Level of Leisure Satisfaction among Persons with Spinal Cord Injury: A Quantitative Study

By

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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.

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Dedication

This thesis is dedicated to my parents, whose sacrifices and belief in me have been the foundation of my academic journey.

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List of Abbreviations

AIS	ASIA Impairment Scale
ASIA	American Spinal Injury Association
BHPI	Bangladesh Health Professions Institute
CRP	Centre for the Rehabilitation of the Paralysed
IRB	Institutional Review Board
IPAQ	International Physical Activity Questionnaire
IQR	Interquartile Range
LS	Leisure Satisfaction
LSM	Leisure Satisfaction Measure
LSS	Leisure Satisfaction Scale
LTPA	Leisure-Time Physical Activity
OT	Occupational Therapy
SCI	Spinal Cord Injury
SD	Standard Deviation
SPSS	Statistical Package for the Social Sciences
WHO	World Health Organization

Abstract

Background: Leisure activities play an important role in supporting emotional well-being, social interaction, and overall quality of life for persons with spinal cord injury (SCI). However, leisure satisfaction is often overlooked during inpatient rehabilitation, particularly in rehabilitation settings within Bangladesh.

Aim: This study aimed to identify the level of leisure satisfaction and the factors associated with it among individuals with SCI who were receiving inpatient rehabilitation services at the Centre for the Rehabilitation of the Paralysed (CRP).

Methods: A quantitative cross-sectional study was conducted with 120 individuals with SCI selected through purposive sampling. Data were collected through face-to-face interviews using a structured questionnaire that included socio-demographic and injury-related information, along with the Leisure Satisfaction Measure (LSM). Leisure satisfaction was examined across six domains: psychological, educational, social, relaxation, physiological, and aesthetic. Data analysis was carried out using SPSS version 20.0.

Results: Among the 120 participants, 85% (n=102) were male. About 37.5% (n=45) were aged between 31–49 years, and 67.5% (n=81) lived in rural areas. Injury related information shows that, 49.2% of participants had thoracic-level injuries, and 90.8% reported traumatic causes of injury. More than half of the participants (53.3%) were in the rehabilitation phase, and 92.5% used a wheelchair as their primary mobility device. In this study level of leisure satisfaction shows that, 68% (n=82) of participants have high leisure satisfaction, while 32% (n=38) have moderate levels of satisfaction. Statistical analysis revealed significant differences in leisure satisfaction across phases of rehabilitation and according to participants preferred leisure activities ($p = 0.001$).

Conclusion: Leisure satisfaction is a meaningful aspect of inpatient rehabilitation for persons with spinal cord injury, especially in supporting psychosocial well-being. Recognizing and integrating leisure as part of holistic rehabilitation may enhance recovery experiences and contribute to improved quality of life for individuals with spinal cord injury.

Keywords: Spinal Cord Injury, Leisure Satisfaction, Inpatient Rehabilitation, Occupational Therapy, Quality of Life.

CHAPTER I: INTRODUCTION

1.1 Background

SCI refers to damage to the spinal cord resulting in an abrupt loss of motor, autonomic, and sensory functions below the lesion site (Nejati-Koshki et al., 2017).SCI is an acute, chronic, and neurologic condition associated with significant lifelong morbidity and mortality. It can be broadly classified to two categories traumatic and non-traumatic. Traumatic SCI usually results from violent events, including motor vehicle crashes, falls, or violence, while non-traumatic SCI is caused by infections, inflammatory myelitis, vascular or non-inflammatory myelopathies, tumors, or congenital malformations (Nejati-Koshki et al., 2017)

According to the World Health Organization (WHO), globally, over 15 million people are living with SCI. The estimated global prevalence ranges from 236 to 1,298 cases per million people, depending on factors such as healthcare access, reporting systems, and injury causes (Furlan et al., 2013).

A comprehensive study conducted between 2018 and 2022 examined 3,035 SCI patients across 18 major medical facilities in Bangladesh. The findings revealed that approximately 33.4% of these patients were aged between 18 and 30 years, highlighting a high incidence of SCI in this age group. The study also found that males outnumbered females by nearly 2.5 times among SCI patients. Traumatic injuries accounted for 59.6% of cases, with falls from height (42.1%) and road traffic accidents (27%) being the most common causes. Non-traumatic SCI was primarily due to degenerative myelopathy (41.1%), tumors (27.7%), and tuberculosis (14.8%). Additionally, 58.1% of patients were diagnosed with tetraplegia, and 40.1% with paraplegia (Uddin et al., 2023).

Leisure activities play a huge role in the lives of individuals with SCI and they're not just about having fun, they're crucial for overall well-being. Research shows that engaging in leisure activities helps people with SCI improve their physical health, but more importantly, it boosts their emotional resilience and social integration (Zhao & Cole, 2023).

