

Resilience in Persons with Paraplegia: A Qualitative Study



By
Afsana Chowdhury

February 2022, held in March 2023

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

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

Thesis completed by:

Afsana Chowdhury

4th year, B.Sc. in Occupational Therapy

Bangladesh Health Professions Institute (BHPI)

Centre for the Rehabilitation of the Paralysed (CRP)

Chapain, Savar, Dhaka: 1343

.....
Signature

Supervisor's Name, Designation, and Signature

Md. JulkerNayan

Associate Professor

Department of Occupational Therapy

Bangladesh Health Professions Institute (BHPI)

Centre for the Rehabilitation of the Paralysed (CRP)

Chapain, Savar, Dhaka: 1343

.....
Signature

Name of the Co-supervisor

Sk. Moniruzzaman

Associate Professor & Head

Department of Occupational Therapy

Bangladesh Health Professions Institute (BHPI)

Centre for the Rehabilitation of the Paralysed (CRP)

Chapain, Savar, Dhaka: 1343

.....
Signature

Head of the Department's Name, Designation, and Signature

Sk. Moniruzzaman

Associate Professor & Head

Department of Occupational Therapy

Bangladesh Health Professions Institute (BHPI)

Centre for the Rehabilitation of the Paralysed (CRP)

Chapain, Savar, Dhaka: 1343

.....
Signature

Statement of Authorship

Except where it is made in the text of the thesis, this thesis contains no material published elsewhere or extracted in whole or in part from a thesis presented by me for any other degree or seminar. No other person's work has been used without due acknowledgement in the main text of the thesis. This thesis has not been submitted for the award of any other degree in any other tertiary institution. The ethical issue of the study has been strictly considered and protected. In case of dissemination of the findings of this project for future publication, the research supervisor will be highly concerned, and it will be duly acknowledged as an undergraduate thesis.

Afsana Chowdhury

4th year, B.Sc. in Occupational Therapy

Bangladesh Health Professions Institute (BHPI)

Centre for the Rehabilitation of the Paralysed (CRP)

Signature

Chapain, Savar, Dhaka: 1343

Acknowledgement

First of all, I want to express my thankfulness to Allah for providing me with the willpower to complete this study. My appreciation for all of my teachers' patience and input, is beyond words. My research class teachers Shamima Akter Swapna and Arifa Jahan Ema Ma'am, as well as my supervisor Md. JulkerNayan and co-supervisor Sk. Moniruzzaman sir, deserve a special word of gratitude. Moreover, I could not have made this journey without the defense committee's kind contribution of knowledge and experience. Furthermore, my study would not have been possible without the kind cooperation of CRP's rehabilitation division, which provided me with all the assistance I required to find participants for my study.

I am also appreciative of a few of my friends for listening to my worries about the study and providing emotional support. Gratitude should also be extended to all of my research participants, who have influenced and motivated me. Most importantly, I would like to acknowledge my family, particularly my parents and siblings. Their confidence in me has sustained my enthusiasm and upbeat attitude throughout this process. Finally, I want to applaud myself for completing the study and this journey.

Dedication

This thesis is dedicated to all of the SCI survivors in the world.

TABLE OF CONTENT

List of Tables	viii
List of Figures.....	ix
List of Abbreviations	x
Abstract.....	xi
CHAPTER I: INTRODUCTION	1
1.1 Background	1
1.2 Justification of the study	4
1.3 Operational Definition.....	5
1.4 Study Questions, Aim and Objectives.....	6
1.4.1 Overarching Research Question	6
1.4.2 Aim and Objectives	6
CHAPTER II: LITERATURE REVIEW	7
2.1 Overview of Resilience	7
2.2 Overview of Resilience in persons with SCI	8
2.3 Knowledge about Disability adjustment	10
2.4 Relation of Resilience and Disability Adjustment	12
2.5 Gap of the Study.....	13
CHAPTER III: METHODS	15
3.1 Study Design	15
3.1.1 Method.....	15
3.1.2 Approach	15
3.2 Study Setting and Period.....	16
3.3 Study Participants.....	16
3.3.1 Sampling Techniques	16

3.3.2 Inclusion and Exclusion Criteria	17
3.3.3 Participant Overview	17
3.4 Ethical Considerations.....	19
3.4.1 Research Ethics Committees	19
3.4.2 Informed Consent	19
3.4.3 Unequal Relationship	20
3.4.4 Risk and Beneficence	20
3.5 Data Collection Process	21
3.5.1 Participant Recruitment Process.....	21
3.5.2 Data Collection Method.....	22
3.5.3 Data Collection Instrument.....	23
3.6 Data Management and Analysis.....	24
3.7 Trustworthiness and Rigor	26
3.7.1 Methodological Rigour.....	26
3.7.2 Interpretive Rigour	27
CHAPTER IV: RESULTS.....	29
4.1 Theme One: From Denial to Determination	30
4.1.1 Denial of the Situation.....	30
4.1.2 Frustration.....	30
4.1.3 Positive Attitude	31
4.1.4 Determination to Move Forward	31
4.2 Theme Two: Health Issues and their Influence on Life.....	32
4.2.1 Pressure Sore	32
4.2.2 Age-related Conditions.....	33
4.3 Theme Three: Barriers	33
4.3.1 Environmental Barriers.....	33
4.3.2 Societal Barriers	34

4.4 Theme Four: Support System.....	35
4.4.1 Family and Finance	35
4.4.2 Relatives, Friends and Community	36
4.4.3 NGOs and Rehabilitation Centre.....	37
4.5 Theme Five: Adaptation.....	37
4.5.1 Acceptance.....	37
4.5.2 Learning.....	38
4.6 Theme Six: Participation.....	39
4.6.1 Participation in Sports	39
4.6.2 Participation in Vocational Training	39
4.6.3 Involvement in Workforce.....	40
4.6.4 Involvement in Social Works	40
4.7 Theme Seven: Spirituality/ Faith.....	41
4.8 Theme Eight: Inspired by others	42
CHAPTER V: DISCUSSION	43
CHAPTER VI: CONCLUSION	47
6.1 Strengths and Limitations	47
6.1.1 Strength.....	47
6.1.2 Limitation	47
6.2 Practice Implication.....	48
6.2.1 Recommendation for Future Practice and Research.....	48
6.3 Conclusion.....	49
LIST OF REFERENCE	50
APPENDICES	58
Appendix A1: Ethics Approval Certificate	58
Appendix A2: Permission to Conduct Research and Data Collection.....	60

Appendix B1: Information Sheet and Consent Form (Bangla).....	62
Appendix B2: Information Sheet and Consent form (English).....	66
Appendix C1: Self-developed Interview Guide (Bangla).....	71
Appendix C2: Self-developed Interview Guide (English).....	74
Appendix D: Thesis Supervisor-Student Contact: face-to-face or electronic and guidance record	77

LIST OF TABLES

Table 3.1	Overview of Participants	18
Table 4.1	Themes and Sub-themes	29

LIST OF FIGURES

Figure 1.1	Resilience as a process	03
Figure 3.1	Steps involved in participants' recruitment	21

LIST OF ABBREVIATIONS

BHPI	Bangladesh Health Professions Institute
CRP	Centre for the Rehabilitation of Paralysed
IRB	Institutional Review Board
PTSD	Post-traumatic stress disorder
PWD	Person with Disability
SCI	Spinal Cord Injury
WHO	World Health Organization
WMA	World Medical Association

ABSTRACT

Background: Resilience is regarded as a crucial coping capacity for persons dealing with trauma and loss, such as spinal cord injury. It has been reported that resilience has moderate to strong relationships with a variety of psychosocial traits, including coping mechanisms, spiritual belief, and life satisfaction, in addition to mental health. Spinal Cord Injury (SCI) can have psychological effects that worsen the quality of life. It is becoming increasingly clear that developing resilience may be linked to better health outcomes. A spinal cord injury is frequently an abrupt and life-altering occurrence that requires significant and prolonged rehabilitation. The ability to bounce back from a spinal cord injury and adjust to their impairment after returning to the community depends on their ability to build resilience.

Aim: The study aims to explore the understanding of how resiliency helps persons with paraplegia to adjust to their disability.

Methods: A phenomenological qualitative study design was used. Nine paraplegic SCI patients—seven men and two women—participated; they had all completed rehabilitation and were returning to their community. Individuals took part in a face-to-face, semi-structured interview conducted by the study's investigators adopting a self-developed interview guide. Thematic analysis is chosen for data analysis. Thematic analysis is utilized to focus on how survivors of spinal cord injury experience and build resilience.

Results: Eight themes in the responses of participants describing what they felt contributed to their resilience in adjusting to SCI emerged through a thematic analysis of the data. The eight themes were: From denial to determination, health issues and

their influence on life, barrier, support system, adaptation, participation, spirituality or faith, and inspired by others.

Conclusion: Individuals with SCI recognized a positive attitude, perseverance and determination to move forward, and social support from friends and family as major contributors to their ability to adapt in the face of traumatic circumstances that resulted in SCI, which was consistent with previous research findings. Resilience is a crucial component in the long-term treatment of SCI that can be improved by focusing rehabilitative therapies on mood management as well as self-efficacy beliefs. Larger-scale research can help in a better understanding of these findings.

Keywords: resilience, spinal cord injury, tetraplegia, paraplegia, rehabilitation.

CHAPTER I: INTRODUCTION

1.1 Background

Spinal cord injury (SCI) is a severe neurological disorder that has a significant Socioeconomic impact on those who are affected as well as on the healthcare system. There are 12,500 new cases of spinal cord injury in North America each year, according to the National Spinal Cord Injury Statistical Center (Hachem et al., 2017). A sudden, unexpected, and traumatizing incident like a spinal cord injury (SCI) often requires extensive, ongoing rehabilitation to maintain the patient's physical and psychological well-being (Singh et al., 2014). According to the World Health Organization (WHO), between 250,000 and 500,000 persons worldwide experience spinal cord injury each year (WHO, 2013). Physical challenges result from a disruption in the cord's normal motor, sensory, or autonomic function and can include immobility issues (the majority of SCI patients use an electric or manual wheelchair to get around), a loss of sensation, including sexual sensation, autonomic dysreflexia (a condition that causes excessively high blood pressure), complications with the bowel and bladder (like urinary tract infections), muscle spasms, pain, pressure sores, and obesity (with 40% of people being overweight or obese following SCI) and difficulty in temperature regulation (Anson & Shepherd, 1996). People who have had SCI may also struggle psychologically. According to research, 30–40% of patients with spinal cord injuries develop depression and 20–25% of them experience anxiety (Kennedy et al., 2000). Additionally, spinal cord injuries frequently occur quickly and unexpectedly (for example, by falling off a horse or being tackled in a sport like a rugby union). People are not ready for such a life-changing event, so this is traumatizing. These unexpected occurrences might also bring back unpleasant and unsettling memories, like those of a car accident or a war.

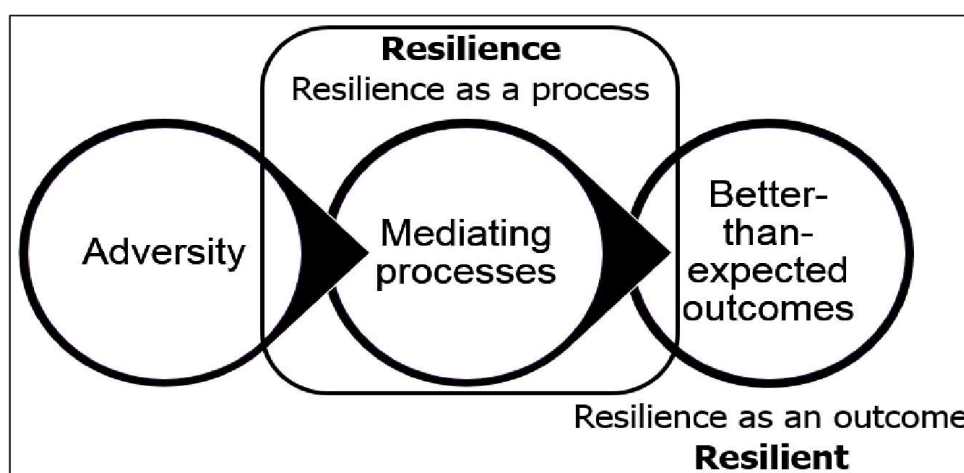
After an injury, this might lead to post-traumatic stress disorder (PTSD), which affects 10–40% of people (Kennedy & Duff, 2001). In addition to these challenges, patients with spinal cord injuries may also have short attention spans, restricted initial learning capacity, poor concentration skills, memory impairment, and altered problem-solving abilities, all of which may hinder the initial rehabilitation process (Singh et al., 2011).

Following SCI, a person's physical, psychological, and social environments significantly shift, going from being very accessible to extremely restricted. Nevertheless, many survivors of SCI have healthy, fulfilling lives (Quale & Schanke, 2010). Some people appear to "bounce back" and adapt more quickly when adversity hits their life. Others, though, seem to never entirely return after the incident (Tugade & Fredrickson, 2004). Being able to cope with these stressful situations shows resilience rather than luck. An individual's capacity to cope with and recover from adversity or a traumatic experience is referred to as resilience (White et al., 2010). Resilience is a term used to describe how adversity is lessened and how it improves well-being in children, adolescents, and adults around the world (Ungar et al., 2008). Resilience is important during such physical, psychological and social difficulties, enabling physically ill individuals to live and function better with their illness (Stewart & Yuen, 2011) as well as in the transitional process of learning to live with chronic illness (Kralik et al., 2006).

The concepts of resilience theory deal with how people respond to and adjust to difficult situations like adversity, change, loss, and risk. Numerous disciplines, including psychiatry, human development, and change management, have examined resilience theory (Katie Hurley, 2022). Although the resilience theory's process-outcome debate is legitimate, it unnaturally separates the process from the consequence. Adversity, outcomes, and mediating factors are the three interconnected parts of resilience

research. Without taking into account these three factors, resilience cannot be thought about or researched. However, the issue with the outcome definition of resilience is that it does nothing to explain the observed positive results in the face of adversity. The process definition of resilience is preferable since a declaration without justification is of limited use. Therefore, conceptually, resilience is a process that results in an outcome, and the mediating mechanisms are the main focus of the resilience study (Figure 1.1).

Figure 1.1: Resilience as a process



A person's life is significantly impacted if they suffer a spinal cord injury. The patient's life and/or those of her family have significantly changed as a result of the injury. Patients find it difficult to adapt to this kind of shift. Self-esteem issues may arise after acquiring SCI (Gerschick et al., 1995). someone who was once independent may no longer be in charge of his or her own life or even body and may require assistance from others. People with traumatic SCI may also have a concurrent traumatic brain injury, which makes adjusting more difficult (Buchanan & Elias, 2001). Additionally, using a wheelchair in unadopted situations can be challenging, and encountering environmental obstacles is linked to reduced life satisfaction (Whiteneck et al., 2004). Disability

adjustment is a dynamic process that helps people with SCI become more adapted to their surroundings. Following SCI, social adjustment is another area that can be challenging. According to research, 34% of spinal injury victims were a significant burden on their families, 32% had cold, distant relationships with their partners, and only 34% were able to return to work or work from home after the accident (Singh et al., 2011).

This study takes the idea of resilience and explores how it helps people with paraplegia to adjust to their disability in the community. It will tackle it from a phenomenological perspective. The objectives set by the four types of resilience are psychological, physical, emotional, and social.

1.2 Justification of the study

Although resilience is crucial after SCI (deRoos-Cassini et al., 2010; Quale & Schanke, 2010; Stewart & Yuen, 2011; White et al., 2010; white et al., 2008), we know very little about what it is and how it is nurtured, particularly beyond the rehabilitation phase. Therefore, this study will examine the resiliency of persons with spinal cord injuries and paraplegia who have finished rehabilitation and are now residing in the community.

