears that after her parents died, she had to live with her extended family. Since she was not married, travelling to Yangon to repair her artificial leg (as she was physically impaired) became more and more difficult; she eventually gave up on travelling to Yangon. Because of the difficulty of travelling to Yangon, she was forced to remain at home all times. Her story confirms that she was even constrained from attending school, since she couldn't get her artificial leg repaired in Yangon:

> When I was a child, when I was 13, people said I could wear artificial leg. So my dad brought me to Yangon. Before that, he didn't let me go anywhere as he didn't trust me. He didn't trust me, so I didn't attend school.

For most of these poorer people with disabilities residing in rural Myanmar, travelling to Yangon in order to enrich their lives is inevitable. it appears as if their life-enrichment is intertwined with the frequency of association with Yangon, not only to purchase ATs, but also to access better training facilities for better careers, for higher quality education, and to pursue their dreams just like other non-disabled people. These people with disabilities were forced to travel to Yangon to accomplish these goals. As one person with a visual disability says:

> Interviewer: Don't you use computers?

> Participant: We have computers in Yangon, but we don't have it here. We know basic computer skill like typing.

> Interviewer: Where did you learn it from?

> Participant: In Yangon, from my friends who can use it well.

For the above person, learning to use a computer was a Yangon-bound experience, thanks to his friends residing there and not due to any formal training program. Furthermore, his experience suggests that not only is learning advanced skills such as IT a Yangon-bound endeavor, but so is a relatively common occupation, such as livestock farming:

> Interviewer: What is your hobby?

> Participant: I am weak in IT but I want to do the livestock farming.

> Interviewer: Why can't you start it now?

> Participant: I will think about it when I get back to Yangon.

The unease and inconvenience of living in a peripheral area outside Yangon, which people with disabilities like the aforementioned person's experience, even when trying to begin a common economic activity such as livestock farming, was not an exception. This field study provided rich evidence to show how living in the centre, coupled with relatively more accessible public space, gave many people with disabilities confidence to live their lives. Those who could not afford to move to Yangon, or at least have access to its facilities, and were forced to remain in their peripheral, mostly rural, precarious livelihoods, were inclined to live a more religious life, rather than trying to win over their day-to-day battles. These individuals were often older as well, thus further limiting their ability to initiate a different life path. One visually challenged man told a story that is a telling testimony of this trend: 'I can't work now. As I am a Buddhist and I believe in Buddhism, I work if I have to, if I don't have to, I just live by myself.'

# 5. DISCUSSION

In this paper, we suggested that the people with disabilities living in Yangon experienced more autonomy in their day-to-day lives than other living in peripheries or rural areas, often living independently from their families. As many researchers have pointed out, better economic and social freedom experiences in urban areas allow people with disabilities to move out of their traditional family environments and live a life of their own (Grossman & Magaña 2016; Mitra, Posarac & Vick 2011; Vick 2013). This can be even true for people with disabilities who wanted to lead a married life. For example, one Yangon-based man with a locomotor disability lived independently with his wife who was also disabled. The disability literature has suggested that there was a tendency for a person with a disability to marry another disabled person for closer affinity (Grossman & Magaña, 2016).

The evidence from peripheral areas of Yangon (Mandalay, Ayeyarwady, and Shan) did not overlap with the situation in Yangon. The people with disabilities living in peripheral areas had a weaker sense of autonomy. Some of them did not marry. Others were fostered by their parents or relatives until their death. This difference between urban and rural experiences does not necessarily establish a differential disabling experience. Rather, the results highlight that there were considerable factors that made living in Yangon more enabling for the people with disabilities in general.

We suggested that there were crucial differences between Yangon and peripheral dwellers in terms of their perceptions of daily life. In comparison to the experiences in the peripheral areas – disabling experiences of extreme hardships in moving outside their homes, mobility in public space, and obtaining help from others – Yangon dwellers' basic impression suggested that they were 'fine'. They said that despite their impairments, they were able to take help from individuals who were around when they went outside their homes. Relative economic prosperity also allowed them to have access to better services. In one case, a visually challenged man from Yangon was able to hire a tutor to visit his home and teach him in school subjects in which he was performing poorly.

Moreover, several peripheral respondents highlighted the fact that attitudes toward disabled people in Yangon were considerably different from the attitudes experienced in rural communities. They suggested that the public in Yangon were accustomed to appreciating and acknowledging the identity of people with disabilities and therefore were more forward in assisting them whenever help was needed in public spaces. In contrast, attitudes towards disabled people in peripheral regions were not supportive and inclusive. Acknowledgement of peoples' differences would indicate that human society is interdependent, as we all are temporarily abled-bodied persons, ethically bound to assist others in their needs (Goodley 2011). Therefore, in a similar pattern to the previous evidence of independent living, the perceptions of daily hardships of the urban and rural dwellers differed considerably. We follow with some notable findings below.

