# **BMJ Open** Stakeholders' perspectives on the provision of vocational training for youth with disabilities in Sri Lanka: protocol for a mixed-methods study

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#### ABSTRACT

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## Correspondence to

Dr Isuru Dharmarathna; isuru.d@kln.ac.lk **Introduction** The quality and the range of vocational training (VT) courses offered to youth with disabilities (YwD) in low-middle-income countries are underexplored. This protocol describes a study designed to gather perceptions of a range of stakeholders related to the quality and relevance of VT programmes conducted by the Department of Social Services in Sri Lanka. The purpose of this study is to communicate with authorities the ways in which they can improve their services by paying close attention to the needs and recommendations of all stakeholders.

**Methods and analysis** A parallel mixed-methods study will be conducted at eight vocational training institutes (VTIs). A survey will be conducted with five participant groups; YwD presently enrolled in VTIs (n=358) and their caregivers (n=358), YwD who completed the VT (n=45) and their caregivers (n=45) and educators at VTIs (n=47). The qualitative component includes semi-structured interviews and focus group discussions. The three groups of participants include: educators, caregivers of potential YwD for future VT (6–10 per group) and key informants from state, corporate and non-governmental sectors (a total of 20). Quantitative and qualitative data will be analysed using descriptive and inferential statistics and cross-thematic analysis, respectively.

**Ethics and dissemination** This study received ethical clearance from the Ethics Review Committee, Faculty of Medicine, University of Kelaniya (Ref. No: P/15/02/2021). All data collection processes will abide by health and safety measures required by the national government. Written informed consent will be obtained from all participants. Results from this research will be disseminated, to local stakeholders and participants, via local and international conferences and publications in peer-reviewed journals.

#### INTRODUCTION

Children with disabilities have limited access to education. Education is only one among many basic needs that are inadequately met in relation to youth with disabilities (YwD)

## Strengths and limitations of this study

- The aim of this parallel mixed-methods study is to explore the depth and the breadth of the ways in which vocational services are provided and the ways in which they influence the future prospects of youth with disabilities (YwD) in Sri Lanka.
- The study will include a variety of stakeholders including YwD, their parents, potential and present employers, parents of potential youth who will seek vocational training and authorities from government, non-governmental and corporate sector.
- The interview methods will include specific accommodations for participants who cannot verbally communicate as well as those who are unable to fill forms on their own (eg, data collection tools will include visual aids and sign language).
- A single questionnaire is designed to obtain information from all YwD, irrespective of the types of disabilities they are presented with, thus limiting the study by making disability-specific information unavailable.
- There may be some technological barriers to some participants during data collection, as online methods will be used due to COVID-19 restrictions.

in Sri Lanka. This results in higher rates of unemployment among YwD, creating perpetual financial dependency of this marginalised group. The International Labor Organization (2014)<sup>1</sup> estimates 15% of the world's population lives with a disability, of which 80% are of working age. The majority of people with disabilities live in low-income and middle-income countries (LMICs) and belong to the poorest populations. Across the globe, disability, economic inactivity and unemployment comprise a triple burden, making disability the cause and the effect of poverty.<sup>2</sup> Therefore, WHO (2011)<sup>3</sup> emphasises the importance of initiatives to promote unlocking the vast potential of YwD by removing the barriers that deter participation. It is predicted that resolving these challenges can improve health, rehabilitation, education and employment globally.

Similar to other South Asian LMICs, the majority (96%) of People with Disabilities (PwD) in Sri Lanka do not engage in education nor in employment.<sup>4</sup> They are marginalised from mainstream education and training provisions.<sup>5</sup> Furthermore, in Sri Lanka, cultural and religious beliefs in relation to PwD often frame them as 'dependents' on 'abled' family members. This leads families to be sympathetic towards YwD, rather than working towards making them viable participants in society. For instance, families that see PwD as dependent keep them at home without providing any formal education or vocational training (VT).<sup>6</sup>

The International Classification of Functioning, Disability and Health (ICF) defines employment as an indicator for measuring participation in society.<sup>7</sup> Therefore, the role of families and political commitment in terms of employing YwD becomes pivotal in achieving this goal.<sup>89</sup>

VT along with supported employment, sheltered employment and inclusive redesign of work processes are identified to enhance employability of YwD around the world.<sup>10 11</sup> United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) supported VT as a pathway to employment for YwD<sup>12</sup> which is currently operational under the purview of the government of Sri Lanka. VT is defined by the UNESCO as 'those aspects of the educational process involving, in addition to general education, the study of technologies and related sciences and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupation in various sectors of economic life'.<sup>13</sup> VT increases the likelihood of employability of YwD, focusing on specific skills while receiving directed training. This invariably enriches their standards of living through exposure to many other aspects such as socialisation, financial management and entrepreneurship. Further, formal VT will augment an individual's ability to participate in lifelong learning, to initiate economic growth within their communities. In a systematic review, Tripney *et al*<sup>14</sup> reported a positive association between involvement of VT and employment outcomes in LMICs.

Globally, YwD get limited opportunities for VT of their own choice.<sup>15</sup> Multiple factors act as barriers for them to voluntarily access options based on their own choices. Social stigma is a primary contributor in limiting choices, including rigidly planned courses, negative attitudes and misconceptions among caregivers and the lack of awareness among the employers of the full potential of YwD.<sup>16</sup> Such factors discourage and demotivate YwD diminishing their self-confidence and inhibiting their desire to access VT options. Furthermore, the lack of connections between village level structures and vocational training institutes (VTIs) is also a major barrier in making referrals to VTIs.<sup>17</sup> From the perspective of social justice, inclusion and accessibility, the ways in which VT is currently provided threatens the mental and physical well-being of YwD. In LMICs, YwD are typically deprived of primary education. This in turn results in being excluded from mainstream VTIs in Sri Lanka. This is partly due to lack of resource personnel who can cater to the needs of YwD in mainstream VTIs.<sup>18</sup> As a result, PwD have limited opportunities for market-oriented VT and skills development. This relegated PwD to contribute mainly to the informal economy, exasperating exploitation such as denying them an equitable income and jobs making them even more vulnerable in society.

Sri Lanka is a signatory of the UNCRPD (2006) which recommends the societal inclusion of PwD.<sup>19</sup> It clearly identifies their right for employment. Sri Lanka has a national standard, indicating that the state sector must employ 3% PwD into the workforce.<sup>20</sup> However, there is no standard defined for the private sector. Similar standards are reported from other LMICs in the world.<sup>21–23</sup> Despite these strides in improving employment opportunities for YwD, there are many attitudinal and logistical barriers that continue to make employers weary of providing equitable opportunities for YwD.<sup>24–26</sup>

While there is growing interest among the private sector employers to recruit YwD in mainstream employment,<sup>27</sup> most of these trends seem to be seen in high-income settings. In Sri Lanka, the Department of Social Services (DSS) manages the VTIs. DSS provides residential VT courses, the largest recognised institute to offer such courses for YwD.<sup>28</sup> Nonetheless, the quality of services provided along with how relevant these courses are to YwD requires further exploration. One of the ways in which to begin to address the question of quality and relevance, is to obtain the perspectives of stakeholders such as YwD, caregivers, policymakers and employers. The knowledge obtained by being in conversation with stakeholders can help identify needs, demands and challenges in the delivery of VT programmes for YwD. Further, it is essential to explore job market opportunities and the views of current and potential employers when designing and modifying VT programmes for YwD.