The primary goal of this study is to gain a greater understanding of how people with SCI think about the actions they take to maintain resilience and well-being over the long term. For health practitioners that interact with patients during the acute and post-acute phases of rehabilitation, a deeper grasp of what people with SCI experience as crucial to sustaining and nurturing psychosocial well-being over time is essential knowledge. A lot of attention is paid to the kind of support that the participants, looking back, felt was crucial.

This study may reveal how resilience helps patients with SCI in adjusting to their impairment. To help the person with SCI become resilient, health professionals, as well as family members, may find this result useful. In Bangladesh, this kind of research has not yet been conducted. Therefore, it is crucial to understand how resilience functions in SCI patients in the context of Bangladesh. Resilience research may have a significant impact on the health and well-being of SCI survivors.

1.3 Operational Definition

Resilience: Resilience is the ability to deal with and recover from adversity. Resilient people maintain their composure in the face of adversity (Horn & Feder, 2018).

Spinal Cord Injury: A spinal cord injury, defined as damage to any segment of the spinal cord or nerves at the end of the spinal canal (cauda equina), frequently results in permanent changes in strength, sensation, and other body functions below the site of the injury (MayoClinic, 2021).

Additionally, paralysis caused by spinal cord damage is known as:

- **Tetraplegia:** The arms, hands, trunk, legs, and pelvic organs are all impacted by the spinal cord injury, which is also referred to as quadriplegia.
- **Paraplegia:** The trunk, legs, and organs of the pelvis may be completely or partially paralyzed. (MayoClinic, 2021)

Rehabilitation: Rehabilitation is defined as “a set of interventions designed to optimize functioning and reduce disability in individuals with health conditions in interaction with their environment” (WHO, 2021).

1.4 Study Questions, Aim and Objectives

1.4.1 Overarching Research Question

How does resiliency help persons with paraplegia to adjust to their disability?

1.4.2 Aim and Objectives

Aim: To explore the understanding of how resiliency helps persons with paraplegia to adjust to their disability.

Objectives:

- i. To find out how psychological strength helps to cope with challenges or uncertainty related to disability adjustment.
- ii. To identify how physical ability helps to adapt to challenges related to adjustment.
- iii. To explore how people with paraplegia cope emotionally with stress and adversity related to disability adjustment.
- iv. To explore how the family and society help a person with paraplegia for adjustment after SCI.

CHAPTER II: LITERATURE REVIEW

The significant information from this study was presented in this section. The findings of a few articles about resilience and disability adjustment in spinal cord injury are summarized in this chapter. This review chapter demonstrates the resilience of SCI Patients after rehabilitation and their ability to cope with disabilities after returning to the community.

2.1 Overview of Resilience

Resilience is a multifaceted dynamic system of cognitions, behaviours, and biological factors operationalized as an outcome pattern of positive adaptation in the presence of a significant disruption event (e.g., tragedy, trauma, adversity, significant life pressures) (Bonanno et al., 2011; Rutter, 2007; White et al., 2010). Everybody encounters difficulties in life, and resilience is the capacity to overcome them. According to findings from previous research, resilience is a trait that everyone possesses to varied degrees and is based on a system of fundamental human adaptability (Masten, 2001; Newman, 2005). Resilience is strongly related to the concepts of coping and adaptation that take place under challenging circumstances (Rutter, 2007). According to Masten, the term "resilience" refers to a class of occurrences marked by positive results despite significant challenges to adaptation or development. An individual is believed to be unable to make the claim that they are resilient "if there has never been a substantial threat to their growth." (Masten, 2001) It may be claimed that until they have experienced hardship, people do not build resilience. Definitions and comparisons are challenging because hardship is experienced and defined differently by different people. Norman (2000) nonetheless outlines three fundamental requirements for resilience. First of all, resilience is not a fixed quality that belongs only to one

individual. The second is that adversity may worsen with time and Last but not least, resilient behavior may not always indicate a normal emotional state. (Norman, 2000).

A cross-sectional survey of people with SCI living in the community included written comments that were completed. These comments were then subjected to qualitative analysis. Through the data and/or membership lists of 4 organizations, more than 1,800 mail questionnaires were sent to those who had been identified as having a traumatic SCI. The survey was completed and returned by 475 persons, and about half (48.6%; $n = 231$) of those who participated responded to the open-ended question, "Is there anything else you would like to tell us about your resilience or capacity to "bounce back" when you confront a challenge?" Most respondents with SCI considered themselves to be happy and said that their ability to adjust and resiliency was influenced by their personalities, strong social networks, and spirituality (Duggan et al., 2016). But in this study the fact is that only people who choose to answer the open-ended question and take part in the larger survey were included in the study is a major drawback due to self-selection bias. Although the sample is still quite large and varied for a qualitative study, it is unquestionably weighted to reflect the viewpoints of people with SCI who were motivated and energetic enough to participate.

2.2 Overview of Resilience in persons with SCI

The idea of resilience specifically regarding traumatic SCI has been examined in six research. In 2008 White, Driver and Warren identified resilience's impact after injury, they became the first researcher to emphasize its significance in spinal cord injuries (white et al., 2008). They extended on this in 2010 by doing a quantitative analysis of how resilience changed throughout the rehabilitation process. This was also the first investigation on SCI specifically(White et al., 2010). According to Dunn, Uswatte, and

Elliott (2009), adults with an acquired physical handicap can be resilient. They first contend that as they assist in reestablishing baseline levels of psychological and physiological functioning, good emotions are crucial for resilience(Dunn et al., 2012). Second, they advocate for encouraging resilience rather than mandating it. This is so because there are many different ways to handle difficulty.

In order to study resilience in individuals with SCI, Catalano, Chan, Wilson, Chiu, and Muller (Catalano et al., 2011) applied their own model of resilience to the Framework of Resilience Model(Kumpfer, 1999). Using structural equation modeling to verify their hypothesis, they discovered that social support and problem-focused coping directly affected resilience. By acting as a mediator between depression symptoms and perceived stress, resilience in turn buffered depressive symptoms(Catalano et al., 2011).

A qualitative study in USA included 42 individuals with SCI where 33 men and 9 women, who were in inpatients. According to the study, resilience did not alter significantly after inpatient rehabilitation, but each indication of adjustment did. Significant relationships between resilience, life satisfaction, spirituality, and depressive symptoms were also found in the research. But this study made no ideas for prevention strategies or looked at the factors that indicate resilience(White et al., 2010). The Spinal Injury Rehabilitation Center and communities in Nepal contributed 82 individuals to a descriptive cross-sectional study. Significant correlations were found between resilience and social support, self-efficacy, depressive mood, and demographic factors as sex, employment, and current residence. But in this study, the researcher read the questions and filled out the questionnaires for individuals who were illiterate, which may have led to biases. Participants were more inclined to respond favorably than to their own feelings(Bhattarai et al., 2018).

The most recent study about resilience And SCI is a scoping review, where 40 studies were reviewed. An overview of the state of resilience research in SCI was given in this scoping review. The goal of resilience research is to identify and enhance the circumstances and associated mechanisms that promote personal well-being in the face of difficulty. The bulk of studies used cross-sectional data and were quantitative correlational studies. The majority of those research viewed resilience as a result, a collection of human traits, or a set of resources, while tacitly or explicitly recognizing that both are crucial factors to take into account while studying resilience(McDonald et al., 2020).

2.3 Knowledge about Disability adjustment

Leah Curran and Louise Sharpe wrote an article that was published in 2005. In that article, the literature on adjustment with physical illness is examined. The definition of adjustment in the literature almost often involves a psychological function. In reality, however, adjustment is a process that starts as soon as symptoms appear, continues all the way through the illness, and reacts to changes in the illness state. A comprehensive strategy that explains how the process of adjustment develops is required, despite the fact that numerous models have been proposed to explain various elements of adjustment to chronic illness. With such knowledge, clinicians will be better able to support adjustment and perhaps even stop long-term issues. Providing the best possible level of medical treatment must prioritize assisting patients in adjusting to their illness(Sharpe & Curran, 2005).

Forty-eight people with spinal cord injury who were at least 18 years old and in stable medical condition participated in a hypothetical study in Memphis, US. Ages of participants ranged from 18 to 61. For a sample of individuals with spinal cord injuries,

this study looked into the relationship between perceived changes in sense of coherence from pre- to post-injury and adjustment. It was assumed that a person's perception that their sense of coherence had been considerably diminished following a spinal cord injury would be linked to poor adjustment. The Reactions to Impairment and Disability Inventory by Livneh and Antonak and the Sense of Coherence Scale by Antonovsky were completed by 48 spinal cord injury patients. Results showed a link between adjustment and a more solidified feeling of coherence(Lustig, 2016). But due to the restrictions that limit the generalizability of the findings, the study's findings should be regarded with caution. The nonprobability and cross-sectional nature of the data suggest that the study's sample should only be used in the interpretation of the findings. It's probable that some of the participants are different from the majority of people with spinal cord injuries (e.g., better educated) because they took the survey online.

A most recent narrative review of Research on Adjustment to Spinal Cord Injury and Mental Health: Gaps, Future Directions, and Practice Recommendations. This review does not aim to evaluate various theories of adjustment in a systematic manner. The process of adjustment, however, cannot be generalized since it is dynamic, unique, and complex, as persuasive reviews of the literature have demonstrated. Both qualitative and quantitative studies were chosen to record bottom-up and top-down viewpoints. Reference directories of retrieved documents were appropriately searched. According to the reviewed research, positive coping mechanisms are ignored in current mental health after SCI guidelines, which may lead to a deficit-based understanding of this condition. Research on "positive" or adjustment-enhancing processes is typically cross-sectional, heterogeneous, and not well-suited to influence the creation of future guidelines. To better guide the management of mental health following SCI, researchers

should come to agreement on the operationalization of key processes and move past a fixation with "outcomes"(Sandalic et al., 2022).

2.4 Relation of Resilience and Disability Adjustment

The experiences of people with disabilities lack any concepts of resilience. Although there is a lack of research in this area, person with disabilities are frequently excluded from the resilient category and placed in the vulnerable category(Runswick-Cole & Goodley, 2013). First off, resilience has far too frequently been seen in the context of disability as “the positive pole” of individual diversity in people's response to stress and hardship(Young et al., 2008). This has a variety of repercussions. First, person with disabilities are accused of having a lack of willpower to deal with "their lot in life"(Ungar, 2005), and second, they are charged with using their disabilities as a justification(Runswick-Cole & Goodley, 2013).

A study by deRoon-Cassini, Mancini, Rusch and Bonanno (2010) longitudinally examined by identifying four trajectories that explain how one might adjust to a severe physical injury. These four concepts were resilience, recovery, delayed distress and chronic distress. Although resilience was the most common trajectory, it should be noted that resilience was only determined from the absence of psychopathology and not through positive development, therefore this conclusion should be interpreted with caution(deRoon-Cassini et al., 2010). In 2010 Quale and Schanke used questionnaires and in depth semi-structured interviews to expand on these findings. Additionally, they discovered that both positive affect and negative affect could indicate resilience, the most common trajectory among the four. Other factors that distinguished the various trajectories included optimism, social support, and suffering. They proposed that

resilience resulted from having an ideal degree of coping and self-efficacy and that more education appeared to be protective (Quale & Schanke, 2010).

A thematic analysis of in-depth interviews with seven men who had previously undergone medical rehabilitation and had lived with spinal cord injury for 2-32 years as part of an exploratory qualitative study. The study's findings demonstrate that participants needed ongoing adaptability, perseverance, and solution-focused adjustment, all of which are seen as processes demonstrating resilience (Geard et al., 2018). But in this study the sample size was further constrained because only men accepted the request for in-depth interviews; hence, the findings should be evaluated with care. This study's main limitation—the absence of female participants with SCI—raises questions about whether the results also apply to women.

2.5 Gap of the Study

- Among the published literature were found, few articles worked on person with SCI in inpatients and did not find any significant change in resilience. Because in inpatient, it is too early to developed resilience.
- The majority of articles on resilience deal with people with physical disabilities rather than SCI.
- The majority of studies used cross-sectional data and were quantitative correlational studies. The majority of those research viewed resilience as an outcome, a collection of human characteristics, or a set of resources, while tacitly or explicitly recognizing that both are crucial factors to take into account while studying resilience.

- The biggest flaw in the majority of the research is the lack of female SCI participants, which raises concerns about whether the findings also hold relevant for females.
- Although there are few studies on resilience in SCI, the timing of their publication reveals that the majority of this field's study was done in the late 1990s and early 2000s. Recent research on resilience in SCI has largely consisted of some scoping reviews.
- Due to the largest prevalence of SCI in the globe, the majority of studies on resilience in SCI were undertaken in the Iran, and Saudi Arabia(Lee BB, 2014). There is some research conducted in USA, UK and Canada. Except for Nepal and India, there are no studies on this topic in South Asia or Bangladesh.

Therefore, it's crucial to understand how resilience helps in adjusting to a person's disability after returning to the community.

CHAPTER III: METHODS

This chapter will provide an overview of the research methods, including the justification for the research design, the ethical issues, the study setting, the strategy for recruiting and sampling participants, the methods for collecting data, the process for analyzing that data, and the level of research rigour.

3.1 Study Design

3.1.1 Method

The researcher used qualitative research design to explore how resiliency helps persons with paraplegia to adjust their disability. Since the aim of this study was to explore, qualitative research was deemed appropriate for it. Even though qualitative research can imply different things to different people, it can be challenging to describe. Additionally, it is surrounded by a complicated family of terminologies, concepts, and presumptions that are interrelated (Denzin & Lincoln, 2011). Denzin and Lincoln describe qualitative research as a complex research technique that takes a subject-centred, interpretive approach. Researchers can create a comprehensive understanding of the topic under study thanks to qualitative research's complex nature (Denzin & Lincoln, 2011). The researcher utilized a qualitative research strategy because it may address the experience of a specific event and how living conditions are changed by the event of the people (Patton & Cochran, 2002).

3.1.2 Approach

The phenomenological approach was used by the student researcher to carry out this investigation. Because any study where the researcher is interested in how people interpret their own lives or circumstances can use a phenomenological approach. This phenomenological qualitative research design can be used to learn about the

participants' everyday experiences (Kitzmüller et al., 2012). To ascertain whether a phenomenological technique is the most effective way to analyze the study problem. An issue where it is crucial to comprehend different people's common or shared experiences of a phenomenon is best suited for this style of research. Understanding these typical experiences will be crucial for developing strategies, policies, or deeper comprehension of the characteristics of the phenomenon (Creswell & Poth, 2017). Hicks (2009) asserts that a qualitative research design is suited for a study when the researcher is eager to learn the answers to the research questions by exploring the participants' experiences, emotions, and performance (Hicks, 2009). So, this approach is excellent for obtaining participant insights, judgment, experience, and perspective.

3.2 Study Setting and Period

- Each participant took part in the study from their respective community. This in-depth study was carried out in the communities of Savar. Savar was chosen since the study duration was short, and Savar is a fairly vast area with the greatest rehabilitation centre for SCI.
- The participant-recommended locations where they felt comfortable sharing their stories were used by the researcher to collect data.

Study Period: April,2022 to March,2023

3.3 Study Participants

3.3.1 Sampling Techniques

For this qualitative study, the researcher used a purposive sampling of participants who met the inclusion criteria. Because the researcher utilized judgment while choosing participants, intentional sampling was used.(French et al., 2001) Samples were drawn from a diverse population. In qualitative research, the purposeful sampling method is

used to examine the lived experiences of a particular population using predetermined selection criteria. In qualitative research studies, sample sizes are quite small and they are not always representative of the entire community (Patton & Cochran, 2002).

