Employment and Participation in Meaningful Activities for Persons with Disabilities in Bhutan

Results from a National Survey



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Executive Summary

The Comprehensive Survey of Transition and Employment of Youth with Disabilities in Bhutan was conducted in 2019 and 2020. It was part of a project on employment and meaningful participation of youth with disabilities in Bhutan titled, "Understanding, Developing, and Supporting Meaningful Work for Youth with Disabilities in Bhutan: Networks, Communities, and Transitions," funded by the government of the United Kingdom (UK) and managed by the University of Minnesota Institute on Community Integration, Royal Thimphu College (Bhutan), and the University of Birmingham (UK). The survey was Phase One of the project and included 216 youth with disabilities (average age: 23) across 17 out of 20 *dzongkhags* [districts] in Bhutan. Fieldwork surveys and interviews were conducted in person, using Geographic Information Systems [GIS]-enabled technology.

Survey results were analyzed using exploratory factor analysis (EFA) to identify potential scales, predicators, covariates, and themes. Significant findings from the survey are as follows:

- The older a person with a disability is, the *more* likely they are to have a paid job and work a greater number of hours for pay.
- Youth with disabilities who took part in Technical and Vocational Education and Training (TVET) were much *more* likely to have a paid job and work a greater number of hours.
- There was a significant *negative* relationship between the number of years in education and paid employment, indicating that the level of formal education the person with a disability experienced did *not* result in more work for pay.
- The number of years of formal education *did* predict the likelihood of participation in meaningful social and community activities *outside* of paid employment.
- If meaningful activities were available, youth with disabilities *did* engage in social and community participation.
- Youth with disabilities who felt they were supported by their family members to seek or have a job were significantly *more* likely to be employed.
- Significantly more persons with disabilities living in urban or semi-urban areas had *more* hours of paid employment than those living in rural and semi-rural regions.
- Insignificant variables included number and level of disabilities, gender, and social stigma associated with disability characteristics.

The results of our survey lead to the following takeaways and suggestions for Bhutan, and similar low- and middle-income countries:

- Technical and Vocational Education and Training (TVET) is a significant factor in gaining paid employment and working a greater number of hours. Therefore, it is crucial for governments to invest in TVET for all youth and adults, but also to make TVET inclusive for all abilities.
- Although TVET was found to be significant for employment outcomes overall, just the number of years in formal education completed had a *negative* effect on the level of paid employment. This would suggest that the employment skills gained in formal education were either absent or misaligned for youth with disabilities, and in fact there was an economic cost to being in school that was not compensated by future earnings. Therefore, **it is important to better align formal education with employment and life skills and increase education's socio-economic integration.**
- Family support was a significant predictor of employment and meaningful participation in Bhutan. It is important to support families in supporting their youth with disabilities, and to encourage high expectations for youth with disabilities.
- There is a disparity in employment outcomes between urban and rural areas in Bhutan. While rural Bhutan may have more informal and non-wage socio-economic participation overall, it is important to invest in rural areas and provide appropriate means for socio-economic opportunities.

Introduction

Globally, persons with disabilities are the most marginalized group when it comes to socio-economic participation and employment. Unemployment averages for persons with disabilities in nearly every country range from 80% to 90% (United Nations [UN], n.d.). In the United States, the largest national economy in the world, only 30% of persons with disabilities aged 16–64 are employed (Bureau of Labor Statistics [BLS], 2021). During the COVID-19 pandemic, persons with disabilities were hit especially hard. During this time the United States, 1 in 5 workers with disabilities lost their job (National Organization on Disability [NOD], 2020). Worldwide, the pandemic has significantly impacted persons with disabilities not only in employment, but also in access to health and basic resources (Humanity & Inclusion, 2020). This disparity has a significant impact not only on diversity and inclusion in societies and on the lives of persons with disabilities themselves, but also on national economies.

The presence and participation of persons with disabilities in economic development in low- and middleincome countries (LMICs) has significant potential for positive socio-economic impact. It is estimated that access to vocational education and job training for persons with disabilities can generate wage gains of up to 20%, and their participation in the labor market can aggregate to total household gains of billions of dollars annually (Banks & Polack, 2015). Excluding or limiting persons with disabilities from the workforce of national economies is estimated to significantly reduce productivity and tax revenue and supporting greater economic participation of persons with disabilities would bring in more money than it would cost. Despite these promises, the relationship between disability, poverty, and inequality is significant (United Nations Economic and Social Commission for Asia and the Pacific [UNESCAP], 2018).

It is important to note that while we use the words 'work' and 'employment,' we do not necessarily mean only a wage-paying job with a private business or public entity. People engage in many socio-economic activities that do not involve cash. These activities may include home and family care that is important but often unpaid, and informal exchanges of goods, services, and labor. In Bhutan, for example, a person with a disability who sweeps the grounds around a *lakhang* [Buddhist temple] may be paid with food or other household goods, while a monk inside that *lakhang* may subsist on food given by the surrounding community. These are not 'jobs' in a capitalist economic sense, but they are still an exchange of labor or services for compensation. In other words, they are socio-economic participants. This is an especially important distinction to make in low- and middle-income countries, where there are many examples of informal and non-cashbased economic relationships that often go unrecognized (Chen, 2007). The project that produced this research report seeks to recognize the contextually appropriate and complex nature of socio-economic participation for persons with disabilities in Bhutan and other low- and middleincome countries. From 2019 to 2021, the University of Minnesota Institute on Community Integration, Royal Thimphu College (Bhutan), and the University of Birmingham (UK) initiated the project "Understanding, Developing, and Supporting Meaningful Work for Youth with Disabilities in Bhutan: Networks, Communities, and Transitions," funded through a Global Challenges Research Grant by UK Official Development Assistance (ESRC ES/S004319/1). The project sought to survey and share the current reality for inclusive employment and social participation for young adults with disabilities in Bhutan; provide advocacy, coordination, and interventions to support increased awareness and activity in this area; and work towards sustained support and awareness for inclusive employment and social participation for young adults with disabilities around the world—particularly in countries with limited resources and that are significantly rural in nature.

This research report presents data and evidence from a comprehensive survey of youth with disabilities in Bhutan focused on employment and meaningful community participation. The project sought to investigate the extent to which young adults with disabilities in Bhutan are working for pay and are engaged in other meaningful activities, and what factors contribute to these two outcomes. The survey was conducted across the entire country of Bhutan, collected by Bhutanese field researchers in 2019 and 2020 via a Geographic Information System (GIS)-enabled questionnaire. A full account of the methodology is given in the next section following a brief description of the context of Bhutan. The research questions that guided this survey are given below.

Research questions

- 1. What are the characteristics and environmental factors of persons with disabilities who are working?
- 2. What are the <u>characteristics</u> and <u>environmental factors</u> of persons with disabilities who are *not working*?
- 3. What are the <u>characteristics</u> and <u>environmental factors</u> of persons with disabilities who are *engaged* other meaningful activities?
- 4. What are the <u>characteristics</u> and <u>environmental factors</u> of persons with disabilities who are *not* engaged in other meaningful activities?
- 5. What <u>community factors/employer</u> (availability of employment, stigma, openness, and capacity for employing people with disabilities) *are significantly related to* persons with disabilities having paid employment?
- 6. What <u>family or community factors</u> (living with family, type of dzongkhag) *mediate* persons with disabilities having paid employment?
- 7. What <u>community factors</u> (availability of meaningful activities, stigma) *are significantly related to* persons with disabilities being involved in other meaningful activities?
- 8. What <u>family or community factors</u> (living with family, type of dzongkhag) *mediate* persons with disabilities being involved in other meaningful activities?

