

**Linguistic Validation and Translation of Work Environment Impact Scale
(Version-2) for Stroke Survivors in Bangladesh**



By
Razia Sultana

April, 2019

*This thesis is submitted in total fulfillment of the requirements for the subject
RESEARCH 2 & 3 and partial fulfillment of the requirements for degree:*

Bachelor of Science in Occupational Therapy
Bangladesh Health Professions Institute (BHPI)
Faculty in Medicine
University of Dhaka

Study completed by:

Razia Sultana

4th year, B. Sc. in Occupational Therapy

BHPI, CRP, Savar, Dhaka

.....

Signature

Study Supervisor's name, and signature:

Nayan Kumer Chanda

Lecturer in Occupational Therapy

Department of Occupational Therapy

BHPI, CRP

.....

Signature

Head of department's name and signature:

Sk. Moniruzzaman

Associate Professor and Head of Department

Department of Occupational Therapy

Bangladesh Health Professions Institute (BHPI)

CRP, Savar, Dhaka-1343

.....

Signature

Board of Examiners

Nayan Kumer Chanda
Lecturer in Occupational Therapy
Department of Occupational Therapy
Bangladesh Health Professions Institute (BHPI)
Centre for the Rehabilitation of the Paralysed (CRP)
Savar, Dhaka- 1343

Signature

Md. Julker Nayan
Associate Professor
Department of Occupational Therapy
Bangladesh Health Professions Institute (BHPI)
Centre for the Rehabilitation of the Paralysed (CRP)
Savar, Dhaka- 1343

Signature

Sumon Kanti Chowdhury
Senior Research Investigator
ICDDR
Mohakhali, Dhaka- 1212



Signature

SK.Moniruzzaman
Associate Professor & Head of the Department
Department of Occupational Therapy
Bangladesh Health Professions Institute (BHPI)
Centre for the Rehabilitation of the Paralysed (CRP)
Savar, Dhaka- 1343

Signature

Statement of Authorship

Except where is made in the text of the thesis, this thesis contains no materials published elsewhere or extracted in whole or in part from a thesis presented by me for any other degree or diploma or seminar.

No others person's work has been used without due acknowledgement in the main text of the thesis. This thesis has not been submitted for the aware of any other degree or diploma in any other tertiary institution.

The ethical issues of the study has been strictly considered and protected. In case of dissemination the finding of this project for future publication, research supervisor will highly concern and it will be duly acknowledged as undergraduate thesis.

Signature: _____

Date: _____

Razia Sultana

4th year, B.Sc. in Occupational Therapy

Acknowledgement

In this content firstly, I will show my gratitude to Almighty Allah for giving me the strength to conduct this research study. I would like to give thanks to my all family members for support and inspired me always. I am indebted to a large number of people who have provided invaluable support and encouragement for accomplishing this undertaking.

I would like to pay my highest gratitude to my honorable supervisor, Nayan Kumer Chanda who gave me the opportunity to work with a new topic and guided me during the time of conducting this study. In addition, I have benefited from respectable teachers of Occupational Therapy department. Finally, a word of appreciation to all of participants who have greatly contributed to complete this study. I would like to state my grateful feelings towards my friends for their splendid assistance and helpfulness.

I also gave the special thanks to all participants who given me the valuable time and authentic information to fulfill my study.

Dedication

Dedicated to my honorable and beloved parents, my respected all teachers of Bangladesh Health Professions Institute, my little sister and my husband.

Table of Content

<i>Board of Examiner</i>	<i>iii</i>
<i>Statement of Authorship</i>	<i>iv</i>
<i>Acknowledgement</i>	<i>v</i>
<i>Dedication</i>	<i>vi</i>
<i>Table of Content</i>	<i>vii, viii</i>
<i>List of Table</i>	<i>viii</i>
<i>List of Figure</i>	<i>viii</i>
<i>List of Appendix</i>	<i>viii</i>
<i>List of Abbreviation</i>	<i>ix</i>
<i>Executive summary/ abstract</i>	<i>x</i>

Chapter 1: Introduction

1.1	Background	1, 2
1.2	Justification of the Study	2
1.3	Research Question	3
1.4	Study aim and Specific objective	3
1.5	Operational Definition	4, 5

Chapter 2- Literature Review

2.1	Work Environment	6
2.2	Positive Work Place	7, 8
2.3	Stroke	8
2.4	Work Environment Impact Scale	8, 9
2.5	Linguistic Validation	9, 10, 11

Chapter 3- Methodology

3.1	Conceptual framework	12
3.2	Study design	13
3.3	Study population	13
3.4	Study setting	13
3.5	Study period	13
3.6	Sample size	14
3.7	Inclusion and exclusion criteria	14
3.8	Sampling technique	14
3.9	Data collection tools/ Materials	14, 15
3.10	Data collection method	15

3.11	Data management and analysis	15, 16
3.12	Data collection and quality assurance	16
3.13	Ethical Consideration	17
3.14	Field test and rigor	17-18
3.15	Summary of Data analysis	19
Chapter 4: Result and Discussion		20-29
Chapter 5: Conclusion		30, 31
Reference		32-34
Appendix		i-xxiii

List of Table

S.N	Table	Topic	Page no
01	Table 1	Item Comprehension by Rate	21, 22
02	Table 2	Expert and reviewer opinion about the questionnaire	25
03	Table 3	Participants perception about the questionnaire	26
04	Table 4	Participants opinion about the questionnaire	28

List of Figure

S.N	Figure	Topic	Page no
01	Figure 1	Overview of Linguistic Validation	5
02	Figure 2	Procedure of Linguistic Validation	10

List of Appendix

S.N	Appendix	Topic	Page no
01	Appendix 1	Permission letter for conducting the study	i
02	Appendix 2	Permission for data collection	ii
03	Appendix 3	Information sheet and consent form in Bangla	iii-vii
04	Appendix 4	Information sheet and consent form in English	viii-xi
05	Appendix 5	WEIS Bangla version (Final)	xii-xv
06	Appendix 6	WEIS English version	xvi, xviii
07	Appendix 7	WEIS English version (Back translation)	xix-xxi
08	Appendix 8	Questionnaire for patient in Bangla	xxii
09	Appendix 9	Questionnaire for patient in English	xxiii

List of Abbreviation

WEIS- Work Environment Impact Scale

WHO- World Health Organization

OTs- Occupational Therapist

Abstract

Stroke is one of the major causes of disability throughout the world in every year. Following stroke a person's work ability is significantly affected. A sound assessment tool can help the stroke survivors to identify the environmental factors that affect their work in their work place. The Work Environment Impact Scale (WEIS) is an assessment that focuses on the fit between a person and his or her work environment. It is based on Kielhofner's Model of Human Occupation and designed to gather information on how clients experience their work environment.

To develop the Bengali version of Work Environment Impact Scale without changing the meaning of original scale(English version), to explore whether the patients easily understand the questions or face any difficulties and to seek opinion from the patient about the questionnaire

This study was conducted by using qualitative content analysis approach of qualitative method. Purposive sampling was used for selecting Participants. Data was collected by using face to face interview with a semi-structured question. Data was analyzed by using content analysis.

After analyzing data, it was found that, the linguistic translation process led to conceptually equivalent Bengali version of the Work Environment Impact Scale. The comparison between the first backward translation in Bengali and the original English version identified some words and sentences requiring re-translation. The expert panel helps to identify and resolve the items.

The findings provide evidence that the Swedish version of the WEIS is a psychometrically sound assessment across diagnoses and occupations, which can provide valuable information about experiences of work environment challenges.

Work Environment, Environmental impact, Linguistic validation, Work Environment Impact Scale, Stroke.

1.1 Background

Stroke is a disease that suddenly interrupts the arteries leading to and within the brain and affects the blood supply of the brain. It is the no. 5 cause of death and a leading cause of disability in the United States. A stroke occurs when a blood vessel that carries oxygen and nutrients to the brain is either blocked by a clot or bursts (or ruptures). When that happens, part of the brain cannot get the blood (and oxygen) it needs, so it and brain cells die. (American Stroke Association, 2016)

The assessment of individuals work ability is an important part of the process of returning to work. Work ability assessments aim to help people with disabilities to find, return to, or remain in work. In order to understand a client's work ability, personal factors, as well as environmental factors need to be accounted for since the client's work ability depends on the dynamic interaction between the client and his or her environment. More knowledge about factors causing long-term sick leave, and about what facilitates a return to work after long-term sick leave, is needed. To obtain such knowledge, valid assessment tools are essential for identifying efficacious intervention strategies, and putting useful findings into practice is the ultimate goal. (Hammingsson & Taylor, 2013)

More than 40 % of working age adults with stroke fail to return to work. The work context is a key factor in return to work, but little is known about the experiences of employers in supporting employees with stroke. Returning to work (RTW) is a primary rehabilitation goal yet reported success varies widely. In a systematic review examining the social consequences of stroke in working aged adults.

Daniel et al. found that, of the 8,810 stroke survivors working before stroke, only a mean 44 % (range 0–100 %) returned to work. Similar figures are reported in national prevalence surveys in Japan and Sweden, with higher proportions among younger stroke survivors who were working at onset. It is not only returning to work that presents a problem; ensuring

people remain in work is also difficult. Stroke survivors may return prematurely and leave once the true impact of the stroke on their job is realized (Ekbladh, Fan & Sandqvist, 2012).

The Work Environment Impact Scale (WEIS) is an assessment instrument that focuses on the fit between a person and his or her work environment. It is designed to assist the therapist to gather information on how individuals with physical or psychosocial disabilities experience and look or think about their work environments (The WEIS manual, 1998).

Cross cultural validity and reliability research can be helpful in the development of intervention design to meet the needs of the population and contribute to rational allocation of resources .

There is rising interest in reliability and validity research around the world. In Bangladesh there is not previous research about this Work environment impact scale's (WEIS) validity besides that the number of stroke survivors and this type of research worldwide has grown markedly in recent decades. So the investigator wants to translate and investigate this scale's validity for stroke survivors and it will be helpful for the investigator, Occupational Therapy department and also the Bangladeshi stroke survivors (Gobelet.C, 2007).

1.2 Justification of the study

It is the first study of the Linguistic validity of Work Environment Impact Scale in Bangladesh. The aim of this study was to measure the linguistic validation of Work Environment Impact Scale (version-2)- Bangla version for Stroke survivors. It is important to valid a scale or tool or research instrument according to country's cultural perspective. It is necessary to get proper outcome and users also benefited by using a valid tool in the research study or achieve an expected outcome. The study will be helpful for the professionals of Occupational Therapy and other professionals. Establishing a tools validation will also strength for the Occupational Therapy professions.

1.3 Research Question

Does the Work Environment Impact Scale (version-2)- Bangla version is valid tool for stroke survivors?

Aim:

To measure the linguistic validation of Work Environment Impact Scale (version-2)- Bangla version for Stroke survivors

Objectives:

- To develop the Bengali version of Work Environment Impact Scale without changing the meaning of original scale(English version)
- To explore whether the patients easily understand the questions or face any difficulties
- To seek opinion from the patient about the questionnaire

1.4 Operational Definition

Work environment: Work environment is the sum of the interrelationship that exists among the employees and the employers and the environment in which the employee work. It includes the technical environment, the human environment and the organizational environment (Oludeki , 2015).

Environmental impact: The opportunity, support, demand and constrain of the physical and social aspects of the environment on a particular individual

Stroke: A stroke or cerebrovascular accident (CVA) is rapidly developing clinical signs of focal or global disturbance of cerebral function, lasting more than 24 hours or leading to death .They occur when the blood supply to the brain becomes blocked. The sudden death of brain cells due to lack of oxygen, caused by blockage of blood flow or rupture of an artery to the brain. Sudden loss of speech, weakness, or paralysis of one side of the body can be symptoms. A stroke is a medical emergency that needs immediate medical attention (McIntosh, 2017).

Work environment impact scale (WEIS):

The WEIS is a semi-structured interview and rating scale designed to assist the therapist to gather information on how individuals with physical or psychosocial disabilities experience and perceive their work environments (The WEIS manual,1998).