In order to perform the study, purposive sampling was chosen to pick nine individuals, and the sample size was determined by the saturation of the data. Data saturation in qualitative research refers to situations where the sample size is chosen and data is repeatedly gathered before the qualitative researcher stops recruiting participants for data collection (Saumure & Given, 2013). Two of the nine participants are women, while the other seven are men. The proportion of male and female SCI patients in Bangladesh was used to determine the number of participants. In Bangladesh, there are 13.14% female and 86.82% male SCI patients (Rahman et al., 2017).

3.3.2 Inclusion and Exclusion Criteria

Inclusion Criteria

- i. Age over 18 years.
- ii. Persons with paraplegia using wheelchairs.
- iii. Both male and female (ratio 7:2).
- iv. Completion of rehabilitation service at CRP.

Exclusion Criteria

- i. SCI with progressive diseases include cancer and Alzheimer's disease.

3.3.3 Participant Overview

The participants included 9 spinal cord injured paraplegic men and women (7 men and 2 women) who are wheelchair user. Participants were aged between 32 and 62. A summary of participants' details is provided below:

Table 3.1*Overview of Participants*

Pseudo Name	Age (Year)	Sex	Year of Injury	Marital Status	Living Arrangement	Educational Qualification	Occupational status
Shafiq	49	Male	1983	Married	Wife	SSC	Retired and social worker
Chayan	45	Male	2008	Married	Wife and two daughters	Class 9	Unemployed
Mofiz	55	Male	1988	Married	Wife and daughter	SSC	Social and volunteer worker
Shefali	32	Female	2003	Married	Mother, sister, Husband and son	Class 7	Homemaker and social worker
Fayaz	62	Male	2011	Married	Wife and daughter	M.Sc. in Economics	Retired
Joshim	41	Male	2003	Unmarried	Siblings	Class 5	Small business (shop)
Rokeya	32	Female	2019	Unmarried	Mother, brother and his family	M.Sc.	Part time employed
Karim	46	Male	1999	Married	Wife	M.Sc.	Business and social worker
Shobuj	37	Male	2014	Married	Wife and son	SSC	Internet Business

3.4 Ethical Considerations

The Declaration of Helsinki, which includes research on identifiable human material and data, was created by the World Medical Association (WMA) as a statement of ethical standards for medical research involving human beings. Each of the Declaration's individual paragraphs should be applied while taking into account all other pertinent paragraphs because the Declaration is meant to be interpreted as a whole (WMA, 2022). The following list of ethical guidelines for research are based on the helsinki - ethical principles.

3.4.1 Research Ethics Committees

Institutional Review Board (IRB), BHPI, CRP, Savar, Dhaka-1343, granted its approval, ensuring ethical conduct. The project has the reference number (CRP/BHPI/IRB/09/22/620) (the IRB's certificate of ethics approval included in Appendix A1). Since the data belonged to CRP, data collection approval was also acquired from CRP (see Appendix A2 for Data Collection approval certificate from CRP, Bangladesh).

3.4.2 Informed Consent

In order to obtain participants' assent, the researcher created information sheet and consent forms in both Bangla (Appendix B1) and English (Appendix B2). Each participant who expressed interest in participating in the interview was asked to sign a written consent form, and the researcher also explained information sheet thoroughly before asking for signature in consent form.

The researcher made sure that each participant understood their position in the study and was assured that they would not suffer any negative effects as a result. The value of this study was also discussed by the researchers. Participants were made aware that

the study supervisor would be the only person to whom the information they provided would be shared. The researcher made clear the participants' rights.

3.4.3 Unequal Relationship

- There is no uneven power between the participants and the researcher.
- The participants were selected after having their information acquired from the CRP's social welfare department through purposive manner.
- The study participants were chosen based on inclusion and exclusion criteria, so there was no bias in the selection process.

3.4.4 Risk and Beneficence

- There is no known risk of the participants for providing the information.
- Participants may not directly benefit from providing data, but others with SCI or other disabilities and healthcare professionals may benefit as a result of their experiences.
- The procedure for withdrawing was explained to participants. Before the data analysis began, any interviewee could choose not to participate.
- Confidentiality of the participants was guaranteed and upheld by the student researcher. Access to the interviews is restricted to the student researcher and the supervisor, as was explicitly noted in the information sheet.
- The student researcher was accessible to respond to any participant inquiries or questions regarding the study.

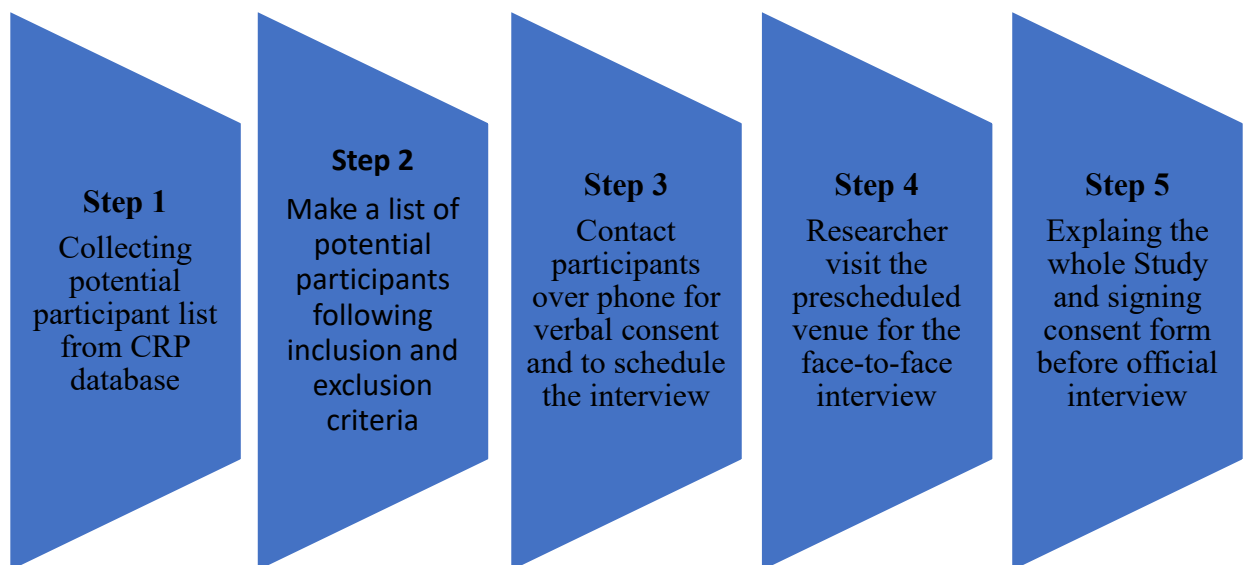
3.5 Data Collection Process

3.5.1 Participant Recruitment Process

The social welfare department of CRP is contacted for participant information. According on the data gathered, the researcher chose participants who fit the requirements for inclusion.

The researcher first called the individuals to establish contact. After describing the study, enquire about their interest in participating, and set up an interview time. The population that has agreed to give consent is then recruited to participate. Below is a diagram of the flow of participant recruitment:

Figure 3.1 Steps involved in participants recruitment



3.5.2 Data Collection Method

Semi-structured interviews were the main method of collecting data. All information was gathered utilizing a semi structured research question during face-to-face interviews. Semi structured interviews with participants were done as part of this study to gather comprehensive data (Patton & Cochran, 2002). Participants in interview would be able to use their own words to describe their thoughts, experiences, or perceptions. Additionally, they would have the chance to express their thoughts and discuss actual events or facts (Dicicco-Bloom & Crabtree, 2006). The researcher would be able to assess the participants' level of comprehension of the questions by looking at their faces during the interview process. All participants could easily understand the question because it was written in Bengali. At the very beginning, the researcher would first verbally outline the aims, objectives, and purpose before outlining the rights, obligations, advantages, and significance of the written consent form in a clear manner and giving information sheets and consent forms. Before the interview began, the location of the interview was selected according to the participant's choice. The researcher began conducting interviews as soon as the individual gave their consent. A recorder was utilized during the interview to capture the exchanges and discussions between the interviewer and the participants. It took 40 to 45 minutes to complete the interview. Two of the nine participants were women, and the remaining seven were men. Interviews with the two female participants take place at their homes. All of the male participants participate in interviews, either in their places of work or other chosen locations within their communities. The participant's signature on the consent form was taken by the student researcher as validation of their willingness to participate. The participant's demographic data was then gathered by the researcher. After it was finished, the student researcher began conducting a semi-structured interview and

asking questions in accordance with a "self-developed interview guide" (See appendix C1 for Bangla and C2 for English). The data was collected from 23rd October 2022 to 8th November 2022.

3.5.3 Data Collection Instrument

3.5.3.1 Self-developed Interview Guide

Using a self-developed interview guide, data were gathered through in-depth interviews. I was inspired by the different types of resilience when I formed my study objectives, and as a result, I divided the guide's questions into four categories. Psychological, physical, emotional, and community resilience are the four different types of resilience (Cherry, 2022). As a result, my interview questions primarily reflect each participant's capacity for resilience and adaptation in four areas (See Appendix C1 for Bangla and C2 for English).

3.5.3.2 Field Test

Two people took part in a field test. A field test has to be carried out prior to the final data collection in order for the researcher to refine their data-gathering strategy. The researcher explained the aim and objectives of the study to the participants during the interview. The researcher knew from the field test which parts of the question participants struggled with or did not fully comprehend. The researcher watched the interview's circumstances and the participant's responses, which helped her decide whether to change the question or not. There is no major change in the interview questions after the field test. Last but not least, the question was created in both English (Appendix C2) and Bangla (Appendix C1).

3.5.3.3 Field Notes

Field notes are frequently advised in qualitative research as a way to record necessary contextual data. Field notes make a guarantee that rich context endures beyond the initial research team with the increasing usage of data sharing, secondary analysis, and meta-synthesis (Phillippi & Lauderdale, 2017). The field notes were another data source in addition to the audio recording. The physical aspects of the residence, the working area, and the roadways, as well as the participants' nonverbal cues and any family members' information that was accessible, were all included in the field notes.

3.6 Data Management and Analysis

Thematic analysis was the method of choice for data analysis. The researcher applied the six steps of thematic analysis outlined by Braun and Clarke when analyzing the data (Braun & Clarke, 2016). The supervisors and the student researcher first discussed the phases of analysis, which are detailed below.

Step 1: Make yourself familiar with the data

Student researchers became familiar with the data by conducting interviews, and authentically transcribing the data in Bangla as participant's first language. Then translating all of the transcripts into English, because English is the academic language. Student researcher then read everything in-depth to grasp the significance and data pattern. The key points were underlined using highlighters.

Step 2: Generating the initial codes

In this step, the student researcher began creating the first codes by writing an explanation of the points that were highlighted. Student researchers create initial codes

by emphasizing the relevant respondent topics. Writing down what is important about the same or similar features was done in a consistent manner. With an experienced instructor who is competent, the student researcher discussed the coding process with her.

Step 3: Searching for tentative themes

In the third stage, the student researcher copied the codes from each interview along with the line numbers on a huge piece of paper. Following a study of the codes, related concepts were gathered to identify probable themes. This theme is based on the shared code that each participant has adopted.

Step 4: Reviewing themes

The student researcher reviewed the theme in the fourth step. The theme was evaluated and improved in this step by the investigator using reasonable evidence. The student researcher then developed sub-themes underneath the primary theme.

Step 5: Defining and naming themes

The theme was identified and specified in the fifth step by the student researcher. The reader can figure out what is represented in the theme from the theme's name.

Step 6: Producing the report

The sixth and final procedure includes student researchers developing a result in accordance with the theme. It is an effective technique for data analysis that enables researchers to summarize, highlight, and understand a variety of data sets.

Researchers have indicated that thematic analysis is an excellent initial analytical method for beginner qualitative researchers to understand, in large part due to those who have clearly spelt out its analytical processes (Braun & Clarke, 2016). Thematic

analysis is the appropriate method of data analysis since the student researcher thoroughly investigated how resiliency helps people with paraplegia in adjusting to their disability in SCI paraplegics' the community. With investigator triangulation, researchers include several observers to record, process, or analyze data separately and receive feedback from respective teachers while coding to emergent themes and sub-themes.

3.7 Trustworthiness and Rigor

3.7.1 Methodological Rigour

Methodological rigour was defined by (Fossey et al., 2002) using the following standards: Congruence, responsiveness to social context, appropriateness, adequacy, and transparency are among the criteria.

Congruence: The study was conducted using a qualitative design and phenomenological methodology which was compatible with its aims and objectives (see section 3.1: Study Design).

Responsiveness to social context: Due to the researcher's face-to-face interaction with participants throughout the interview, this study was aware of the social situation. Because the interview was conducted in the individuals' actual settings, such as their homes, CRP, or their workplaces, the situation as it actually occurred was documented (see section 3.2: Study Setting and period).

Appropriateness and adequacy: The most appropriate study participants were chosen using a purposive sampling technique. The main method used to gather data was a face-to-face interview. Following the interviews, remarks were immediately recorded together with field notes from observations for use in the data analysis. Earlier, in the

section on participant recruitment, a thorough description of the participants was given along with a complete explanation of the sampling process (see section 3.3: Study Participants).

Transparency: The researcher does, however, ensure that the data collection procedure is transparent, without bias in sampling, and without a history of power relationships. The supervisors actively participated in various stages of the data analysis. Overall, the entire study was carried out methodically by following research procedures with the guidance of an expert supervisor (see section 3.5: Data Collection Process for more information).

3.7.2 Interpretive Rigour

According to the following six criteria, (Fossey et al., 2002) defined interpretive rigour as:

Authenticity: The opinions and voices of participants were quoted verbatim, proving the authenticity of the data. The researcher accepted the participant's responses regardless of how they were presented. The translated data has been doubled and tripled check by the researcher to make sure it contains all the relevant information. Throughout data collection and analysis, the researcher never tries to influence the results in accordance with her own beliefs or values (see section 3.6: Data Management and Analysis).

Coherence: The subject teacher guided us through each step of the data analysis process. The experts with this kind of knowledge assist the researchers with everything from highlighting the key features of the transcript to coding and emerging themes and sub-themes. Since the direct supervisor was out of the country at the time, subject

teachers checked the themes and sub-themes in the end (see section 3.6: Data Management and Analysis).

Reciprocity: Reciprocity is maintained by digitally recording the interviews, verbatim transcribing each interview in the following phase, and having the researcher translate the interviews while maintaining the original meaning (see section 3.6: Data Management and Analysis).

Typicality: Since that the research was conducted in Bangladesh, it may be challenging for people from other countries to comprehend the context.

Permeability of the researcher: The outcome and data analysis accurately and completely reflect the opinions and statements of the participants. The section on data analysis and coherence has a description of the supervisor engagement process. The participation of the supervisor and subject teacher helped to maintain the study's fairness (see section 3.6: Data Management and Analysis).

CHAPTER IV: RESULTS

This chapter discusses how resiliency helps persons with paraplegia to adjust to their disability. Participants discussed their experience in four areas which are psychological, physical, emotional and community through semi-structured interview. Eight main themes emerged from interview data, for and each theme several sub-themes are identified. An overview of the themes and sub-themes is included in the following table:

Table 4.1

Themes and Sub-themes

Themes	Sub-Themes
1. From Denial to Determination	Denial of Situation
	Frustration
	Positive Attitude
	Determination to Move Forward
2. Health Issues and their Influence on Life	Pressure Sore
	Age-related Conditions
3. Barriers	Environmental Barriers
	Societal Barrier
4. Support System	Family and Finance
	Relatives, Friends and Community
	NGOs and Rehabilitation Centre
5. Adaptation	Acceptance
	Learning
6. Participation	Participation in Sports
	Participation in Vocational Training
	Involvement in Workforce
	Involvement in Social-works
7. Spirituality/ Faith	
8. Inspired by Others.	

Each theme is described, below, with quotes from participants.

4.1 Theme One: From Denial to Determination

While talking about their whole SCI journey, most of the participants said that they did not believe the situation at first, actually, they do not want to believe it. They became frustrated, and some of them restrain them from any activities.