VT opportunities for YwD in Sri Lanka must be framed within the imperative of providing inclusive and fair training opportunities. Ways in which to mainstream youth within the employment sector requires enhancing competencies in content, skills and attitudes, appropriate and specific to their own social and economic contexts.<sup>2324</sup>

This paper describes the protocol for a mixed-methods study designed to explore the perspectives of a diverse range of stakeholders, namely the YwD, their caregivers and the potential employers on VT opportunities at the VTIs in Sri Lanka. We believe this protocol will promote researchers from similar contexts and research intentions to build their research design and methodologies in enhancing VT opportunities for YwD.

## Open access

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# **AIM AND OBJECTIVES**

The overarching aim of this study is to explore whether the VT programmes offered through the VTIs affiliated to the DSS, Sri Lanka, meet the expectations of the YwD, their caregivers and the job market.

The specific objectives of this study are:

- 1. To describe the socio-demographic characteristics and the disability profile of the YwD trained at the VTIs.
- 2. To explore the perspectives of YwD, their caregivers, and educators on existing VT.
- 3. To explore the perceptions of policymakers, disability right advocates, non-governmental organisations (NGOs) and employers on VT and employment opportunities for YwD in Sri Lanka.

# METHODS AND ANALYSIS

## Study design

A mixed-methods study will be conducted<sup>29</sup> consisting of a cross-sectional quantitative study and an exploratory cross-thematic qualitative study. This study will be conducted from January to December 2021. It will be carried out using a parallel mixed-methods design. This approach allows researchers to conduct quantitative and qualitative components concurrently. The data collection and analysis of the two components will be done independently and both quantitative and qualitative results will be interpreted together at the end.<sup>30</sup> This methodology will enable us to explore the scope and depth of the present status of VT opportunities for YwD in Sri Lanka.

## **Study locations**

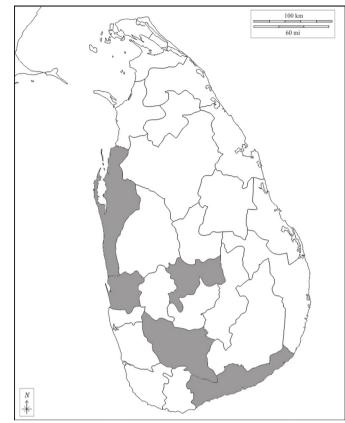
The study will be conducted in eight VTIs located in five districts (figure 1). The VTIs are located in Amunukubura, Kalawana, Katawala, Madampe, Ragama, Seeduwa, Telabuyaya and in Waththegama. In addition to the VTIs, Ayati, National Centre for Children with Disabilities, Faculty of Medicine, Ragama, Sri Lanka will be used as a study setting.

## **Study participants**

The cross-sectional quantitative study will be conducted among five groups of participants while the exploratory qualitative study will be conducted with three groups of participants (figure 2).

## **Quantitative phase**

The cross-sectional study will include following participants: (1) YwD currently enrolled in the VTIs and (2) one of their caregivers; (3) YwD who completed the VT within the last 2 years and (4) one of their caregivers; and (5) all educators attached to VTIs. The inclusive criteria is determined by the recruiting criterion set by the DSS. The criteria maintains that prospective trainees should be unmarried men and women with any type of disability and aged between 16 and 35 years. A complete list and contact details of presently enrolled YwD and their caregivers, and YwD who have completed training and their caregivers will be obtained from the DSS following



**Figure 1** Distribution of vocational training institutes for YwD governed by the Department of Social Services in Sri Lanka. YwD, youth with disabilities.

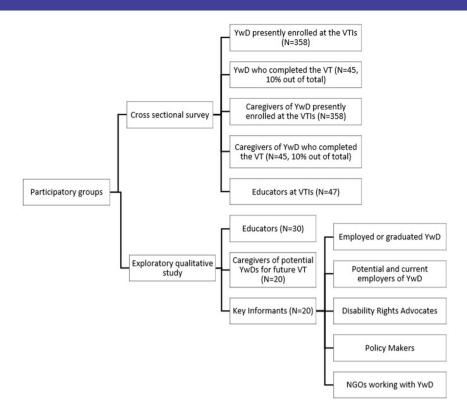
ethical and institutional clearance. Trainees' attendance will be checked to ensure that programme dropouts are excluded from the study. Every eligible YwD and one of their caregivers (who is living with him/her) will be invited and included in the survey with informed written consent. All educators of the eight VTIs will be invited to participate following institutional and ethical clearance. Only consenting participants will be recruited.

## **Qualitative phase**

Educators from each VTI will be invited to the qualitative component of this study. Caregivers of potential YwD for future VT will be recruited from the Ayati, National Center for Children with Disabilities, a community-based health facility providing services for children and youth. The study investigators will actively connect with their existing professional networks (such as governmental and NGOs, institutes and associations). These key informants (KIs) will be selected to represent employed or graduated YwD, potential and current employers of YwD, disability rights advocates, policymakers and NGOs working with YwD. Qualitative data collection will proceed once informed written consent is obtained.

## INCLUSION AND EXCLUSION CRITERIA

Table 1 summarises the inclusion and exclusion criteriaof this study.



**Figure 2** Main participatory groups of the study. N, number; NGOs, non-governmental organisations; VT, vocational training; VTIs, vocational training institutes; YwD, youth with disability.

## SAMPLE SIZE CALCULATION AND SAMPLING PROCEDURE Quantitative phase

We aim to invite the entire population of YwD presently enrolled in VTIs (n=358), their caregivers (n=358) and educators at VTIs (n=47) and recruit consenting members to participate. The total number of YwD who completed the course during the last 2 years was approximately 456. Hence a 10% of youth who completed the VT (n=45), and their caregivers (n=45) will be recruited using proportionate stratified random sampling, and consented participants will only be included. The sampling frame was obtained from the DSS. It included the names and

Table 1         Inclusion and exclusion criteria of the study		
Inclusion criteria		
Participatory groups in quantitative component	<ul> <li>All YwD presently enrolled in VTIs training for a minimum of 1 month irrespective of their gender, disability or the training course.</li> <li>YwD who completed the training in the past 2 years (2018–2020), who are contactable through telephone, email or word of mouth irrespective of their present employment status, disability, gender and the type of employment.</li> <li>Caregivers of the eligible YwD.</li> <li>All educators presently employed as instructors or heads at the VTIs.</li> </ul>	
Participatory groups in qualitative phase	<ul> <li>Educators presently employed as instructors or heads at the VTIs.</li> <li>Caregivers of YwD presently attend services at the Ayati National Center for Children with Disabilities for a minimum duration of 3 months.</li> <li>Private and public sector employers presently employing YwD or have the potential or plans to employ them.</li> <li>Policymakers directly or indirectly involved in providing services or employment of YwD.</li> <li>YwD with any type of severity of disability will be included with no discrimination.</li> <li>Disability rights advocates/legislators in Sri Lanka.</li> <li>NGOs presently providing services for employment and VT for YWD.</li> </ul>	
Exclusion criteria		
Participatory groups in quantitative phase	YwD presently registered at the VTIs but not attending courses on a regular basis or are enrolled for less than 1 month.	
Participatory groups in qualitative phase	<ul> <li>Presently employed YwD attending the National Center for Children with Disabilities.</li> <li>Not experienced working with YwD.</li> </ul>	

NGOs, non-governmental organisations; VT, vocational training; VTIs, vocational training institutes; YwD, youth with disability.