Validity:

Validity is the extent to which the scores actually represent the variable they are intended to. Validity is a judgment based on various types of evidence (Numan,2007).

Linguistic validity:

Linguistic validity means that different language versions of an instrument such as a questionnaire are conceptually equivalent in each of the target countries. Such questionnaires should be understood and practically performed in the same way. Linguistic and cross-cultural aspects must be taken into account as well the concept related to the questionnaire involved. Linguistic validity can be reached by means of a forward-backward translation procedure (Gut feelings in general practice, 2013).

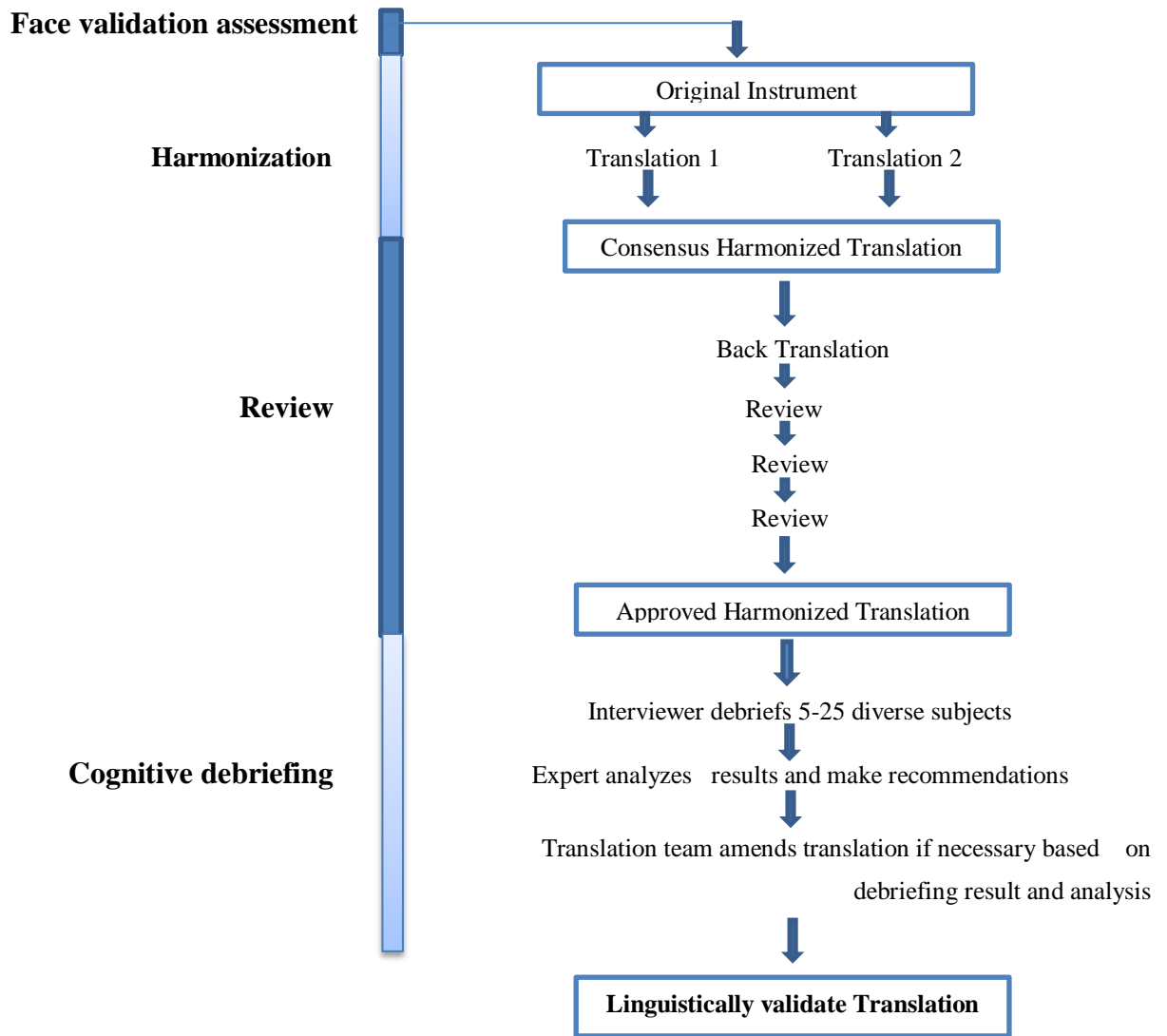


Figure: Overview of Linguistic validation

(Piault et al, 2012)

2.1 Work environment

Work environment is the term used to describe the surrounding conditions in which an employee operates. It is a broad term that can be composed of physical conditions, such as office temperature, or equipment, work tools as well as air, noise and light. Working environment also includes the psychological aspects of how one's work is organized and his wellbeing at work. It is also related to work processes or procedures (Money-zine.com, 2019).

The work environment can involve the social interactions at the workplace, including interactions with peers, subordinates, and managers. Generally, and within limits, employees are entitled to a work environment that is free from harassment. A hostile work environment exists when unwelcome sexual conduct interferes with an employee's job performance, or creates a hostile, intimidating, or offensive work environment (Aurora, 2018).

The term work environment can also be associated with the physical condition of the building. Healthy work environments will be free from problems associated with sick building syndrome, which is often due to poor ventilation or off-gassing of chemicals used during construction. The accumulation of molds and mildew may also lead to sick building syndrome (Work Environment,2019) .

A positive workplace culture improves teamwork, raises the morale, increases productivity and efficiency, and enhances retention of the workforce. Job satisfaction, collaboration, and work performance are all enhanced. And, most importantly, a positive workplace environment reduces stress in employees (Forbes,2018) .

2.2 Benefits from a positive workplace

Enhanced health

Workplaces that are negative or full of stress often breed poor health conditions, ranging from physical pain to mental and emotional stress. In fact, the American Psychological Association recently calculated that the U.S. economy loses more than \$500 billion every year due to workplace stress. Positive culture in a workplace can reduce the amounts of stress and, in turn, the instances of health problems (Michael poh,2017).

Better employee engagement

When employees are happy in a positive workplace, they work harder, are more focused, and are more engaged in the work they need to do. When employees are unhappy, stressed, or exposed to a negative workplace environment, they tend to disengage, which negatively impacts productivity and the bottom line. Employees who are more engaged in their work also work more efficiently and make fewer mistakes (Benefits of positive Work place, 2018).

Greater loyalty

When a positive workplace culture is fostered, employees are happier, more committed to their employer, and more loyal. Reduced turnover in the workplace is good for everyone, not the least of which the business, which doesn't have to endure the time and expense of hiring and training new workers (Hongkiat, 2017).

Fewer absences

Remember the first benefit we discussed, better health? Healthier employees are less likely to be absent from work, which can cost employers a significant amount of money in terms of productivity lost (Michael poh, 2017).

Better performance

A healthy and positive workplace breeds workers who give their all, and are committed to getting the job done, no matter what. Additionally, since there are less negative workplace

influences (like stress) in this type of culture, individual and overall business performance improves (Hongkiat, 2017).

2.3 Stroke

Stroke is the third leading cause of death in Bangladesh. The World Health Organization ranks Bangladesh's mortality rate due to stroke as number 84 in the world. The reported prevalence of stroke in Bangladesh is 0.3%, although no data on stroke incidence have been recorded (Islam N et al, 2013).

The global burden of disease has shifted in the last few decades from infectious and nutritional disorders to non-communicable disease . The incidence of stroke has been increasing throughout the world and is particularly prevalent in developing countries (BMC Research notes,2017).

Bangladesh is a densely populated developing country and faces the double burden. Stroke creates a significant burden in an economic and social perspective, and this burden is increasing due to unhelpful working environment and highly demanded working schedule (Mamin, Islam, Rumana, Faruqui, 2017).

However, the lack of usable, valid, reliable, and theoretically sound assessment instruments for assessing work ability is a concern. Credible and theoretically sound assessment methods for assessing clients' work ability strengthen the possibilities for making valid interpretations and obtaining important information for composing further intervention strategies which can guide suitable interventions in the process of returning to work. The Work Environment Impact Scale (WEIS) is work-related interview assessment instruments that have been developed to assess subjective psychosocial and environmental factors of work ability. (WEIS research)

2.4 Work Environment Impact Scale

The Work Environment Impact Scale (WEIS) [Ekbladh & Haglund, 2010] is an assessment instrument used to identify how psychosocial and physical factors in the work environment affect individuals' satisfaction and well-being at work. The theoretical basis for WEIS is the Model of Human Occupation (MOHO). (Kielhofner, 2008)

The Work Environment Impact Scale (WEIS) is an assessment that focuses on the fit between a person and his or her work environment. It is based on Kielhofner's Model of Human Occupation and designed to gather information on how clients experience their work environment. The aim of this study is to examine the linguistic validation of the WEIS assessment instrument. The assessment of individuals work ability is an important part of the process of returning to work .Work ability assessments aim to help people with disabilities to find, return to, or remain in work (Ekbladh, Fan &Sandqvist, 2012).

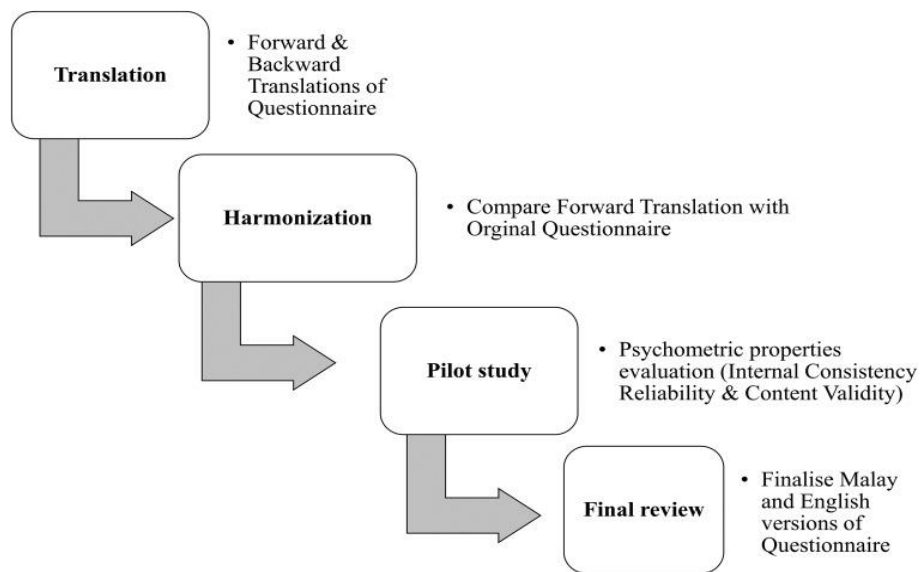
In order to select appropriate and relevant assessment instruments, professionals need to know the purpose of the assessment as well as its strengths and limitations. The WEIS is recommended for use with individuals who are currently employed and for individuals who are not presently working, but are anticipating return to a specific job or type of work. Typical candidates for this assessment are persons who are experiencing difficulty on the job, and persons whose work is interrupted by an injury or episode of illness (Olson.L, 1998).

The WEIS is designed to provide a comprehensive assessment of how the qualities and characteristics of the work environment impact a worker. An important concept underlying this scale is that workers are most productive and satisfied when there is a "fit" or "match" between the worker's environment and the needs and skills of the worker. The WEIS is organized around 17 environmental factors such as the physical, space, social contacts and supports, temporal demands, objects utilized, and daily job functions. Consequently, it seeks to gain a comprehensive picture of how a wide range of features of the environment impact a worker (The WEIS manual, 1998).

These 17 factors are reflected in 17 items on the rating scale. Each of the items is scored with four-point rating that is used to indicate how the environmental factor impacts the worker's performance, satisfaction, and well-being (physical, social , emotional) (The WEIS manual,1998).

2.5 Linguistic validity:

Linguistic validity means that different language versions of an instrument such as a questionnaire are conceptually equivalent in each of the target countries. Such questionnaires should be understood and practically performed in the same way. Linguistic and cross-cultural aspects must be taken into account as well the concept related to the questionnaire involved. Linguistic validity can be reached by means of a forward-backward translation procedure. (Gut feelings in general practice,2013).