The Context of Bhutan

Bhutan is a small country located entirely in the Himalaya. The topography of Bhutan ranges from lowland jungles in the south that touch the Assamese plains of India, and then rising precipitously to the high Himalaya of the Tibetan plateau—topping out at 7,570 meters (24,836 ft). The population of Bhutan is just over 750,000 people (National Statistics Bureau [NSB], 2018).

Bhutan began the process of economic modernization into a planned capitalist economy with the First Five-Year Plan in 1959. In less than 100 years, Bhutan has made great strides in modern healthcare, education, and infrastructure. However, Bhutan is still relatively low in terms of development, ranking 129th in the Human Development Index (United Nations Development Programme [UNDP], 2020). Despite these economic indicators, Bhutan is well known for its alternative development philosophy of Gross National Happiness (GNH). In the late 1970s, the Fourth *Druk Gyalpo* [King] of Bhutan famously criticized economic indicators such as Gross National Income in favor of a more holistic and sustainable focus on social, cultural, and environmental happiness. Since that time, the Bhutanese government has been working to operationalize this vision into its economic and social policies.

In Bhutan, the concept of "disability" has evolved into modern societal institutions such as education and healthcare. Before schools and hospitals existed, disability was seen through a Buddhist lens of *karmic* life-cycles of sin and rebirth, leading to a complex cultural attitude of pity and compassion. While it is still quite relevant in Bhutan today, this concept of disability has blended with more modern views of medical pathology, social models, and human rights initiatives (Schuelka, 2015). In many ways, as the concept of disability in Bhutan evolved, it became more negative. The introduction of schools and access to healthcare introduced social stratification and ability-sorting (Schuelka, 2018a).

Modern education for children with disabilities in Bhutan is a fairly recent phenomenon. This is especially true for children with severe intellectual and developmental disabilities. Schuelka (2013, p. 67) concluded that these children were "marginalized and excluded." This was confirmed by later research (e.g., Kezang Sherab, et al. 2015) that many children with disabilities were out of school, mainly because parents did not want to send their children with disabilities to school, citing an unfriendly school environment such as a lack of individualized and accommodative curriculum, lack of trained teachers, and inaccessible infrastructure. The registration of people with disabilities in Bhutan in 2015 found that 84.5% of people with disabilities have never attended school. However, societal attitude and ways of thinking about disabilities are changing. Bhutan

has signed the United Nations' (UN) Convention on the Rights of Persons with Disabilities. Bhutan's Ministry of Education (MoE) has been closely working with UN agencies such as the United Nations Children's Fund (UNICEF) to create educational opportunities for youth with disabilities. Recently, the Bhutan government also approved the holistic national policy for persons with disabilities with a vision of "empowered persons with disabilities living in an inclusive society" (Gross National Happiness Commission [GNHC], 2019). This policy emphasizes education for youth with disabilities. For instance, Paro College of Education began offering its teaching students a post-graduate program on inclusive education. Furthermore, there are 22 Special Educational Needs (SEN) schools (at least one in each of the 20 dzongkhags [districts]) that integrate children with disabilities into mainstream schooling, two specialized institutes (Wangsel Institute for Deaf children and Muenselling Institute for students with visual impairments, established in 1973), and two Draktsho vocational training centers with a total of 997 students (MoE, 2020). There are also many nongovernmental organizations (NGOs), such as the Ability Bhutan Society (ABS), Draktsho Vocational Training Centres, Disabled Persons Organisation of Bhutan (DPOB), Bhutan Foundation, and Phensem who are instrumental in supporting the education of youth with disabilities. Despite these developments, recent research has shown that persons with disabilities still face social stigma; cultural and religious beliefs; a lack of resources, caregiver and teacher preparedness; and a lack of awareness amongst the public (Dawa Dukpa et al., 2021; Rinchen Dorji, 2015; Kezang Sherab et al., 2015; MoE & UNICEF, 2017; Schuelka, 2018a; UNICEF, 2013).

The economic and social participation of persons with disabilities is also an issue in Bhutan. According to the latest Population and Housing Census of Bhutan, 2.1% of the population are categorized as disabled (NSB, 2020). However, using alternative forms of data collection using a functioning model, UNICEF (2015) finds there could be up to 20% disability prevalence in Bhutanese youth. If this is true, there would be significant number of Bhutanese with some form of disability. Mannocchi and Schuelka (2020, p. 2) also found that most persons with disabilities in rural settings are "isolated and inactive." This indicates that most persons with disabilities do not participate in economic and social activities and that they are dependent on their families and friends. Earlier research (Schuelka, 2015), as well as anecdotal evidence, also suggests that persons with disabilities are considered to be a family burden because it is believed that they cannot earn an income.

Bhutan has an overall unemployment rate of 5%, with 22.6% of that figure falling under the category of youth (15–24 years) unemployment (NSB, 2020). There is lack of unemployment data for persons with disabilities. Even the report on the Population and Housing Census of Bhutan does not mention anything about the unemployment rate of persons with disabilities. This suggests that persons with disabilities are a marginalized

group without adequate attention to their health and well-being. However, recently some UN agencies such as UNICEF and NGOs have promoted the health and well-being of persons with disabilities. For instance, the Draktsho Institutes (NGO) and Wangsel Institute for the Deaf and Muenselling Institute for the Visually Impaired (Ministry of Education) have been providing some vocational skills to help persons with disabilities to find paid work. With such support systems in place, the economic and social participation of persons with disabilities is likely to improve in the near future.

As mentioned above, Bhutan started officially recognizing persons with disabilities as early as 1973. Bhutan's commitment towards persons with disabilities grew with the ratification of the Convention on the Rights of the Child in 1990 and Convention on the Rights of Persons with Disabilities in 2010. Consequently, the rights of the child have also been acknowledged in the Bhutan Building Rules of 2002, Labour and Employment Act of 2007, and the Constitution of Bhutan in 2008 (UNICEF, 2015). However, Bhutan's first national policy for persons with disabilities was launched only in August 2019 with a vision of "Empowered persons with disabilities living in an inclusive society" (GNHCS, 2019, p. 5). This policy framework is based on the following guiding principles: "non-discrimination, diversity and inclusiveness, disabilities in Bhutan may face significantly less discrimination and social stigma. This is also likely help Bhutan meet its international commitments such as the United Nations' Sustainable Development Goals and the UN Convention on the Rights of the Persons with Disabilities.