Table 2         Proposed study instruments to collect quantitative data from each participatory group			
Participatory group	Mode of administration	Description of the instrument	
YwD currently enrolled in the VTIs	One-to-one or telephone administered questionnaire* (online supplemental file 01).	Consists of close-ended and Likert scale questions to gather information on socio-demographic characteristics, the nature of VT programmes currently enrolled in and their views of said programmes, employment history and their future prospects.	
Caregivers of YwD presently enrolled in the VTIs	One-to-one or telephone administered questionnaire (online supplemental file 02).	Consists of close-ended and Likert scale questions to gather information on socio-demographic characteristics of the caregiver, views of their child's VT and their expectations.	
YwD who have completed the VT	Telephone administered questionnaire (online supplemental file 03).	Consists of close-ended and Likert scale questions to gather information on socio-demographic characteristics, the nature of VT programme currently enrolled in and the experiences with it, employment history and their current satisfaction.	
Caregivers of YwD, who have completed VT	Telephone administered questionnaire (online supplemental file 04).	Consists of close-ended and Likert scale questions to gather information on socio-demographic characteristics of the caregiver, about their child's VT and employability and level of satisfaction.	
Educators	Online administered questionnaire (online supplemental file 05).	Includes questions about their demographic characteristics, education, VT qualifications and their experiences.	

All these five questionnaires include several open-ended questions to explore their perceptions about the current training, their expectations and the experiences.

\*Adapted from the vocational profile developed by the European Union of Supported Employment.<sup>33</sup>

VT, vocational training; VTIs, vocational training institutes; YwD, youth with disability.

contact details of the participants who completed the training in 2019 and 2020 in all VTIs, Sri Lanka.

## **Qualitative phase**

The exploratory cross-thematic qualitative study comprises both semi-structured interviews and focus group discussions (FGDs). Participants are chosen based on purposive sampling mechanisms to ensure all stakeholder groups are included in the study. Participants for the FGDs will be categorised to maintain homogeneity according to; working experience, type of courses and the interests shared by educators; socioeconomic background, skill levels and interests shared by caregivers of potential YwD for VT. Accordingly, 30 educators and 30 caregivers of potential YwD for future VT will be recruited to conduct several FGDs. Snowballing technique will be used to invite approximately 30 relevant and appropriate KIs to participate representing all categories mentioned in figure 2.

# **STUDY INSTRUMENTS**

Tables 2 and 3 present the type of study instruments proposed, mode of administration and a brief description about each instrument are presented. In summary, five surveys (online supplemental files 1–5) and participant specific interview guides (online Supplemental files 6–8) will be used to conduct FGDs and the semi-structured interviews.

## **Data collection**

Ten research assistants (RAs) were recruited from a background of disability-related fields and allied health specialties including psychology, speech and language therapy, audiology and physiotherapy with an undergraduate degree and training on research methodology. They underwent several training sessions with quantitative (DDS) and qualitative (TH) methodologists on data collection and interviewing techniques. Specific instructions on communication techniques with YwD were given

Table 3         Proposed study instruments to be used to collect qualitative data from each participatory group			
Participatory group	Qualitative data collection instrument and mode	Description of the instrument	
Educators	Online FGDs (online supplemental file 06).	Interview protocols will be used to conduct the FGDs and KI interviews.	
Caregivers of potential YwD for future VT	Online FGDs (online supplemental file 07).		
Kls	Online semi-structured interviews (online supplemental file 08).		

FGDs, focus group discussions; KI, key informants; VT, vocational training; YwD, youth with disability.

by ID, a professional speech and language therapist with specific qualifications in supported employment.

#### Quantitative phase

The cross-sectional study will be conducted on each participatory group using different modes and instruments as mentioned in table 2. These will be conducted by UTC, MHG and NA. Data collection of the consenting YwD presently enrolled at the VTIs and their caregivers will take place in a quiet room in the VTI based on an interviewer administered questionnaire on one-on-one basis. Necessary accommodations and adaptations are considered and provided to collect data from YwD, who are current trainees at the VTIs. They will be given adequate time to answer, and the smiley face responses will be shown for any satisfaction related questions. Trainees with hearing impairments will have the questionnaires read to them in sign language through an interpreter. At present, during protocol development, the VTIs function with restrictions due to the COVID-19 pandemic. Therefore, there may be a chance of missing some of the eligible participants from the above two groups during on-site face-to-face data collection. In such an event, we propose to conduct telephone administered interviews to complete the questionnaires. Additionally, data collection for trainees with hearing impairments will be conducted as an intervieweradministered questionnaire through video conferencing using visual aids and sign language by trained RAs. Quantitative data collection from educators will be performed through an online survey system (Google Survey).

## Qualitative phase

FGDs and KIs interviews will be the two main data sources. Interviews with caregivers of potential YwD for future VT and educators in VTIs will take place as online video conferences due to the COVID-19 pandemic situation. These will be conducted by ID, UTC, MHG and NA. There will be two silent observers while the third researcher conducts the interviews. TH will be a silent observer at several interviews to ensure the trained researchers conduct interviews appropriately. The KIs interviews will also take place as audio or video interviews through online platforms. All interviews will be conducted in the language of preference of the participants that is, Sinhala, Tamil or English. All interviews will be conducted over secure platforms using online facilities. These will be audio-recorded and stored with password protection.

## **Data processing**

There are a number of quality control mechanisms in place to minimise the errors occurring in the quantitative data entry phase. Manual double-key data entry will be performed by two RAs. First, a simple exploratory analysis will be performed in Statistical Package of Social Science (SPSS) V.25.0 independently to identify missing values, invalid values and out of range values. Necessary corrections will be done by revisiting the original questionnaires. Then, a validation report for data entry errors will be obtained from EpiData (V.3.1) software<sup>31</sup> and inconsistencies will be corrected. Percentage of records and fields with data entry errors will be recorded.

The RAs will start coding audio transcripts of qualitative data using NVivo V.12 software. The coding protocol will follow both inductive and deductive methods iteratively in developing codes and themes. A code book with definitions will be maintained throughout the study. Furthermore, all the RAs will maintain a research field notebook in which they will write their observations and reflections of the data collected. The first round of coding will be done individually by the RAs. The research team will meet once a week to discuss their codes and themes, compiling and adjusting the code book to reflect their findings. The successive rounds will be conducted using the code book, which will be expanded and defined collectively during research team meetings. NVivo memos will be maintained for all codes and themes. Furthermore, all analytical queries will be run using NVivo explore and analyse features.