(SCIENCE DIRECTOR.COM)

Figure 2: Procedure of Linguistic Validity

For the development of Bangla version of WEIS, student investigator will use a procedure with the following steps:

Translation into Bangla:

Two forward translations from English into Bangla will be produced by two independent translators. Both English–Bangla translators have wide experience and will native Bangla speakers. Translators followed specific instructions including: a brief description of the scale,

information relative to the measurement concept system and characteristics of the translation, and use of clinical and culturally equivalent sentences. Each translator independently translated the version and then compared and discussed the result with that of the other translator, until a common version was reached.

Back-translation:

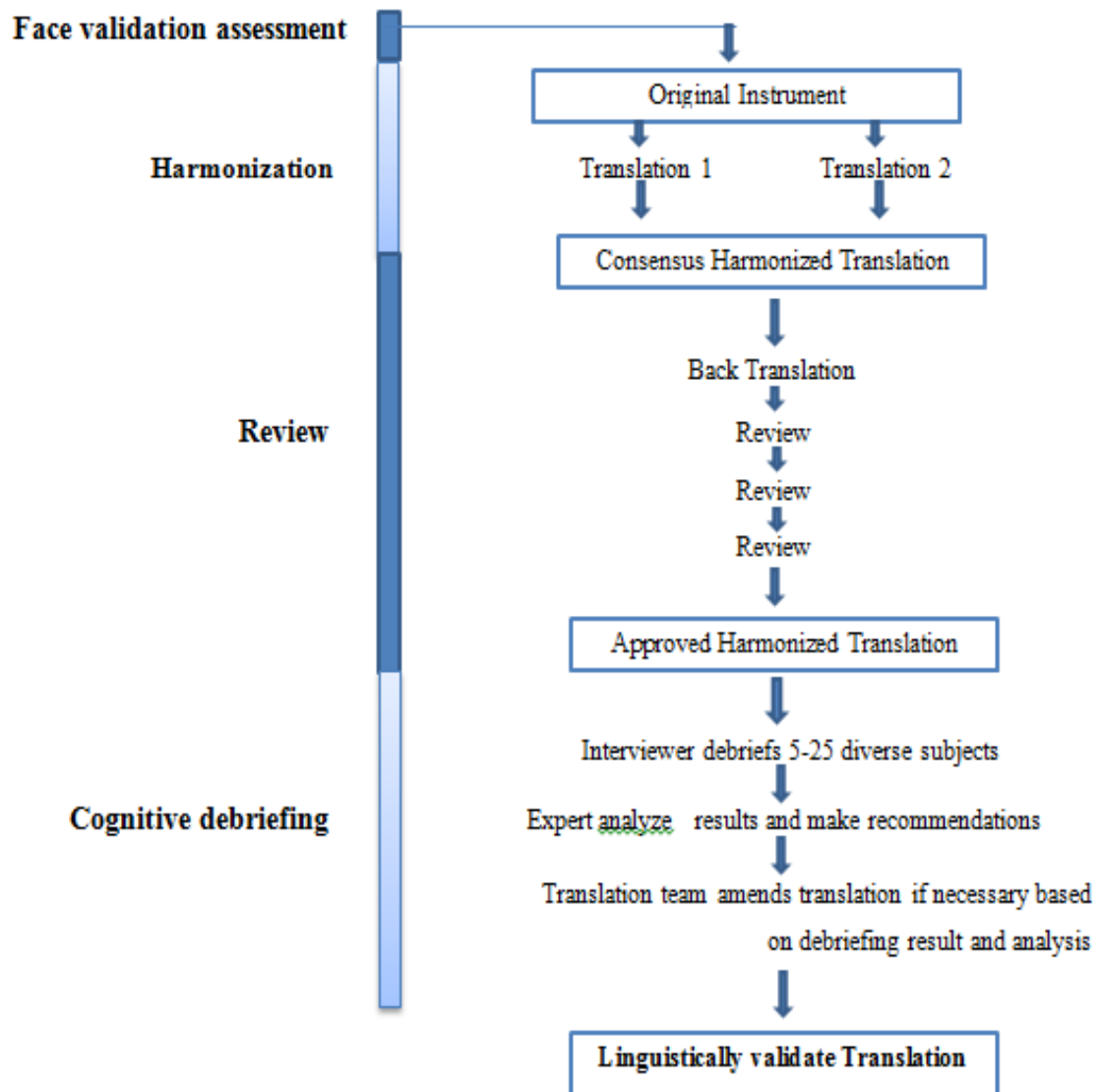
The Bangla version of the WEIS will again translated into English by other two translators with wide experience .Two translator will be selected who has English educational background. Both translators do not know that there was an original English version. The aim will to identify possible discrepancies in the Bangla translation. Both translations will be analyzed, and a final version will be established.

Assessment of the cultural equivalence of the Bangla version:

A committee consisting of two translators and four clinicians (three experts in spinal cord injury and one in the process of instrument's adaptation), compared the original English version and the final Bangla version. The aim of the committee will evaluate the translation of the scale, verify the cultural equivalence of the new vn and approve the definitive Bangla version

- To make the patient better understanding of the questionnaires
- To make a valid tool for stroke survivors

3.1 Conceptual framework:



(Piault et al, 2012)

3.2 Study design:

Approval for this study was obtained from the director of MOHO by email and also BHPI ethical research committee. This is a methodological study with a view of Linguistic validation and translation of Work Environment Impact Scale(version-2), following the particular step of method: initial translation, consensus harmonized translation, backward translation, review, approved the harmonize translation and interviewing. The harmonized translated version was translated into the original language by a blind procedure in which the translator did not have access to the English version of the Work Environment Impact Scale(version-2). All of those procedure was conducted by the linguistic validation team (the original translator, back translator, Clinical Occupational Therapists and other experts). In this research qualitative content analysis are used to justify that, the Bengali version of the Work Environment Impact Scale (version-2) is a valid tool. It is a scientific method of observation, which produces non-parametric data (Social Cops, 2018). It involves collecting data by interact with people, analyzing conversation & bringing out interest into another person's views, opinion, feelings, & belief (Hick 2007).

3.3 Study Population:

Stroke survivor in Occupational Therapy outpatient unit of Center for the Rehabilitation of the Paralysed at Savar.

3.4 Study settings:

The researcher observes and interacts with the participants in their own context. In this research, participants need an environment where they share their perceptions and experiences about their work environment. This study was conducted in Centre for the Rehabilitation of the Paralysed (CRP), Savar in the Occupational Therapy outpatient unit, For data collection the researcher used that places which were recommended by the participants and where the participants feel comfortable to express their experiences.

3.5 Study period:

The period of this study was from September, 2018 – April, 2019.

3.6 Sample Size:

The study was conducted by 10 participants.

3.7 Inclusion criteria:

- Stroke survivors those are not working after injury
- Whose work is interrupted by an injury or episode of illness
- Male and female stroke survivors

Exclusion criteria:

- Stroke survivors who are presently working
- Stroke survivors who have cognitive deficit and severe seek

3.8 Sampling technique:

Purposive sampling was used because the researcher used judgment for selecting participants (French et al., 2001). Sample was collected from a wide range of population. Purposive sampling method is used in qualitative studies to study live experienced of a specific population by using specific selection criteria. Sample sizes are very small and there is not necessarily representative of the vast population in this research study (Patton & Cochran, 2002). 10 participants were selected. Purposive sampling according to criteria to conduct the study and the sample size was depended on data saturation.

3.9 Data collection tools:

- Audio recorder was used to record interview of the participants for judgment and it is the most appropriate method for recording interview. The researcher used tape recorder to replace the hand writing particularly by which the researcher observes and records participant's practices (Bloor & Wood, 2006).
- Work environment impact scale(version-2)– Bangla version
- Semi-structured questionnaire
- Information sheet and consent form
- Pen, paper and clip board : to collect field notes

- Observation: During interview participants used facial expression and body language to express their opinions. So, observation enables the researcher to understand the participant's opinion

3.10 Data collection method:

The questionnaire was translated into Bangla by the method of back-translation. Ethical permission for the study was obtained from Centre for the Rehabilitation of the Paralysed authority. The investigator was responsible for circulating and retrieving the questionnaire and all participants will give verbal information consent. At first, the researcher would verbally present the details of the study such as, aim, objectives and purpose of the study then explain the rights, roles, benefits and importance of the written consent form in a descriptive way and arranged the interview in a suitable place. When the participant agreed with the researcher and they felt comfort with the place, then the researcher started to interview. During the interview, a recorder was used to record the conversations and discussion between the participants and interviewer. The data was collected from face to face interview.

3.11 Data management and analysis

Cognitive debriefing:

A breakdown of item comprehension by language is summarized in Table 1. The average item comprehension rate for each item in the WEIS questionnaire, across language, was 100%. 10 Stroke survivors were participated in this study. 8 of them was male and others 2 was female. This table shows the comprehension of all participants. Besides that qualitative content analysis is also used to analyze the data .

In the qualitative research, it was suggested to analyses the collected data to organize the information according to different codes, categories and themes (Bowling, 1997). Data analysis allowed the researcher to establish the study aims according to collected information from participants. The appropriate analysis of data would give an accurate result for the study. The investigator selected Qualitative Content Analysis (QCA) method for analyzing data. QCA follows the three steps (coding, categorizing and generating theme) to present the result of the study. The analysis of data began from transcribe of interviews. At first, the researcher would organize the interviews and transcribe the entire

interview in Bengali from the audio tape recorder. Each of the transcripts were translated from Bengali to English by 2 different individuals, one was the researcher and another two were such person who did not know about the aim or objectives of the research question. Then the researcher would verify all of the transcriptions and read it several times to find out what the participants wanted to say. The researcher organized the data according to each interview question. Then each participant's answer was analyzed and find some major categories and under those major categories some coding came out from the research question and each code was separated from each other. The researcher found 3 categories in this study by content analysis and these are:

Category 1: Develop the Bengali version of Work Environment Impact Scale without changing the meaning of original scale(English version)

Category 2: Explore the understanding of the participants about the questionnaire.

Category 3: Patient's opinion about the questionnaire.

3.12 Quality control & quality assurance

All data collection should be accurately done with the concern of respective supervisor as well follow all instructions. Ensure that, the methods which have been using there that's are validated fit for the purpose before use the text. Prior to starting the data collection, the researcher completed a field test with 2 participants for the survey question, and face- to - face interviews conducted to ensure whether the question were understand by the participants. It is important to carry out a field test before collecting the final data because it help the researcher to refine the data collection plan and to justify the reliability and validity of the questionnaire fit with Bangladeshi context. This field test was performed to identify any difficulties that exist in the questionnaires. Then the researcher got chance to rearrange the questionnaires to make it more understandable, clear and enough for the participants and the study.

3.13 Ethical Consideration:

- The investigator was taken permission from the research supervisor and Occupational Therapy Department in BHPI.
- All the participants had informed about the purpose, aim and objective of the study and it will be ensured that the study will not be harmful for them.
- A Bangla written consent form was used to take the permission of each participant of the study
- Confidentiality was maintained as the investigator ensured not to leak out any personal information (participants name, address and others personal details).
- Participants had also be informed that they have full rights to withdraw themselves or refuse to perform any task or question at any time during the study.

Field test:

A field test was conducted at Occupational Therapy outpatient unit with one participants. Before the time of final data collection, it was necessary to conduct a field test to help the researcher for purifying the data collection plan. During the interview, researcher informed the participants about the aim and objectives of the study. The researcher used the Bangla format of questionnaire. Researcher observed the situation of the interview, participant's response thus help to modify the question where necessary.

Rigor of the study:

To reduce source of error and biasness this study was conducted through rigorous manner or trustworthiness. The entire study was conducted in a systematic way by following research steps under the supervision of an experienced supervisor. At the time of data collection and data analysis, the researcher never tries to influence the result by her own value or perspectives. The researcher accepted answers of the participants whether they give a positive or negative impression. The researcher prepared transcript from the field notes and audio recording. Soon after the interview it was written. Translation has completed by two

people to avoid biasness then researcher completed the same translation and record to reduce mistake and compare it with the Bangla transcript. The researcher has checked translated data for several times so that all information would be include. All of notes kept safe to maintain confidentiality. In the result chapter, the researcher would not influence the result by personal view.