4.1.1 Denial of the Situation

All of the participants expressed that, just after the injury when they heard that they may not be walk again, they did not want to believe that. They feel that they lost everything of their lives. For example, Shafiq, the 54-year-old male participant with paraplegic SCI, who is a wheelchair user, said:

“At first, I could not accept myself for a year, I would never go out of the house, stay away from social activities or social events. I did not go out of the house or do anything. I used to spend 24 hours a day in my room.”

Mofiz, 55 years old male with paraplegia, expressed that:

“When I heard that I may have to lead the rest of my life in a wheelchair, I feel like it would rather be better if I die from the accident. I could not accept myself for a long time and hold myself from many things at that time.”

4.1.2 Frustration

After the denial of the situation, most of the participants go through many mental and emotional ups and downs. Fayaz, 62 years old male with paraplegia, expressed his emotion and stated:

“I was in such a state that I thought my life was over here. There is nothing more to say about life. I have to sit on it, the w/c. This is how I have to die. What is

the benefit of living? Or what can I do to survive? These thoughts would come. If I compare it with my earlier life, I will see many differences. So, what is the benefit of this life to me, I had this disappointment for a long time.”

Shobuj, 37 years old male with paraplegia, expressed that:

“I wanted to commit suicide. In one word, I wanted to commit suicide. I have tried three times to commit suicide. Once I thought that I had to cut my wrist and try to cut the wrist with blades. (With a smile of scorn) I do not have my own balance, what do I cut? Then I fell off the bed. Once, thinking that I would die if I fall from the bed.”

4.1.3 Positive Attitude

Some participants reported that their positive attitude regarding their condition or situation help them to accept and adjust to the uncertain incident in their life after the stages of denial and depression. Mofiz, 55 years old male with paraplegia, expressed that:

“In the future, I will have to move around, I will have to move around in a wheelchair, there is nothing for anyone to do here. Since there is nothing to do, what is the point of worrying about it? After that, I turned my attention to work.”

4.1.4 Determination to Move Forward

Both female participants and some of the male participants think that determination is one of the biggest things which helps them to adjust after this big accident. The urge of doing something, to show others that they can also do something for others and society. This thinking helps them a lot to go through their adjustment journey. Sally, 32 years old female paraplegic SCI, expressed that:

“I think that rather than thinking about the past, I have to show a little bit that I can do it. Yes, I’m sick, so what?” ... It is totally possible. Because we cannot walk, that doesn’t mean we have to stay indoors. We also have to work. We also have to clean the house; we also have to cook. We have to do everything for ourselves. I will not be myself if I am dependent on others.”

Rokeya, 32 years old female with paraplegia, also stated:

“My whole being turns out better if I had a will. When I could not even sit up at all or if I sat down with help, I would put something behind me to support. And then I would try to wear my clothes alone and thinking that “I had to be like me”.”

4.2 Theme Two: Health Issues and their Influence on Life

All of the participants discussed their physical health and strength, and also how all of these had an impact on their lives. They addressed issues related to health and functioning as affecting the participants’ ability to bounce back after a challenge.

4.2.1 Pressure Sore

When they are asked about their health, all of the individuals mentioned pressure sores and how this had affected their lives. Joshim, 41 years old male with paraplegia, who has a pressure ulcer and urinary infection, who works in his own shop, expressed his frustration by stating:

“It may take a month, maybe even two months to heal or recover. So, this gap, in this gap that we cannot open our store, stay on bed rest, then who will pay for us? Who will pay the rent for this shop? Then we get very stressed mentally. Thinking about how to do that? How to pay the rent of the house? Because there

is no one to help us. We have no family or friends to help us. Those, who have, may not understand it. This is how we live our lives.”

4.2.2 Age-related Conditions

While talking about health issues except for two participants, all of the participants complain about some physical weakness which comes with age, this weakness has a great impact on their life. Shefali, 32 years old female paraplegic SCI, expressed that:

“This affects a little bit. I can work fast before, which I cannot do now. I can cook for thirty people myself. If a ceremony was held inside the house, 20/30 people were there, and I, alone, did everything. And now when going to do with five or two people, I feel a little tired. This one is coming with my age and also has a history of disease. It is that the body’s energy slowly decreases.”

4.3 Theme Three: Barriers

Throughout the interview, most of the participants mentioned their challenges or barriers and how they overcome them, and also the thinking of advancing in life helps them to grow after injury. They mentioned various environmental, societal, and financial barriers that occasionally stand in their way of becoming resilient in life following an injury.

4.3.1 Environmental Barriers

While talking about the challenges which they felt were hard to overcome, most of them answer similarly. They pointed out the fact that they struggled to become resilient due to a lack of accessible environment. While talking about this issue Mofiz stated: “Moving freely with the wheelchair is the hardest part.” Joshim, 41 years old male with paraplegia, also said something similar:

“We face obstacles everywhere. Like if we go to the market, there is no accessible entrance. Even when I enter a shop, there isn’t any accessible entrance to enter. Because a market, or everywhere, then walking on the road, there is no accessible environment for the wheelchair user.”

4.3.2 Societal Barriers

Almost all of the individuals encountered some kind of societal barrier after their injuries. While discussing these issues, one of the female participants, Rokeya, mentioned that the way the community people looked at her didn't make her feel very good. She stated that,

“People in my culture have a skewed perception of me. They looked at me as if I were an alien from another planet. Being with them is the most difficult challenge for me. Going to a healthy and non-judgmental environment for people with disabilities is a significant challenge for me.”

Another participant, Joshim, mentioned that when some people ridicule him about his disability or when he has disagreements with others, they curse at him. He explained,

“For them, we're like, if I say it in Bengali, 'lengra,' When there is a disagreement or a minor misunderstanding, the terms lengra are used to us. They also told us that we were sinners. God punishes us for our sins.”

All of the participants agree that this type of obstacles has had a significant impact on their minds, influencing the process of becoming resilient.

4.4 Theme Four: Support System

All of the participants agree on the fact that support is the most important aspect after any big incident to bounce back in life. While speaking about the support system participants mentioned about their Families and finance, relatives, friends and community, and NGO's and rehabilitation centres in this study. They mentioned some support system affect them positively which help them to build up resilience. On the other hand, some support system affects negatively on their resilience journey after injury.

4.4.1 Family and Finance

All of the participants shared that they had enough family support during their journey. While talking about financial support only two participants talk that they had basic financial support. Chayan, 45 years old male with paraplegia, expressed that:

“And I can cope with this situation because one of my daughters is in working force then. So, the financial problem was not so much.” ... “And the family and relatives went to the medical centre to visit me. Yes, many people are helping mentally or giving money at that time.”

One participant gives a slightly different statement in this topic, Joshim, 41 years old male with paraplegia, stated:

“Everyone has a good relationship with me. (With some scoffing) Everyone has love and affection for me. But as I am a PWD, I have financial problems. They only helped me when they didn't have to spend money. Instead of what it used to be, family and financial support is slowly dwindling. Many people fled in fear that I might ask for something.”

With the exception of two participants, all of the participants who lacked basic financial support said that these things made them feel less confident. It takes a long time for them to become motivated and resilient due to their low self-esteem.

4.4.2 Relatives, Friends and Community

Except for two participants, the rest of the participants face negative attitudes from relatives or the relatives deprived them of their rights. Chayan stated that:

“Seeing my situation in society, everyone forcefully took away all the land I own. Given the opportunity, I cannot do anything. And my cousins, uncles, are even more unscrupulous. They got the opportunity and took all the land.”

Shafiq, Fayaz and Joshim also faced the same situation. They are deprived of their rights to ancestral land. Which made them feel worthless which effects on resilience process.

Except for one participant, the rest of the others talked about supportive friends and colleagues has a great impact on their lives. Especially, Rokeya, 32 years old female with paraplegia, expressed that:

“My inspiration has always been my circle of friends. And I was working for a while in a school, the teachers there. I mean, I had colleagues, and because of them I actually got more energy. And the one above gave me something from inside because of which I am able to come so far today. I can recover.”

All of the participants agree that the support of friends makes them feel worthwhile to pursue anything and has helped them become more resilient.

4.4.3 NGOs and Rehabilitation Centre

NGOs and rehabilitation Centre has a role in the adjustment journey of some of the participants. Shefali stated:

“There are many other NGOs, then we have this rehabilitation centre, I take a lot of advice from them, and try to do it alone like myself. Some of the NGOs gave loans to start a business, which helps me to become financially independent.”

Shafiq also said similarly: “But in fact, when all the physios, occupational therapists, counselling staff, the way they cooperate with their motivation, their enthusiasm, and I think because of that I can adapt my mind and accept myself slowly.”

All of the participants mentioned how they receive mental and occasionally financial support from NGOs and rehabilitation centres, which has helped them move closer to developing resilience after such an injury.

4.5 Theme Five: Adaptation

With respect to utilizing adaptive coping, participants identified specific strategies such as accepting the situation and learning or training oneself. Throughout the interviews, most of the participants pointed out these aspects, which are acceptance and learning.

4.5.1 Acceptance

All of the participants agree on the fact that acceptance is the first step of adaptation to any big accident. Accepting their injury can begin to increase their self-esteem and adapt to SCI. Chayan stated that: “The accident must be dealt with acceptance. As soon as it is dealt with, life can be moved forward.” Mofiz also stated similarly: “Since then, I have taken a little care and started to accept, and slowly, one by one, I have taken care of myself and started accepting myself.” Fayaz expressed that:

“If my mind is thinking about the former me then maybe I will suffer. If I understand that, no, this is how I have to fight, this is how I have to struggle, this is how I have to live. Within this boundary I must move, within it, I must live.”

Karim, 46 years old male with paraplegia pointed out that: “if the disability is not adjusted if someone can never mentally accept that "I am a PWD" he will have many difficulties in his life. It means adjusting. It is part of life.”

All of the participants mentioned that they can move on with their lives when they slowly start to accept the situation.

4.5.2 Learning

While talking about adapting to life after injury, all of them pointing out their continuous learning like how to do daily activities, how to transfer, and how to live good life in this situation helps them to develop coping abilities. Mofiz expressed that:

“I am able to overcome these obstacles because of these learnings. If learning did not happen, I would not see, I would not learn, I would not know. Then I could not overcome these obstacles. And because of this learning, I am able to do the job. And it is because of this job that I can come so far today. This learning has become the biggest thing in my life.”

All of them said a common thing is that adjusting to disability is a learning process. The learning and training from the rehabilitation center helps them a lot to adapt to injury and because of that they are in their present position which can made them resilient.

4.6 Theme Six: Participation

Some of the participants made the point that taking part in sports and vocational training helped them regain their self-esteem and deal with their disabilities.

4.6.1 Participation in Sports

Among nine participants, two participants mentioned that getting involved in sports help them to adapt and also some of the participants agree that being involved in leisure activities help them to adapt and refresh their minds. In this aspect, Shafiq stated:

“I absolutely love sports to stay fit. But at some point, when this accident happened, after the accident I think that it is not possible for me to play sports again. So, with the overall support of this rehabilitation centre, being in the environment here, I focused on sports again. Being focused has shown that, in fact, much can be done in this situation, and I, myself, am an example.”

Fayaz also pointed that: “Then there is in the University I work for, there, they were playing sports, I watched sports. Sometimes there was a show, I used to watch that show. Those things help me to adjust in life.”

4.6.2 Participation in Vocational Training

Most of the participants pointed out that participation in vocational training offers them the confidence that they can work to support their families and lives. This thinking enhances their mental fortitude. Mofiz, 55 years old male with paraplegia, expressed: “After one year spent at home, again, I was brought here in this centre, for that training, for vocational training. Later I stayed here for a year. And then I opened a shop in Mirpur.”

Joshim, 41 years old male with paraplegia, stated that:

“After a few days, I took vocational training for electronics. Then sit in the shop, now I have been running the shop for thirteen years... Here has different training for different disabilities. Then there is vocational training, electronics, tailoring and shop training. Training is also given for free for six months, food is free. In the meantime, they are giving them employment, everything. I think parents cannot do that either, cannot think like that.”

All of the participants believed that participating in vocational training helped them become financially independent, which was worked on as one of the crucial components of being resilient.

4.6.3 Involvement in Workforce

All of the participants discussed and agree that doing job and having a stable financial support helps them to be independent in life. Mofiz stated proudly:

“When I got employment here, my mind slowly got refreshed and then actually I could easily overcome those obstacles, many obstacles. It was my intention that, “When I get a permanent job and I get a salary or I need money when that is my solution, then no problem is a problem anymore.”

4.6.4 Involvement in Social Works

All of them are part of an association that works for the development of person with SCI and also do social activities. In this aspect, Shafiq stated that:

“At least in this situation I have gone to many places in the country and abroad and am doing work. Still involved in social activities and involved with these associations, a Spinal Cord Injury Development Association. After that, I am involved with many organizations, which means I am not sitting alone. In this situation, I see that if you do not actually work, if you do not mix with society,

if you do not work with people, if you do not keep yourself busy, you will feel worse.”

The majority of participants stated that working for individuals with disabilities, such as themselves, makes them feel good about themselves and worthy of doing something to help others.

4.7 Theme Seven: Spirituality/ Faith

Spirituality was a strong theme among participants in this study. Many participants felt that their spirituality, faith or ability to make meaning out of their experience had a significant impact on their ability to adapt. When expounding on the role of faith in his injury, one participant, Chayan stated:

“Lying down all day after the injury, it did not make sense. At first, it was difficult to accept. Then I slowly start to pray namaz, first start to pray in lying, then start praying in sitting. That’s how I start to accept everything that happened to me. Many people support me, counselling me and that’s how I pass that time.”

Shefali, 32 years old female paraplegic SCI, expressed that:

“Now my mother is sick, she was paralyzed after a stroke. I am in charge of the mother's service and care... Everyone thinks that I'm a girl, how is it possible that when I'm the girl in a wheelchair? But the power of Allah is upon me. When I remember this strength, I always put my trust in Allah and do everything.”

4.8 Theme Eight: Inspired by others

All of the participants said that inspiration and motivation from others help them to adjust after injury. Shafiq, who came to this rehabilitation centre when he was a teenager, expressed: “At this rehabilitation centre when I see other kids like me playing sports, then at some point, I get attached to them. I also play sports with them”.

Karim also stated the fact that:

“there's a lot of motivation work here. We had a man here as my colleague, who did counselling work. His activities, his movements, he was tetraplegic. He could not even take a glass of water with his hand and eat. But he was alive and he used to say,” This is living”.”

Shefali said differently that she wants to be inspired others. She expressed:

“This is what will give me strength. If we are dependent on others today, we must remain dependent on them. Today if I learn, then another will learn by watching me. They will say “Yes, I can do it too if she can”.”

CHAPTER V: DISCUSSION

This qualitative study sheds light on how resilience affects SCI survivors with adjustment to their condition in the community. In the study, there were nine paraplegic participants—7 males and 2 females. From the participant's transcript, eight themes were identified by the study.

The first objective of this study was to find how psychological strength helps to cope with challenges or uncertainty related to disability adjustment. According to this study's findings on the first theme—from denial to determination, having a positive attitude and being determined will help the participants start to adjust to a limitation. The same findings on how to build resilience and cope with disabilities have also been published in literature from other countries (Duggan et al., 2016; Monden et al., 2014). However, the new study discovers that the initial stage of developing resilience is the denial of the situation and frustration; after going through these phases, people start to develop resilience and take a small step toward adjustment. The majority of research primarily concentrates on the positive factors that significantly affect resilience and adjustment. But in order to get there, individuals must experience certain unfavorable psychological ups and downs, which are not strongly described by the earlier work. This represents the study's most new findings.