## **Data analysis**

#### Quantitative phase

Statistical analysis will be performed using the SPSS software, V.25.0. Both graphical and statistical methods will be used to present and analyse data. The distribution of characteristics of all continuous variables will be visually inspected using histograms. Descriptive statistics including frequencies, percentages, mean (SD) and median (IQR) will be used. Data with normal distribution and non-normal distribution will be presented as mean (SD) and median (IQR), respectively. The  $\chi^2$  test of Fisher's exact test (small cell numbers) will be used to test the relationships between categorical variables. All statistical tests will be two-sided with significance level set at 0.05.

## Qualitative phase

The main themes built during the analysis phase will be translated and transcribed verbatim and analysed thematically using the six steps outlined by Braun and Clarke<sup>32</sup>: (1) become familiar with the data, (2) generate initial codes, (3) search for themes, (4) review for themes, (5) define themes and (6) write-up. Open coding will be used, and initial codes will be generated iteratively by going through the entire data set systematically. Thematic analysis will be assisted by the NVivo. A sample of documents will be coded by two independent researchers to ensure reliability of codes and themes. Furthermore, a member check will be conducted with a sample group of participants, before finalising and interpreting data gathered.

#### **SPECIAL COVID-19 CONSIDERATIONS**

Precautions will be taken to minimise the spread of COVID-19 pandemic during the data collection process. Due to the travel restrictions during this period, the research will be conducted using hybrid methods which was cleared through the ethical review process. Due to the challenges of meeting the participants in-person, the research team will contact the participants via phone and emails and provide information by speaking to them individually and will obtain consent via Google sheets, through short message service (SMS) or by getting down pictures of consent sheets filled as photographs through email or social media platforms. They will be given the time and opportunity to obtain more information regarding the study and to clarify their concerns and questions. All online conference meetings will be protection encrypted and closed password only meetings. Virtual data collection methods would follow the same in-person questionnaire structures and will be consistent throughout the study.

#### Patient and public involvement

From the stage of conceptualisation, some groups of prospective participants including educators and some parents of YwD contributed towards designing and revising study tools. All protocols and study instruments were reviewed by several YwD prior to finalising the version used in the study. Qualitative analysis will follow an iterative process. The study instruments will undergo alterations during the qualitative study based on the opinions of the YwD, parents, employers and trainers who are prospective participants of this study. On the completion of the research, all findings will be shared with members of the public who contributed towards the study. In determining the validity of the findings, triangulation and member-check processes will be conducted throughout the study.

#### **IMPLEMENTATION**

This study is conducted as a tripartite collaboration among,

- 1. The Department of Disability Studies, University of Kelaniya is an academic institution, which is the only institute of its kind that has pioneered research on people with disabilities in Sri Lanka and has also taken the lead to establish many services for children and YwD including supported employment.
- 2. The Department of Social Services is the present key player in the government sector of Sri Lanka for providing VT for YwD. The VT in the state sector was established more than three decades ago and has undergone only ad hoc changes in the curricula and the courses offered.
- 3. The NGO proposed and initiated this project with the aim of creating job opportunities catering for the needs of YwD and their families and aligning those with the expectations of employers and the present job market.

#### **ETHICS AND DISSEMINATION**

Ethical clearance for this study was obtained from the Ethics Review Committee of the Faculty of Medicine,

University of Kelaniva, Sri Lanka (Ref. No: P/15/02/2021). Institutional clearance was taken from the Director, DSS and the individual VTIs. This study involves a vulnerable population, as such additional precautionary ethical clearing information was provided and approved. All eligible participants and their parents/caregivers will be provided an information sheet about the objective of the survey/FGDs/interviews. The procedure, benefits, risks, hazards, discomforts and freedom to withdraw from the study or termination of study participation have been clearly defined in the information sheet. The information sheets are available in all three verbal languages used in Sri Lanka (Sinhala, Tamil and English). In case of difficulty in reading the information sheet, the RA will read it out and explain to participants. Sign language support will be provided to any participant with hearing impairment. Contents of this sheet will be explained prior to all data collection processes.

The participants will be given access to communicate with the research team and ethical review board to clarify any queries. Written informed consent will be obtained prior to participation by all participants of quantitative and qualitative arms (online supplemental file 09) including the YwD. For online participants consent will be obtained through SMS. It is assumed in this research that the youth who are capable of undergoing VT have the capacity to consent to participate in a survey, hence an assent form is not included in this study. All data will be entered and stored anonymously. Sampling frames received from the DSS, will be kept as password protected Microsoft Excel datasheets. The computer-stored data will be kept under password protection and will be accessible only to the research team. The confidentiality of the collected data will be maintained during and after the study.

Results from this research will be disseminated, including to local stakeholders and participants, via local and international conferences and publications in peerreviewed journals.

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#### REFERENCES

- 1 International Labour organization. Disability inclusion strategy and action plan 2014-17, 2015. Available: https://www.ilo.org/wcmsp5/ groups/public/-ed\_emp/-ifp\_skills/documents/genericdocument/ wcms\_370772.pdf [Accessed 2021 Jul 21].
- 2 Bickenbach J. The world report on disability. *Disabil Soc* 2011;26:655–8.
- 3 World Health Organization, The World Bank. World report on disability. World Health organization, 2011. Available: www.who.int [Accessed Jul 21 2021].
- 4 Department of Census and Statistics, Sri Lanka. Census of population and housing final report. Ministry of finance and planning, 2012. Available: http://www.statistics.gov.lk/pophousat/cph2011/ pages/activities/reports/cph\_2012\_5per\_rpt.pdf [Accessed 21 Jul 2021].
- 5 United Nations country team. Universal periodic review Sri Lanka 3rd cycle 2017, 2017. Available: http://uprdoc.ohchr.org/ [Accessed 21 Jul 2021].
- 6 Mendis P. Training and employment of people with disabilities: Sri Lanka 2003, AbilityAsia country study series, International labour organization, 2004. Available: http://ilo.org/wcmsp5/groups/ public/-asia/-ro-bangkok/documents/publication/wcms\_113197.pdf [Accessed 21 Jul 2021].
- 7 World Health Organization. International classification of functioning, disability and health: ICF. World Health organization, 2001. Available: http://apps.who.int/iris/bitstream/handle/10665/42407/9241545429. pdf;jsessionid=2B5B38C250356078CF8C449E71352A90? sequence=1 [Accessed 21 Jul 2021].
- 8 Brennan P. Raising the quality and image of TVET: Lower-level training or motor for inclusive and sustainable growth? *Prospects* 2014;44:183–95 https://search.ebscohost.com/login.aspx?direct=tru e&AuthType=ip,shib&db=eax&AN=97072049&site=ehost-live
- 9 Coleridge P. Economic empowerment. In: Barron T, Amerena P, eds. Disability and inclusive development. London: Elanard Cheshire International, 2007: 111–54.
- 10 McGurk SR, Mueser KT. Sustaining the long-term effects of supported employment for persons with psychiatric disabilities. *Am J Psychiatry* 2016;173:953–5 https://search.ebscohost.com/login. aspx?direct=true&AuthType=ip,shib&db=afh&AN=118480625&site= ehost-liveMcGurk & Mueser
- 11 van Ruitenbeek GMC, Zijlstra FRH, Hülsheger UR. Predicting and assessing work performance of people with limited work capacity (LWC): a Multi-Wave, Multi-Source study. *J Occup Rehabil* 2021;31:360–75 https://search.ebscohost.com/login.aspx?direct=tru e&AuthType=ip,shib&db=ccm&AN=150639133&site=ehost-live
- 12 United Nations General Assembly. Convention on the rights of persons with disabilities (CRPD), 2016. Available: https://www.un. org/development/desa/disabilities/convention-on-the-rights-ofpersons-with-disabilities.html [Accessed 26 Jul 2021].
- 13 Special needs education. Prospects 1995;25:177–324 https://search. ebscohost.com/login.aspx?direct=true&AuthType=ip,shib&db=eax& AN=508559690&site=ehost-live
- 14 Tripney J, Hombrados J, Newman M. Technical and vocational education and training (TVET) interventions to improve the Employability and employment of young people in Low- and