Summary of data analysis

Aim of the study	Objectives of the study	Questions	Categories	Theme
Does the Work Environment impact scale (version-2) Bengali version is a valid tool for Stroke survivors	To develop the Bengali version of Work Environment Impact Scale without changing the meaning of original scale(English version)	Question 1	Develop the Bengali version of Work Environment Impact Scale	All the expert and reviewer stated that, every points of the Bengali version of the WEIS has carry out the actual meaning of original scale(English version)
	To explore whether the patients easily understand the question or face any difficulty	Question 2, 3	Explore the understanding of the participants about the questionnaire	Most of the patient said that, they clearly understand all the questions and don't face any difficulties to answers the questions as it is their own language
	To seek opinion from the patient about the questionnaire	Question 4	Patient's opinion about the questionnaire	Maximum patient told that, they have no opinion about the questionnaire because they thought that investigator asked the questions for their betterment.

In result and discussion chapter, it has presented the result of the research study and presented the findings by using different literature. In qualitative studies, it is common practice to present result and discussion together in one section (Bailey, 1997). Result part of this section has described as completely so that it is possible to judge the findings of the study.

In this chapter tables are used to demonstrate the findings of the study.

Issue regarding WEIS questions identified in cognitive interviews with patients (n=10), and item revised

Item in the English Version	Patient's comprehension of the pre-final Bangla version of WEIS	Item revised
Item 1. Time Demands: Time allotted for available/expected amount of work	Good comprehension overall, all participant stated that they clearly understand this item	No
Item 2. Task Demands: The physical, cognitive, and/or emotional demands/opportunities of work tasks	Good comprehension by all participant	No
Item 3. Appeal of Work Tasks: The appeal/ enjoyableness or status/value of work tasks	Good comprehension by all participant	No
Item 4. Work Schedule: The influence of work hours upon other valued roles, activities, and other self-care needs	Good comprehension by all participant	No
Item 5. Co-Worker Interaction: Interaction/collaboration with co-workers required for job responsibilities	Good comprehension by all participant. They told that ,they understand this item clearly	No
Item 6. Work Group Membership: Social involvement with co-workers at work/outside of work	Good comprehension by all participant	No
Item 7. Interaction: Feedback, guidance, support and/or other communication or interaction with supervisor(s)	Good comprehension overall (9/10). One participant stated that they understand the item but had no need to interact with his supervisor because he has self-business	No
Item 8. Work Role Standards: Overall climate of work setting expressed in expectations for quality, excellence, commitment, or achievement, and/or efficiency	Good comprehension overall (10/10). Every participant said that they understand the item properly	No
Item 9. Work Role Style: Opportunity/expectation for autonomy/compliance when organizing, making requests, negotiating, and choosing how and what work tasks will be done daily	Good comprehension overall (10/10).	No
Item 10. Interaction with Others: Interaction/communication with subordinates, customers, clients, audiences, students or others (excluding supervisor or co-workers)	Good comprehension by all participant	No

Item 11. Rewards: Opportunities for job security, recognition/ advancement in position, and/or compensation in salary or benefits	Good comprehension by all participant	No
Item 12. Sensory Qualities: Properties of the workplace such as noise, smell, visual or tactile properties, along with temperature/climate or air quality and ventilation	Good comprehension by all participant	No
Item 13. Architecture/Arrangement: Architecture or physical arrangement <u>of</u> and <u>between</u> work space(s)/environment(s)	Good comprehension by all participant	No
Item 14. Ambience/Mood: The feeling/mood associated with the degree of privacy, friendliness, morale, excitement, anxiety, frustration in the workplace	Good comprehension by all participant	No
Item 15. Properties of Objects: The physical, cognitive or emotional demands/opportunities of tools, equipment, materials and supplies	Good comprehension by all participant	No
Item 16. Physical Amenities: Non-work-specific facilities necessary to meet personal needs at work such as restrooms, lunchrooms, or break rooms	Good comprehension by all participant	No
Item 17. Meaning Of Objects/Products: What objects/products signify to a person	Good comprehension by all participant	No

Table 1: Item Comprehension by Language

In the qualitative research, it was suggested to analyse the collected data to organize the information according to different codes, categories and themes (Bowling, 1997).

Category 1: Develop the Bengali version of Work Environment Impact Scale.

Under this category one theme was emerged as following

Theme 1: All the expert and reviewer stated that, every points of the Bengali version of the WEIS has carry out the actual meaning of original scale (English version)

First objective was to develop the Bengali version of Work Environment Impact Scale without changing the meaning of original scale(English version)

Category 2: Explore the understanding of the participants about the questionnaire

Theme 2: Most of the patient said that, they clearly understand all the questions and don't face any difficulties to answer the questions as it is their own language

Second objective was explore whether the patients easily understand the questions or face any difficulties

Under this objective question no. 2 and 3 was used and following one category were emerged.

Category 3: Patient's opinion about the questionnaire.

Under this category one theme was emerged as follows

Theme 3: Maximum patient told that, they have no opinion about the questionnaire because the researcher ask the questions for their betterment

Third objective was to seek opinion from the patient about the questionnaire under this objective question no. 4 was used and following one category were emerged.

Discussion:

In this discussion session it would be easy to understand the participant's comment which used as codes because under each table the interview findings are described. The tick mark was given only for those columns where the participant spoke about the issue. Here "P" was used for the participant. At each table the interview findings are described with the coding.

Theme 1: All the expert and reviewer stated that, every points of the Bengali version of the WEIS has carry out the actual meaning of original scale (English version)

Coding	E ₁	E ₂	R ₁	R ₂	R ₃
Carry out actual meaning of original scale	✓	✓	✓	✓	✓

Table 2: Expert and reviewer opinion about the questionnaire

From this table it is seen that, the investigator seek opinion from the expert and reviewer about the Work Environment Impact Scale Bengali version questionnaire and everybody stated that every points of the Bengali version carry out the actual meaning of the original scale

Everybody said that

“I have seen the Bangla questionnaire and it has carry out the actual meaning of the original version”.

A study experiment that, the tool will be implemented in their national database and provide a comprehensive set of scale that could now be applied (Poulsen. L et al, 2016).

Another study said that, if everybody understand all of the questionnaire clearly then they can identify their problems and a better ergonomic solution is proposed (Hammond et al, 2014).

Theme 2: Most of the patient said that, they clearly understand all the questions and don't face any difficulties to answer the questions as it is their own language

Coding	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
Don't face any difficulty to catch any questions		✓		✓	✓	✓	✓	✓	✓	✓
Not facing difficulties to understand but require time to answer	✓									
Need time to understand			✓							

Table -3: Participants perception about the questionnaire

Most of the participant answered that, they didn't face any difficulty or problem to catch any questions and the questions was not hard for them as it was their native language.

1st participant stated that,

"No. I require some time to say but I can catch all conversation immediately".

The American Stroke association said that, A Stroke that occurred in the area of brain that control speech and language can result in aphasia, a disorder that affect the ability to speak, read, write and listen. Injury in the frontal regions of the left hemisphere impacts how words are strung together to form complete sentence. This can lead to expressive aphasia.

Another article said that, Individuals with expressive or Broca's aphasia are able to understand the speech of others to varying degrees but they felt difficulty to express his own word and need more time to express it (Internet Stroke centre,2019).

6th participant said that-

“No. You asked me ordinary questions. I have replied all answers usually. No problem”

4th participant told that-

“No, No. I need some time to understand but I have understood all speeches that you told.

According to National Aphasia Association, this type of problem is called receptive aphasia. In this form of aphasia the ability to grasp the meaning of spoken words and sentences is impaired, while the ease of producing connected speech is not very affected.

Theme 3: Maximum patient told that, they have no opinion about the questionnaire because the researcher ask the questions for their betterment

Code	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
No opinion	✓			✓	✓	✓	✓	✓	✓	✓
Point no 7 is not suitable for him		✓	✓							

Table-4: Participants opinion about the questionnaire

Most of the participant stated that all the points of the Work Environment Impact Scale (version-2) Bengali version’s questionnaire are appropriate for them so they have no opinion.

1st participant said that

“All the points that the researcher asked him those was relevant for his work and work place. So, he has not any specific opinion”.

The interview focuses on the client’s unique perceptions of opportunities and constraints in the work environment related to physical spaces, social groups, objects and tasks. The same environment has different impacts on different individual (Keilhofner. G, 2008).

2nd participant said that

“One point of the Work Environment Impact Scale’s (version-2) Bengali version was not matched with him because he is a business man and he manage all his task and also supervise others so he has no boss/supervisor”.

In WEIS an extra item was “not applicable” besides the rating (1, 2, 3, 4) in the answer key. The aim of this key was to identify issues that might not have been understood or were not appropriate for the target population and also the culture (Rocha BR et al, 2014).

Limitation

Limitations are influences that the researcher cannot control. They are the shortcomings, conditions or influences that cannot be controlled by the researcher that place restrictions on your methodology and conclusions (Price, James. H, Marnan. J, 2017).

Limitations are those characteristics of design or methodology that impacted or influenced the interpretation of the findings from any research. They are the constraints on generalizability; applications to practice, and/or utility of findings that are the result of the ways in which initially chose to design the study or the method used to establish internal and external validity or the result of unanticipated challenges that emerged during the study (Price et al, 2004).

During the time of conducting this study, there were some limitations present. By considering these limitations the researcher conducted this study. The limitations are given:

- ❖ In Bangladeshi context, it is a new study. So there was a lack of available information related to this study such as, research study.
- ❖ This study is a qualitative type of study. Purposive sampling was used to collect data from participants. In-depth interview was required to gain information from participants. Due to lack of interviewing skills it was not possible to collect data from participants through in-depth interview as researcher has undertaken this study for the first time.
- ❖ In this research studies, only 3 female stroke patients were included. So it is not possible to find out their or their opinion about their working environment.
- ❖ The research faced difficulty to collect the related research articles because it was not possible for her to get access of those articles.

Recommendation:

- For future using of the WEIS is needed to Identify the psychometric properties
- Further research can conduct with large number of participants. It will help to generalize the result easily
- Occupational Therapists needs to be addressed different studies related to the WEIS in different areas like SCI, GBS
- If possible include equal number of female participants to generalize the research

Conclusion

The findings provide evidence that, the Bengali version of Work Environment Impact Scale (version-2) is a valid assessment tool across diagnosis and occupation. It provides an instrument for obtaining valuable information about the wok environment and the experience of the work environment challenges. However caution is needed when rating results between different raters.