This policy framework identifies policy interventions in critical areas such as in education (improving access to education, removing attitudinal barriers, early identification and intervention, and learning, assessment and examination); health (access to health services, prevention, early identification, intervention and rehabilitation, and healthy aging); economic security (employment, support and enabling environment for business opportunities, awareness, and advocacy); caregivers, families, and communities (decision making, family/caregiver's involvement in service provision, support for family and caregivers, and community); protection and access to justice; disaster risk reduction and mitigation; built environment; public transport; information, communication, and technology ((access, portrayal, depiction, and use of persons with disabilities in the media); participation in cultural, spiritual, recreation, leisure, and sport activities; policy and planning; political participation; finance; human resource and capacity development; support and collaboration with NGOs/Civil Society Organizations/Disabled Persons Organizations; and data and

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information management. Until decided otherwise, the Gross National Happiness Commission Secretariat will be the lead agency to coordinate all disability-related policy, plans, and programs.

Methods

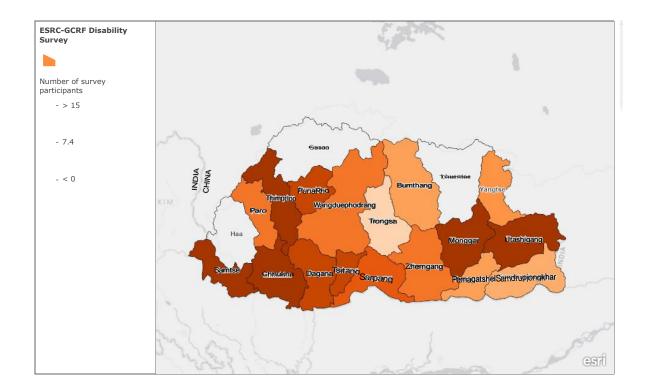
The survey featured in this research report was conducted in the Kingdom of Bhutan [*Druk Gyal Khap*] between in 2019 and 2020. Royal Thimphu College coordinated data collection for this study, which spanned 17 of 20 *dzongkhags* [districts], covering all regions of Bhutan—from rural to urban, and from the sub-tropical foothills to the sub-alpine tundra of the Great Himalaya. Ethical clearance for the survey was given by the Bhutanese National Statistics Bureau (NSB/SDPD/Survey/2019-20/4870), as well as the University of Birmingham Research Ethics Office (ERN_18-1601).

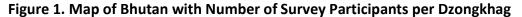
Participants

Survey participants included 216 young adults with disabilities, of whom 59% were male and 41% were female. According to the Bhutanese National Statistics Bureau (2018), the total disabled youth population (age 16–24) is approximately 880 people. The National Statistics Bureau now uses the Washington Group (2021) functioning classification system to determine disability characteristics, and we also employed and adapted the Washington Group scales in our own survey.

On a scale from 1 (no difficulty) to 4 (cannot do it at all) assessed across different areas, including physical, cognitive, social, communication, and adaptive behavior, the average level of difficulty was 1.8. The average level of difficulty on a scale from 1 to 10 was 4.7. Most participants were able to respond to the interview questions themselves (80%), while proxy responders, usually their family members, answered on behalf of 20% of participants who were not able understand and/or answer the questions due to their disability. Most participants lived with their family (77.8%) and were not married (86.9%). Only 18.5% of participants received any financial assistance because of their disability, and 32.9% of participants were attending some type of education program. Of the remaining 143 (67.1%) not in school, 76 reported that they had not completed even one year of schooling.

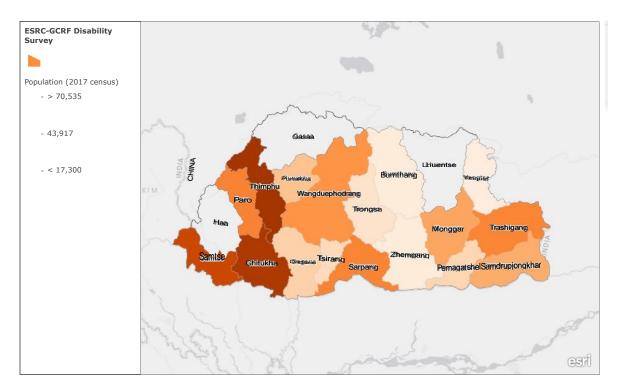
All participants took part in this study on a voluntary basis with no incentives provided for their participation. The approximate number of participants per dzongkhag can be seen in Figure 1 below, indicating areas with both larger populations and higher participation in the survey. There are more persons with disabilities in urban and semi-urban areas of Bhutan such as Thimphu and Phuentsholing (Chhukha), as well as the morepopulated rural and semi-rural dzongkhags of Samtse, Monggar, and Trashigang. This could be simply that there are more people living in these areas and thus would naturally have a higher population of persons with disabilities, but it could also indicate that persons with disabilities—and their families—have migrated to more-populated areas because of access to social services and opportunities for themselves as well as family members with disabilities. Another consideration is access to healthcare in urban versus rural areas. In our survey, we asked participants about the dzongkhag that they call "home," which might not be where they currently (or temporarily) live. In Bhutan, although many people migrate to urban areas for economic and social opportunities, they still consider their "home" community to be where their family (and ancestors) have traditionally lived. Figure 2 shows the distribution of Bhutan's population, displaying only the dzongkhags represented in this survey.¹





¹ Gasa is the smallest – and one of the most remote – Dzongkhags in Bhutan (pop. 3,952); Lhuentse is also quite remote and difficult to reach (pop. 14.437); Haa is more accessible but not able to be reached by our fieldwork team during the monson season (pop. 13,655).

Figure 2. General Population Map of Bhutan (Only Survey Dzongkhags)



Survey Instrument

The Comprehensive Survey of Transition and Employment of Youth with Disabilities in Bhutan was developed by researchers at the University of Minnesota Institute on Community Integration in collaboration with faculty, researchers, and staff at the University of Birmingham (UK) and the Royal Thimphu College in Bhutan. The purpose of the survey was to capture the current situation (facilitators and barriers) of employment, other paid and unpaid work, and engagement in other meaningful activities for young adults and adults with disabilities in Bhutan. The survey included a demographics section, followed by sections on the experiences of young adults with disabilities with transition from school to employment, their experiences with community attitudes, and the level of support that family and employers offered them when working or participating in other meaningful activities.

Survey development was based on the project research questions, a thorough review of the literature on employment and participation in other meaningful activities among people with disabilities with a focus on measurement, and a series of meetings between investigators and Bhutanese project staff. Once a series of initial survey items had been developed, they were vetted by a technical expert panel (TEP) composed of US, Bhutanese, and UK project staff to establish their content validity with special attention to cultural and contextual appropriateness. Employment surveys are usually based on countries with large urban populations and a high percentage of individuals engaged in commercial business activities, so we needed to develop a bespoke and contextually appropriate survey. There were 12 items related to demographics and personal characteristics, and 78 items related to participants' experience in society related to their disability.

Nearly half of Bhutan's population are employed in agriculture, and in the rural areas nearly two-thirds of the population are engaged in agriculture. Nearly 40% of Bhutan's population live in an urban area—mainly in the capital of Thimphu and the border trading town of Phuentsholing (NSB, 2018). Labor statistics in Bhutan also exclude a wide variety of people in its accounting, as the National Statistics Bureau removes nearly 37% of the work-age population from its counting and labels them as "economically inactive." Those who are deemed "economically inactive" include persons with disabilities. Based on TEP suggestions, the investigators held discussions with project staff and refined items to ensure that they reflected the Bhutanese context. Although the survey was not formally piloted prior to use, it was vetted by individuals and local organizations familiar with the current employment status and engagement in other meaningful activities of people with disabilities in Bhutan.