Middle-Income countries: a systematic review. Campbell Syst Rev 2013;9:1–171 https://search.ebscohost.com/login.aspx?direct=true& AuthType=ip,shib&db=eric&AN=ED558002&site=ehost-live

- 15 International Labour Organization. Global employment trends 2013: recovering from a second jobs dip. International labour organization, 2013. Available: https://www.ilo.org/wcmsp5/groups/public/dgreports/-dcomm/-publ/documents/publication/wcms\_202326.pdf [Accessed 21 Jul 2021].
- 16 Ebuenyi ID, Syurina EV, Bunders JFG, et al. Barriers to and facilitators of employment for people with psychiatric disabilities in Africa: a scoping review. *Glob Health Action* 2018;11:1463658 https://search.ebscohost.com/login.aspx?direct=true&AuthType=ip, shib&db=cmedm&AN=29764342&site=ehost-live
- 17 Disability FD. Poverty, and schooling in developing countries: results from 14 household surveys. *The World Bank Economic Review* 2008;22:141–63.
- 18 Higashida M. The relationship between the community participation of disabled youth and socioeconomic factors: mixed-methods approach in rural Sri Lanka. *Disabil Soc* 2017;32:1239–62.
- 19 United Nations General Assembly. Convention on the rights of persons with disabilities (CRPD), 2006. Available: https://www.un. org/development/desa/disabilities/convention-on-the-rights-ofpersons-with-disabilities.html [Accessed 26 Jul 2021].
- 20 Ministry of Social Welfare. National policy on disability for Sri Lanka. Ministry of social welfare, 2003. Available: http://67.199.83.28/doc/ NatPolicyDisabilitySep2003srilanka1.pdf [Accessed 20 Jul 2021].
- 21 Matsui R. Employment opportunities of persons with disabilities and the special subsidiary company scheme in Japan. *Work* 2013;45:261–5 https://search.ebscohost.com/login.aspx?direct=true &AuthType=ip,shib&db=ccm&AN=104180416&site=ehost-live
- 22 Leinonen T, Solovieva S, Husgafvel-Pursiainen K, et al. Do individual and work-related factors differentiate work participation trajectories before and after vocational rehabilitation? *PLoS One* 2019;14:1–19 https://search.ebscohost.com/login.aspx?direct=true&AuthType=ip, shib&db=afh&AN=134838760&site=ehost-live
- 23 Vornholt K, Villotti P, Muschalla B, et al. Disability and employment – overview and highlights. European Journal of Work and Organizational Psychology 2018;27:40–55.
- 24 Strindlund L, Abrandt-Dahlgren M, Ståhl C. Employers' views on disability, employability, and labor market inclusion: a phenomenographic study. *Disabil Rehabil* 2019;41:2910–7 https:// search.ebscohost.com/login.aspx?direct=true&AuthType=ip,shib& db=psyh&AN=2019-74801-006&site=ehost-live
- 25 Scott M, Milbourn B, Falkmer M, et al. Factors impacting employment for people with autism spectrum disorder: a scoping review. Autism 2019;23:869–901 https://search.ebscohost.com/login. aspx?direct=true&AuthType=ip,shib&db=eric&AN=EJ1217207&site= ehost-
- 26 Bonaccio S, Connelly CE, Gellatly IR, et al. The participation of people with disabilities in the workplace across the employment cycle: employer concerns and research evidence. J Bus Psychol 2020;35:135–58 https://search.ebscohos t.com/login.aspx?direct= true&AuthType=ip,shib&db=psyh&AN=2019-06448-001&site=ehostlive
- 27 Brotherton M, Stancliffe RJ, Wilson NJ, et al. Supporting workers with intellectual disability in mainstream employment to transition to a socially inclusive retirement. *Journal of Intellectual and Developmental Disability* 2016;41:75–80 https://search.ebscohost. com/login.aspx?direct=true&AuthType=ip,shib&db=psyh&AN=2016-08763-010&site=ehost-live
- 28 Department of Social Services. Objectives. Battaramulla: department of social services, 2021. Available: https://www. socialservices.gov.lk/web/index.php?lang=en [Accessed 26 Jun 2021].
- 29 Tariq S, Woodman J. Using mixed methods in health research. JRSM Short Rep 2013;4:204253331347919.
- 30 Creswell JW, Creswell DJ. Research design: qualitative, quantitative, and mixed methods approaches. 5th ed. SAGE Publications, 2018.
- 31 Christiansen TB, Lauritsen JM, eds. EpiData Comprehensive Data Management and Basic Statistical Analysis System. Odense Denmark: EpiData Association, 2010. http://www.epidata.dk
- 32 Braun V, Clarke V. Using thematic analysis in psychology. Qual Res Psychol 2006;3:77–101 https://www.researchgate.net/publication/ 235356393
- 33 European Union of support employment. European Union of support employment toolkit, 2010. Available: https://www.euse.org/content/ supported-employment-toolkit/EUSE-Toolkit-2010.pdf [Accessed 10 Jun 2021].