There is a clear connection between engaging in leisure activities and experiencing higher levels of life satisfaction. Individuals who stay active in both work and recreational activities report feeling more satisfied with their lives and experience better mental health than those who are less engaged (Schönherr et al., 2005). For SCI patients, physical leisure activities, like exercise, have been shown to have powerful benefits. These activities don't just help with mobility and strength – they also improve mental well-being (Stendell et al., 2024). Many individuals with SCI face barriers, like limited access to adaptive sports programs or the physical challenges of engaging in certain activities. These barriers can make it difficult for SCI patients to fully participate in leisure activities, which can limit the positive impact they can have on their health (Hwang et al., 2016). One study found that regular participation in leisure activities significantly improves both physical and emotional well-being, which is why it's so important to focus on leisure as part of the rehabilitation process. Overall, when SCI patients are able to participate in leisure activities, particularly physical ones, it has a profound effect on their recovery (Urbański et al., 2021).

1.2 Justification of the study

People with SCI often face major physical, psychological, and social changes, and this can reduce their quality of life. This research is significant because it focuses on leisure satisfaction, which is sometimes overlooked in rehabilitation even though it strongly supports recovery and long-term wellbeing. Evidence shows that leisure and recreation participation is positively linked with social integration and life satisfaction for people with SCI (Zhao & Cole, 2023). This means that rehabilitation should not only focus on medical treatment and physical function, but also on helping people take part in meaningful leisure activities that support a satisfying life.

This study is useful because it can guide rehabilitation professionals, especially occupational therapy practitioners to create more adaptive and client-centred programs. Leisure-time physical activity is encouraged because it can support health and stress management among people living with SCI (Watson et al., 2024). Also, exercise interventions have been shown to improve mental health outcomes and health-related quality of life for adults with SCI, based on systematic review evidence (Ponzano et al., 2024). Therefore, understanding the barriers and facilitators which helps or prevents leisure engagement can improve rehabilitation planning and make programs more inclusive.

The benefits of this research extend to individuals with SCI and the wider rehabilitation field. When leisure satisfaction improves, people may experience better emotional wellbeing, stronger social participation, and greater life satisfaction (Zhao & Cole, 2023). This supports occupational therapy goals because OT is concerned with participation in meaningful occupations including leisure as part of holistic rehabilitation. In addition, SCI-specific exercise guidelines recommend regular

physical activity to improve fitness and cardiometabolic health, showing that structured activity is a recognized part of healthy living with SCI (Martin Ginis et al., 2018).

Finally, this research can support policymaking by providing evidence for improving access to leisure opportunities, e.g., accessible facilities, adaptive programs, inclusive community spaces. Overall, the study can contribute to better rehabilitation practice by showing that leisure is not "optional" it is an important part of improving quality of life and supporting long-term adjustment after SCI.

1.3 Operational Definition

- **Spinal Cord Injury (SCI):** Damage to the spinal cord resulting in partial or complete motor and/or sensory impairment, as diagnosed clinically (Uddin et al., 2023).
- **Leisure:** Leisure refers to voluntarily chosen activities undertaken during free time that provide enjoyment, relaxation, social interaction, or personal satisfaction, excluding mandatory therapeutic or work-related activities. (Zhao & Cole, 2023)
- **Leisure Satisfaction:** The level of fulfillment and positive feelings derived from participation in leisure activities, measured using the Leisure Satisfaction Measure (LSM). (Beard & Ragheb, 1980)