The second objective of this study is to identify how physical ability helps to adapt to challenges related to adjustment. After SCI, the person with SCI experiences a variety of health issues, and those issues have an impact on their life and adjustment process. Because of that health issue physical ability decreases. Although some earlier pieces of the literature indicated these health problems, they did not explain how they affected people (Duggan et al., 2016). However, this research provided the influence of those

issues clearly. The participants' descriptions of pressure sores and urine infection after SCI highlight the most serious health issues. If they get any sores or get a urinary infection, their life will become quite difficult. They are required to take bed rest; therefore, they are unable to perform any economically productive work. During that time, their financial situation deteriorates.

The third objective of this study is to explore how people with paraplegia cope emotionally with stress and adversity related to disability adjustment. Following SCI, some participants reported experiencing a sense of acceptance. Given that people have previously stated that accepting their SCI enables them to perceive and use it constructively, this discovery may be significant. People noted that acceptance is a continual process that requires time and reflection, but it allowed them to go forward in their life after having a spinal cord injury. The areas of positive change after adversity that are most frequently discussed are perspective on life, perception of relationships, and perception of oneself. The perspective of life was the most frequently cited theme; Chun and Lee also found this theme in the participant's narratives of their lives after SCI (Chun & Lee, 2008). People in both studies made remarks about appreciating the little things, being more thankful, and valuing every moment of life. It seems that one area in which many feel that they have benefited from SCI is having a greater perspective on life. However, none of the studies clearly discuss their perspective on overcoming obstacles and moving forward in life, which is the focus of this study. To "bounce back" and restore emotional control, participants indicated the considerable effort, energy, and strength needed to combat negative emotions and negative attributions (which had not previously been researched in detail). The participants discussed how they overcame difficulties by engaging in constructive self-talk to keep a positive outlook and preserve emotional stability. The participants also emphasized

the different activities they engage in to maintain a regular life, including training, visiting friends, travelling, and sports. These results highlight the effort put into promoting psychosocial well-being by using one's own inner courage and skill.

The fourth objective of this study is to explore how the family and society help a person with paraplegia for adjustment after SCI. Social relationships and support were frequently mentioned as having an impact on resilience, which is consistent with the way that physical disability and mobility issues can have social consequences that affect a person's sense of belonging to their family and the larger community. In this study, respondents with SCI expressed gratitude for the support they received from family and friends and noted that it helped them reintegrate into society and foster resilience. There has been debate over the significance of familial and personal relationships; some research recognized these connections as unmet needs, while others saw them as crucial to a person's psychological and physical health(Kennedy et al., 2000). The majority of the literature on the topic of support systems primarily focuses on the advantages that the majority of participants receive like support from society or relatives. However, in this study, some participants draw attention to the unfavorable treatment they received from relatives and society both then and now. This study focuses on the barriers they encounter in society and the environment. Additionally, it highlighted how their support system influences their lives and how they adjust by accepting adversity and developing resilience.

The most frequent findings of the majority of the literature on resilience and disability adjustment relate to participants receiving inspiration from others to help them through the process of adjustment(Dunn et al., 2012). However, in this study one of the participants pointed out that she wants to inspire others, therefore having this thought really helps her in the adjustment process. Respondents also articulated the category of

spirituality or faith in a higher power as a source of support, which contributes to the body of knowledge on SCI adjustment. The question of whether or how humans call for and receive support from a higher power, such as spiritual forces and spiritual beings like God, has received less study in the SCI literature.

In this study, the majority of the respondents say that having a job or being actively employed really helps them in developing resilience and making quick adjustments to their lives. One of the key components of their adjustment, according to some participants, was getting a fresh start in life through participation in sports, vocational training, involvement in the workforce and social work. Most of the literature focuses on sports and getting a job or involvement in the workforce. But none of the literature focuses on this issue, such as social work or volunteer work and vocational training, which can be ways to build resilience and adjust to disability. I believe this is a completely new finding in the resilience study.

The underlying clinical framework may need to be altered or expanded in order to effectively use findings to inform and guide treatment plans. Continued investigation into the post-SCI adjustment process is required in order for the field to fully recognize, comprehend, and value the positive aspects of transformations.

CHAPTER VI: CONCLUSION

6.1 Strengths and Limitations

6.1.1 Strength

I want to highlight my research's strong points before we talk about its limitations.

- My methodology is one of the main strong points of my research. The appropriate research design for any study of emerging issues is a qualitative design. Additionally, participants provide information in semi-structured interviews, which directly mirror their remarks. My research methods were also checked by my supervisor.
- In the context of Bangladesh, resilience and disability adjustment related to resilience in SCI are relatively recent phenomena. As a result, there isn't much literature on my topic. In comparison to other issues, this helps my research to stand out more and become more original.
- COREQ Guidelines are followed throughout the thesis design.
- Finally, member checking is one of this study's strongest points.

6.1.2 Limitation

There were some limitations imposed when this study was being conducted. The researcher carried out this investigation while taking these limitations into account. The limitations are detailed below:

- Data were only collected from paraplegic SCI participants in this study, so findings cannot be generalized to those with other forms of SCI.
- Due to the exploratory nature of this qualitative study that was specifically designed for SCI in the setting of Bangladesh, it is challenging to extend the

findings to non-SCI populations or SCI populations from other countries and draw firm conclusions regarding the experience of resilience among people with SCI.

- Finally, some participants, but not all, have experience doing this kind of interview repeatedly. Some participants' comfort levels may have been impacted by this familiarity, which could have changed how they responded.

6.2 Practice Implication

It is crucial that healthcare professionals incorporate into their practices not just knowledge derived from studies that show statistical correlations between and among variables, but also knowledge derived from qualitative studies that contribute an understanding of the process of "successful adjustment." It is congruent with the present practices of many clinicians and enables patients to reprocess and find new understandings and meaning for their life following such an injury, as stated by the participants in this study. The underlying clinical framework may need to be changed or expanded in order to use such evaluation results to educate and guide well-directed treatment approaches. Resilience is a crucial component in the long-term treatment of SCI that can be improved by focusing rehabilitative therapies on mood management as well as self-efficacy beliefs.

6.2.1 Recommendation for Future Practice and Research

Future research should focus on maintaining resilience improvement over time because it is possible for resilience to deteriorate as people age and for rehabilitation effects to eventually lose their effectiveness. Here are a few recommendations for additional study:

- Explore the resiliency pattern in elderly SCI patients.

- Identifying what spirituality means to a person with SCI and how it could affect the development of resilience.

6.3 Conclusion

As a result, the current study adds a level of depth and richness to existing conceptualizations of resilience. The findings show that people with SCI subjectively attribute many of the same factors to their capacity for adaptation that has been found in previous empirical studies on SCI and other traumatic disorders. The topic of resilience and the ability to rebound following SCI seems to strike a chord with a significant number of individuals. Both the supports and the obstacles to adjustment are evident in their reactions.

Only 9 paraplegic SCI patients' lives were evaluated in this study. By hearing the experiences of more spinal cord injury victims, future research could expand on this study's findings. Resilience may be developed differently in other stories. This thesis provides answers to queries such as what resilience is in SCI patients, how resilience is developed, and how resilience might be used to adjust to disability. Additionally, this research has inspired a number of new avenues of investigation. By sharing these individuals' SCI stories, I hope that this research will encourage people with SCI to consider the stories they tell and how those stories are affecting their resiliency and adjustment. Additionally, I believe that stories will raise awareness of SCI so that communities, families, and cultures can better support those with SCI by creating circumstances that foster resilience in them.

LIST OF REFERENCE

- Anson, C. A., & Shepherd, C. (1996). Incidence of secondary complications in spinal cord injury. *International Journal of Rehabilitation Research*, 19(1), 55-56.
- Bhattarai, M., Maneewat, K., & Sae-Sia, W. (2018). Psychosocial factors affecting resilience in Nepalese individuals with earthquake-related spinal cord injury: a cross-sectional study. *BMC Psychology*, 18(1). <https://doi.org/10.1186/s12888-018-1640-z>
- Bonanno, G. A., Westphal, M., & Mancini, A. D. (2011). Resilience to loss and potential trauma. *Annual Review of Clinical Psychology*, 7, 511-535. <https://doi.org/10.1146/annurev-clinpsy-032210-104526>
- Braun, V., & Clarke, V. (2016). (Mis)conceptualising themes, thematic analysis, and other problems with Fugard and Potts' (2015) sample-size tool for thematic analysis. *International Journal of Social Research Methodology: Theory & Practice*, 19(6), 739-743. <https://doi.org/10.1080/13645579.2016.1195588>
- Buchanan, K. M., & Elias, L. J. (2001). Psychological distress and family burden following spinal cord injury: concurrent traumatic brain injury cannot be overlooked. 22(3), 16-17. <https://pubmed.ncbi.nlm.nih.gov/14625968/>
- Catalano, D., Chan, F., Wilson, L., Chiu, C.-Y., & Muller, V. R. (2011). The buffering effect of resilience on depression among individuals with spinal cord injury: a structural equation model. *Rehabilitation Psychology*, 56(3), 200-211. <https://doi.org/10.1037/a0024571>
- Cherry, K. (2022). *What Is Resilience?* <https://www.verywellmind.com/what-is-resilience-2795059>

- Chun, S., & Lee, Y. (2008). The experience of posttraumatic growth for people with spinal cord injury. *Qualitative health research, 18*(7), 877-890. <https://doi.org/10.1177/1049732308318028>
- Creswell, J. W., & Poth, C. N. (2017). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches* (4th ed.). (SAGE Publications, Inc)
- Denzin, N. K., & Lincoln, Y. S. (2011). *The SAGE Handbook of Qualitative Research*. (Thousand Oaks, CA: Sage.)
- deRoos-Cassini, T. A., Mancini, A. D., Rusch, M. D., & Bonanno, G. A. (2010). Psychopathology and resilience following traumatic injury: a latent growth mixture model analysis. *Rehabilitation Psychology, 55*(1), 1-11. <https://doi.org/10.1037/a0018601>
- Dicicco-Bloom, B., & Crabtree, B. F. (2006). The Qualitative Research Interview. *Medical Education, 40*, 314-321. <https://doi.org/10.1111/j.1365-2929.2006.02418.x>
- Duggan, C., Wilson, C., DiPonio, L., Trumpower, B., & Meade, M. A. (2016). Resilience and happiness after spinal cord injury: a qualitative study. *Top Spinal Cord Inj Rehabil., 22*(2), 99-110. <https://doi.org/10.1310/sci2202-99>
- Dunn, D. S., Uswatte, G., & Elliott, T. R. (2012). Happiness, Resilience, and Positive Growth Following Physical Disability: Issues for Understanding, Research, and Therapeutic Intervention. <https://doi.org/10.1093/oxfordhb/9780195187243.013.0062>
- Fossey, E., Harvey, C., McDermott, F., & Davidson, L. (2002). Understanding and evaluating qualitative research. *The Australian & New Zealand Journal of Psychiatry, 36*(6), 717-732. <https://doi.org/10.1046/j.1440-1614.2002.01100.x>

- French, S., Reynolds, F., & Swain, J. (2001). *Practical Research: A Guide for Therapists*. (Butterworth-Heinemann)
- Geard, A., Kirkevold, M., Løvstad, M., & Schanke, A.-K. (2018). Exploring narratives of resilience among seven males living with spinal cord injury: a qualitative study. *BMC Psychology*, *6*(1). <https://doi.org/10.1186/s40359-017-0211-2>
- Gerschick, Miller, T. J., & S., A. (1995). Coming to terms: Masculinity and physical disability. *Men's health and illness: Gender, power, and the body*, 183-204. <https://doi.org/10.4135/9781452243757.n9> (Sage Publications, Inc.)
- Hachem, L. D., Ahuja, C. S., & Fehlings, M. G. (2017). Assessment and management of acute spinal cord injury: from point of injury to rehabilitation. *Journal of Spinal Cord Medicine*, *40*(6), 665-675. <https://doi.org/10.1080/10790268.2017.1329076>
- Hicks, C. (2009). *Research Methods for Clinical Therapists* (5th ed.).
- Horn, S. R., & Feder, A. (2018). Understanding resilience and preventing and treating PTSD. *Harvard Review of Psychiatry*, *26*(3), 158-174. <https://doi.org/10.1097/HRP.0000000000000194>
- Katie Hurley, L. (2022). *What Is Resilience? Your Guide to Facing Life's Challenges, Adversities, and Crises*. <https://www.everydayhealth.com/wellness/resilience/#resilience-theory>
- Kennedy, P., & Duff, J. (2001). Coping effectively with spinal cord injury. *Health*. (Stoke Mandeville Hospital NHS Trust, United Kingdom)
- Kennedy, P., Marsh, N., Lowe, R., Grey, N., Short, E., & Rogers, B. (2000). A longitudinal analysis of psychological impact and coping strategies following spinal cord injury. *British Journal of Health Psychology*, *5*(part 2), 157-172. <https://doi.org/10.1348/135910700168838>

- Kitzmüller, G., Asplund, K., & Häggström, T. (2012). The long-term experience of family life after stroke. *The Journal of Neuroscience Nursing*, 44(1).
<https://doi.org/10.1097/JNN.0b013e31823ae4a1>
- Kralik, D., Loon, A. v., & Visentin, K. (2006). Resilience in the chronic illness experience. *Educational Action Research*, 14(2), 187-201.
<https://doi.org/10.1080/09650790600718035>
- Kumpfer, K. L. (1999). *Factors and processes contributing to resilience: The resilience framework* (M. D. G. J. L. Johnson, Ed.). Kluwer Academic Publishers.
- Lee BB, R. A. C., M Fitzharris & P C Wing (2014). The global map for traumatic spinal cord injury epidemiology: update 2011, global incidence rate. *Spinal Cord*, 52, 110-116. <https://doi.org/10.1038/sc.2012.158>
- Lustig, D. C. (2016). The Adjustment Process for Individuals With Spinal Cord Injury: The Effect of Perceived Premorbid Sense of Coherence. 48(3).
<https://doi.org/10.1177/00343552050480030301>
- Masten, A. S. (2001). Ordinary magic. Resilience processes in development. *The American Psychologist*, 56(3), 227-238. <https://doi.org/10.1037//0003-066x.56.3.227>
- MayoClinic. (2021). *Spinal cord injury*. <https://www.mayoclinic.org/diseases-conditions/spinal-cord-injury/symptoms-causes/syc-20377890>
- McDonald, S. D., Jr, M. P., & Mickens, M. N. (2020). Resilience After Spinal Cord Injury: A Scoping Review. *American Journal of Physical Medicine & Rehabilitation*, 99(8), 752-763.
<https://doi.org/10.1097/PHM.0000000000001371>
- Monden, K., Trost, Z., Catalano, D., Garner, A., Symcox, J., Driver, S., Hamilton, R., & Warren, A. (2014). Resilience following spinal cord injury: a

- phenomenological view. *Spinal Cord*, 52, 197-201.
<https://doi.org/10.1038/sc.2013.159>
- Newman, R. (2005). APA's Resilience Initiative. *Professional Psychology Research and Practice*, 36(3), 227-229. <https://doi.org/10.1037/0735-7028.36.3.227>
- Norman, E. (2000). Resiliency Enhancement: Putting the Strengths Perspective into Social Work Practice. (Columbia University Press, New York)
- Patton, M., & Cochran, M. (2002). A Guide to Using Qualitative Research Methodology. (Médecins Sans Frontières, Paris. h)
- Phillippi, J., & Lauderdale, J. (2017). A Guide to Field Notes for Qualitative Research: Context and Conversation. 28(3). <https://doi.org/10.1177/1049732317697102>
- Quale, A. J., & Schanke, A.-K. (2010). Resilience in the face of coping with a severe physical injury: a study of trajectories of adjustment in a rehabilitation setting. *Rehabilitation Psychology*, 55(1), 12-22. <https://doi.org/10.1037/a0018415>
- Rahman, A., Ahmed, M. S., Sultana, M. R., Taoheed, F., Andalib, A., & Arafat, S. M. Y. (2017). Epidemiology of Spinal Cord Injury in Bangladesh: A Five Year Observation from a Rehabilitation Center. *Journal of Spine* 6(2). <https://doi.org/10.4172/2165-7939.1000367>
- Runswick-Cole, K., & Goodley, D. (2013). Resilience: A Disability Studies and Community Psychology Approach. *Social and Personality Psychology Compass*, 7(2), 67-78. <https://doi.org/10.1111/spc3.12012>
- Rutter, M. (2007). Implications of Resilience Concepts for Scientific Understanding. *Annals of the New York Academy of Sciences*, 1094(1), 1-12. <https://doi.org/10.1196/annals.1376.002>
- Sandalic, D., Arora, M., Pozzato, I., Simpson, G., Middleton, J., & Craig, A. (2022). A Narrative Review of Research on Adjustment to Spinal Cord Injury and Mental