# Supplementary 1: Survey Questionnaire – Current Trainee Youth with Disabilities

# Interviewer administered questionnaire (one-to one or telephone administered)

Code				Remarks
Date				
Center				
Training subject/area		Fabric Weaving Technology	Massage Therapy	
		Refrigeration and Air Conditioning $\Box$	Motor Mechanics	_
		Radio, Television Technology and	Mechanics	
		Associated Equipment Technology		_
		Handicrafts (cane and coir)	Bakery and Food	
			Technology	_
		Handicrafts (ornamental)	Motor Bicycles an	
			Three Wheeler	
			Technology	-
		Handicrafts (Brooms and Ekel Brooms	Batik crafts	-
		Handicrafts (Bamboo / Coconut Shels)	Electronics	_
		Carpentry and woodcarving	Masonry	_
		Computer course	Cement Based Product	
			Techniques	_
		Dressmaking	Beauty Culture	_
		Tailoring	Food technology and	
			packaging	_
		Operating Industrial Sewing Machines	Carpentry and	
		(Factory)	woodcarving	_
		Footwear and Leather Goods Industry	Welding craft	_
		Massage Therapy	Automotive Painting	_
		Home Gardening and Agriculture		
Demographic Details				
	Age	······		
	Sex	Male	_	
		Female		

	Hometown		••••		
	Ethnicity	Sinhalese			
		Sri Lankan Tamil			
		Indian Tamil			
		Sri Lankan Moor			
		Burgher			
		Malay			
		Other			 
	Family income			_	
		>10,000		_	
		10,000 - 30,000		_	
		30,000 - 50,000			
		< 50,000			
		Other			 
Health Information	Primary disability				
		Hearing		Mental Health	
		Hearing/Speech		Mobility/Dexterity	
		Communication		Learning	
		Visual		Other	
	Other medical Issues				
	Aids Needed				
Lifestyle	Residence	Family Home		Own home	
		Supported Home		Related accommodation	
		Hostel		Other	
	Home support given by	Family		Friend	
		Other			

BMJ	Open
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	Assistance Required	Personal hygiene		Communication	
		Dressing		Cleaning/grooming	
		Shopping		Mobility	
	Able to travel by Independent means	Public transport		Family transport	
		Own vehicle		Other	
		Walking			
	Communication Skills	Verbal		Braille	
		Sign Language		If other, specify	
		AAC			
	Language/s	Sinhala		English	
		Tamil		Other	
	Social Interests/Hobbi es				
Educational History	School/s				
	Duration				
	Qualifications				
	Year				
	Coping skills:	Good (1) Fair (	2) Poor (3) Need Ass	sistance (4)	
		Reading			
		Writing			
		Math			
		Money			
Vocational Training	Previous Training	Center			

	Course	
	Status	Completed
		Not completed
	Qualification	Certificate
		Diploma 🛛
		Degree
Current Training	Center	
	Course Duration	
	Duration Completed (No of year)	·····
	Areas you like most	Content $\Box$ Practical $\Box$ Working in a group $\Box$ Exams $\Box$
	What areas need to be changed	Content Duration Other
	What courses have you enjoyed/ do y	ou enjoy?
	What courses were difficult to follow	and why?
	What instructors did you like best and	l why?

	What do you plan to do after this training program?	
	What are some difficulties you face when following the training program?	
Satisfaction in theoritical aspect/ content of	of the sillabus:	
Happy 😳 Neutral 😐 Unhappy	y 😕	
Reason:		
Satisfaction in practical training:		
Happy 🙂 Neutral 😐 Unhapp	y 😇	
Reason:		
Satisfaction in duration of training:.		
Happy 😳 Neutral 😑 Unhappy 🛜		
Reason:		
Satisfaction in training environment:		
Happy 💛 Neutral 💛 Unhappy		

Reason:			 
Satisfaction in facilities Happy · Neutra Reason	ıl 😐 Unhappy		
Overall Satisfaction:			
Happy 😳 Neutra	ıl 😐 Unhappy		
Reason:			 
Proposed Changes		What are the other training opportunities yo Give 3 opportunities 1 2 3	
Employment History	Were you employed before?	Yes 🗋 No 📋	
	If yes,		
	Company		
	Job Description		
	Duration		

BMJ	Open
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	Hours Per Day	
	Days Per Week	
	Work Pattern	
	Mode of Transport	
	Distance Prepared to Travel	
	Salary	
Future plans of the students	Job	
	Specific Job Task/s	
	Hours per day	
	Days per week	
	Work pattern	Full-time Part-time Night/day shift
	Mode of transport	
	Distance to travel	
Salary	Current	
	Expecting	

## Supplementary 2: Self-administered Questionnaire- Caregivers of Current Trainee Youth with Disabilities

## Self-administered questionnaire (one-to-one or telephone administered)

Code			Remarks
Date			
Center			
Child's Code			
Demographic Details			
	Age		
	Sex	Male Female	
	Hometown		
	Ethnicity Marital status	Sinhalese   Sri Lankan Tamil   Indian Tamil   Sri Lankan Moor   Burgher   Malay   Other   Married   Separated   Divorced   Unmarried	
	No of healthy children		
	No of children with disabilities		
	Family income	Less than 10,000	

		Other					
	Highest education qualification						
	Current employment						
	Main language						
	Need/not communication aid/s						
	Do you need your chi	ild to do a job?	Yes 🗌 N	No 🗌	· · · · · · · · · · · · · · · · · · ·		
	What do you expect f	form your child's Voc	ational Tr	aining?			
	Employ in a job in the same field of training Employ in a job in a separate field of training Non-Employ						
Child's vocational training	Do you think that the training offered meets the expected choice of training ? Very satisfied  Neutral Not satisfied						
	Your level of satisfaction on the fairnss of the selection criteria for Vocational Training Program?						
	Very satisfied  Neutral  Not satisfied						
	To what extent do you agree with the training duration?						
	Very satisfied 🗌 N	eutral 🔲 Not satisfi	ed 🗌				
	To what extent are yo	ou satisfied with the k	nowledge	e gained by your chi	d's training at the moment?		
	Very satisfied 🗌 N	eutral 🗌 Not satisfi	ed 🗌				

To what extent are you satisfied with the training/practice gained by your child at the moment?
Very satisfied  Neutral  Not satisfied
To what extent are you satisfied with the practicability/relevence of the training?
 Very satisfied  Neutral  Not satisfied
To what extent are you satisfied with the child's safety during the training period:
Very satisfied  Neutral  Not satisfied
Your satisfaction in child's future job security:
Very satisfied  Neutral  Not satisfied
Satisfaction in facilities provided by the center:
Very satisfied  Neutral  Not satisfied
Satisfaction in special benefits (sports/leadership training etc.) provided by the center:
Very satisfied  Neutral  Not satisfied
Any other comments

## Supplementary 3: Telephone-administered Questionnaire - Passed-out Youth with Disabilities

## **Telephone-administered Questionnaire**

Code			Remarks
Date			
Center			
Training Subject/Area	Fabric Weaving TechnologyRefrigeration and AirConditioning	Massage Therapy  Motor Mechanics	
	Radio, Television Technology and Associated Equipment Technology	Mechanics	
	Handicrafts (cane and coir) $\Box$	Bakery and Food Technology	
	Handicrafts (ornamental)	Motor Bicycles an Three Wheeler Technology	
	Handicrafts (Brooms and Ekel Brooms	Batik crafts	
	Handicrafts (Bamboo / Coconut Shells)	Electronics	
	Carpentry and woodcarving $\Box$	Masonry	
	Computer course	Cement Based Product Techniques	
	Dressmaking	Beauty Culture	
	Tailoring	Food technology and packaging	
	Operating Industrial Sewing Machines (Factory)	Carpentry and woodcarving	
	Footwear and Leather Goods Industry	Welding craft	
	Massage Therapy	Automotive Painting	]
	Home Gardening and Agriculture		
Demographic Details			