1.4 Aim of the study

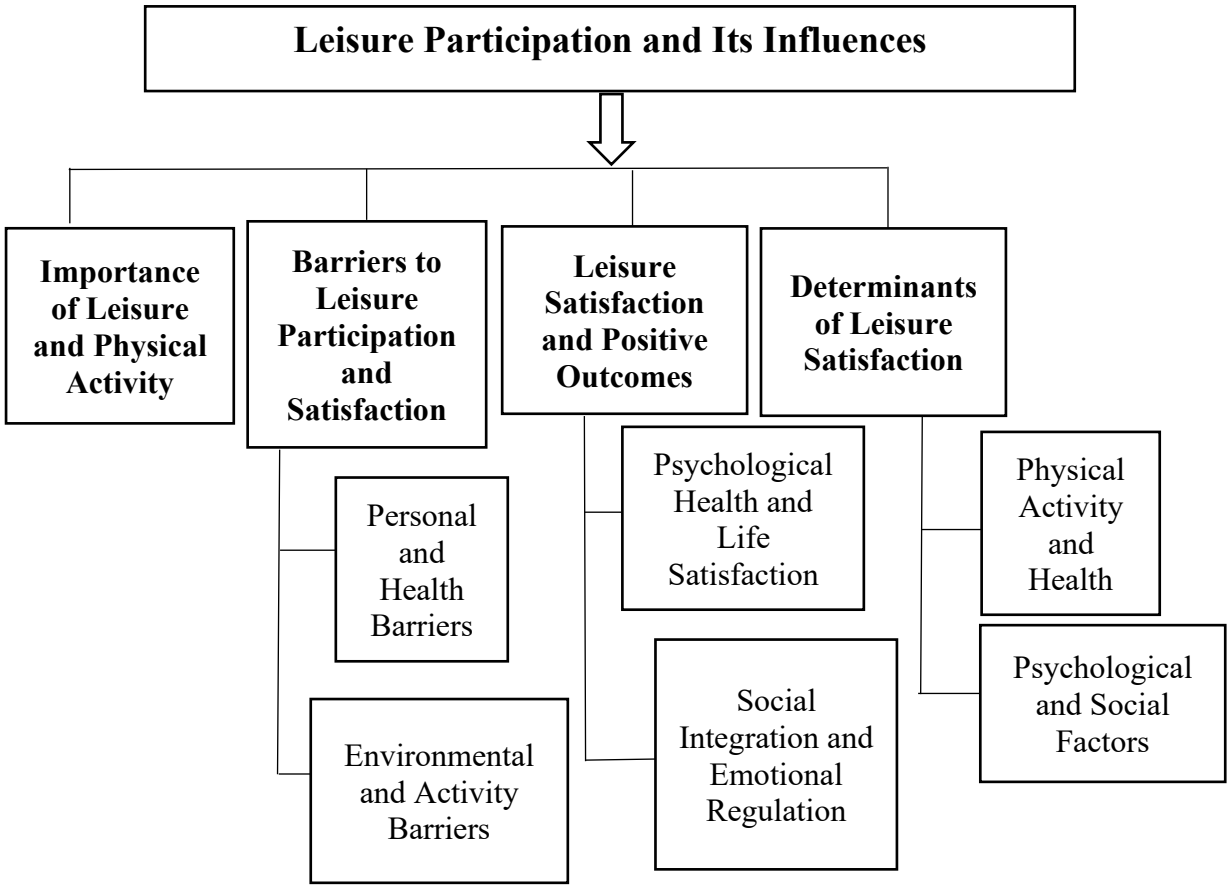
To assess the level of leisure satisfaction and its associated factors among individuals with spinal cord injury.

CHAPTER II: LITERATURE REVIEW

This literature review chapter provides an overview of studies that examine leisure satisfaction among individuals with SCI. The review highlights evidence on the relationship between leisure participation, psychological well-being, barriers in leisure engagement, and overall quality of life in SCI patients. Relevant articles published within the last 15-20 years were sourced from Google Scholar, PubMed, CINAHL, and other reputable databases. The search terms were carefully selected to align with the research question. Please see figure 2.1 for an overview of the literature review findings.

Figure 2.1

Overview of Literature Review Findings



2.1 Importance of Leisure and Physical Activity

Participation in leisure-time physical activities (LTPA) is widely associated with numerous positive outcomes for individuals living with SCI, encompassing both physical and psychosocial domains. LTPA helps individuals adjust to their injury, increases mobility, and enhances functional independence. Regular engagement in physical activity is considered a primary strategy for reducing the risk of developing secondary health complications such as chronic pain, cardiovascular disease, diabetes, and depression. Furthermore, LTPA is linked to enhanced mental health and overall psychological well-being, suggesting a mechanism for managing the high rates of psychological distress, anxiety, and depression experienced post-injury(Kim et al., 2011).

Despite these clear benefits, engagement in LTPA among people with chronic SCI remains low. Studies indicate that between 27% and 50% of the SCI population is physically inactive. A study focusing on middle-aged and older Australians with SCI found that 44% reported no participation in total LTPA, and nearly 75% reported no moderate-to-heavy LTPA (Stendell et al., 2024). This insufficient level of activity severely compromises fitness and contributes to long-term health decline. Leisure activity patterns often deviate from the non-disabled population, showing increased time spent in passive and isolated activities compared to active and social engagement (Waller et al., 2024).

2.2. Barriers to Leisure Participation and Satisfaction

Low LTPA participation and dissatisfaction among SCI patients stem from interrelated barriers categorized as personal, environmental, and activity-specific.

2.2.1 Personal and Health Barriers

Internal factors, often tied to the physical consequences of SCI, frequently hinder

participation. Commonly endorsed barriers include experiencing chronic pain or discomfort while exercising, lacking energy or feeling easily exhausted, and struggling with scheduling/planning activities. The presence of secondary health complications, such as poor bladder and bowel management, is a critical source of dissatisfaction. In one study, 64% of participants who reported dissatisfaction with physical leisure activity identified poor bladder/bowel management as the main cause (Mat Rosly et al., 2018). Other physical barriers cited included decreased vital capacity and spasticity.