Reference:

- About Stroke/ American Stroke Association. (2016). Retrieved from <https://www.strokeassociation.org/en/about-stroke>
- Ekbladh. E, Wei Fan C, Sandqvist. J, Hemmingsson.H and Taylor. R. (2013). Work environment impact scale: Testing the psychometric properties of the Swedish version. *Work* 47 (2014) 213–219 DOI 10.3233/WOR-121574.
- Ekbladh E, Haglund L. WEIS-S version 2. [In Swedish] Linköping: Linköping University, Faculty of Health Sciences, Department of Neuroscience and Locomotion, 2000.
- Renee. A, Gray Kielhofner. (1998). *The Manual of Work Environment Impact Scale* (2nd edition) Chicago.
- Gobelet. C, Luthi F, Al-Khodairy AT, Chamberlain MA. Vocational rehabilitation: A multidisciplinary intervention. *Disabil Rehabil* 2007; 29(17): 1405-10.
- Oludeyi,O,S. (October 25,2015). A review of the Literature on work environment and work commitment: implication for future research in citadels of learning. Retrieved from <https://www.academia.edu/23>
- McIntosh. J. (November 23, 2017). Stroke: Causes, Symptoms, diagnosis and treatment- WebMd Retrieved from <http://www.webmd.com/heart-disease/stroke>
- Neuman, W. L. (2007).** *Basics of social research: Qualitative and quantitative approaches* (2nd ed.). Boston, MA: Allyn and Bacon.
- Linguistic validity – Glossary – Gut Feelings in General practice. (November 26, 2013) Retrieved from www.gutfeelings.eu/glossary/linguistic-validity
- Paiulet et al., (2012). Linguistic validation of translation of the self assessment goal achievement (saga) questionnaire from English. Retrieved from <https://www.ncbi.nlm.nih.gov/articals>
- Work Environment- Money-zine.com. (2019). Retrieved from <http://www.money-zine.com/definitions/carer-dictionary/work-environment/>
- How to Create a Positive Workplace Culture- Forbes. (August,29 2018). Retrieved from <https://www.forbes.com/sites/.../2018/.../how-to-create-a-positive-work-place-culture/>

- Working Environment. (2018). <https://www.aurora.umu.se>employment>
- Michael. P. (2017). The benefit of strong work place culture-Bizcommunity.com. Retrieved from <http://m.bizcommunity.com>Artical>
- Benefits of Positive Workplace Culture-Video &Lesson Learning Transcript/Study.com. (2018). Retrieved from <http://study.com>academybenifits>
- Islam. N et al. (2013). Burden of Stroke in Bangladesh-ResearchGate. Retrieved from http://www.researchgate.net/publication/230877528_Burden_of_Stroke_in_Bangladesh
- Stroke in a resource-constrained hospital in Madagascar | BMC. (July 24, 2017). Retrieved from <https://bmcsresnotes.biomedcentral.com/articles/10.1186/s13104-017-2627-4>
- Mamin. AF, Islam. SM, Rumana. SF, Faruqui. F. (2017). Burden of stroke in Bangladesh-SAGEPub. Retrieved from <journals.sagepub.com>doi>pdf>
- Kielhofner G. A model of human occupation: theory and application. 4th ed., Lippincott Williams & Wilkins, Philadelphia, 2008.
- Kielhofner G, Lai JS, Olson L, Haglund L, Ekbladh E, Hedlund M. Psychometric properties of the work environment impact scale: A cross-cultural study. *Work* 1999; 12(1): 71-7.
- The 3 Quality Research Methods You Should Know-SocialCops. (March 26, 2018) Retrieved from <https://blog.socialcops.com>resources>
- Hicks, C. M. (2000) *Research methods for clinical therapists*. 3rd edn.Edinburgh: Churchill Livingstone.
- Patton, M. Q. and Cochran, M. (2002) *A Guide to using: Qualitative Research Methodology*. Available at:<http://fieldresearch.msf.org/msf/bitstream/10144/84230/1/Qualitative%20research%20methodology.pdf> [Accessed 28 October 2014]
- French, S Reynolds, F and Swain, J (2001) *Practical research a guide for therapists*. Oxford: Butterworth Heinemann.
- Bloor. M, Wood. F. (2006). Audio recording. Retrieved from <http://srmo.sagepub.com/view/keywords-in-qualitative-meethods/n⁵.xml>

- Bowling, A. (1997) *Research Methods in Health: Investigating and Health Services*. Philadelphia: Open University Press.
- Bailey, D M (Ed.). (1997) *Research for the health professional: a practical guide*. Philadelphia: F.A. Davis Company.
- Poulsen. L et al. (2016). Danish translation and linguistic validation of the BODY-Q: a description of the process. DOI 10.1007/s00238_016_1247_x
- Hammond. A et al. (2014). Linguistic Validation of an English Version of the Evaluation of Daily Activity Questionnaire in Rheumatoid Arthritis. Retrieved from <http://hqlo.biomedcentral.com>
- Type of Aphasia/ American Stroke Association. (2019). Retrieved from <http://www.strokeassociation.org>
- What is Aphasia?/ Internet Stroke Centre. (2019). Retrieved from www.strokecentre.org/patients/aphasia
- Rocha. BR et al. (2014). Cross cultural Adaptation of the Brazillian version of the protocol Evaluation of the Ability to sing Easily.
- Price, James. H, Marnan. J. (2017). Research Limitation and the Necessity of Reporting Team. *American Journal of Health Education* 35 (2014). 66-67.

Appendix -1



বাংলাদেশ হেল্থ প্রফেশন্স ইনস্টিটিউট (বিএইচপিআই)
Bangladesh Health Professions Institute (BHPI)
(The Academic Institute of CRP)

Ref. CRP-BHPI/IRB/10/18/1239

Date: 17.10.2018

To
Razia Sultana
B.Sc. in Occupational Therapy
Session: 2014-2015, Student ID: 122140143
BHPI, CRP, Savar, Dhaka-1343, Bangladesh

Subject: Approval of thesis proposal “Linguistic validation of the Work Environment Impact Scale-Bangla version for Stroke survivors” by ethics committee.

Dear Razia Sultana,

The Institutional Review Board (IRB) of BHPI has reviewed and discussed your application to conduct the above-mentioned dissertation, with yourself, as the Principal investigator. The Following documents have been reviewed and approved:

Sr. No.	Name of the Documents
1	Dissertation Proposal
2	Questionnaire (English and Bengali version)
3	Information sheet & consent form.

Since the study involves “Work Environment Impact Scale” questionnaire that takes 20 to 25 minutes and have no likelihood of any harm to the participants, the members of the Ethics committee have approved the study to be conducted in the presented form at the meeting held at 09:00 AM on September 1, 2018 at BHPI.

The institutional Ethics committee expects to be informed about the progress of the study, any changes occurring in the course of the study, any revision in the protocol and patient information or informed consent and ask to be provided a copy of the final report. This Ethics committee is working accordance to Nuremberg Code 1947, World Medical Association Declaration of Helsinki, 1964 - 2013 and other applicable regulation.

Best regards,

Muhammad Millat Hossain

Muhammad Millat Hossain
Assistant Professor, Dept. of Rehabilitation Science
Member Secretary, Institutional Review Board (IRB)
BHPI, CRP, Savar, Dhaka-1343, Bangladesh

সিআরপি-চাপাইন, সাভার, ঢাকা-১৩৪৩, বাংলাদেশ, ফোন : ৭৭৪৫৪৬৪-৫, ৭৭৪১৪০৪ ফ্যাক্স : ৭৭৪৫০৬৯

CRP-Chapain, Savar, Dhaka-1343, Tel : 7745464-5, 7741404, Fax : 7745069, E-mail : contact@crp-bangladesh.org, www.crp-bangladesh.org

Appendix-2



বাংলাদেশ হেল্থ প্রফেশন্স ইনষ্টিটিউট (বিএইচপিআই)
BANGLADESH HEALTH PROFESSIONS INSTITUTE (BHPI)
(The Academic Institute of CRP)

CRP-Chapain, Savar, Dhaka, Tel: 7745464-5, 7741404, Fax: 7745069
BHPI-Mirpur Campus, Plot-A/5, Block-A, Section-14, Mirpur, Dhaka-1206. Tel: 8020178, 8053662-3, Fax: 8053661

তারিখ : ২৪.০১.২০১৯

প্রতি

হেড অব মেডিকেল সার্ভিসেস উইং
সিআরপি, সাভার, ঢাকা।

বিষয় : রিসার্চ প্রজেক্ট (dissertation) এর জন্য আপনার প্রতিষ্ঠান সফর ও তথ্য সংগ্রহ প্রসঙ্গে।

জনাব,

আপনার সদয় অবগতির জন্য জানাচ্ছি যে, পক্ষাঘাতগ্রস্তদের পুনর্বাসন কেন্দ্রে-সিআরপি'র শিক্ষা প্রতিষ্ঠান বাংলাদেশ হেল্থ প্রফেশন্স ইনষ্টিটিউট (বিএইচপিআই) ঢাকা বিশ্ববিদ্যালয় অনুমোদিত বিএসসি ইন অকুপেশনাল থেরাপি কোর্স পরিচালনা করে আসছে।

উক্ত কোর্সের ছাত্রছাত্রীদের কোর্স কারিকুলামের অংশ হিসাবে বিভিন্ন বিষয়ের উপর রিসার্চ ও কোর্সওয়ার্ক করা বাধ্যতামূলক।

বিএইচপিআই'র ৪র্থ বর্ষ বিএসসি ইন অকুপেশনাল থেরাপি কোর্সের ছাত্রী রাজিয়া সুলতানা তার রিসার্চ সংক্রান্ত কাজের জন্য আগামী ২৬.০১.২০১৯ তারিখ থেকে ১৫.০২.২০১৯ তারিখ পর্যন্ত সময়ে আপনার প্রতিষ্ঠানে সফর করতে আগ্রহী।

তাই তাকে আপনার প্রতিষ্ঠান সফরে সার্বিক সহযোগীতা প্রদানের জন্য অনুরোধ করছি।

ধন্যবাদান্তে

শেখ মনিরুজ্জামান
বিভাগীয় প্রধান
অকুপেশনাল থেরাপি, বিএইচপিআই।

Appendix- 3



বাংলাদেশ হেল্থ প্রফেশন্স ইনস্টিটিউট (বিএইচপিআই)

অকুপেশনাল থেরাপি বিভাগ

সিআরপি- চাপাইন, সাভার, ঢাকা-১৩৪৩. টেলি: ০২-৭৭৪৫৪৬৪-৫, ৭৭৪১৪০৪, ফ্যাক্স: ০২-৭৭৪৫০৬

কোড নং:

অংশগ্রহণকারীদের তথ্য এবং সম্মতিপত্র

গবেষণার বিষয়: "ওয়ার্ক ইনভায়রনমেন্ট ইমপেক্ট স্কেল এর ভাষাগত বৈধতা ।"

গবেষক: রাজিয়া সুলতানা, বি.এস.সি ইন অকুপেশনাল থেরাপি (৪র্থ বর্ষ), সেশন: ২০১৪-২০১৫ ইং, বাংলাদেশ হেল্থ প্রফেশন্স ইনস্টিটিউট (বিএইচপিআই), সাভার, ঢাকা- ১৩৪৩

তত্ত্বাবধায়ক: নয়ন কুমার চন্দ, লেকচারার, অকুপেশনাল থেরাপি বিভাগ, বাংলাদেশ হেল্থ প্রফেশন্স ইনস্টিটিউট।

গবেষণার স্থান: অকুপেশনাল থেরাপি বহিঃবিভাগ, পক্ষাঘাতগ্রস্থদের পূর্নবাসন কেন্দ্র (সিআরপি), সাভার, ঢাকা-১৩৪৩ বাংলাদেশ।

পর্ব ১ তথ্যপত্র:

ভূমিকা: আমি রাজিয়া সুলতানা, ঢাকা বিশ্ববিদ্যালয়ে চিকিৎসা অনুষদের অধীনে বাংলাদেশ হেল্থ প্রফেশনস ইনস্টিটিউটে বি.এস.সি.ইন অকুপেশনাল থেরাপি বিভাগে ৪র্থ বর্ষের ছাত্রী হিসেবে স্নাতক শিক্ষাকার্যক্রম (২০১৪-২০১৫ ইং) সেশনে অধ্যয়নরত আছি। বিএইচপিআই থেকে অকুপেশনাল থেরাপি বি.এস.সি শিক্ষাকার্যক্রমটি সম্পন্ন করার জন্য একটি গবেষণা প্রকল্প পরিচালনা করা বাধ্যতামূলক। এই গবেষণা প্রকল্পটি অকুপেশনাল থেরাপি বিভাগের প্রভাষক নয়ন কুমার চন্দ এর তত্ত্বাবধায়নে সম্পন্ন করা হবে। এই অংশগ্রহণকারী তথ্যপত্রের মাধ্যমে গবেষণার প্রকল্পটির উদ্দেশ্য, উপাত্ত সংগ্হের প্রণালী ও গবেষণাটির সাথে সংশ্লিষ্ট বিষয় কিভাবে রক্ষিত হবে তা বিস্তারিতভাবে আপনার কাছে উপস্থাপন করা হবে। যদি এই গবেষণায় অংশগ্রহণ করতে আপনি ইচ্ছুক থাকেন, সেক্ষেত্রে এই গবেষণার সম্পৃক্ত বিষয় সম্পর্কে স্বচ্ছ ধারণা থাকলে সিদ্ধান্ত গ্রহণ সহজতর হবে। অবশ্য এখন আপনার অংশগ্রহণ আমাদের নিশ্চিত করতে হবে না। যে কোন সিদ্ধান্ত গ্রহণের পূর্বে, যদি চান তাহলে আপনার আত্মীয়-স্বজন, বন্ধু অথবা আত্মভাজন যেকারো সাথে এই ব্যাপারে আলোচনা করে নিতে পারেন। অপরপক্ষে, অংশগ্রহণকারী তথ্যপত্রটি পড়ে, যদি কোন বিষয়বস্তু বুঝতে সমস্যা হয় অথবা যদি কোন কিছু সম্পর্কে আরো বেশি জানার প্রয়োজন হয়, তবে নির্দিধায় প্রশ্ন করতে পারেন।