- Health: Gaps, Future Directions, and Practice Recommendations. *Psychology Research and Behavior Management*, 2022(15), 1997-2010.
<https://doi.org/10.2147/prbm.s259712>
- Saumure, K., & Given, L. M. (2013). Data Saturation. *The SAGE Encyclopedia of Qualitative Research Methods*. <https://doi.org/10.4135/9781412963909>
- Sharpe, L., & Curran, L. (2005). Understanding the process of adjustment to illness. *Social Science & Medicine*, 62(5).
<https://doi.org/10.1016/j.socscimed.2005.07.010>
- Singh, A., Tetreault, L., Kalsi-Ryan, S., Nouri, A., & Fehlings, M. G. (2014). Global prevalence and incidence of traumatic spinal cord injury. *Clinical Epidemiology*, 6, 309-331. <https://doi.org/10.2147/CLEP.S68889>
- Singh, R., Rohilla, K., Siwach, R., Dhankar, S. S., & Kaur, K. (2011). Understanding psycho-social issues in persons with spinal cord injury and impact of remedial measures. *International Journal of Psychosocial Rehabilitation* 16(1), 104-111.
https://www.researchgate.net/publication/281909304_Understanding_psychosocial_issues_in_persons_with_spinal_cord_injury_and_impact_of_remedial_measures
- Stewart, D. E., & Yuen, T. (2011). A systematic review of resilience in the physically ill. *Psychosomatics: Journal of Consultation and Liaison Psychiatry*, 52(3), 199-209. <https://doi.org/10.1016/j.psych.2011.01.036>
- Tugade, M. M., & Fredrickson, B. L. (2004). Resilient Individuals Use Positive Emotions to Bounce Back From Negative Emotional Experiences. *Journal of Personality and Social Psychology*, 86(2), 320-333.
<https://doi.org/10.1037/0022-3514.86.2.320>


- Ungar, M. (2005). A Thicker Description of Resilience. *International Journal of Narrative Therapy & Community Work*(3/4), 89-96. <https://search.informit.org/doi/10.3316/informit.247303462342985>
- Ungar, M., Liebenberg, L., Boothroyd, R., & Kwong, W.-m. (2008). The Study of Youth Resilience Across Cultures: Lessons from a Pilot Study of Measurement Development. *Research in Human Development*, 5(3), 166-180. <https://doi.org/10.1080/15427600802274019>
- White, B., Driver, S., & Warren, A. M. (2010). Resilience and indicators of adjustment during rehabilitation from a spinal cord injury. *Rehabilitation Psychology*, 55(1), 23-32. <https://doi.org/10.1037/a0018451>.
- white, B., simon, D., & Ann-Marie, W. (2008). Considering resilience in the rehabilitation of people with traumatic disabilities. *Rehabilitation Psychology*, 53(1), 9-17. <https://doi.org/10.1037/0090-5550.53.1.9>
- Whiteneck, G., Meade, M. A., Dijkers, M., Tate, D. G., Bushnik, T., & Forchheimer, M. B. (2004). Environmental factors and their role in participation and life satisfaction after spinal cord injury. *Archieve of Physical Medicine Rehabilitation*, 85(11), 1793-1803. <https://doi.org/10.1016/j.apmr.2004.04.024>
- WHO. (2013). *Spinal cord injury*. <https://www.who.int/news-room/factsheets/detail/spinal-cord-injury>
- WHO. (2021). *Rehabilitation*. <https://www.who.int/news-room/factsheets/detail/rehabilitation>
- WMA. (2022). *WMA Declaration of Helsinki - Ethical Principles for Medical Research Involving Human Subjects*. <https://www.wma.net/policies-post/wma-declaration-of-helsinki-ethical-principles-for-medical-research-involving-human->

subjects/#:~:text=Medical%20research%20involving%20human%20subjects
%20must%20be%20conducted%20only%20by,or%20other%20health%20car
e%20professional

Young, A., Green, L., & Rogers, K. D. (2008). Resilience and Deaf Children: A Literature Review. *Deafness & Education International*, 10(1), 40-55.
<https://doi.org/10.1002/dei.234>

APPENDICES

Appendix A1: Ethics Approval Certificate



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

Ref: CRP/BHPI/IRB/09/22/620 Date: 28th September, 2022

Afsana Chowdhury
 4th Year B.Sc. in Occupational Therapy
 Session: 2017-18, Student ID: 122170266
 BHPI, CRP, Savar, Dhaka-1343, Bangladesh

Subject: Approval of the thesis proposal "Resilience in persons with paraplegia: A qualitative study" by the ethics committee.

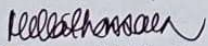
Dear Afsana Chowdhury,
 Congratulations.

The Institutional Review Board (IRB) of BHPI has reviewed and discussed your application to conduct the above-mentioned dissertation, with yourself, Md. Julker Nayan as the thesis supervisor. The following documents have been reviewed and approved:

Sr. No.	Name of the Documents
1	Thesis Proposal
2	Self-developed interview guide
3	Information sheet & consent form.

The purpose of the study is to explore an in-depth understanding of how resilience helps persons with paraplegia to adjust to their disability. The study involves the use of a Self-developed interview guide to explore an in-depth understanding of how resilience helps persons with paraplegia to adjust to their disability that may take 60 to 90 minutes to answer the question, and there is no likelihood of any harm to the participants. Participation in the study may benefit the participants by improving their knowledge about how resilience helps persons with paraplegia to adjust their disability. The members of the Ethics committee have approved the study to be conducted in the presented form at the meeting held at 8.30 AM on 27th August, 2022. at BHPI (32nd IRB Meeting).

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, the World Medical Association Declaration of Helsinki, 1964 – 2013, and other applicable regulations.

Best regards,

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

সিআরপি-চাপাইন, সাভার, ঢাকা-১৩৪৩, বাংলাদেশ। ফোন: +৮৮ ০২ ২২৪৪৪৫৪৬৪-৫, +৮৮ ০২ ২২৪৪৪১৪০৪, মোবাইল: +৮৮ ০১৭৩০ ০৫৯৬৪৭
 CRP-Chapain, Savar, Dhaka-1343, Bangladesh. Tel: +88 02 224445464-5, +88 02 224441404, Mobile: +88 01730059647
 E-mail : principal-bhpi@crp-bangladesh.org, Web: bhpi.edu.bd

Date: 29.08.2022

The Chairman
Institutional Review Board (IRB)
Bangladesh Health Professions Institute (BHPI)
CRP-Savar, Dhaka-1343, Bangladesh

Subject: **Application for review and ethical approval.**

Sir,

With due respect, I would like to draw your kind attention that I am a student of B.Sc. in Occupational Therapy student at Bangladesh Health Professions Institute (BHPI), Centre for the Rehabilitation of the Paralysed (CRP). I would like to conduct research titled, **"Resilience in persons with paraplegia: A qualitative study"** with myself, as the Md. Julker nayan has my thesis supervisor. The purpose of the study is to explore an in-depth understanding of how resiliency helps persons with paraplegia to adjust to their disability.

The self-developed interview guide will be used in the study and will take about 60 to 90 minutes. Other related information will be collected from the participants. Data collectors will receive informed consent from all participants. Any data collected will be kept confidential.

Therefore, I look forward to having your approval for the thesis proposal and starting data collection. I also assure you that I will maintain all the requirements for the study.

Sincerely yours,

Afsana chowdhury

Afsana Chowdhury
4th Year B.Sc. in Occupational Therapy
Session: 2017-18, Student ID: 122170266
Bangladesh Health Professions Institute, CRP
Savar, Dhaka-1343, Bangladesh

Recommendation from the thesis supervisor/concerned authority:

Md. Julker Nayan

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

Appendix A2: Permission to Conduct Research and Data Collection

Date: 11th October, 2022

To

The Course Coordinator

Dept. of Occupational Therapy

BHPI

Subject: prayer for seeking to conduct the research project.

Sir,

With due respect, I am seeking permission to conduct the research project as a part of my 4th year course module. My research title is "Resilience in persons with paraplegia: A qualitative study". The aim of the study is to explore an in depth understanding of how resilience helps persons with paraplegia to adjust their disability. Now I am looking for your kind approval to start my research project and would like to assure that anything of my project will not harmful for the participants.

So, I therefore pray and hope that your honor would to grant me the permission of conducting the research and will help me to conduct a successful study as a part of my course.

I remain


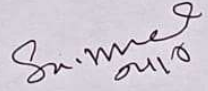
Sir

Afsana Chowdhury

Afsana Chowdhury

4th year B. Sc. (Honours) in Occupational Therapy, BHPI

Attachment: Proposal of Research

Signature and comment of the supervisor	Signature and comments of the course coordinator
 Md. Julker Nayan Associate Professor Department of Occupational Therapy Bangladesh Health Professions Institute (BHPI)	 Sk. Moniruzzaman Head Department of Occupational Therapy Bangladesh Health Professions Institute (BHPI)

I refer CRP to assist her to
data collect from community
Banjara Chowdhury
11/10/2022

Date: 11th October, 2022

To

Head of the Rehabilitation Division

Centre for the Rehabilitation of the Paralysed (CRP)

CRP-Chapain, Savar, Dhaka-1343

Subject: Prayer for permission to collect data for the research project.

Sir,

With due respect to state that, I am a student of 4th year B. Sc. (Honours) in Occupational Therapy of Bangladesh Health Professions Institute (BHPI). In 4th year, I have to submit a research project to the University of Dhaka in partial fulfillment of recruitments of the degree of Bachelor of Science in Occupational Therapy. The area of my research is spinal cord injury and my research title is "**Resilience in persons with paraplegia: A qualitative study**". As it is phenomenological qualitative research, I would like to take the interview of participants of people with paraplegia who have completed a rehabilitation program from CRP. That's why I need the address of the patients who have got treatment from CRP.

So, I therefore pray and hope that your kind enough to give me permission to take the address of paraplegic SCI patients after completing full rehabilitation from CRP and help me to complete the project successfully.

I remain

Sir

Afsana Chowdhury

Afsana Chowdhury

4th year B. Sc. (Honours) in Occupational Therapy, BHPI

Attachment: Proposal of Research

Forwarded for your
kind consideration for
allow for permission to
collect the data.
Dr. M. M. M. M.
11/10/2022

Appendix B1: Information Sheet and Consent Form (Bangla)

তথ্যপত্র ও সম্মতিপত্র



বাংলাদেশ হেলথ প্রফেশন্স ইনস্টিটিউট (বিএইচপিআই)
অকুপেশনাল থেরাপি বিভাগ
সিআরপি- চাপাইন, সাভার, ঢাকা- ১৩৪৩ টেলিঃ ০২-৭৭৪৫৪৬৪-৫,
৭৭৪১৪০৪, ফ্যাক্সঃ ০২-৭৭৪৫০৬

কোড নংঃ

অংশগ্রহণকারীদের তথ্যপত্র

গবেষণার বিষয়ঃ "প্যারাপ্লেজিয়া আক্রান্ত ব্যক্তিদের মধ্যে সহনশীলতা: একটি বর্ণনামূলক গবেষণা"।

গবেষকঃ আফসানা চৌধুরী, বি. এস. সি ইন অকুপেশনাল থেরাপি (৪র্থ বর্ষ), সেশনঃ ২০১৭-২০১৮ ইং, বাংলাদেশ হেলথ প্রফেশন্স ইনস্টিটিউট (বিএইচপিআই), সাভার, ঢাকা- ১৩৪৩

তত্ত্বাবধায়কঃ মোঃ জুলকার নায়েন, সহযোগী অধ্যাপক, বিভাগীয় প্রধান, অকুপেশনাল থেরাপি বিভাগ, বাংলাদেশ হেলথ প্রফেশন্স ইনস্টিটিউট (বিএইচপিআই)

গবেষণার স্থানঃ সাভার।

তথ্যপত্রঃ

ভূমিকা

আমি আফসানা চৌধুরী, ঢাকা বিশ্ববিদ্যালয়ের মেডিসিন অনুষদের অধীনে বাংলাদেশ হেলথ প্রফেশন্স ইনস্টিটিউট (বি এইচ পি আই) তে চতুর্থ বর্ষে (সেশন ২০১৭-২০১৮) অধ্যয়ন করছি। বিএইচপিআই থেকে অকুপেশনাল থেরাপিতে বিএসসি সম্পন্ন করতে, চতুর্থ বর্ষে একটি গবেষণা প্রকল্প পরিচালনা করা বাধ্যতামূলক। অকুপেশনাল থেরাপির সহযোগী অধ্যাপক মোঃ জুলকার নায়েন এর তত্ত্বাবধানে এই গবেষণা প্রকল্পটি করা হবে। এই গবেষণার উদ্দেশ্য হল- কীভাবে সহনশীলতা প্যারাপ্লেজিয়া আক্রান্ত ব্যক্তিদের তাদের অক্ষমতার সাথে সামঞ্জস্য করতে সহায়তা করে তা গভীরভাবে বোঝা। আমি, গবেষক আপনাকে এই গবেষণায় অংশগ্রহণের জন্য আমন্ত্রণ জানাতে চাই। আপনার মূল্যবান অংশগ্রহণ এই গবেষণা প্রকল্পকে আরও শক্তিশালী করবে। এই অংশগ্রহণকারী তথ্যপত্রের গবেষণার প্রকল্পটির উদ্দেশ্য, উপাত্ত সংগ্রহের প্রণালি 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 এখনই আপনার অংশগ্রহণ আমাদের নিশ্চিত করতে হবে না, অপরপক্ষে, অংশগ্রহণকারী তথ্যপত্রটি পড়ে, যদি কোন বিষয়বস্তু বুঝতে সমস্যা হয় অথবা যদি কোন কিছু সম্পর্কে আরও বেশি জানার প্রয়োজন হয়, তবে নির্দিধায় প্রশ্ন করতে পারেন।

গবেষণার প্রেক্ষাপট ও উদ্দেশ্য

এই গবেষণার মূল উদ্দেশ্য হল- কীভাবে সহনশীলতা প্যারাপ্লেজিয়া আক্রান্ত ব্যক্তিদের তাদের অক্ষমতার সাথে সামঞ্জস্য করতে সহায়তা করে তা গভীরভাবে বোঝা। এই গবেষণা ধারা

একজন প্যারাপ্লেজিয়া আক্রান্ত ব্যক্তিদের মানসিক শক্তি, শারীরিক ক্ষমতা, অনুভূতি, পরিবার ও সমাজের সহায়তা কীভাবে অক্ষমতা সাথে সম্পর্কিত চ্যালেঞ্জ বা অনিশ্চয়তা মোকাবেলা করতে সহায়তা করে তা বোঝা। এই গবেষণার মাধ্যমে সেবা প্রদানকারী সদস্যগণ আপনার অভিজ্ঞতার কথা জানতে পারবেন এবং প্রাপ্ত তথ্যসমূহ সেবার মান উন্নয়নে সাহায্য করবে।

এই গবেষণা সম্পর্কিত তথ্য

আপনার থেকে অনুমতিপত্রে স্বাক্ষর নেবার আগে, এই অংশগ্রহণকারী তথ্যপত্রের মাধ্যমে গবেষণা প্রকল্পটির পরিচালনা করার তথ্যসমূহ বিস্তারিত ভাবে আপনার কাছে উপস্থাপন করা হবে। তার পরে আপনি একটি সম্মুখ সাক্ষাতকারে অংশগ্রহণ করবেন। যেখানে কীভাবে সহনশীলতা প্যারাপ্লেজিয়া আক্রান্ত ব্যক্তিদের তাদের অক্ষমতার সাথে সামঞ্জস্য করতে সহায়তা করে তা গভীরভাবে বোঝার জন্য আলোচনা করা হবে।

তথ্য সংগ্রহের অনুমদন পাওয়ার দুই মাস পর্যন্ত তথ্য সংগ্রহ করা হবে। এই সময়ের মধ্যে গবেষণাকারী আপনার কাছে আসবে এবং সম্মুখ সাক্ষাতকার নিবে। আপনি যদি কোন প্রশ্নের উত্তর দিতে ইচ্ছুক না হন তাহলে পরবর্তী প্রশ্নে যেতে পারবেন। সংগ্রহীত তথ্যবলি গোপনীয় থাকবে এবং কোথাও আপনার নাম প্রকাশিত হবে না এবং গবেষণার অধীক্ষক মোঃ জুলকার নায়েন ব্যাতিত কেউ এই বিষয়ে অবগত থাকবে না।

ঐচ্ছিক অংশগ্রহণ

গবেষণায় অংশগ্রহণ সম্পূর্ণ ঐচ্ছিক, আপনি যেই সিদ্ধান্তটি নিবেন সেটা আপনার সামাজিক জীবনে কোনোরূপ প্রভাব ফেলবে না। আপনি তথ্য সংগ্রহকালীন যেকোনো সময় আপনার সিদ্ধান্ত পরিবর্তন করতে পারবেন। আপনি এর আগেও চাইলে আপনার অংশগ্রহণ প্রত্যাহার করতে পারবেন।

অংশগ্রহণের সুবিধা ও ঝুঁকিসমূহ কি?