Demographic and economic factors also function as personal barriers. A lack of financial resources can significantly restrict engagement in desired activities. Additionally, older age (36–65 years old) was identified as a significant predictor of non-participation in moderate-vigorous LTPA, consistent with findings that older individuals tend to have lower LTPA levels. Female gender and non-traumatic causes of injury were also associated with performing less total LTPA (Urbański et al., 2021).

2.2.2 Environmental and Activity Barriers

Environmental barriers relate to external systemic challenges. Key issues reported across various studies include limited access to facilities or programs specialized for individuals with SCI, the unavailability of adequately trained staff, and difficulties associated with transportation. Transportation issues significantly decrease the likelihood of participation; for example, one study found those reporting transportation difficulties were nine times less likely to engage in moderate-vigorous LTPA (Hwang et al., 2016). Financial environmental constraints, such as the perceived high cost of exercise equipment, are commonly cited. LTPA participation can also exhibit seasonal variation, with activity levels generally increasing in warmer seasons (spring and summer) and decreasing in colder seasons (autumn and winter) (Urbański et al., 2021). Activity-specific barriers largely relate to the nature of recreational pursuits. Many

desired activities require adaptive equipment that participants do not own (endorsed by 74% in one study), necessitating modifications due to the complexity of skills required or the inaccessibility of the terrain. The inability to overcome these structural obstacles contributes significantly to overall low satisfaction, particularly with the physiological dimension of leisure satisfaction (Mat Rosly et al., 2018).

2.3 Leisure Satisfaction and Positive Outcomes

Leisure satisfaction has a recognized, positive influence on broader measures of well-being, including psychological health, social integration, and quality of life.

2.3.1 Psychological Health and Life Satisfaction

Leisure satisfaction demonstrates a significant, positive correlation with overall psychological health and life satisfaction (LSW). This positive relationship implies that meeting personal needs through leisure strongly contributes to an individual's sense of contentment. Longitudinally, engagement in leisure and recreation (LR) activities has been consistently and positively associated with LSW over a 45-year post-injury period (Zhao & Cole, 2023).

Despite the predictable declines in mobility and weekly LR participation observed over time, LSW has paradoxically shown a small but steady increase as individuals live longer with SCI. However, low satisfaction with specific life domains, particularly vocational and leisure situations, contributed significantly to a reduced overall QoL several years after injury (Schönherr et al., 2005).

The importance of LS extends beyond the patient. For informal caregivers of SCI patients, low LS scores were strongly correlated with increased psychiatric morbidity, particularly depression and anxiety, emphasizing the role of leisure in the broader care environment (Raj et al., 2006).

2.3.2 Social Integration and Emotional Regulation

LS is intertwined with social functioning. For individuals aging with SCI, maintaining social integration acts as a partial mediator in the relationship between LR participation and life satisfaction. This suggests that the quality of social connections gained through leisure is vital to maintaining long-term well-being post-injury (Shandra, 2021).

During challenging periods, such as the COVID-19 pandemic, participation in social and sport activities was positively associated with increased life satisfaction and happiness (S. H. Kim & Cho, 2022). Specifically, community-based activities provide confidence, enhance self-esteem, and foster connectedness, thereby contributing significantly to LSW. In the general population, positive LS has been shown to promote the use of constructive emotional regulation strategies, such as cognitive reappraisal, which helps individuals manage their emotional responses and positively influences self-esteem (Liu & Yu, 2015).

2.4 Determinants of Leisure Satisfaction

2.4.1 Physical Activity and Health

Physical activity is a significant predictor of leisure satisfaction. (Özkan et al., 2021) demonstrated that among sport science students, higher levels of physical activity correlated with greater leisure satisfaction, especially in the aesthetic dimension. This relationship likely extends to individuals with SCI, for whom accessible physical activity options are more limited. The positive correlations observed between physical activity and multiple sub-dimensions of leisure satisfaction, including social, physiological, and relaxation highlight the holistic benefits of movement based leisure activities (Özkan et al., 2021). Another study further emphasized the role of injury type and gender in LTPA participation, noting that those with non-traumatic SCI and females had substantially lower LTPA levels. These disparities suggest that targeted

interventions are necessary to address participation gaps and optimize LS outcomes across diverse subgroups (Stendell et al., 2024).

2.4.2 Psychological and Social Factors

A study confirmed that individuals engaged in serious leisure activities, those that are goal-directed, skill-building, and intrinsically rewarding, reported higher leisure satisfaction and subjective well-being than those involved in casual leisure. This suggests that purposeful, skill-based leisure could offer enhanced psychological rewards in SCI populations, particularly when around autonomy and mastery (Liu & Yu, 2015).