গবেষণার প্রেক্ষাপট ও উদ্দেশ্য

কাজের পরিবেশ প্রত্যেকের চাকুরীর একটি গুরুত্বপূর্ণ অংশ তাই আপনাকে এই গবেষণার অংশ হিসেবে আমন্ত্রণ করা হল। একজন মানুষের কাজের পরিবেশ তার পেশাগত অংশগ্রহণকে সকল দিক থেকে প্রভাবিত করে। প্রত্যেকেরই তাদের কাজের পরিবেশ এবং কাজের কৌশল সম্পর্কে আলাদা দৃষ্টিভঙ্গি রয়েছে এবং

প্রত্যেকেরই তাদের পেশাগত অংশগ্রহণ সম্পর্কে আলাদা ব্যাখ্যা রয়েছে। একজন কর্মচারীর তার কাজের পরিবেশ, পেশাগত অংশগ্রহণ এর সবলতা ও দুর্বলতা এবং যদি তাদের ডেমোগ্রাফিক বিষয় এর সাথে পেশায় অংশগ্রহণ এর কোনো সাদৃশ্য থাকে সে সম্পর্কে আলাদা উপলব্ধি রয়েছে। তাই একজন চাকুরীজীবী হিসেবে আপনার কাজের পরিবেশ, পেশাগত অংশগ্রহণ এর সবলতা ও দুর্বলতা এবং যদি আপনার ডেমোগ্রাফিক বিষয় এর সাথে পেশায় অংশগ্রহণ এর কোনো সাদৃশ্য থাকে সে সম্পর্কে আপনার অনুধাবন এবং অভিজ্ঞতা জানা উপযুক্ত। সাধারণত এই গবেষণার উদ্দেশ্য হল শারীরিক প্রতিবন্ধী ব্যক্তি বা চাকুরীজীবীদের পেশাগত অংশগ্রহণের ওপর তাদের কাজের পরিবেশের প্রভাব আছে কিনা খুঁজে বের করা। এছাড়াও আমরা শারীরিক প্রতিবন্ধী ব্যক্তিদের পেশাগত অংশগ্রহণ এর সবলতা ও দুর্বলতা এবং তাদের ডেমোগ্রাফিক বিষয় (বয়স, লিঙ্গ, আয়), প্রতিবন্ধিতার ধরন এর সাথে পেশায় অংশগ্রহণ এর কোনো সাদৃশ্য আছে কিনা সে সম্পর্কে জানতে পারবো।

এখন গবেষণা কমিটিতে অংশগ্রহণের সাথে সম্পৃক্ত বিষয় সমূহ কি সে সম্পর্কে জানা যাক

আপনার থেকে অনুমতি পত্রে স্বাক্ষর নেয়ার আগে, এই অংশগ্রহণকারী তথ্যপত্রের মাধ্যমে গবেষণার প্রকল্পটি পরিচালনা করার তথ্য সমূহ বিস্তারিতভাবে আপনার কাছে উপস্থাপন করা হবে। আপনি যদি এই গবেষণায় অংশগ্রহণ করতে চান তাহলে আপনাকে এই সম্মতি পত্রে স্বাক্ষর করতে হবে। অংশগ্রহণকারীকে একটি পত্র পূরণ করতে দেয়া হবে যাতে তাদের ডেমোগ্রাফিক বিষয় (বয়স, লিঙ্গ, আয়) সম্পর্কে জানতে চাওয়া হবে এবং কিছু প্রশ্নের একটি পত্র দেয়া হবে, এটি পূরণ করতে প্রায় ২০-২৫ মিনিট লাগবে। এই গবেষণায় চাকুরীজীবী স্ট্রোক আক্রান্ত ব্যক্তিদের নেয়া হয়েছে যেহেতু তাদের নির্দিষ্ট ভূমিকা এবং দায়িত্ব সম্পর্কে নিজেদের নিজস্ব অভিজ্ঞতা রয়েছে। এই গবেষণা প্রকল্প চলাকালীন সময়ে গবেষক আপনার আছে আসবেন এবং মুখোমুখি কিছু প্রশ্ন করবেন। আপনি যদি কোনো প্রশ্নের উত্তর দিতে ইচ্ছুক না থাকেন, আপনি সেটি বাদ দিয়ে যেতে পারবেন। তথ্যগুলোর গোপনীয়তা বজায় রাখা হবে, আপনার নাম পত্রে সংযোগ করা হবে না, আপনাকে শুধুমাত্র একটি নাম্বার এর মাধ্যমে চিহ্নিত করা হবে এবং শুধুমাত্র নয়ন কুমার চন্দ্র, তত্ত্বাবধায়ক ছাড়া আর কেও এই গবেষণার কোনো তথ্য উপাত্তসমূহের প্রবেশাধিকার পাবেন না।

এই গবেষণা প্রকল্পে আপনার অংশগ্রহণ ঐচ্ছিক। যদি আপনি অংশগ্রহণ না করেন তবে আপনাকে অংশগ্রহণ করতে হবে না। আপনি সম্মতি প্রদানের সত্ত্বেও যে কোনো সময় গবেষককে কোনো ব্যাখ্যা প্রদান ছাড়াই নিজের অংশগ্রহণ প্রত্যাহার করতে পারবেন।

অংশগ্রহণের সুবিধা ও ঝুঁকিসমূহ

গবেষণায় প্রকল্পে অংশগ্রহণে আপনি সরাসরি কোনো সুবিধা পাবেন না। তবে আমরা আশাবাদি যে, এই গবেষণার ফলাফলের মাধ্যমে প্রাপ্ত উপাত্ত থেকে প্রতিবন্ধী স্ট্রোক আক্রান্ত ব্যক্তিদের পূর্বের পেশায় ফিরে যেতে ও নতুন পেশায় অংশগ্রহণের ক্ষেত্রে কাজের পরিবেশের প্রভাব সম্পর্কে জানা যাবে। এবং এই গবেষণায় অংশগ্রহণে কোনোরকম ঝুঁকি, বিপত্তি বা অসন্তুতি নেই বলে আশা করা যাচ্ছে।

তথ্যের গোপনীয়তা কি নিশ্চিত থাকবে?

এই সম্মতিপত্রে স্বাক্ষর করার মধ্য দিয়ে, আপনি এই গবেষণা প্রকল্পে অধ্যয়নরত গবেষণা কর্মীকে আপনার ব্যক্তিগত তথ্য সংগ্রহ ও ব্যবহার করার অনুমতি দিয়েছেন। এই গবেষণা প্রকল্পের জন্য সংগৃহীত যেকোন তথ্য, যা আপনাকে সনাক্ত করতে পারে তা গোপনীয় থাকবে। আপনার সম্পর্কে সংগৃহীত তথ্যসমূহ সাংকেতিক উপায়ে উল্লেখ থাকবে। শুধুমাত্র এর সাথে সরাসরি সংশ্লিষ্ট গবেষক ও তার তত্ত্বাবধায়ক এই তথ্যসমূহে প্রবেশাধিকার পাবেন। সাংকেতিক উপায়ে চিহ্নিত উপাত্ত সমূহ পরবর্তী উপাত্ত বিশ্লেষণের কাজে ব্যবহৃত হবে। তথ্যপত্রগুলো তালাবদ্ধ ড্রয়ারে রাখা হবে। বিএইচপিআই এর অকুপেশনাল থেরাপি বিভাগে ও গবেষকের ব্যক্তিগত ল্যাপটপে উপাত্তসমূহের ইলেকট্রনিক ভার্সন সংগৃহীত থাকবে।

প্রত্যাশা করা হচ্ছে যে, এই গবেষণা প্রকল্পের ফলাফল বিভিন্ন ফোরামে প্রকাশিত এবং উপস্থাপিত হবে। যে কোন ধরনের প্রকাশনা ও উপস্থাপনার ক্ষেত্রে তথ্যসমূহ এমন ভাবে সরবরাহ করা হবে, যেন আপনার সম্মতি ছাড়া আপনাকে কোন ভাবেই সনাক্ত করা না যায়। তথ্য-উপাত্ত প্রাথমিক ভাবে কাগজপত্র সংগ্রহ করা হবে।

গবেষণা সম্পর্কে জানতে কোথায় যোগাযোগ করতে হবে?

গবেষণা প্রকল্পটি সম্পর্কে যোগাযোগ করতে চাইলে অথবা প্রকল্পটি সম্পর্কে কোনো প্রশ্ন থাকলে এখন অথবা পরবর্তী যে কোনো সময়ে জিজ্ঞাস করা যাবে। সে ক্ষেত্রে আপনি ০১৯৪৭৩২৭৮৭১ (রাজিয়া সুলতানা শোভা) নাম্বারে যোগাযোগ করতে পারেন। বাংলাদেশ হেলথ প্রফেশনাল ইন্সটিটিউট(বি এইচ পি আই) সি আর পি, সাভারের প্রাতিষ্ঠানিক নৈতিকতা পরিষদ থেকে পর্যালোচিত এবং অনুমোদিত হয়েছে। এই গবেষণা প্রকল্প পরিচালনা প্রসঙ্গে যেকোনো উদ্ভিগ্ন অথবা অভিযোগ থাকলে প্রাতিষ্ঠানিক নৈতিকতা পরিষদের সাথে এই নাম্বারে (৭৭৪৫৪৬৪-৫) যোগাযোগ করবেন।

গবেষণা থেকে নিজেকে প্রত্যাহার করা যাবে কি?

আপনি সম্মতি প্রদান করা স্বত্বেও যে কোন সময় গবেষককে কোন ব্যাখ্যা প্রদান করা ছাড়াই নিজের অংশগ্রহণ প্রত্যাহার করতে পারবেন। বাতিল করার পর তথ্যসমূহ কি ব্যবহার করা যাবে কি যাবেনা তার অনুমতি অংশগ্রহণকারীর প্রত্যাহারপত্রে (শুধুমাত্র স্বেচ্ছায় প্রত্যাহারকারীর জন্য প্রযোজ্য) উল্লেখ করা থাকবে।

অংশগ্রহণকারীর প্রত্যাহার পত্র

(শুধুমাত্র স্বেচ্ছায় প্রত্যাহারকারীর জন্য প্রযোজ্য)

অংশগ্রহণকারীর নাম:

প্রত্যাহার করার কারণ:

.....
.....
.....
.....
.....

পূর্ববর্তী তথ্য ব্যবহারের অনুমতি থাকবে কিনা?