এই গবেষণা প্রকল্পে অংশগ্রহণ করে আপনি কোন প্রকার সরাসরি সুবিধা পাবেন না। তবে এটা আশা করা যায় যে, এই গবেষণায় পাওয়া উপাত্ত পরবর্তীতে এই পেশা এবং পেশাজীবীদের সাহায্য করবে। এখানে সংশ্লিষ্ট গবেষণায় অংশগ্রহণে কোন ধরনের বাড়তি ঝুঁকি, বিপত্তি অথবা অস্বস্তি নেই বলে আশা করা যাচ্ছে। আপনার দৈনন্দিন কাজকর্ম এবং সহকর্মীদের সাথে সম্পর্কে কোনরূপ বিরূপ প্রতিক্রিয়া সৃষ্টি করবে না।

তথ্যের গোপনীয়তা কি নিশ্চিত থাকবে?

গবেষণাকারী দল ব্যাতিত অন্য কারো সাথে আপনার সম্পর্কে কোনকিছু আলোচনা করা হবে না। এই গবেষণা প্রকল্পের মাধ্যমে প্রাপ্ত তথ্য গোপনীয়তার সাথে সংরক্ষণ করা হবে। আপনার যেকোনো ধরনের তথ্য আপনার নামের পরিবর্তে কোডের ব্যবহার করা হবে। ওই কোডটি সম্পর্কে শুধুমাত্র গবেষণাকারী জানবে এবং তা সংরক্ষণ করবে। এই সকল তথ্য গবেষণার সুপারভাইজার মোঃ জুলকার নায়েন ব্যাতিত কারো সাথে আলোচনা করা হবে না।

গবেষণার ফলাফলের প্রকাশনা সঙ্ক্রান্ত তথ্য

এই গবেষণার ফলাফল সামাজিক মাধ্যম, ওয়েব সাইট, সম্মেলন এবং জার্নালে প্রকাশিত হতে পারে।

অংশগ্রহণকারীর ভাতা

উক্ত গবেষণায় অংশগ্রহণের জন্যে অংশগ্রহণকারী কোন ধরনের ভাতা পাবেন না।

গবেষণা কাজে আয়ের উৎস

গবেষণা কাজের সকল খরচ গবেষণাকারী নিজে বহন করবে। এই গবেষণাটি ছোট পরিসরে করা হবে এবং এর জন্যে বাহ্যিক কোন সহায়তা নেই।

গবেষণা সম্পর্কে জানতে কথায় যোগাযোগ করতে হবে?

গবেষণা প্রকল্পটির বিষয়ে যোগাযোগ করতে চাইলে অথবা গবেষণা প্রকল্পটির সম্পর্কে কোন প্রশ্ন থাকলে, এখন অথবা পরবর্তীতে যে কোন সময়ে তা জিজ্ঞাসা করা যাবে। সেক্ষেত্রে আপনি গবেষকের সাথে উল্লেখিত ০১৬৩২৫৫৫৩৪৬ (আফসানা চৌধুরী) নাম্বারে যোগাযোগ করতে পারেন। এই গবেষণা প্রকল্পটি বাংলাদেশ হেলথ প্রফেশনস ইনস্টিটিউট, সাভারের প্রতিষ্ঠানিক নৈতিকতা পরিষদ থেকে পর্যালচিত ও অনুমোদিত হয়েছে। এই গবেষণা প্রকল্প পরিচালনা প্রসঙ্গে যেকোন উদ্ভিন্ন অথবা অভিযোগকারী ব্যক্তি প্রতিষ্ঠানিক নৈতিকতা পরিষদের সাথে এই নাম্বারে (৭৭৪৫৪৬৪-৫) যোগাযোগ করবেন।

গবেষণা থেকে নিজেকে প্রত্যাহার করা যাবে কি?

আপনি সম্মতি প্রদান করা স্বত্বেও যেকোন 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 স্বৈচ্ছায় প্রত্যাহারকারীর জন্য প্রযোজ্য)।

গবেষকের সাথে যোগাযোগের ঠিকানা:

যদি আপনার কোন প্রশ্ন থাকে, আপনি এখন বা পরে আমাকে জিজ্ঞাসা করতে পারেন। আপনি যদি পরে প্রশ্ন জিজ্ঞাসা করতে চান, আপনি এই ই-মেইল: afsanachowdhury63@gmail.com, যোগাযোগ নম্বর: +8801632555346 ব্যবহার করে তদন্তকারী আফসানা চৌধুরী, ব্যাচেলর সায়েন্স ইন অকুপেশনাল থেরাপি বিভাগের সাথে যোগাযোগ করতে পারেন।

অভিযোগ:

এই গবেষণা প্রকল্প পরিচালনার বিষয়ে কোনো অভিযোগ থাকলে, অ্যাসোসিয়েশন অফ এথিক্স (CRP/BHPI/IRB/09/22/620) এর সাথে যোগাযোগ করুন। এই প্রস্তাবটি ইনস্টিটিউশনাল রিভিউ বোর্ড (আইআরবি), বাংলাদেশ হেলথ প্রফেশনস ইনস্টিটিউট (বিএইচপিআই), সিআরপি, সাভার, ঢাকা-১৩৪৩, এবং বাংলাদেশ দ্বারা পর্যালোচনা করা হয়েছে, যাদের কাজ হল গবেষণায় অংশগ্রহণকারীদের ক্ষতি থেকে সুরক্ষিত করা নিশ্চিত করা। আপনি যদি IRB সম্পর্কে আরও জানতে চান, তাহলে বাংলাদেশ হেলথ প্রফেশনস ইনস্টিটিউট (বিএইচপিআই), সিআরপি- চাপাইন, সাভার, ঢাকা- ১৩৪৩ টেলি: ০২-৭৭৪৫৪৬৪-৫, ৭৭৪১৪০৪, ফ্যাক্স: ০২-৭৭৪৫০৬ -এ যোগাযোগ করুন।

অংশগ্রহণকারীর প্রত্যাহার পত্র

(শুধুমাত্র স্বৈচ্ছায় প্রত্যাহারকারীর জন্য প্রযোজ্য)

অংশগ্রহণকারীর

নাম.....

প্রত্যাহার

করার

কারণঃ.....

অংশগ্রহণকারীর স্বাক্ষরঃ

তারিখঃ

কোড নং:

সম্মতিপত্র

আমি আফসানা চৌধুরী, বর্তমানে ঢাকা বিশ্ববিদ্যালয়ের চিকিৎসা অনুষদ অধিভুক্ত সিআরপির অধীনস্থ বাংলাদেশ হেলথ প্রফেশনস ইনস্টিটিউট (বিএইচপিআই)-এ বি.এস.সি ইন অকুপেশনাল থেরাপিতে চতুর্থ বর্ষে অধ্যয়নরত। আমার গবেষণার শিরোনাম- "প্যারাপ্লেজিয়া আক্রান্ত ব্যক্তিদের মধ্যে সহনশীলতা: একটি বর্ণনামূলক গবেষণা"

যারা ইন্টারভিউতে অংশগ্রহণ নিচ্ছেন তাদের জন্য

অনুগ্রহ করে নিম্নলিখিত বিবৃতি গুলো পড়ুন এবং হ্যাঁ বা না তে টিক (✓) দিন যাতে আপনি তথ্য-পত্রের বিষয়বস্তু, আপনার সম্পৃক্ততা বুঝাতে পারেন এবং আপনি উপরের নাম কৃত গবেষণায় অংশ নিতে সম্মত হন।

- ১। আমি নিশ্চিত করি যে গবেষণার জন্য তথ্যপত্রটি আমাকে ব্যাখ্যা করা হয়েছে..... হ্যাঁ/ না
- ২। গবেষণার বিষয় বুঝার জন্য আমাকে অংশগ্রহণকারীর প্রশ্ন জিজ্ঞাসা করার সুযোগ দেওয়া হয়েছে।..... হ্যাঁ/ না
- ৩। এই গবেষণার সাথে সম্পৃক্ত আমার প্রশ্নের সন্তোষজনক উত্তর আছে।হ্যাঁ/ না।
- ৪। ইন্টারভিউ থেকে তথ্য গবেষণার সুপারভাইজার দ্বারা পরীক্ষা করা হতে পারে। তাছাড়া, সমস্ত ব্যক্তিগত বিবরণ অত্যন্ত গোপনীয় হিসেবে বিবেচিত হবে। আমি তদন্তকারী এবং সুপারভাইজারকে আমার রেকর্ড করা তথ্য ব্যবহার করার মতই অনুমতি দিয়েছি।.....হ্যাঁ/ না।
- ৫। অংশগ্রহণের বিষয়ে আমার সিদ্ধান্তে আসার জন্য আমার পর্যাপ্ত সময় আছে.....হ্যাঁ/ না.
- ৬। আমি আমার সাক্ষাৎকারের উদ্ধৃতিগুলো উপরোক্ত গবেষণায় ব্যবহার করার জন্য সম্মতি জানাচ্ছি.....হ্যাঁ/ না
- ৭। আমি উপরোক্ত গবেষণায় অংশ নিতে সম্মতি জানাচ্ছি.....হ্যাঁ/ না

অংশগ্রহণকারীর স্বাক্ষর:

তারিখ:

আমি উপরের অংশগ্রহণকারীকে তথ্যপত্রটি সুনির্দিষ্টভাবে ব্যাখ্যা করেছি এবং তিনি অংশ নিতে সম্মতি প্রকাশ করেছেন।

গবেষকের স্বাক্ষর:

তারিখ:

Appendix B2: Information Sheet and Consent form (English)



Bangladesh Health Professions Institute (BHPI) Department of Occupational Therapy

CRP- Chapain, Savar, Dhaka-1343. Tel: 02-7745464-5,7741404, Fax: 02-774506

Code no.:

Information sheet

Title: “Resilience in Persons with Paraplegia: A Qualitative Study”

Investigator: Afsana Chowdhury, 4th year student of B.Sc. in Occupational Therapy, Session: 2017-2018, Bangladesh Health Professions Institute (BHPI), CRP- Savar, Dhaka-1343.

Supervisors: Md. Julker Nayan, Associate Professor of Occupational Therapy, Head of the Department, Dept. of Occupational Therapy, BHPI, CRP, Chapain, Savar, Dhaka-1343.

Place: The study will be conducted in Savar.

Information sheet

Introduction

I am Afsana Chowdhury, student of 4th year (Session 2017-2018) of B.Sc. in Occupational Therapy at Bangladesh Health Professions Institute (BHPI), the academic institute of the Centre for the Rehabilitation of Paralysed (CRP) which is affiliated to the University of Dhaka. As a part of my academic activities, I have to conduct a research project in this academic year. This research project will be conducted under thesis supervisor, Md. Julker Nayan. By this information sheet investigator presented detailed information about the study purpose, data collection process, ethical issues. If you are interested to participate in this study, then clear information about the study helps you to easily make decision. If this consent form contains some words that you do not understand, please ask me to stop. I will take time to explain. Information about the study participants will keep confidential and the aim of the study will be informed to the participants. If you cannot understand any part of the investigation, Investigator will help you to understand.

Background and aim of the Research

The main aim of this study is to gain a deeper understanding of how resilience helps people with paraplegia adjust to their disability. This line of research seeks to understand how a person with paraplegia's mental strength, physical abilities, emotions, family and community support help them cope with the challenges or uncertainties

associated with the disability. Through this research, service members will learn about your experiences and the information obtained will help improve the quality of service.

Research related information

Before you sign the consent form, you will be presented with detailed information about the conduct of the research project through this participant information sheet. After that you will attend a face-to-face interview. In which a deeper understanding of how resilience helps people with paraplegia adjust to their disability will be discussed.

Data will be collected for up to two months after receiving consent for data collection. During this time the researcher will come to you and conduct a face-to-face interview. If you are not willing to answer a question, you can skip to the next question. The information collected will be kept confidential and your name will not be published anywhere and no one will know about it except the Research Superintendent Md. Zulkar Nayan.

Voluntary participation

The choice that you make will have no effect on your social participation or community life style. 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.

Risk and benefit

By participating in this study, you may not have any direct benefit. But there is an expectation that, finding from the study will be helpful for the profession and professionals. It will be expected that there is no risk in this study. Information for this study will be collected without hampering the everyday activities and co-relation with other colleagues.

Confidentiality of the study

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 code on it instead of your name. Only the researchers will know what your code is and we will lock that information up with a lock and key. It will not be shared with or given to anyone except Md. Julker Nayan, study supervisor.

Information about publication of the study findings

The findings from this study will be published in social site, web site, conference and journal.

Participant's wage

Participants will not get any wages for participating in this study.

Source of money for this study

All money that will be needed for this study will be collected from investigator own source. This study will be conduct in a small range and any external source is not available for this research.

How to contact

If you have any questions, you can ask me now or later. If you wish to ask questions later, you may contact with the investigator Afsana Chowdhury, Bachelor science in Occupational Therapy, Department of Occupational Therapy. by using this e-mail: afsanachowdhury63@gmail.com, contact number: +8801632555346. This proposal has been reviewed and approved by Institutional Review Board (IRB), 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, and Bangladesh. You can ask me any more questions about any part of the research study, if you wish to.

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.

Complaints:

If there are any complaints about the conduct of this research project, contact the Association of Ethics (CRP/BHPI/IRB/09/22/620). This proposal was reviewed by the Institutional Review Board (IRB), Bangladesh Health Professions Institute (BHPI), CRP, Savar, Dhaka-1343, and Bangladesh, whose mandate is to ensure that research participants are protected from harm. If you want to know more about the IRB, contact Bangladesh Health Professions Institute (BHPI), CRP-Chapain, Savar, Dhaka-1343 Tel: 02-7745464-5, 7741404, Fax: 02-774506.

Withdraw from

Participants Name:

Reason of withdrawing:

.....