The survey was administered by trained project staff as a structured in-person interview using iPads to immediately enter all data. The iPads were fitted with SIM cards and all data was instantaneously uploaded to a secure online server via mobile data. The survey was GIS-enabled and used the ESRI Survey123 app and online platform.

Procedures

Participant recruitment. A participant recruitment plan was developed by the project team with special attention to Bhutan's geography, knowledge of where people with disabilities live, and representation of people's perspectives across all regions of the country. The list and contacts of potential survey participants was initially based on information provided by several civil society organizations, government entities, and individuals. These are acknowledged at the end of this report. Based on the list of young adults with disabilities provided by these organizations, research assistants (RAs) from Royal Thimphu College made telephone calls to locate the participants and sought their consent to be interviewed. However, knowing that some potential participants might not be included on the list provided, an additional snowball sampling technique was employed. This approach involves participants recruiting other participants for a test or study through their own professional and social connections. It is often used where potential participants are difficult to identify. In Bhutan, this approach to participant recruitment is especially valuable as many people

with disabilities live in remote mountainous areas and are not necessarily known to all authorities. Bhutan is also a small country with robust community and social networks. Current participants were not provided with any incentives/compensation to reach out to other persons with disabilities who might be interested in taking part in the study. Based on information gathered from local leaders and listed participants, additional participants were located and interviewed.

Most participants contacted agreed to be interviewed. There were 12 parents and individuals with disabilities who did not consent to being interviewed. They did not feel comfortable with the process due to the personal nature of the survey topic or because of communication barriers. In some cases, their parents shared their reservations about interviewing and participation, citing the social stigma attached to disability and the individual's uneasiness in sharing stories about their disabilities and challenges.

Training of data collectors. The initial training of data collectors took place over three days in 2019 at Royal Thimphu College (RTC) when the project team visited Bhutan, and the training was conducted by the lead project staff with extensive experience in survey research. The training provided an overview of the tool structure, including types of questions and response options, obtaining participant consent, interviewing approach, data recording using iPads, and so on. Interviewers then practiced mock interviews under the supervision of experienced project staff and were provided with extensive feedback about their interviewing technique. A four-hour follow-up session was conducted with interviewers to ensure that they were comfortable using the data entry technology-based application used for the interviews.

Data collectors included five research assistants who were RTC faculty members, and field staff for data collection who included two Bhutanese co-investigators from the project staff. The research assistants from RTC were relatively junior academic faculty or were new to social science research. Four of the five research assistants were Bhutanese, with the fifth being an Indian national who had lived in Bhutan for over a decade. All field staff—research assistants and co-investigators—were fluent in the most common languages of Bhutan: Dzongkha, Tshangla (Sarchop), and Nepali.

Data collection. Data collection in this project was more challenging than in a typical survey research for several reasons. One of these was communication. In addition to communication barriers resulting from the disabilities of participants, the languages of Bhutan are quite localized. Although Dzongkha is the official language of the country, and English is the language used in education, Bhutan is linguistically rich with 19 languages spoken. This richness can at least partially be attributed to the geography of the country with its high mountain passes and deep valleys. In addition, although deaf citizens in Bhutan use a form of Dzongkha sign language, this system of non-verbal communication is still under development and there is a lack of qualified interpreters. Data collectors encountered communication issues including questions about participants' understanding and the fact that in a country that prioritizes social ties, data collectors had little or no exposure to the youth and adults with disabilities they were interviewing prior to survey visits. It should be noted that in almost all cases, data collectors were able to meet the communication needs of participants. The project was fortunate in having data collectors who spoke multiple languages—a very common attribute in Bhutan. In addition, when it was clear that a specific language was likely to be the only one through which a participant could communicate, an interviewer who spoke that language was assigned to conduct that interview.

Access to survey participants was a second challenge that needed to be overcome. Bhutan is located in the eastern Himalaya and is therefore both mountainous and heavily forested. The country has a dry and a monsoon season. The heavy rains of the monsoon season erode many roads and landslides are frequent. In addition, in the high mountains, there are no roads to many parts of the country. The survey was conducted during peak monsoon season, so most places located far away from highways were inaccessible. Therefore, data collectors interviewed some participants at their schools or training institutes rather than in their home environments.

The survey was administered as an in-person interview using iPads. Data collectors began each interview by engaging participants in an informed consent process, followed by the collection of demographic information and the survey itself. While the interview was structured, the whole interview process was conversational, allowing the data collectors to familiarize themselves with the person, and in many cases their family, before asking specific questions.

Data Analysis

Tables 1, 2, and 3 below provide a summary of three types of variables, predictors, covariates, and outcomes, used in the analyses. The variables were purposefully selected based on the research questions and after examining their distributions (e.g., skew) and correlations with other variables (e.g., in the case of the scales).

The proposed analysis included descriptive analysis of all variables, followed by exploratory factor analyses (EFA), descriptive analysis of variables included in the inferential analyses, included combined and created

variables, linear regression for employment outcome (continuous) and a logistic regression for other meaningful activity outcome (binary) to answer the research questions. Descriptive statistics (i.e., means, range of scores, missing data, etc.) guided the creation of composite and scale variables entered into inferential analyses of outcomes. All analyses were computed using the IBM SPSS statistics software, version 25.

There were four variables included in the analyses based on individual survey items. These included items focused on age, gender, family attitudes toward engagement in meaningful activities, and participation in meaningful activities. The remaining variables included in analyses were created either by combining survey items into more comprehensive or meaningful variables (e.g., type of dzongkhag was organized on a continuum from urban to rural) or by conducting exploratory factor analyses (EFA) to empirically create variables at the scale level.

There were two categories of predictor variables included in the analyses: the personal characteristics of participants with disabilities (e.g., age, education level) and environmental characteristics specific to employment and participation in meaningful activities of people with disabilities in Bhutan. We also included two covariates hypothesized to have an impact on the studied outcomes: living with family vs. with others and living in an urban or rural dzongkhag. The two main outcomes of interest in this study were the extent to which the person with a disability is working for pay and to whether they are engaged in meaningful community activities.