BMJ	Open
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	Age			
	Sex	Male		
	Sex	Female		
	Hometown			
	Ethnicity	Sinhalese		
		Sri Lankan Tamil		
		Indian Tamil		
		Sri Lankan Moor		
		Burgher		
		Malay		
		Other 🗌		
	Marital status	Married		
		Separated		
		Divorced		
		Unmarried		
	Children/No			
	Income	>10,000		
		10,000 - 30,000		
		30,000 - 50,000		
		< 50,000		
		Other		
Health Information	Primary disability			
		Hearing	Mental Health	
		Hearing/Speech	Mobility/Dexterity	
		Communication	Learning	
		Visual	Other	
	Other medical Issues			
	Aids Needed			

Lifestyle	Residence	Family Home	Own home	
		Supported Home	Related accommodation	
		Hostel	Other	
	Home support given by	Family	Friend	
		Partner	Other	
	Assistance Required	Personal hygiene	Mobility	
		Dressing	Cleaning/grooming	
		Shopping	Communication	
	Able to travel by		 Family transport	
	Independent means	Public transport		
		Own vehicle	Other	
		Walking		
	Communicati on Skills	Verbal	Braille	
		Sign Language	If other, specify	
		AAC		
	Language/s	Sinhala	English	
		Tamil	Other	
	Social Interests/Hob bies			
Educational History	School/s			
	Duration			
	Qualifications			

	Year			
	Coping skills:	Good (1), Fair (2), Poor (3), Nee	ed Assistance (4)	
		Reading		
		Writing		
		Math		
		Money		
Vocational Training	Previous training received other than DSS	Center		
		Course		
		Course Duration		
		Status (Completed/not)		
		Qualification	Certificate	
	Previous training in DSS	Center		
		Course		
		Course Duration		
	If not,	burse of your choice		
	What other cou	rses you would have preferred?		
		Areas you like most	Content Practical Working in a group Exa	ams
		What areas need to be changed		

				Content	Duration
Satisfaction in th	neoritical aspec	t/ content of	the sillabus:		
	_	Unhappy			
Нарру 🥌	Neutral	Unhappy			
Reason:					
Satisfaction in n					
Satisfaction in p					
Нарру 🙂	Neutral	Unhappy			
Reason:					
Satisfaction in d	uration of train	ing:			
Нарру 🙂	Neutral	Unhappy			
Trappy	redual	Omappy			
D					
Reason:		•••••			
Satisfaction in tr	aining environ	ment:			
Нарру 💛	Neutral	Unhappy			
Reason:					
	••••				
Satisfaction in fa	acilities:				
Нарру 💛	Neutral	Unhappy	$\overline{\mathbf{O}}$		

Reason:				
Overall Satisfaction: Happy Neu Reason:	ıtral <sup>©</sup> Unha			
	Proposed changes	1.		
	Expected plans after the Vocational Training		Employed in the same area of trained	
			Employed in a different area than the	field of training
			Non-Employ	
Previous employment environment	Company			
	Job description			

	Duration							
	Duration							
	Hours per day							
	Days per							
	week							
	Work pattern	Full-time 🗌 Part-time 🗌 Nigh	Full-time 🗌 Part-time 🗌 Night/day shift 📃					
	Mode of							
	transport							
	Distance							
	prepared to							
	travel							
	Salary							
Current employment environment	Company							
	Job							
	description							
	Duration							
	Hours per day							
	Days per week							
	Work pattern Full-time Part-time Night/day shift							
	Mode of							
	transport							
Preferred	Preferred jobs							
employment	(e.g.							
environment	Catering)							
	Specific job							
	task/s							
	Hours per day							

	Days per week			
	Work pattern	Full-time 🗆 Part-time 🗆 Nigh	nt/day shift 🗌	
	Mode of			
	transport			
	Distance to			
	travel			
Salary	Current			
	Expected			

# Supplementary 4: Interviewer Administered Questionnaire: Caregivers of Passed-out Youth with Disabilities

## **Telephone-administered Questionnaire**

Code			
Date			
Center			
Child's Code			
Demographic Details			
	Age		
	Sex	Male Female	
	Hometown		
	Marital status	Married Separated Divorced Unmarried	
	No of healthy children		
	No of children with disabilities		
	Income	Less than 10,000	
	Highest education qualification		
	Current employment		

	Main language
	Need/not communication aid/s
	Did you want your child to do a job? Yes No
	What do you expect form your child's Vocational Training?Employ in a job in the same field of trainingEmploy in a job in the separate field of trainingNon-Employ
	Do you think your child received the most suitable training for his/her current job? Yes No
Child's vocational training	Your level of satisfaction on the fairnss of the selection criteria for Vocational Training Program? Very satisfied  Not satisfied
	To what extent are you satisfied with the training duration? Very satisfied  Neutral Not satisfied
	To what extent are you satisfied with the knowledge gained by your child at the moment? Very satisfied $\Box$ Neutral $\Box$ Not satisfied $\Box$
	To what extent are you satisfied with the training/practice gained by your child at the moment ? Very satisfied $\Box$ Neutral $\Box$ Not satisfied $\Box$
	To what extent are you satisfied in the practicabilty/relevence of the training? Very satisfied  Not satisfied  Not satisfied
	To what extent are you satisfied in the child's safety during the training period: Very satisfied $\Box$ Neutral $\Box$ Not satisfied $\Box$
	Satisfaction in child's future job security: Very satisfied  Not satisfied  Not satisfied

Satisfaction in facilities provided by the center: Very satisfied  Not satisfied
Satisfaction in special benefits (sports/leadership training etc.) provided to students by the center: Very satisfied

## Supplementary 5: Online administered Questionnaire- Educators (Teachers and Principals at Vocational Training Institute)

### **Online-administered Questionnaire**

Code			
Date			
Center			
Teaching subject/area	Fabric Weaving Technology	Massage Therapy  Motor Mechanics	
	Radio, Television Technology and Associated Equipmen Technology	Mechanics	
	Handicrafts (cane and coir)	Bakery and Food Technology	-
	Handicrafts (ornamental)	Motor Bicycles an Three Wheeler Technology	
	Handicrafts (Brooms and Ekel Brooms	Batik crafts	
	Handicrafts (Bamboo / Coconut Shells)	Electronics	
	Carpentry and woodcarving	Masonry	
	Computer course	Cement Based Product	
	Dressmaking	Beauty Culture	
	Tailoring	Food technology and packaging	
	Operating Industrial Sewing Machines (Factory)	Carpentry and woodcarving	
	Footwear and Leather Goods Industry	Welding craft	

		Massage Therapy		Automotive Painting	
		Home Gardening a	ind 🗌		
		Agriculture			
Demographic Details					
	Age				
	Sex	Male Female		-	
	Hometown				
	Ethnicity	Sinhalese Sri Lankan Tamil Indian Tamil Sri Lankan Moor Burgher Malay Other			
	Fluent language/s	Sinhala		English	
		Tamil		Other	
Health Information	Primary disability				
		Hearing		Mental Health	
		Hearing/Speech		Mobility/Dexterity	
		Speech		Learning	
		Visual		Other	
Educational and relevant professional qualification	Highest educational qualification	O/L		Diploma	
		A/L		Higher Diploma	
		Certificate		Degree	
		NVQ		Postgraduate	