Another study found that leisure satisfaction mediated the relationship between serious leisure and subjective well-being in marathon runners, proposing a structural model where serious leisure leads to satisfaction, which in turn leads to increased well-being. Although not SCI-specific, this pathway supports interventions that promote meaningful engagement in leisure. Given the disruptions to identity and autonomy experienced by many with SCI, serious leisure may serve as a key medium for personal development and psychological restoration (Tian et al., 2020).

2.5. Key Gaps of the Studies

- There is limited research on longitudinal changes or how leisure satisfaction responds to interventions in SCI populations.
- Limited exploration of intersectional factors such as socioeconomic status, ethnicity, or rural vs. urban residency that may affect leisure opportunities and satisfaction.
- Standardized tools like the Leisure Satisfaction Scale (LSS) may not fully capture culturally specific or emerging digital forms of leisure engagement.
- Lack of integration with other multidimensional measures (e.g., IPAQ, Health-Promoting Lifestyle Profile) to understand how leisure satisfaction interacts with physical activity and overall health behaviors.

CHAPTER III: METHODS & MATERIALS

3.1 Study Question, Aim, Objectives

3.1.1 Study Question

What is the level of leisure satisfaction among persons with spinal cord injury?

3.1.2 Aim

To assess the level of leisure satisfaction and its associated factors among individuals with spinal cord injury.

3.1.3 Objectives

- To find out the demographic characteristics of the participants.
- To assess the level of leisure satisfaction (e.g., Psychological, Educational, Social, Relaxation, Physiological and Aesthetic) of the participants.
- To find out the factors associated with leisure satisfaction.

3.2 Study Design

3.2.1 Study Method

This study used a quantitative research design to explore leisure satisfaction among individuals with SCI. A quantitative approach was appropriate because it enabled the collection of numerical data that could be analysed statistically to identify levels of satisfaction and overall trends within the study population. This design supported a structured and objective assessment of leisure satisfaction across participants.

Quantitative research is suitable for studies that focus on measuring variables and analysing numerical data to address research objectives (Creswell, 2018). Using this approach allowed the researcher to systematically evaluate leisure satisfaction and draw conclusions that could be generalised to a wider population of individuals with

SCI, thereby strengthening the relevance and applicability of the findings.

3.2.2 Study Approach

This study used a cross-sectional research design to examine leisure satisfaction among individuals with SCI during their rehabilitation process. A cross-sectional approach was appropriate because it captured participants' experiences at a single point in time, providing a clear picture of their current level of leisure satisfaction without requiring long-term follow-up or repeated measurements (Setia, 2016).

Using this design, the study explored the relationship between leisure satisfaction and selected personal or injury-related factors. The findings were intended to inform rehabilitation professionals about how leisure experiences can be better supported within rehabilitation programs to enhance emotional well-being and overall quality of life for individuals with SCI. In addition, the cross-sectional design was efficient and considerate of participants time, as all data were collected during one assessment session(Levin, 2006).

3.3 Study Setting and Period

3.3.1 Study Setting

The study was conducted in the in-patient rehabilitation unit of the Centre for the Rehabilitation of the Paralysed (CRP), located in Savar, Dhaka. This setting was selected because CRP is a specialised rehabilitation centre that provides comprehensive multidisciplinary care for individuals with spinal cord injury. Conducting the study in this setting allowed access to participants who were actively engaged in leisure activities, making it an appropriate environment for assessing leisure satisfaction during the rehabilitation process.

3.3.2 Study Period

The study period was from June 2025 to December 2025 and data was collected

between 2nd August 2025 to 15th September 2025.

3.4 Study Participant

3.4.1 Study Population

The study included individuals with SCI who were receiving inpatient rehabilitation services.

3.4.2 Sampling Techniques

Purposive sampling was used to select participants with characteristics relevant to the study objectives. This approach is suitable for cross-sectional studies, where data are collected from a specific population at a single point in time, allowing focused and relevant data collection (Wang & Cheng, 2020).

3.4.3 Inclusion and Exclusion Criteria

3.4.3.1 Inclusion Criteria

- Participants who have a medically confirmed diagnosis of SCI.
- Persons with SCI who are currently receiving inpatient rehabilitation at CRP

3.4.2.2 Exclusion Criteria

- Participants who have severe cognitive impairment affecting their ability to respond.

3.4.4 Sample Size

The sample size was calculated using the Cochran formula, based on the reported prevalence of spinal cord injury (SCI) in the Dhaka Division, Bangladesh (48.3%) (Uddin et al., 2023), with a 95% confidence level ($Z = 1.96$) and 5% margin of error ($d = 0.05$):

$$n = \frac{Z^2 \cdot p \cdot (1-p)}{d^2} \approx 384$$

Adjusting for a 10% non-response rate resulted in a target sample of 422 participants.

Due to time constraints and limited accessibility, data were collected from 120 participants, which formed the final sample.