হ্যাঁ/না

অংশগ্রহণকারীর নাম:

অংশগ্রহণকারীর স্বাক্ষর:

তারিখ:

পর্ব: ০২ সম্মতি পত্র

”ওয়ার্ক ইনভায়রনমেন্ট ইমপেক্ট স্কেল এর ভাষাগত বৈধতা ” - শীর্ষক গবেষণায় অংশগ্রহণের জন্য আমাকে আমন্ত্রণ জানানো হয়েছে। আমি পূর্বলিখিত তথ্য পত্রটি পড়েছি বা এটা আমাকে পড়ে শোনানো হয়েছে। এই বিষয়ে আমার প্রশ্ন জিজ্ঞাসা করার সুযোগ ছিল এবং যে কোন প্রশ্নের আমি সন্তুষ্টজনক উত্তর পেয়েছি। এই গবেষণায় একজন অংশগ্রহণকারী হবার জন্য আমি স্বেচ্ছায় সম্মতি দিচ্ছি।

অংশগ্রহণকারীর নাম:

অংশগ্রহণকারীর স্বাক্ষর:

তারিখ:

গবেষক ও সম্মতিকারীর বিবৃতি:

আমি অংশগ্রহণকারীকে অংশগ্রহণকারীর তথ্যপত্রটি পড়ে শুনিয়েছি এবং আমার সর্বোচ্চ সামর্থ্য অনুযায়ী নিশ্চিত করেছি, অংশগ্রহণকারীর বোধগম্য হয়েছে যে, নিম্নোক্ত বিষয়সমূহ করা হবে।

- ১) সকল তথ্য গবেষণার কাজে ব্যবহৃত হবে।
- ২) তথ্যসমূহ সম্পূর্ণভাবে গোপনীয় করা হবে।
- ৩) অংশগ্রহণকারীর নাম ও পরিচয় প্রকাশ করা হবে না।

আমি নিশ্চিত করেছি যে, এই বিষয় সম্পর্কে অংশগ্রহণকারীকে প্রশ্ন জিজ্ঞাসা করার সুযোগ দেয়া হয়েছে এবং অংশগ্রহণকারী যে সকল প্রশ্ন জিজ্ঞাসা আমার সর্বোচ্চ সামর্থ্য অনুযায়ী, সেগুলোর সঠিক উত্তর প্রদান করা সম্ভব হয়েছে। আমি নিশ্চিত করেছি যে, কোন ব্যক্তিকে সম্মতি দান করতে বাধ্য করা হয়নি। তিনি অবাধে অথবা স্বেচ্ছায় সম্মতি দিয়েছেন।

অংশগ্রহণকারীকে অংশগ্রহণকারীর তথ্য ও সম্মতিপত্রের একটি অনুলিপি দেওয়া হয়েছে।

গবেষকের নাম:

গবেষকের স্বাক্ষর :

তারিখ:

Appendix-4

Informed Consent Form for Occupational Therapy Client

Title: Linguistic validation and translation of Work Environment Scale (version-2)- for Stroke survivors in Bangladesh

Investigator: Razia Sultana, Student of B.Sc. in Occupational Therapy, Bangladesh Health Professions Institute (BHPI), CRP- Savar, Dhaka- 1343

Supervisor: Nayan Kumer Chanda, Lecturer, Occupational Therapy Department, Bangladesh Health Professions Institute

Place: Occupational Therapy Outpatient Unit, Centre for the Rehabilitation of the Paralysed (CRP), Savar, Bangladesh

Part I:Information Sheet Introduction

I am Razia Sultana, B.Sc. in Occupational Therapy student of Bangladesh Health Professions Institute(BHPI), have to conduct a thesis as a part of this Bachelor course, under thesis supervisor, Nayan Kumer Chanda. You are going to have details information about the study purpose, data collection process, ethical issues. You do not have to decide today whether or not you will participate in the research. Before you decide, you can talk to anyone you feel comfortable with about the research. If this consent form contains some words that you do not understand, please ask me to stop. I will take time to explain.

Background and Purpose of the study

You are being invited to be a part of this research because this is to provide the translation of Work Environment Impact Scale in Bangla language for its use in our country, Bangladesh, and subsequently confirm the linguistic validity of the new tool, the Bangla version of the WIES. Your experience as a Stroke survivor it will be best suited to reveal your understanding, knowledge about the linguistic validity through your voluntary participation in this study. The general purpose of the study is to development of the Bangla version of the Work Environment Impact Scale. The purpose of the study is to know the validation of WEIS. The importance of the adaptation of WEIS is that it guarantees the possibility of measuring the same concept in different cultures and countries.

Research related information

The research related information will be discussed with you throughout the information sheet before taking your signature on consent form. After that participants will be asked to complete Work Environment Impact Scale those may need 20-25 minutes to fill. Before fill-up the this scale there will be questions on socio-demographic factors (for example: Age, sex, injury level. Particularly, in this research we have selected the Stroke Survivors as they know their native language and don't have mental illness. Investigator will give you a reminder at day three/five and finally will come to collect data during sixth working day. The survey questionnaire will be distributed and collected by Razia Sultana. If you do not wish the questions included in the survey, you may skip them and move on to the next question. The information recorded is confidential, your name is not being included on the forms, only a number will identify you, and no one else except Nayan Kumer Chanda, Supervisor of the study will have access to this survey.

Voluntary Participation

The choice that you make will have no effect on your job or on any work-related evaluation or reports. You can change your mind at any time of the data collection process even throughout the study period. You have also right to refuse your participation even if you agreed earlier.

Right to Refuse or Withdraw

I will give you an opportunity at the end of the interview to review your remarks, and you can ask to modify or remove portions of those, if you do not agree with my notes or if I did not understand you correctly.

Risks and benefits

We are asking to share some personal and confidential information, and you may feel uncomfortable talking about some of the topics. You do not need to answer any question or take part in the discussion interview/survey if you don't wish to do so, and that is also okay. You do not have to give us any reason for not responding to any question, or for refusing to take part in the interview. On the other hand, you may not have any direct benefit by participating in this research, but your valuable participation is likely to help us find out the linguistic validation of WEIS. Information about you will not be shared to anyone outside of the research team. The information that we collect from this research project will be kept private. Any information about you will have a number on it instead of your name. Only the researchers will know what your number is and we will lock that information up with a lock and key. It will not be shared with or given to anyone except Nayan Kumer Chanda, study supervisor.

Sharing the Results

Nothing that you tell us today will be shared with anybody outside the research team, and nothing will be attributed to you by name. The knowledge that we get from this research will be shared with you before it is made widely available to the public. Each participant will receive a summary of the results. There will also be small presentation and these will be announced. Following the presentations, we will publish the results so that other interested people may learn from the research.

Who to Contact

If you have any questions, you can ask me now or later. If you wish to ask questions later, you may contact any of the following: Razia Sultana, Bachelor of Science in Occupational Therapy, Department of Occupational Therapy, e-mail: raziasultana.ot18.edu@gmail.com, Cell phone- 01947327871. This proposal has been reviewed and approved by Institutional Review Board (CRP-BHPI/IRB/10/18/1239), Bangladesh Health Professions Institute (BHPI), CRP-Savar, Dhaka-1343, Bangladesh, which is a committee whose task it is to make sure that research participants are protected from harm. If you wish to find about more about the IRB, contact Bangladesh Health Professions Institute (BHPI), CRP-Savar, Dhaka-1343, Bangladesh. You can ask me any more questions about any part of the research study, if you wish to. Do you have any questions?

Can you withdraw from this study:

You can cancel any information collected for this research project at any time. After the cancellation, we expect permission from the information whether it can be used or not.

Withdrawal Form

Participants Name:

ID number:

Reason of Withdraw:
.....

Participants Name:

Participants Signature:

Day/Month/Year:

Part II: Certificate of Consent

Statement by Participants

I have been invited to participate in research title Linguistic Validation of the Work Environment Impact Scale- Bangla Version for Stroke survivors. I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions I have been asked have been answered to my satisfaction. I consent voluntarily to be a participant in this study

Name of Participant _____

Signature of Participant _____ Date _____

Statement by the researcher taking consent

I have accurately read out the information sheet to the potential participant, and to the best of my ability made sure that the participant understands that the following will be done:

- 1.
- 2.
- 3.

I confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

A copy of this ICF has been provided to the participant.

Name of Researcher taking the consent _____

Signature of Researcher taking the consent _____

Date _____

Appendix-5

ওয়ার্ক ইনভায়রনমেন্ট ইমপেক্ট স্কেল

নিচের প্রত্যেকটি অনুচ্ছেদ কর্মক্ষেত্রের পরিবেশীয় বৈশিষ্ট্যকে নির্দেশ করে এবং ৪টি মাননির্ধারকের ভিত্তিতে এর স্কেরিং করা হয়। তোমার মূল্যায়ন প্রতিফলন করবে কিভাবে পরিবেশীয় বৈশিষ্ট্য কর্মীদের সন্তুষ্টি, কর্মদক্ষতা এবং শারীরিক/মানসিক বা সামাজিক সুখ-সমৃদ্ধিও জন্য তাতেও চাহিদা বা পছন্দেও ওপর প্রভাব বিস্তার করে।

সাধারণ মানদণ্ড নির্ধারণ

শ্রেণীকরণ	অর্থ	বর্ণনা/বিবরণ
৪	দৃঢ়ভাবে সমর্থন	এই পরিবেশীয় উপাদান তার কার্যসম্পাদন, সন্তুষ্টি এবং শারীরিক/মানসিক বা সামাজিক কল্যানসাধনকে দৃঢ়ভাবে সমর্থন করে। (এই মান শুধুমাত্র বিশেষ বা লক্ষণীয় সমর্থন প্রদান করা উপাদানেই দেয়া উচিত)
৩	সমর্থন	এই পরিবেশীয় উপাদান তার কার্যসম্পাদন, সন্তুষ্টি এবং শারীরিক/মানসিক বা সামাজিক কল্যানসাধনকে সমর্থন করে। (এই মান শুধুমাত্র সমর্থন প্রদান করা উপাদানেই দেয়া উচিত)
২	হস্তক্ষেপ করা	এই পরিবেশীয় উপাদান তার কার্যসম্পাদন, সন্তুষ্টি এবং শারীরিক/মানসিক বা সামাজিক কল্যানসাধনকে ব্যাহত করে।
১	কঠোরভাবে হস্তক্ষেপ	এই পরিবেশীয় উপাদান তার কার্যসম্পাদন, সন্তুষ্টি এবং শারীরিক/মানসিক বা সামাজিক কল্যানসাধনকে কঠোরভাবে ব্যাহত করে।
এন/এ	প্রযোজ্য নয়	উপাদানটি মূল্যায়নের জন্য যথেষ্ট তথ্য নেই/ উপাদানটি রোগীর নির্দিষ্ট পরিস্থিতির ক্ষেত্রে প্রযোজ্য নয়।

রোগীর নাম:

থেরাপিস্টের নাম:

নিয়োগকর্তার নাম:

পরিচালনার তারিখ:

১. সময়ের চাহিদা : বরাদ্দকৃত সময়ের জন্য সহজলভ্য/ প্রত্যাশিত কাজের পরিমাণ				
১	২	৩	৪	প্রযোজ্য নয়
মন্তব্য:				

২. কাজের চাহিদা: কাজের ক্ষেত্রে শারীরিক, বুদ্ধিগত এবং/অথবা মানসিক চাহিদা/সুযোগ ।				
১	২	৩	৪	প্রযোয্য নয়
মন্তব্য:				
৩. কাজের উপভোগ্যতা : কাজের ভালোলাগা/উপভোগ্যতা বা মর্যাদা /মান ।				
১	২	৩	৪	প্রযোয্য নয়
মন্তব্য:				
৪. কাজের সময়সূচি: অন্যান্য গুরুত্বপূর্ণ ভূমিকা, কার্যক্রম এবং নিজের যত্ন ও চাহিদার উপর কাজের সময়ের প্রভাব ।				
১	২	৩	৪	প্রযোয্য নয়
মন্তব্য:				
৫. সহকর্মীদের সাথে সম্পর্ক: চাকরির দায়িত্ব পালনের ক্ষেত্রে সহকর্মীদের সাথে পারস্পরিক সম্পর্ক/সহযোগিতা ।				
১	২	৩	৪	প্রযোয্য নয়
মন্তব্য:				
৬. দলগত কাজের সদস্যপদ: সহকর্মীদের সাথে কাজে/কাজের বাইরে সামাজিকভাবে জড়িত থাকা ।				
১	২	৩	৪	প্রযোয্য নয়
মন্তব্য:				
৭. তত্ত্বাবধায়কের সাথে সম্পর্ক: তত্ত্বাবধায়কের মতামত, নির্দেশনা অনুসরণ, এবং/অথবা তার সাথে যোগাযোগ বা পারস্পরিক সম্পর্ক ।				
১	২	৩	৪	প্রযোয্য নয়
মন্তব্য:				
৮. কাজের মান আদর্শ: গুণগত মান, উৎকর্ষ, প্রতিশ্রুতি অর্জন, এবং/অথবা কার্যকারিতার জন্য কাজের সামগ্রিক পরিবেশ ।				
১	২	৩	৪	প্রযোয্য নয়