		Other		
Relevant training in qualification				
	Duration of training			
	Training field	Special education		
		Discipline		
		Vocational Training		
		RehabilitationOther	_	
Professional experience in Vocational Training	Previous experience in VT	Name and area of the centers		
		Total no of students trained		
		Duration		
		Teaching subjects		
	Current experience in Vocational Training Institute	Duration		
		Teaching subjects		
		Total no of students trained		
	Experience in teaching students with impairments	Hearing	Mental Health	
		Hearing/Speech	Mobility/Dexterity	
		Communication	Learning	
		Visual	Other	

Perception on service provided by the VT center	<ul><li>Fairness of the students selection criteria</li><li>1. Age range to be between 16-35 Years of Age</li></ul>
	Very satisfied Development Not satisfied Development
	Reason
	2. Marital status being Single
	Very satisfied $\Box$ Neutral $\Box$ Not satisfied $\Box$
	Reason
	3. Being a person with disability (a certificate from a registered medical practitioner)
	Very satisfied  Neutral Not satisfied
	Reason
	Student safety measures taken by the center during the training period:
	Very satisfied  Neutral  Not satisfied
	Access facilities for students with disability at the Vocational Training Institute
	Very satisfied  Neutral Not satisfied
	Areas of training: Very satisfied  Neutral Not satisfied

	Satisfaction in teaching and learning methods being used: Very satisfied  Neutral Not satisfied
	Satisfaction in examination preparations: Very satisfied  Neutral Not satisfied
	Satisfaction in conducting examinations: Very satisfied  Neutral Not satisfied
	Facilities provided by the center:     Very satisfied     Not satisfied
	Monthly wage provided during the traing period Very satisfied  Not satisfied
	Already provided/not? Very satisfied  Neutral  Not satisfied
	Satisfaction in special benefits (sports/leadership training etc.) provided to students by the center: Very satisfied $\Box$ Neutral $\Box$ Not satisfied $\Box$
Perception on VT programs	Training duration is adequate/not? Yes   No     Very satisfied   Neutral   Not satisfied
	Satisfaction in available subject areas. Very satisfied  Neutral Not satisfied
	Any other subjects to include?

Relevence of the subjects to the job market: Very satisfied  Not satisfied
If you are granted another training opportunity, what are the training areas you prefer to learn?

Supplementary 6: Interview & Focus Group Topic Guide for Educators (Teachers and principals) Online FGDs

## **Rapport Building Prompts**

- Tell us a little bit about your role and your current position at this center?
- Tell us a little bit about your views on instructing/teaching youth with disabilities?
- What expectations do you have for these youth at the end of your course?

## **Prompts**

- Program Information
  - a. What is your view on the programs/courses they offer at this center?
  - b. What is your view on the programs/courses you teach at the center?
- Curriculum and Instruction
  - a. What teaching methods do you use with youth in your course?
  - b. What type of learning opportunities do they get in your course? (Please give examples)
  - c. How do you design your curriculum for the course you teach?
  - d. Tell us about some successes you have had in your class?
  - e. Tell us about some challenges you have had in your class?
- Improvement Suggestions
  - a. Do you have any suggestions for improvement of the administrators of this center?
  - b. What are somethings you would like to see happen differently at the center?
  - c. What type of support would you like in order to improve the courses you teach?

# Supplementary 7: Interview & Focus Group Topic Guide for Caregivers of Potential Youth with Disabilities

# Online FGDs and/or online semi-structured interviews

# • Journey so far

- a. Tell us a little bit about your child's education/ learning up to this point?
- b. What were some of the hardships you faced?
- c. What kind of supports did you receive so far? Give examples.

# • Daily Routines of young adult youth

- a. Tell me about what a regular day for him/her looks like?
- b. What does he/she seem to enjoy doing?
- c. Tell us a little bit about what your child is good at? Give us examples?
- d. What are the challenges your child faces on a daily basis?

# • Expectations

- a. What does your child want to do in future? (Your child's perspective)
- b. Tell us a little bit about your views on Vocational Training and if that is a path you would choose for your child? Why? Why not?
- c. What expectations do you have for you child in future?
- d. What steps have you taken to support your child's future? Examples.
- e. What persons/ organizations have helped you to make these decisions? How have they helped?
- f. What advice would you give parents who have younger children, what should they be mindful of when preparing their children for the future?

Supplementary 8: Focus Group Interview Topic Guide for Key Informants (Employers who presently have YWDs, policy makers, disability right advocates, NGOs working for YwD)

# **Rapport Building Prompts**

- Tell us a little bit about your role and your current position?
- Tell us a little bit about your views on supporting youth with disabilities?
- What expectations do you have for these youth at the District, Provincial and National Level?
- What are the expectations you have or these youth as potential employers?
- What skills and knowledges do you think youth with disabilities need to possess in order to be successful at your workplace?

## **Prompts**

- Awareness: Program Information
  - a. What is your view on the programs/courses they offer at this center?
  - b. Describe the relationship between this center and your role?
  - c. What type of supports does your institution provide to the center?
  - d. Are the goals and purposes of this center clear to your institution, and how does that help your institution make decisions?
- Improvement Suggestions
  - a. Do you have any suggestions for improvement of the administrators of this center?
  - b. Do you have any suggestions for improvement of the instructors of this center?
  - c. What are somethings you would like to see happen differently at the center?

# **Supplementary 9: Template Consent Form**

# INFORMED CONSENT FORM

Stakeholders' perspectives on provision of vocational training for youth with disabilities in Sri Lanka

# To be completed by the participant

The participant should complete the whole of this sheet himself/herself.

1. Have you read the information sheet? (Please keep a copy for yourself)	YES/NO
2. Have you had an opportunity to discuss this study and ask any	
questions?	YES/NO
3. Have you had satisfactory answers to all your questions?	
	YES/NO
4. Have you received enough information about the study?	
	YES/NO
5. Who explained the study to you?	
6. Do you understand that you have the right to not to participate in this	
study?	YES/NO
7. Do you understand that you are free to withdraw from the study at	
any time, without having to give a reason and without affecting your	YES/NO
future medical care?	
8. Any personal document given, or detail provided may be examined	
by other research assistants. All personal details will be treated as	YES/NO
strictly Confidential. Do you give your permission for these	
individuals to have access to your records?	
9. Have you had sufficient time to come to your decision?	YES/NO

11. Do you agree to take part in this study?
--

## YES/NO

If your participation is requested for online data collection, kindly confirm your consent through a text message (SMS).

Participant's signature	Date
Name (BLOCK CAPITALS)	

## To be completed by the investigator/ person obtaining consent

I have explained the study to the above volunteer, and he/ she has indicated her willingness to take part.

Signature of investigator	 Date
Name (BLOCK CAPITALS)	 