3.5 Ethical Consideration

3.5.1 Ethical Clearance

The ethical clearance was sought from the Institutional Review Board (IRB) of the Bangladesh Health Professions Institute (BHPI) through the Department of Occupational Therapy. The IRB approval number for this study is CRP-BHPI/IRB/07/2025/1101. Permission was also obtained from the Head of the Medical Services Wing and the Head of the Occupational Therapy Department at the Centre for the Rehabilitation of the Paralysed.

3.5.2 Informed Consent

3.5.2.1 Information Sheet/Participant Explanatory Statement

Participants were provided with an information sheet explaining the purpose of the study, the procedures (completing a questionnaire on leisure activities and satisfaction), potential risks and benefits, and confidentiality measures. Participation was voluntary, and participants had the right to withdraw at any time without affecting their ongoing rehabilitation or care. (See Appendix B)

3.5.2.2 Consent Form

A consent form was provided to all participants to formally document their voluntary agreement to take part in the study. By signing the form, participants acknowledged that they understood their involvement was entirely voluntary and that they could withdraw at any point without any impact on their rehabilitation or care. The consent process also ensured that participants were aware of their rights as research subjects and provided a written record of their agreement to participate, which supports the

ethical conduct of the study. (See Appendix C)

3.5.2.3 Withdrawal Form

A withdrawal form was provided to allow participants to formally withdraw from the research at any time without penalty. This ensures that participants' rights are respected and that their decision to withdraw will not affect their ongoing rehabilitation or care. (See Appendix D)

3.5.3 Unequal relationship

There was no unequal relationship in this study. The rights and autonomy of all participants were respected and treated equally throughout the research process. Participation was voluntary, and no power dynamics influenced participants decisions to take part in or withdraw from the study.

3.5.4 Risk and Beneficence

The researcher clearly explained that the study involved no physical, social, psychological or environmental risks and that there were no direct benefits associated with participation.

3.5.5 Confidentiality

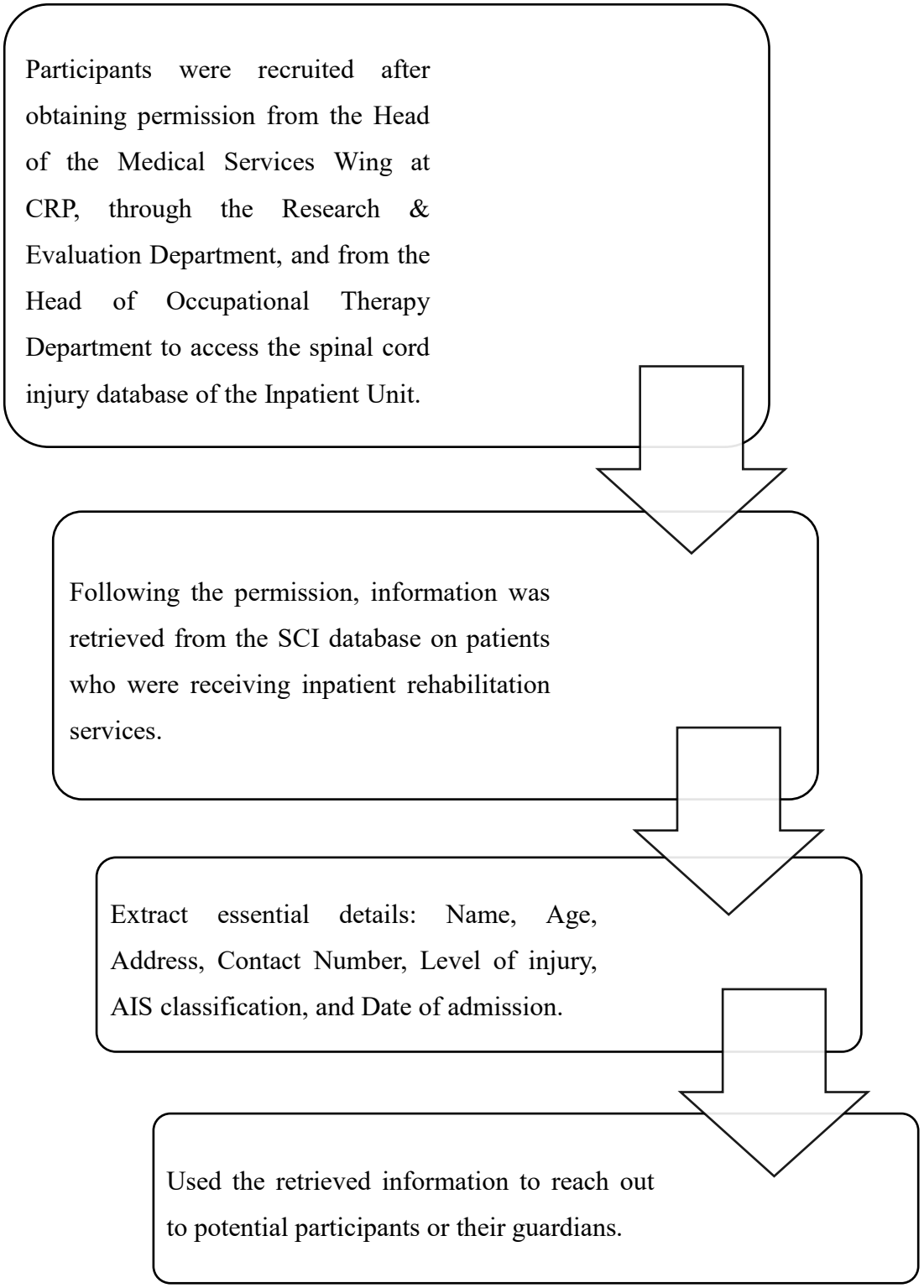
The researcher ensured strict confidentiality of all participant information. Data were shared only with the research supervisor, as stated in the information sheet. Participants were clearly informed about the purpose of the study and assured that their personal information, including names and contact numbers, would remain confidential.