Variable name	Variable label	Variable type
Personal characteristics		
Disabiltynumberaverage	<pre># of difficulties x (multiplied by) average level of difficulty</pre>	Ordinal (created variable)
Age	Age	Scale
Gender	Gender	Nominal
Education	Years in education or currently in education	Ordinal (created variable)
SchAtt8	Are you currently, or have you ever, participated in technical vocational education and training (TVET), <i>zorig</i> <i>chusum</i> training (official or unofficial), or other types of job and work skill trainings? (Employment outcome only)	Nominal
Environmental characteristics		
EA4Availability	Scale Availability of employment (Employment outcome only)	Scale (based on FA)

Table 1. Predictors

MO1Availabilityofmeaningfulactivities	Scale Availability of meaningful activities	Scale (based on
	(Meaningful activity outcome only)	FA)
FA1Familysupport	Scale Family support for employment	Scale (based on
	(Employment outcome only)	FA)
FA2 Familyencouragement	Family encouragement for working at	Scale (based on
	home (Employment outcome only)	FA)
Family Attitude	Does your family encourage you to spend	Single question
	time in the community doing activities you	
	enjoy/find meaningful? (Meaningful	
	activity outcome only)	
EA1Openness	Scale Openness to hiring person with	Scale (based on
	disability (Employment outcome only)	FA)
EA2Employercapacity	Scale Employer capacity to support	Scale (based on
	employees with disability (Employment	FA)
	outcome only)	
EA6Opennessofemployers	Scale Openness of employers to support	Scale (based on
	people with disabilities working	FA)
	(Employment outcome only)	
EA5Disabilitystigma	Scale Disability stigma (Both outcomes)	Scale (based on
		FA)

Table 2. Covariates (mediators)

Variable name	Variable label	Variable type
Mediators		
LiveWithFamilyOther	Living with family (any family) vs. with others	Nominal (created variable)
Dzongktype	Dzongkhags by urban, semi-urban, semi- rural, and rural	Scale (created variable)

Table 3. Outcomes

Variable name	Variable label	Variable type
HoursWorktotal	Combined variable working for money	Scale (created
	(yes, no, student) and how many hours	variable)
	per week working (Employment outcome)	
DoAct	Are you currently taking part in any	Nominal
	meaningful, interesting, enjoyable, valued,	
	or inspiring activity (other than	
	employment)? (Meaningful activity	
	outcome)	

Development of scaled environmental predictor variables using exploratory factor analyses (EFA)

In order to make meaningful predictions about employment and engagement in meaningful activities among young adults with disabilities in Bhutan, one of the first steps was to conduct an exploratory factor analysis (EFA) using items specifically developed to address employment and meaningful activities outcomes. Although items were developed to specifically address the outcomes of interest and their related predicators and covariates, subscales were originally clustered around thematic topics, rather than empirically. As a result, we opted for EFA to identify potential scales for later use based on data. Maximum Likelihood was used as the extraction method and Varimax with Kaiser Normalization for factor rotation. Table 4 includes the scales' characteristics in the form of number of original items, internal consistency (Cronbach's alpha), mean score combined from individual items, and the number/percentage of participants included in calculating the properties of each scale.

Scale name	# of	Cronbach's	Mean/SD	N/%
	items	alpha		
EA1 (Openness to hiring person with	7	.87	12.29 (3.42)	200 (92.6)
disability)				
EA2 (Employer capacity to support	6	.87	10.41 (2.99)	198 (91.7)
employees with disability)				
EA3 (Employee willingness to build	3	.88	5.60 (1.80)	204 (94.4)
disability awareness at work)				
EA4 (Availability of employment)	5	.79	7.54 (2.07)	202 (93.5)
EA5 (Disability stigma)	5	.75	9.62 (2.47)	201 (93.1)
EA6 (Openness of employers to support	4	.79	7.93 (2.29)	199 (92.1)
people with disabilities working)				
T1 (School preparation for adulthood)	10	.92	21.58 (7.03)	121 (56.0)
T2 (School preparation for	4	.90	6.82 (3.31)	125 (57.9)
employment)				
FA1 (Family support for employment)	5	.85	10.74 (3.96)	201 (93.1)
FA2 (Family encouragement for	6	.84	12.17 (3.72)	193 (89.4)
working at home)				
MO1 (Availability of meaningful	2	.92	3.78 (1.42)	205 (94.9)
activities)				

Table 4. Scales created based on EFA

It is important to note that all scales reflect participants' views about the issues. These views may be different from those of employers (report forthcoming) or other community members.

As the results in Table 4 indicate, all scales demonstrated very good or good internal consistency, regardless of the number of items. Scales addressing school preparation (T1 and T2) could only be calculated using participants who had attended school. The scale addressing disability stigma (EA5) demonstrated the lowest internal consistency and is different from the other scales in that it is framed negatively. These scales were used in both inferential analyses addressing employment and participation in a meaningful activity outcome.

Results

Descriptive Statistics

Tables 5 and 6 below provide descriptive information in the form of mean scores, standard deviations, in some cases frequencies and percentages, as well as the number of participants in the analysis for employment and participation in meaningful activities outcomes. Each variable is labeled based on its function in the analysis.

Variable type	Variable name	Mean	SD	Ν
DV	Number of hours working for money	11.40	21.93	202
IV- personal	Number of difficulties and average level of difficulty	9.61	7.25	202
IV - personal	Age	22.49	6.28	202
IV - personal	Gender (1 = M, 2 = F; 3 = other)	1.41	0.49	202
IV - personal	Years in education or currently in education	1.87	1.72	202
	Participation in technical vocational education and training (TVET), <i>zorig chusum</i> training (official or			
N/ norsenal	unofficial), or other types of job and work skill	1 71	0.45	202
IV - personal	trainings (yes = 1, no = 2)	1.71	0.45	202
IV - environmental	Scale: Availability of employment (5 items)	1.51	0.42	202
IV - environmental	Scale: Disability stigma (5 items)	1.94	0.51	202
IV - environmental	Scale: Family support for employment (5 items)	2.13	0.79	202
IV - environmental	Scale: Openness to hiring person with disability (7 items)	1.74	0.49	202
	Scale: Employer capacity to support employees with			
IV - environmental	disability (6 items)	1.73	0.50	202
Covariate/Mediator	Living with family (= 1) vs. with others (= 0)	0.78	0.41	202
Covariate/Mediator	Type of dzongkhag (urban = 1/rural = 4)	2.43	1.00	202

Table 5. Descriptive statistics for employment outcome

Note. DV = dependent variable; IV = independent variable.

As can be seen in Table 5, the average number of hours participants worked were 11.4. The standard deviation (SD), however, is larger than the mean, indicating a large difference between hours worked, including 67.6% of participants who did not work for money at all. The average age of participants was 22.5 years (young adults), and there were approximately 20% more males in the sample than females. The average number of years participants attended school was approximately 2. The SD was almost as high as the mean value, suggesting considerable variability. It is also important to note that approximately 55% of participants indicated they had no formal schooling at all, which deflates the number of years in school among those who did attend. Most participants (approximately 70%) had no vocational or other job-related training. Participant scores on all scales reflect an averaged mean value across the items included in each scale. There were approximately 55%

more people living with family than with others. Most participants lived in semi-rural areas (39%), while the least number lived in rural areas (13%). Twenty-four percent of participants lived in urban areas and approximately the same percentage lived in semi-urban areas.

Variable type	Variable name	Response	Frequency/Mean	Percentage/SD	Ν
DV	Taking part in any meaningful, interesting, enjoyable, valued, or inspiring activity (other than employment)?	Yes	123	60.80	203
	Number of difficulties and				
IV- personal	average level of difficulty	Numeric	9.61	7.25	203
IV - personal	Age	Numeric	22.49	6.28	203
IV - personal	Gender	Male	120	59.30	203
	Years in education or currently				
IV - personal	in education	Numeric	1.87	1.72	203
IV - environmental	Scale: Availability of meaningful activities (2 items) Does your family encourage you to spend time in the community doing activities you	Numeric	1.89	0.71	203
IV - environmental	enjoy/find meaningful?	Yes	134	65.90	203
IV - environmental	Scale: Disability stigma (5 items) Living with family vs. with	Numeric	1.94	0.51	203
Covariate/Mediator	others	With family	158	77.80	203
Covariate/Mediator	Type of dzongkhag (urban/rural)	Urban, semi- urban, semi- rural, rural	50, 47, 80, 26	24.6, 23.2, 39.4, 12.8	203
	(0.00.0.0.0.0.)		20,, 00, 20	55) <u>12</u> .0	

Table 6. Descriptive statistics for meaningful activities outcome

Note. DV = dependent variable; IV = independent variable.