.....

.....

Participants Signature:

Day/Month/Year:

Code No:

Consent Form

This research is a part of the Occupational Therapy course and the name of the researcher is Afsana Chowdhury. I am a student of 4th year of B.Sc. in Occupational Therapy at Bangladesh Health Professions Institute (BHPI), the academic institute of the Centre for the Rehabilitation of Paralyzed (CRP) which is affiliated to the University of Dhaka. The study was entitled “**Resilience in persons with paraplegia: A qualitative study**”.

For participant who are taking part in interviews:

Please read the following statements and put tick (✓) on yes or no to say that you understand the content of the information sheet, your involvement, and that you agree to take part in the above-named study.

1. I confirm that I have understood the information sheet for the study or that it has been explained to me and I have had the opportunity to ask questions.
..... Yes/ No
2. I have satisfactory answers to my questions regarding with this study.
Yes/No
3. I understand that participants in the study is voluntary and that I am free to end my involvement before the data analysis, or request that the data collected in the study be destroyed before data analysis.
..... Yes/ No
4. Information from interview might be examined by research supervisor. However, all personal details will be treated as highly confidential. I have permitted the investigator and supervisor to access my recorded information.
..... Yes/ No
5. I have sufficient time to come to my decision about participation.
Yes/No
6. I agree for quotation from my interviews to be used in the above study.
Yes/No
7. I agree to take part in the above study.
Yes/ No

Participant's name:

Date:

Investigator

I have explained the study to the above participant precisely and she has indicated a willingness to take part.

Investigator's Signature:

Date:

Appendix C1: Self-developed Interview Guide (Bangla)

Socio-demographic Information of Participant

অংশগ্রহণকারীর নাম:
বয়স:
লিঙ্গ:
শিক্ষাগত যোগ্যতা:
বৈবাহিক অবস্থা:
আঘাতের সময় (বছর):
পেশাগত অবস্থা:
পরিবারের সদস্য:

উদ্দেশ্য	মূল প্রশ্ন	উপ-প্রশ্ন
১। মানসিক শক্তি কীভাবে অক্ষমতা সাথে সম্পর্কিত চ্যালেঞ্জ বা অনিশ্চয়তা মোকাবেলা করতে সহায়তা করে তা বোঝা।	আপনি কীভাবে আপনার মনস্তাত্ত্বিক শক্তি ব্যাখ্যা করতে চান যা আপনাকে প্রতিবন্ধকতা সমন্বয় সম্পর্কিত চ্যালেঞ্জ বা অনিশ্চয়তা মোকাবেলা করতে সহায়তা করেছে?	<ol style="list-style-type: none"> 1. আপনার মেরুদণ্ডের আঘাতের যাত্রা সম্পর্কে বিস্তারিত বলুন। কিভাবে আপনার জীবন আগে থেকে বর্তমানে পরিবর্তিত হয়েছে? 2. আপনি কিভাবে এই সমস্ত পরিবর্তনের সাথে মোকাবিলা করেন? 3. আপনার দৈনন্দিন জীবনের কার্যকলাপে আপনি কি ধরনের চ্যালেঞ্জের সম্মুখীন হছেন? 4. আপনি সাধারণত খুব চ্যালেঞ্জিং পরিস্থিতি মোকাবেলা করতে কতটা ভালো অনুভব করেন? আপনি কতবার এই ধরনের পরিস্থিতির মুখোমুখি হন? 5. এমন কিছু নির্দিষ্ট ধরনের চ্যালেঞ্জিং পরিস্থিতি আছে কি যা আপনি মোকাবেলা করতে বেশি স্বাচ্ছন্দ্য বোধ করেন? কেন? একটি সাম্প্রতিক উদাহরণ বর্ণনা করুন। 6. কোন ধরনের চ্যালেঞ্জিং পরিস্থিতিতে আপনি কম স্বাচ্ছন্দ্য বোধ করেন? আপনি অতীতে এই পরিস্থিতিগুলিকে কতটা ভালোভাবে মোকাবেলা করেছেন বলে মনে করেন? 7. কীভাবে আপনি একটি চ্যালেঞ্জিং অভিজ্ঞতাকে একটি ইতিবাচক পাঠ এবং বৃদ্ধির সুযোগে রূপান্তর করতে পারেন? যা শিখছেন তা কি আপনাকে আপনার বর্তমান জীবনের সাথে খাপ খাইয়ে নিতে সাহায্য করেছে? 8. অক্ষমতা সামঞ্জস্য সম্পর্কে আপনি কি মনে করেন? এটা সম্পর্কে আপনার উপলব্ধি কি? একটি

		উদাহরণ দিয়ে আমাকে ব্যাখ্যা করুন।
২। শারীরিক ক্ষমতা কীভাবে চ্যালেঞ্জের সাথে খাপ খাইয়ে নিতে সাহায্য করে, স্ট্যামিনা এবং শক্তি বজায় রাখে এবং দ্রুত এবং দক্ষতার সাথে পুনরুদ্ধার করে তার সাথে সম্পর্কিত সামঞ্জস্য বোঝা।	আপনার শারীরিক ক্ষমতা সম্পর্কে আপনার ধারণা কি এবং আপনার অক্ষমতা উপর এর প্রভাব সম্পর্কে আপনি কী মনে করেন?	9. এখন আপনার শরীরের ক্ষমতা যেমন শক্তি, সহনশীলতা ইত্যাদি সম্পর্কে আপনি কী ভাবেন? এই ক্ষমতা আপনার অক্ষমতার সাথে খাপ খাওয়ানোর উপর কোন প্রভাব ফেলেছে? যদি ফেলে থাকে, তাহলে কি প্রভাব ফেলেছে? একটি উদাহরণ দিয়ে ব্যাখ্যা করুন। 10. আপনার কি এস সি আই ছাড়া অন্য কোন রোগ আছে? যদি থাকে, এটা কি? এটা কি আপনার শারীরিক ক্ষমতার উপর কোন প্রভাব ফেলেছে?
৩। প্যারাপ্লেজিয়া আক্রান্ত ব্যক্তির কীভাবে অক্ষমতার সাথে সম্পর্কিত চাপ এবং প্রতিকূলতার সাথে মানসিকভাবে মোকাবিলা করে তা অন্বেষণ করা	স্ট্রেস এবং প্রতিকূলতার সাথে মোকাবিলা করার বিষয়ে আপনি কীভাবে আবেগ নিয়ন্ত্রণ করেন?	11. এস সি আই এর পরে আপনার শারীরিক ও মানসিক অনেক পরিবর্তন এসেছে। আপনি সেই পরিবর্তনের সময় কি ধরনের মানসিক চাপ অনুভব করেছেন? 12. এমন একটি সময় বর্ণনা করুন যখন আপনি খুব চাপ এবং কঠিন পরিস্থিতিতে শান্ত থাকতে পেরেছিলেন। পরিস্থিতিটি কি ছিল? আপনি কিভাবে এটি করতে সক্ষম হয়েছিলেন? 13. আপনাকে কি কখনও চরম চাপের মধ্যে একটি গুরুত্বপূর্ণ সিদ্ধান্ত নিতে হয়েছে? আপনি কিভাবে সেই পরিস্থিতিতে প্রতিক্রিয়া করেছেন? আপনি কি সে সময় সঠিক সিদ্ধান্ত নিয়েছেন? 14. আপনি কি এমন একটি সময়ের কথা বলতে পারবেন পারেন যখন একটি চাপপূর্ণ বা কঠিন পরিস্থিতিতে আপনার আবেগকে আরও খোলামেলাভাবে প্রকাশ করা আপনার পক্ষে সুবিধাজনক হতো, আপনি যদি আপনার আবেগ প্রকাশ করতেন তবে পরিস্থিতি কীভাবে অন্যরকম হত বলে আপনি মনে করেন?

<p>৪। এস সি আই-এর পরে পরিবার ও সমাজ প্যারালিজিয়ায় আক্রান্ত ব্যক্তিকে কীভাবে সহায়তা করে তা বোঝার জন্য।</p>	<p>সমাজ কি আপনাকে কোনো সমর্থন দিয়েছে এবং কীভাবে সেই সমর্থন আপনার খাপ খাওয়ানকে প্রভাবিত করেছে?</p>	<p>15. আপনার সম্প্রদায়ের আপনার ঘনিষ্ঠ ব্যক্তি বা আত্মীয়দের সম্পর্কে বিস্তারিত বলুন।</p> <p>16. আপনি আপনার পরিবার থেকে কোন ধরনের সমর্থন পান? এই সমর্থনগুলি কি আপনাকে অক্ষমতার সাথে মানিয়ে নিতে সাহায্য করে?</p> <p>17. যখন আপনি সমাজে ফিরে আসেন তখন কি আপনার সমাজ থেকে আপনি কোন সামাজিক সমর্থন পেয়েছেন? কীভাবে সেই সমর্থন আপনার খাপ খাওয়ানোর উপর প্রভাব ফেলে?</p> <p>18. আপনার কি কর্মক্ষেত্রে বা সম্প্রদায়ের এমন কোন ব্যক্তি বা গোষ্ঠী আছে যাদের সাথে আপনি আপনার সমস্যা নিয়ে আলোচনা করতে পারেন? আপনি যদি কোনো সমস্যার সম্মুখীন হন, আপনি কি সাধারণত এই লোকেদের সাথে পরামর্শ করেন, নাকি নিজে নিজে সমস্যা সমাধানের চেষ্টা করেন?</p> <p>19. কোন ধরনের পরিস্থিতিতে আপনি সাধারণত সমর্থন চাওয়া সহজ বলে মনে করেন? একটি উদাহরণ বর্ণনা করুন। কেন আপনি মনে করেন যে সমর্থন চাওয়া অন্য পরিস্থিতির তুলনায় এই পরিস্থিতিতে সহজ?</p> <p>20. এমন কোন পরিস্থিতিতে আছে যখন আপনি অন্যদের কাছ থেকে সমর্থন চাওয়া আরও কঠিন বলে মনে করেন? যদি তাই হয়, তাহলে এই ক্ষেত্রে কোন ধরনের পরিস্থিতি বেশি চ্যালেঞ্জিং?</p>
--	---	--

Appendix C2: Self-developed Interview Guide (English)

Socio-demographic Information of Participant

Participant's Name:

Age:

Sex:

Educational Qualification:

Marital Status:

Times of injury (Year):

Occupational Status:

Living arrangement:

Objective	Main Question	Sub-questions
1. To find out how psychological strength help to cope with challenges or uncertainty related to disability adjustment.	How would you like to explain your psychological strength which helps you to cope with challenges or uncertainty related to disability adjustment?	<p>1. Tell me about your spinal cord injury journey in details. How your life changes from before to now?</p> <p>2. How do you deal with all of these changes?</p> <p>3. What types of challenges are you facing in your daily life activity?</p> <p>4. How well do you feel you generally cope with very challenging situations? How often do you face these sorts of situations?</p> <p>5. Are there certain types of challenging situations that you feel more comfortable dealing with? Why is this? Describe a recent example.</p> <p>6. What types of challenging situations do you feel less comfortable with? What is it about these situations which make you less comfortable? How well do you think you have dealt with these situations in the past?</p> <p>7. How can you transform a challenging experience into a positive lesson and opportunity for growth? Are those learning helping you adapt to your present life?</p> <p>8. What do you think about disability Adjustment? What is your perception of it? Explain to me with an example.</p>

<p>2. To identify how physical ability helps to adapt challenges related to adjustment.</p>	<p>What do you think about your physical ability and its impact on your disability adjustment?</p>	<p>9. What do you think about your body's abilities like strength, endurance, etc. now? Are those abilities have any impact on your adjustment process? If have, then what is the impact? explain it with an example.</p> <p>10. Are you have any other disease or condition other than SCI? If have, what is it? Is that have any impact on your physical ability?</p>
<p>3. To explore how people with paraplegia cope emotionally with stress and adversity related to disability adjustment.</p>	<p>How do you regulate emotion regarding coping with stress and Adversity?</p>	<p>11. After SCI there are so many changes appear in your body as well as mind. What type of mental stress did you experience at those time?</p> <p>12. Describe a time when you managed to remain calm during a very stressful and intense situation. What was the situation? How were you able to do this?</p> <p>13. Have you ever had to make an important decision under extreme pressure? How did you respond to this? Did you make the right decision?</p> <p>14. Can you think of a time when it would have been advantageous for you to express your emotions more openly in a stressful or difficult situation? How do you think the situation would have been different if you had expressed your emotions?</p>
<p>4. To explore how the family and society helps a person with paraplegia for adjustment after SCI.</p>	<p>Has the community given you any support and how does that support impact your adjustment?</p>	<p>15. Tell me about your close people or relatives in your community in detail.</p> <p>16. Which type of support do you get from your family? Are those supports help you to adjust to a disability?</p> <p>17. Is there any social support you get from your society when you return? How does that support make an impact on your adjustment?</p> <p>18. Do you have a person or group of people at work or community whom you can discuss problems or issues with? If you encounter a</p>

		<p>problem, would you typically consult these people or try to work through the problem by yourself?</p> <p>19. In which kinds of situations do you typically find it easier to ask for support? Describe an example. Why do you think asking for support is easier in these situations than in others?</p> <hr/> <p>20. Are there any circumstances under which you find it more difficult to seek support from others? If so, what types of circumstances are more challenging in this regard?</p>
--	--	--

Appendix D: Thesis Supervisor-Student Contact: face-to-face or electronic and guidance record




Bangladesh Health Professions Institute
 Department of Occupational Therapy
 4th Year B. Sc in Occupational Therapy
 OT 401 Research Project










Thesis Supervisor- Student Contact: face to face or electronic and guidance record

Title of thesis: Resilience in persons with paraplegia: A qualitative study

Name of student: Afsana Chowdhury

Name and designation of thesis supervisor: Md. Julker Nayan, Associate Professor of OT, BHPI

Appointment No	Date	Place	Topic of discussion	Duration (Minutes/ Hours)	Comments of student	Student's signature	Thesis supervisor signature
1	22.08.22	DRP, office	Research Title, Aim, objectives	45min	Develop a concept of how to simplify research title and set aim, objectives	Afsana Chowdhury	
2	24.08.22	CRP, office	Background, Significance, Methodology	1 hour	Gave a brief idea how to write background significance & Methodology	Afsana Chowdhury	
3	25.08.22	BHPI Office	Aim, objective.	15 minutes	Feedback of aim, objective and give an idea how to set those.	Afsana Chowdhury	

4	31.08.22	CRP office	Proposal write-up submission feedback.	10 min	Give some correction in methodology and exclusion & inclusion criteria.	Afsana Choudhury	
5	01.09.22	BHPT office	Research Interview guide	30 min	Give a clear indication about the sequencing of the question to ask.	Afsana Choudhury	
6	02.01.23	BHPT Teacher's room	Feedback of first draft of research paper	1 hour	Give suggestions about how to improve the introduc- tion & make some correction in other areas.	Afsana Choudhury	
7	10.01.22	BHPT office	Discuss about initial code, sub-theme, theme	15 min.	Give suggestions about how to code and generate theme	Afsana Choudhury	
8	28.02.23	BHPT office	Feedback of first draft of research paper	30 min	Give some correction on table format & referred to subject teacher	Afsana Choudhury	
9	12.04.23	BHPT Library	Feedback of first half of the result section	30 min	Have to re-arrange one theme & related sub-themes.	Afsana Choudhury	
10	18.04.23	BHPT office.	Feedback of rest of the result section	30 min	Have to add interpretation in most of the themes, re-check table result section	Afsana Choudhury	
11	31.05.23	BHPT office	Research final draft feedback	15 min	Get correction of formatting, layout etc.	Afsana Choudhury	
12	31.05.23	BHPT office	Research final draft feedback	15 min	Get correction of formatting, layout etc.	Afsana Choudhury	
13							
14							