3.6 Data Collection Process

3.6.1 Participant Recruitment Process

Figure 3.6.1

Overview of Participant Recruitment Process



3.6.2 Data Collection Method

Data were collected through a face-to-face survey. This approach allowed the researcher to provide explanations when needed, ensure that participants responses corresponded with the questions, and encourage completion of all items. Face-to-face surveys also allowed more time for data collection compared to other survey modes and are recommended in the literature for achieving higher response rates (Schröder, 2016).

3.6.3 Data Collection Instrument

Data were collected using a structured questionnaire that included both demographic and measurement variables. Demographic information included age, gender, marital status, educational level, employment status, and the level and type of spinal cord injury. Leisure satisfaction was measured using the Leisure Satisfaction Measure (LSM), previously known as the Leisure Satisfaction Scale (LSS), developed by J. G. Beard and M. G. Ragheb. The instrument consists of 24 items and examines how well individuals' needs are met through leisure activities across six domains: psychological, educational, social, relaxation, physiological, and aesthetic. Responses were recorded on a five-point Likert scale, ranging from *almost never true* to *almost always true.* Previous studies have reported good internal consistency and reliability of the Leisure Satisfaction Measure (S. H. Kim & Cho, 2022).

The questionnaire was translated into Bengali, the native language of Bangladesh, using a forward–backward translation method with the support of the supervisor and two individuals experienced in formal Bengali and English writing. Permission to use the Leisure Satisfaction Measure was obtained from Idyll Arbor, Inc., the publisher of the instrument. Because of copyright restrictions, the full questionnaire is not included in the appendix, but a copy of the permission is provided there.

3.6.4 Field Test

A field test was conducted with 3 participants with SCI to assess the clarity, cultural appropriateness, and feasibility of the translated LSM. Feedback from participants confirmed that the items were understandable, and minor wording adjustments were made for clarity. The average time to complete the questionnaire was 12-15 minutes. The field test also helped the researcher standardize data collection procedures for the main study.

3.7 Data Management and Analysis

After data collection, each questionnaire was reviewed for errors or missing information. Variables were defined, and all data were entered and analyzed using the Statistical Package for the Social Sciences (SPSS), version 20.0. The document was prepared using Microsoft Office Word.

3.8 Quality Control and Quality Assurance

All data were entered accurately under the supervision and guidance of the respective supervisor, following all provided instructions. A pilot survey was conducted prior to the main data collection to assess participants understanding of the questionnaire, using three selected participants. Based on the pilot experience, the translated Bengali questionnaire was revised to improve clarity. Data were then collected systematically and the data entry process was completed carefully. Quality control and quality assurance procedures were followed to minimize errors and ensure data accuracy throughout data entry and analysis. Random checks of selected data entries were performed to verify correctness. Data analysis was carried out according to the scale guidelines and supervisor instructions. Throughout the study, the researcher maintained transparency, ensured proper documentation and securely stored all study related documents in accordance with supervisor guidelines.

CHAPTER IV: RESULTS

This chapter presents the findings of the study. The results are presented in tables and focus on leisure satisfaction, including its different dimensions, individual item responses, and factors associated with leisure satisfaction among persons with SCI receiving inpatient rehabilitation at the Centre for the Rehabilitation of the Paralysed (CRP).