The dependent variable (outcome) described in Table 6 was a binary variable, a single question in the survey, asking whether person has participated in any meaningful activities in the community, other than employment. About 60% of participants responded positively. Among the other variables in the equation, several were the same (with almost identical distributions), as in the case of employment (i.e., number and level of difficulties, age, gender, number of years in school, scale: Disability Stigma, living with family, and type of dzongkhag). In the analysis of participation in meaningful activities, we included another scale: *Availability of Meaningful Activities*, which was composed of two original items. We also included a single question about family encouragement to participate in meaningful activities in the community. Sixty-six percent of participants expressed they were encouraged by their family members.

It is important to note that some variables in Table 6 were reported as frequencies with a corresponding percentage value (e.g., gender, living with family), while others were reported as mean scores with corresponding standard deviations (e.g., age, number of years in education).

Inferential Statistics

Table 7. Linear regression for employment outcome

Variable	Unstandardized coefficient ß	Coefficient standard error	Standardized coefficient ß	t	Sig.
Number of difficulties and average level of difficulty	-0.31	0.22	-0.10	-1.43	0.16
Age	0.82	0.22	0.23	3.61	0.10 0.00
Gender	1.94	2.73	0.04	0.71	0.48
Years in education or currently in education	-1.59	0.90	-0.13	-1.78	0.08
Participation in technical vocational education and training (TVET), <i>zorig</i> <i>chusum</i> ¹ training (official or unofficial), or other types of job and work skill trainings	-8.14	3.20	-0.17	-2.55	0.01
Scale: Availability of employment	0.73	4.05	0.01	0.18	0.86
Scale: Family support for employment	7.86	2.16	0.28	3.64	0.00
Scale: Openness to hiring person with disability	0.52	3.54	0.01	0.15	0.88
Scale: Employer capacity to support employees with disability	-0.62	3.45	-0.01	-0.18	0.86
Scale: Disability stigma	-3.77	2.64	-0.09	-1.43	0.16
Living with family vs. with others	-2.28	3.67	-0.04	-0.62	0.54
Type of dzongkhag (urban/rural)	-4.63	1.39	-0.21	-3.33	0.00

Note. DV = number of hours working for money; N=202.

We used linear regression to analyze the continuous variable of employment to investigate the extent to which predictors and moderating variables have a significant impact on the number of hours people with disabilities work for pay in Bhutan. As can be seen in Table 7, several variables were significantly associated with working more hours for pay: age, years of education, participation in technical or vocational education and training, family support for employment, and the type of dzongkhag where the participant lived. Results indicated that the older a person was, the more likely they were to work a greater number of hours for pay.

¹ Traditional Arts and Crafts of Bhutan

Participants who took part in technical or vocational education and training (TVET) were much more likely to have a paid job and work a greater number of hours. However, there was a significant *negative* relationship between the number of years in education and paid employment, indicating that the level of formal education the person with a disability experienced did not tend to result in more work for pay. In other words, while participants found increased employment through participation in TVET, the number of school years did not increase participation in employment. In fact, we found that the more school years that people with disabilities had, the *less* they participated in employment. This may seem surprising, but in Bhutan this is being experienced by all youth, both with and without disabilities (NSB, 2018). Participants who felt they were supported by their family members to seek or have a job were significantly more likely to be employed. Lastly, more people with disabilities living urban or semi-urban areas had more hours of paid employment than their counterparts in rural and semi-rural regions. This can be seen in Figure 3 below, in which the availability of employment, openness of employer to hire a person with a disability, and capacity to support a person with a disability in employment are aggregated and then divided by the attribute of the dzongkhag (urban, semi-urban, semi-rural, rural). Figure 3 provides a visual representation of these results.

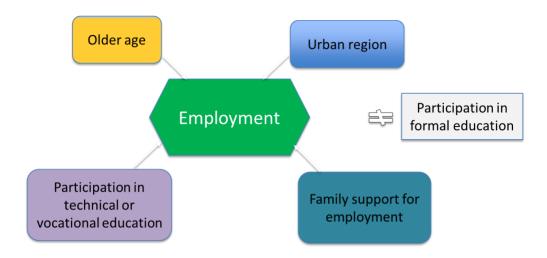
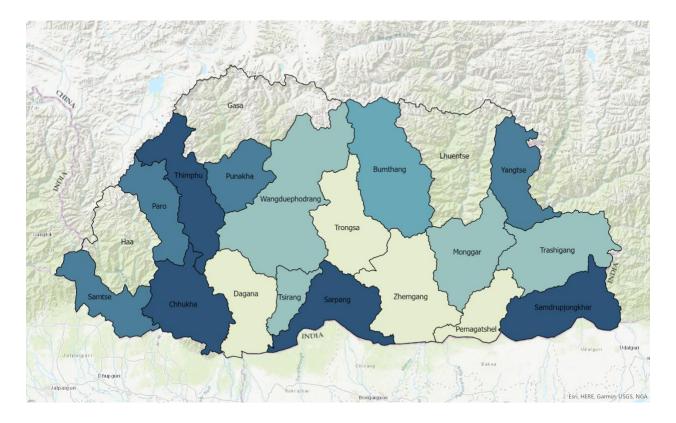


Figure 3. Significant predictors of employment outcomes

Figure 4. Employment outcomes for persons with disabilities in Bhutan, by dzongkhag attribute



In Figure 4, the darker the blue, the more employment opportunities and outcomes exist, according to participants in our survey. The darkest areas also match the more urban areas in Bhutan: Thimphu, Chhukha (which includes the second largest city, Phuentsholing), Sarpang (which includes the border/trade towns of Sarpang and Gelephu), and Samdrup Jongkhar (which includes the border/trade town of the same name).

The other variables in the equation were not significant, including the number and level of disabilities, gender, other scales (except for Family Support for employment) or living with family. These results indicate that the non-significant variables had less explanatory power than the significant variables because of their focus (content) and the way the questions addressing a certain construct were conceptualized.

The total variance explained by the variable in the equation examining the continuous outcome of employment was 29% (R² adjusted), which represents a moderate effect size.

Table 8. Logistic regression for meaningful activity outcome

Variable	Regression coefficient ß	Coefficient standard error	Wald's X2	df	Sig.	eß (odds ratio)
Number of difficulties and average						
level of difficulty	-0.03	0.03	0.85	1.00	0.36	0.97
Age	0.03	0.03	0.74	1.00	0.39	1.03
Gender	0.13	0.37	0.12	1.00	0.73	1.14
Years in education or currently in education	0.26	0.12	4.99	1.00	0.03	1.30
Scale: Availability of meaningful activities	1.07	0.31	12.18	1.00	0.00	2.91
Question: Does your family encourage you to spend time in the community doing activities you						
enjoy/find meaningful?	1.76	0.39	20.89	1.00	0.00	5.82
Scale: Disability stigma	-0.55	0.40	1.85	1.00	0.17	0.58
Living with family vs. with others	0.59	0.52	1.29	1.00	0.26	1.80
Type of dzongkhag (urban/rural)	0.21	0.18	1.28	1.00	0.26	1.23

Note. DV = taking part in a meaningful activity (other than employment); N=203.