1. Access to public services and spaces is more prevalent and inclusive in Yangon than peripheries: People with disabilities living in peripheral or rural areas who had travelled to Yangon on previous occasions reported how transport within the city of Yangon was relatively convenient for them. Many said that buses arrived on time to stipulated bus stops where abundant GPS facilities were available. Some buses were accessible, and the bus fares were affordable as well. Others described how shopping in Yangon was also convenient and accessible to people with disabilities. As Hurulle et al. (2018) described, there were facilities in Yangon, such as currency reading mobile apps for the visually disabled people, accessible public buildings for physically challenged, and signboards for hearing disable people, as compared to the conditions in rural regions. The existence of differential disabling experiences between Yangon and its peripheries was further evidenced by the unavailability of necessary ATs. Participants indicated that they were forced to travel to Yangon to purchase a hearing aid or prosthetics. Furthermore, as one person with a visual disability living in Shan claimed, it was only Yangon which had the better training facilities to learn computing if they ever wanted to learn it for career or education purposes. Some participants couldn't even afford to pursue their livestock farming aspirations for the lack of facilities in rural regions. Therefore, the relative economic prosperity and development in Yangon allows for improvements to the public space to better accommodate those who need special support and provide more inclusive services and products (Zhuang 2016).

2. Attitudinal accessibility is a key determinant of accessibility and inclusion: Attitudes of people towards and recognizing the needs of people with disabilities is a key determinant in accounting for the differential disabling experiences between Yangon and peripheries. Many respondents from rural regions reported how the public in Yangon were 'attitudinally accessible' (i.e., welcoming, helpful, and appreciative) in contrast to the 'attitudinally inaccessible' (i.e., dismissive, evasive, and condemning) experiences in rural/peripheral Myanmar. The frequent usage of 'public space accessibility' in disability literature is narrowly used to suggest the fact that 'material' public space (that includes building, pavements, buses, parks, digital domain) should be accessible to the people with disabilities. But the social attitudes of citizens are equally important. As Goodly (2011) correctly points out, human society is necessarily an interdependent entity. Accordingly, independent living and inclusion does not mean a simple 'writing-off' of one's social responsibilities towards one's 'other'. Therefore, as accounted by the people with disabilities living in the rural regions of Myanmar, for them, 'attitudinal accessibility' also plays a pivotal part of surviving and thriving (Stienstra & Lee 2019). For this reason, the study participants substantially preferred the more attitudinally accessible urban space in Yangon to that of the attitudinally inaccessible rural space.

3. Better sense of autonomy and freedom in Yangon than peripheries: Living in Yangon required less dependence on their family and friends for an average person with a disability, given the fact that the general public were more willing to help them in their need along with the more accessible 'material' accessibility found in the city. In this sense, the 'attitudinal accessibility' supplemented the 'material accessibility' (which includes both analog and digital space). On the other hand, people with disabilities living outside Yangon constantly depended upon their close family members or their friends when they wanted to go out of their homes. This dependence was in addition to the 'material inaccessibility' found in the rural space as determined by the overall underdevelopment of the more rural regions. An alarming situation that follows from both the material and attitudinal inaccessibility of public space outside Yangon is that many of the people with disabilities tended to be 'home-incarcerated'. That is, given the overall inaccessibility, they tended to not move out of their homes for long periods of time. They couldn't trouble their families all the time to accompany them outside, especially if they were fostered by their siblings or other distant relatives. Neither could they afford to go out on their own. As Hurulle et al. (2018) pointed out, internet connectivity in the rural regions was also not strong enough so that they could rely on it as an assistive device as many of their Yangon counterparts did. People in their regions were not accommodative as well.

## 6. CONCLUSION

All the above instances and peoples' experiences demonstrate that the people with disabilities living outside Yangon face significantly stronger disabling experiences as compared to those who lived in Yangon. And since these differences are political and economic in nature, we argue that disability must be understood as a two-fold social problem, comprising micro and macro dimensions. The micro aspects refer to the individual-level, day-to-day disabling barriers that require micro-level solutions, such digital technology-based solutions like universally designed mobile phones providing assistive functions (e.g., text-to-speech GPS, currency identification apps) (Doughty 2011). Mobile phones in their assistive function prove to be one of the most effective devices for helping the poorer people with disabilities living in the developing countries (Lazar & Stein 2017; Salatino et al. 2018). Macro aspects refer to overarching disabling barriers that result from social constraints, accentuated in the developing countries. In this paper, we analyzed such constraints through the differences in disabling experiences between Yangon-residents and others who reside outside Yangon. These barriers must be addressed differently, focusing more on social policies. However, recognizing that such macro-level disabling barriers exist is an important first step towards addressing them in an effective way. Therefore, it is our view that future disability research should not only focus on the narrower individual-level barriers, but also on the macro-level, structural barriers.

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## COMPETING INTERESTS

The authors have no competing interests to declare.

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