মন্তব্য:				
৯. কাজের ধরণ: সংগঠন, অনুবোধ, মধ্যস্ততাকরণ এবং কি ও কিভাবে প্রতিদিন কাজটি করা হবে তা নির্ধারণের সময় স্বায়ত্ত্বশাসন বা সম্মতিগ্রহণের সুযোগ প্রত্যাশা ।				
১	২	৩	৪	প্রযোয্য নয়
মন্তব্য:				
১০. অন্যদের সাথে সম্পর্ক: অধস্তন, গ্রাহক, খদ্দের, শ্রোতা, ছাত্র বা অন্যদের সাথে পারস্পরিক সম্পর্ক/ যোগাযোগ (তত্ত্বাবধায়ক বা সহকর্মীরা বাদে) ।				
১	২	৩	৪	প্রযোয্য নয়
মন্তব্য:				
১১. পুরস্কার: কাজের নিরাপত্তা, স্বীকৃতি/ অবস্থান অগ্রগতি এবং/ অথবা বেতনের সাথে ভর্তুকির সুবিধা ।				
১	২	৩	৪	প্রযোয্য নয়
মন্তব্য:				
১২. সংবেদনশীল গুণাবলি: কর্মক্ষেত্রের বৈশিষ্ট্য যেমন কোলাহল, গন্ধ, দৃষ্টি আকর্ষণীয় বস্তু, তাপমাত্রা/জলবায়ু অথবা বাতাসের ধরন বা বায়ু প্রবাহের ব্যবস্থা ।				
১	২	৩	৪	প্রযোয্য নয়
মন্তব্য:				
১৩. স্থাপত্য/ বিন্যাস: কর্মস্থলের জায়গা এবং পরিবেশের বিন্যাস ও স্থাপত্য ।				
১	২	৩	৪	প্রযোয্য নয়
মন্তব্য:				
১৪. আবেগ/মেজাজ: আপনার কর্মক্ষেত্রের গোপনীয়তা, বন্ধুত্ব, মনোবল, উত্তেজনা, উদ্বেগ, হতাশা যা আপনার অনুভূতি/মেজাজ এর সাথে জড়িত ।				
১	২	৩	৪	প্রযোয্য নয়
মন্তব্য:				
১৫. বস্তু সামগ্রির বৈশিষ্ট্য: যন্ত্রপাতি ও অন্যান্য বস্তুর ভৌত জ্ঞান ও মানসিক চাহিদা/সুযোগ ।				
১	২	৩	৪	প্রযোয্য নয়

মন্তব্য:				
১৬. ভৌত সুযোগ সুবিধা: ব্যক্তিগত চাহিদা পূরনের জন্য প্রয়োজনীয় সুবিধাসমূহ যেমন- টয়লেট, খাবারকক্ষ বা বিশ্রামকক্ষ।				
১	২	৩	৪	প্রযোয্য নয়
মন্তব্য:				
১৭. বস্ত্রসামগ্রীর গুরুত্ব: কোন বস্ত্র/ পন্য একজন ব্যক্তির কাছে গুরুত্বপূর্ণ?				
১	২	৩	৪	প্রযোয্য নয়
মন্তব্য:				

Appendix-6

The Work Environment Impact Scale		
Each item below refers to a feature of the work environment and is scored according to a 4-point scale. Your rating should reflect how each environmental feature impacts (supports or interferes) the worker's needs or preferences for performance, satisfaction, and physical/emotional/social well-being.		
General Rating Scale		
Rating	Meaning	Description
4	Strongly supports	This environmental factor strongly supports his/her work performance, satisfaction, and physical/emotional/social well-being. (This rating should only be given to items that provide exceptional support.)
3	Supports	This environmental factor supports his/her work performance, satisfaction, and physical/emotional/social well-being (This rating should be given to items that provide adequate support.)
2	Interferes	This environmental factor interferes with his/her work performance, satisfaction, and physical/emotional/social well-being
1	Strongly interferes	This environmental factor strongly interferes with his/her work performance, satisfaction, and physical/emotional/social well-being
N/A	Not applicable	Not enough information to rate the item or item does not apply to the client's particular situation.
Client's Name:		Therapist's Name:
Employer's Name:		Date Administered:

1. Time Demands: Time allotted for available/- expected amount of work.				
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	N/A <input type="checkbox"/>
Comments:				
2. Task Demands: The physical, cognitive, and/or emotional demands/opportunities of work tasks.				
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	N/A <input type="checkbox"/>
Comments:				
3. Appeal of Work Tasks: The appeal/enjoyableness or status/value of work tasks.				
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	N/A <input type="checkbox"/>
Comments:				
4. Work Schedule: The influence of work hours upon other valued roles, activities, transportation, and basic self-care needs.				
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	N/A <input type="checkbox"/>
Comments:				

5. Coworker Interaction: Interaction/collaboration with coworkers required for job responsibilities.				
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	N/A <input type="checkbox"/>
Comments:				
6. Work Group Membership: Social involvement with coworkers at work/outside of work.				
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	N/A <input type="checkbox"/>
Comments:				
7. Supervisor Interaction: Feedback, guidance, and/or other communication/interaction with supervisor(s).				
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	N/A <input type="checkbox"/>
Comments:				
8. Work Role Standards: Overall climate of work setting expressed in expectations for quality, excellence, commitment, achievement, and/or efficiency.				
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	N/A <input type="checkbox"/>
Comments:				
9. Work Role Style: Opportunity/expectation for autonomy/compliance when organizing, making requests, negotiating, and choosing how and what work tasks will be done daily.				
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	N/A <input type="checkbox"/>
Comments:				
10. Interaction with Others: Interaction/communication with subordinates, customers, clients, audiences, students, or others, excluding supervisor or coworkers.				
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	N/A <input type="checkbox"/>
Comments:				
11. Rewards: Opportunities for job security, recognition/advancement in position, and/or compensation in salary or benefits.				
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	N/A <input type="checkbox"/>
Comments:				

12. Sensory Qualities: Properties of the work place such as noise, smell, visual, or tactile properties, temperature/climate, or air quality and ventilation.				
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	N/A <input type="checkbox"/>
Comments:				
13. Architecture/Arrangement: Architecture or physical arrangement of and between work spaces and environments.				
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	N/A <input type="checkbox"/>
Comments:				
14. Ambience/Mood: The feeling/mood associated with the degree of privacy, friendliness, morale, excitement, anxiety, frustration in the work place.				
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	N/A <input type="checkbox"/>
Comments:				
15. Properties of Objects: The physical, cognitive, or emotional demands/opportunities of tools, equipment, materials, and supplies.				
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	N/A <input type="checkbox"/>
Comments:				
16. Physical Amenities: Non-word-specific facilities necessary to meet personal needs at work such as restrooms, lunchrooms, or break rooms.				
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	N/A <input type="checkbox"/>
Comments:				
17. Meaning of Objects: What objects signify to a person.				
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	N/A <input type="checkbox"/>
Comments:				

Appendix-7

Work Environment Impact Scale

Each item bellow refers to a feature of the work environment and is scored according to a 4 point scale. Your rating should reflect how each environmental feature impacts (support or interferes) the worker’s needs or preference, satisfaction, and physical/emotional/social well-being

General Rating Scale

Rating	Meaning	Description
4	Strongly support	This environmental factor strongly supports his/her work performance, satisfaction, and physical/-emotional/social well-being. (This rating should only be given to items that provide exceptional support.)
3	Support	This environmental factor supports his/her work performance, satisfaction, and physical/emotional/-social well-being (This rating should be given to items that provide adequate support.)
2	Interfere	This environmental factor interferes with his/her work performance, satisfaction, and physical/- emotional/social well-being
1	Strongly interfere	This environmental factor strongly interferes with his/her work performance, satisfaction, and physical/-emotional/social well-being
N/A	Not applicable	Not enough information to rate the item or item does not apply to the client’s particular situation.
Clients name:		Therapist name:
Employer’s name:		Date Admission:

1. Time demands: The amount of available / publicized work for the allocated time in case of work				
1	2	3	4	N/A
Comments:				
2. Job Requirements: Physical, cognitive and / or emotional needs / opportunities in the workplace				
1	2	3	4	N/A
Comments:				
3. Job Contribution: Application / Beneficiary or Status / Job Standard				
1	2	3	4	N/A
Comments:				

4. Work schedules: Working hours on other personal needs of personal daily activities and other self-care needs				
1	2	3	4	N/A
Comments:				
5. Contact with colleagues: Contact / co-operation with colleagues during the job duties				
1	2	3	4	N/A
Comments:				
6. Member of working group: Have social relationships with colleagues during work / out of work				
1	2	3	4	N/A
Comments:				
7. Communication: Contact with feedback, guidance, support and / or other contact or supervisor				
1	2	3	4	N/A
Comments:				
8. The role of the role of the work: the expectation of the overall environment, the superiority, commitment or achievement and / or efficiency of the workplace.				
1	2	3	4	N/A
Comments:				
9. Type of job role				
1	2	3	4	N/A
Comments:				
10. Communicate with others: Contact, subscribers, listeners, contact with students or others (excluding supervisors or colleagues)				
1	2	3	4	N/A
Comments:				
11. Payment: Safety, recognition / promotion of work, and / or compensation, salary or benefits				
1	2	3	4	N/A
Comments:				
12. Sensory qualities: Temperatures in the workplace, such as the sound, smell, scene or spark as well as the temperature climate or windmill and the movement of the goose				
1	2	3	4	N/A
Comments:				
13. Architecture / Architecture / Placement / Environment in Architectural or Material Range and Work				
1	2	3	4	N/A
Comments:				

14. Emotions / temperament: Confidentiality, friendship, morale, tension, anxiety, frustration in your work that is related to feelings / emotions				
1	2	3	4	N/A
Comments:				
15. Object properties: Physical, cognitive or emotional needs / equipment opportunities, equipment and seminars				
1	2	3	4	N/A
Comments:				
16. Physical Benefits: Facilities that are not related to work for meeting personal needs such as toilets, coffers or restrooms				
1	2	3	4	N/A
Comments:				
17. Object / Product Objectives: Any object / product are important to a person?				
1	2	3	4	N/a
Comments:				

Appendix-8



বাংলাদেশ হেল্থ প্রফেশনস ইনস্টিটিউট (বিএইচপিআই)

অকুপেশনাল থেরাপি বিভাগ

সিআরপি- চাপাইন, সাভার, ঢাকা-১৩৪৩. টেলি: ০২-৭৭৪৫৪৬৪-৫, ৭৭৪১৪০৪, ফ্যাক্স: ০২-৭৭৪৫০৬

১. আপনাকে এতক্ষণ যে প্রশ্নগুলো করা হয়েছে সেগুলো কি আপনি ঠিকভাবে বুঝতে পেরেছেন ?
২. এখানে কি এমন কোন প্রশ্ন আছে যা আপনি বুঝতে পারেন নি বা বুঝতে অসুবিধা হয়েছে ?
৩. আপনাকে কি এমন কোন প্রশ্ন করা হয়েছে যা আপনার কাছে কঠিন লেগেছে ?
৪. আপনাকে এতক্ষণ যে প্রশ্নগুলো করা হয়েছে সেগুলো সম্পর্কে কি আপনার কোন মতামত বা জিজ্ঞাসা রয়েছে ?

Appendix-9



বাংলাদেশ হেল্থ প্রফেশনাল ইনস্টিটিউট (বিএইচপিআই)

অকুপেশনাল থেরাপি বিভাগ

সিআরপি- চাপাইন, সাভার, ঢাকা-১৩৪৩. টেলি: ০২-৭৭৪৫৪৬৪-৫, ৭৭৪১৪০৪, ফ্যাক্স: ০২-৭৭৪৫০৬

English Questionnaire for the patient

1. Do you understand the questions that have been asked you so long?
2. Is there any question that you have not understand or faced problem to understand?
3. Have you been asked any question that you find difficulty?
4. Have you any question or opinion about what you have asking for so long?