To examine the binary outcome of participation in a meaningful activity other than employment, we used logistic regression to investigate which predictors and moderating variables had a significant impact on whether a young adult with disabilities in Bhutan participated in meaningful activity(ies) other than employment. As shown in Table 8, several variables were significantly positively associated with the outcome of meaningful activity. These included: number of years of education, availability of meaningful activities, and family encouragement for engaging meaningful activities in the community. People with disabilities who were encouraged by their family members had activities available in their community, and had more years of education were more likely to participate in meaningful activities. Figure 5 provides a visual representation of these results.

The remaining variables did not explain the outcome of meaningful activity, including the number or level of disabilities, age, gender, perceived disability stigma, living with family or with others, and the region where the person lived. In Figure 6 below, the meaningful outcome variable was divided by dzongkhag attributes (urban, semi-urban, semi-rural, rural). While not statistically significant as a predictor variable, nonetheless it seems that, again, the more urban or semi-urban the dzongkhag, the more the survey participants experienced meaningful activities and outcomes in general society.

Figure 5. Significant predictors of participation in meaningful activities

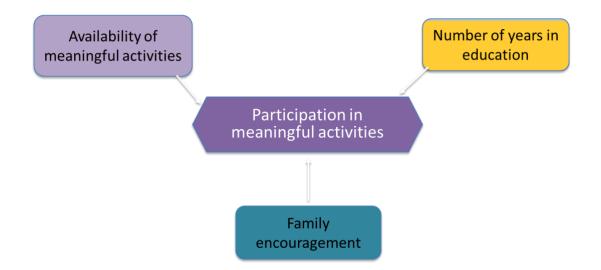
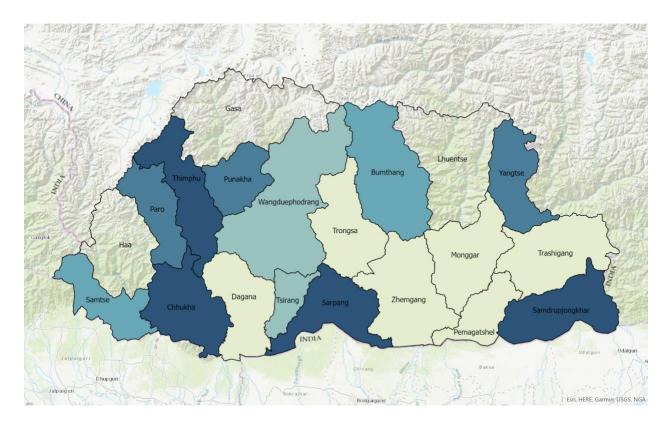


Figure 6. Meaningful Activities and Outcomes for Persons with Disabilities in Bhutan, by Dzongkhag Attribute



The total variance attributed to the variables in this model that explain participation in a meaningful activity was 33% (Cox & Snell R^2), which represents a moderate effect size. The largest odds ratios in individual variables in the regression was family encouragement for participation in meaningful activity, followed by availability of meaningful activities (refer to Table 8).

Results Summary

The results of this sample show more people with disabilities in Bhutan engaged in meaningful activities than working for pay. Employed people with disabilities were typically older, participated in technical and vocational education and training, experienced family support for employment, lived in more urban areas, and had less formal education. People with disabilities who participate in meaningful activities were typically encouraged by their family members, had activities available in their community, and had more years of formal education.

Discussion and Conclusion

Expectations, Values, and Preferences of Socio-Economic Participation

The overall expectations for persons with disabilities are low in Bhutan, and families often seek to 'protect' their youth with disabilities from engaging in hardships that they perceive to be 'beyond their abilities' (Karma Jigyel, et al. 2020; Schuelka, 2015). In Bhutanese culture, there is not an expectation of independence and individual responsibility for subsistence, as there might be in a context such as the United States, so there is little social stigma in terms of living at home and not engaging in socio-economic activities. However, this is not to negate the importance of socio-cultural participation and engagement of personally meaningful activities that all persons with disabilities in Bhutan should be supported in achieving. There is also a societal shift occurring in Bhutan as a human rights discourse promotes more individual determination and participation in education and socio-economic sectors. This is clear from our survey in that family support for socio-economic participation of their youth with a disability was statistically significant factor in increasing that participation.

The various lived-experiences and expectations of persons with disabilities in Bhutan is in sharp focus when observed the differences between urban and rural experiences. As found in our survey, there are more opportunities for socio-economic participation of youth with disabilities in urban areas, as opposed to rural areas, at least in the sense of meaningful paid employment. The availability of meaningful activities remained the same between rural and urban areas, most likely because meaningful activities in Bhutan are explicitly cultural in nature and are conducted throughout Bhutan such as religious rituals and festivals, dances, music, traditional arts and crafts; and sports such as *dhatse* [archery], *dego* [stone throwing], and *khuru* [lawn darts]. However, as was discussed earlier in this report, there is much economic activity in Bhutan that is not necessarily captured in economic statistics and Global North-conceived notions of economic wage and

employment participation. In rural Bhutan, economic activity is primarily agricultural, with many families producing food merely for their own subsistence with some small cash-cropping to earn a bit of extra money to support the household. Urban Bhutan represents an economy in the capitalist sense where earning a wage for services is crucial for living. There are more opportunities for youth with disabilities in urban areas for wage employment in the service sector. Overall youth unemployment in Bhutanese urban areas (33%) is double that of urban areas (15%) (NSB, 2020), which reflects the bifurcated nature of the Bhutanese economy that is also picked up in our survey.

Education: Challenges and Possibilities

Education and training are significantly linked to the job market and employment outcomes. If educational settings are not inclusive, persons with disabilities will not receive the requisite qualifications and skills necessary to compete for employment with their non-disabled peers. The statistics bear this out and are a grim picture of the failure to adequately prepare children with disabilities and other marginalized children for an adult life of socio-economic participation. For example, 17% of children worldwide are out of school completely, with most of the concentration of these children in low and middle-income countries and experience one or multiple disabilities. In fact, 90% of children with disabilities in LMICs do not attend school (UNESCO, 2020).

The first step to support socio-economic participation of persons with disabilities is to ensure inclusion beginning from early childhood care and development (ECCD) and all the way through a student's progression in the formal school system. Of course, inclusive education at the basic education level still faces significant challenges worldwide, although the paths forward are known (Schuelka, 2018b). Establishing inclusivity early in a student's school progression will significantly improve a student's chances to advance from basic education to upper-secondary education, from upper-secondary education to post-secondary education such as university or TVET (technical and vocational education and training), and from post-secondary education to employment (Ebuenyi et al., 2020).

Participation of persons with disabilities in post-secondary education – e.g. university/college and TVET – is low worldwide. In the United States, the percentage of students with a disability in post-secondary education is estimated to be 19%, compared to 80% of non-disabled students attending post-secondary education (NCES, n.d.). The retention and graduation rate of persons with disabilities in the United States are about the same as persons categorized without a disability (Wessel et al., 2009). However, in low and middle-income countries the situation is worse. The percentage of students with disabilities in post-secondary education in LMICs is hard to measure. If 90% of children with disabilities do not attend school *at all* in low and middle-income countries, then it is safe to say that a very small percentage of persons with disabilities in low and middle-income countries attend any form of tertiary education. Of those persons with disabilities that do attend post-secondary education in low and middle-income countries, one study puts the completion rate at 4.5% (Thompson, 2020).

There is still a significant correlation between educational attainment and socio-economic outcomes, although the strength of the relationship has lessened over time and is complex and nuanced as our survey highlights. In most countries, it is true that the higher the education level, the higher the income and lower the unemployment, and education is often framed as a significant return-on-investment that brings socioeconomic lift to entire countries (Patrinos & Psacharopoulous, 2018; Wolla & Sullivan, 2017). However, these correlative relationships are reductive and require closer inspection. It is difficult to disentangle the means in which some students already have that allows them to continue in their schooling, while others must drop out. The correlation between educational attainment and socio-economic outcome must also be differentiated by sectors and also effect size on different socio-economic stratas. For example, in Kenya, higher educational attainment had less of an effect on informal, public, and agricultural sectors; and the effects of educational attainment were only significant at higher levels of education and only for formal private employment (Wambugu, 2011). In Bhutan, the correlation between educational attainment and employment has now actually reversed. In other words, the more schooling that one has attained, the less likely they are to be employed (Mannocchi & Schuelka, 2021). This is not just for youth with disabilities, but for all youth in Bhutan. The results from this survey confirm this trend as being true also for youth with disabilities in Bhutan.

Even if the connection between formal education and socio-economic progress may be tenuous, the importance of post-secondary education to build employable skills and increase socio-economic participation is significant, as found in this survey. In a study in Bangladesh, it was shown that TVET had a significant impact for persons with disabilities in employment, social acceptance, and overall improvement in their quality of life (Nuri et al., 2012). Likewise with our survey, TVET was a significant predictor for gaining meaningful employment and the number of hours worked.

Because of the impact that education – particularly TVET – can have on life outcomes for persons with disabilities, it is all the more important to address the challenges and barriers that impede participation. The

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challenges towards inclusive TVET and higher education are those that exist up and down the education system: inadequately prepared teachers that can utilize universal design for learning pedagogy, unadaptable rigid curriculum, lack of accessible materials and technologies and environments, prohibitive tuition, and other costs to attend, and exclusionary attitudes and policies, to name only a few. Formal education systems must also adapt and integrate into supporting socio-economic participation. This is particularly important for Bhutan, because schooling is still fairly didactic, exclusive, and cognitive skill-focused despite many reform attempts (Kezang Sherab & Schuelka, forthcoming). There is a clear separation between 'school' and 'outside of school' that needs to be broken down to make what is learned in school relevant to future adult outcomes of students. There have been some attempts to introduce more vocational training in secondary education in Bhutan, but this is optional and not standardized. More can be done to bring the community to the school, and vice-versa, for the sake of developing socio-economic and meaningful participation.

Conclusion

In summary, our survey results demonstrate that there is a desire to work for persons with disabilities in Bhutan, but there are few opportunities. According to our survey, only 29% of the participants with disabilities were working. Of those that are working, the majority work in a private business or a farm in their community. Most working persons with disabilities feel accepted by their coworkers.

Most participants with disabilities in our survey were not working. According to our survey, 71% of the participants with disabilities were not working. Of those that are not working, there was a strong desire to work, further employment skills and technical training, and find more employment opportunities in their community. For both working and non-working participants in our survey, the most common categories of desired employment included massage therapy, teaching, tailoring, painting, farming, hospitality; and private businesses like retail, grocery, and community services. These desired employment options mostly aligned with the work that was available to persons with disabilities, as indicated by the survey participants. According to our survey results, there was a significant correlation between employment opportunities and urban areas where there are more jobs available as well as more services and supports available to assist persons with disabilities in employment and social participation.

There are not enough meaningful activities for persons with disabilities to engage upon in their communities. According to our survey, 76% of the participants found 'none' to 'very little' activities available in their communities that matched their interests. Those activities that were identified for available participation primarily included religious practices, rituals, and festivals. This was not a surprising finding. In rural Bhutan, Buddhist *lakhang* [temples] are often the center of the community and many community activities, work, and interactions take place there. There are other common community activities that include sports such as archery and other field games. These were mentioned by the participants in our survey, but not strongly indicated as a preferred activity.

As indicated in our survey results and discussed above, there is a significant role that basic education and technical vocational education and training (TVET) can play in providing more life and work readiness skills that lead directly to employment and social participation. Most participants in our survey (81%) did not know of any places in their communities that they could go to learn about paid work opportunities. Most of our survey participants dropped out of school within 3 to 6 years because of health difficulties and examination failure. While one of our survey findings was that there was a positive correlation between TVET participation and employment, the number of years of schooling had a *negative* effect on employment outcomes. This means that schools are not providing the necessary kinds of life and work skills necessary and that more focus needs to be placed on school to post-school transition for students with disabilities.

There were not significant findings in our survey in terms of disability stigma or persons with disabilities living independently. While disability stigma does exist to some extent in Bhutanese culture and society (Schuelka, 2015), there is a growing awareness of disability rights in Bhutan paired with new discourses on disability and Buddhism that promote compassion and social acceptance. Most Bhutanese live in multi-generational households regardless of ability, so living independently would not be a significant factor. However, a significant finding that we did discover in our survey was the influence of family support in employment and meaningful social participation outcomes. The support and high expectations of family was a contributing factor for positive outcomes for persons with disabilities in Bhutan.

This survey should not only have impact in Bhutan, but also resonate with other low- and middle-income countries facing similar challenges. Our survey results clearly point to the importance of school transition, TVET, family support, and high societal expectations as the primary factors for positive outcomes in employment and meaningful social participation for persons with disabilities. It is less important for rural, agrarian societies to push for independent living and salaried employment in private businesses for persons with disabilities, and more important to support opportunities for persons with disabilities to participate in their communities in a meaningful way. In Bhutan, as in other similar countries, it is important to recognize how each individual can contribute to the collective good of their communities to the best of their ability.

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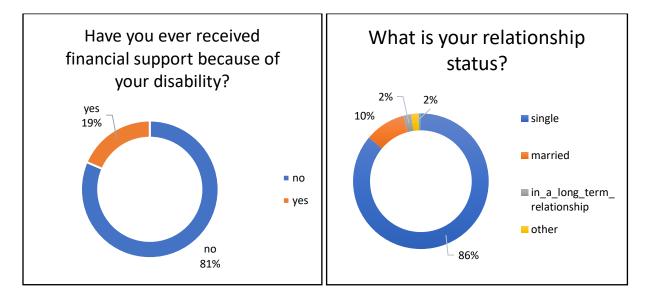
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Annex 1. Selected results of the comprehensive disability survey