Table 4.1

Distribution of Socio-Demographic Variables Among Participants

Variable	Category	Frequency (n=120)	Percentage (%)
Gender	Male	102	85.0
	Female	18	15.0
Age (Years)	12-30 Years	56	46.7
	31-49 Years	45	37.5
	50-68 Years	19	15.8
Median = 32 Years, IQR = 22-45 Years, Min = 12 Years, Max = 67 Years			
Level of Educational	Illiterate	6	5.0
	Primary School	42	35.0
	Secondary School	34	28.3
	Higher Secondary School	22	18.3
	Bachelor's Degree or Higher	16	13.3
Marital Status	Single	37	30.8
	Married	78	65.0
	Widowed	5	4.2
Residential Area	Rural	81	67.5
	Urban	29	24.2
	Semiurban	10	8.3
Employment Status	Employed	32	26.7
	Student	28	23.3
	Homemaker	7	5.8
	Self-Employed	14	11.7
	Unemployed	5	4.2
	Farmer	18	15.0

	Others	16	13.3
Household Income (TK)	5000-10000 TK	34	28.3
	10001-15000 TK	26	21.7
	15001-20000 TK	26	21.7
	>20000 TK	34	28.3
Median = 15500 TK, IQR = 10000-25000 TK, Min = 5000 TK, Max = 142000 TK			

Table 4.1 presents the socio-demographic characteristics of the participants (n = 120). Males account for 85.0% of the sample, while females represent 15.0%. Participants aged 12–30 years constitute 46.7% of the sample, followed by those aged 31–49 years (37.5%) and 50–68 years (15.8%). The median age of the participants is 32 years, with an interquartile range of 22–45 years. In terms of education, 35.0% of participants have completed primary education, 28.3% have secondary education, and 18.3% have higher secondary education. Participants with a bachelor's degree or higher account for 13.3%, while 5.0% are illiterate. Regarding marital status, 65.0% of participants are married, 30.8% are single, and 4.2% are widowed. Residential distribution shows that 67.5% of participants live in rural areas, 24.2% live in urban areas, and 8.3% live in semi-urban areas. Employment status indicates that 26.7% of participants are employed, 23.3% are students, and 15.0% are farmers. Other categories include self-employed 11.7%, homemakers 5.8%, unemployed 4.2%, and other occupations (Maid, Fisherman, Mason, Driver, Waiter, Teacher) at 13.3%. Household income data show that 28.3% of participants report a monthly income of 5,000–10,000 Taka, while an equal proportion (28.3%) report incomes above 20,000 Taka. Participants earning between 10,001–15,000 Taka and 15,001–20,000 Taka each account for 21.7%. The median household income is 15,500 Taka, with an interquartile range of 10,000–25,000 Taka.

Table 4.2

Clinical Characteristics and Mobility Device Use Among Participants

Variable	Category	Frequency (n=120)	Percentage (%)
Level of Spinal Cord Injury	Cervical (C1-C8)	34	28.3
	Thoracic (T1-T12)	59	49.2
	Lumbar (L1-L5)	27	22.5
Months Since Injury	1-6 Months	91	75.8
	7-12 Months	21	17.5
	>12 Months	8	6.7
Cause of Spinal Cord Injury	Traumatic	109	90.8
	Non-traumatic	11	9.2
Type of Spinal Cord Injury	Complete Injury	67	55.8
	Incomplete Injury	53	44.2
ASIA Impairment Scale (AIS) Classification	ASIA A	67	55.8
	ASIA B	17	14.2
	ASIA C	19	15.8
	ASIA D	17	14.2
Phase of Rehabilitation Service	Acute	5	4.2
	Active	30	25.0
	Rehabilitation	64	53.3
	Community Re-integration	21	17.5
Mobility Devices Used	Wheelchair	111	92.5
	Cane/Crutch	6	5.0
	Not Applicable	3	2.5

Table 4.2 presents the clinical characteristics of the participants (n = 120). 49.2% injuries occur at the thoracic level, followed by 28.3% at cervical and 22.5% at lumbar levels. The majority of participants are 1–6 months post-injury 75.8% and most injuries are traumatic in nature 90.8%. Over half of the participants have complete spinal cord injuries (55.8%), and ASIA classifications show that ASIA A is the most common category (55.8%), with smaller proportions in ASIA B (14.2%), ASIA C (15.8%), and ASIA D (14.2%). More than half are currently in the rehabilitation phase (53.3%), while others are in the active phase (25.0%) or community reintegration (17.5%). In terms of mobility device, wheelchair use is predominant (92.5%), with few participants using a

cane or crutch (5.0%) or no mobility device (2.5%).

Table 4.3

Types of Leisure Activities Among Participants

Variable	Category	Frequency (n=120)	Percentage of Cases (%)
Structured Leisure Activity	Music Therapy	105	87.5%
	Indoor Games	105	87.5%
	Arts and Crafts	65	54.2%
	Gardening	40	33.3%
	Outdoor Games	36	30.0%
	N/A	6	5.0%
Unstructured Leisure Activity	Chatting in Person	89	74.8%
	Outdoor Mobility	78	65.5%
	Using Mobile Phone/Internet	56	47.1%
	Watching TV	42	35.0%
	N/A	8	6.7%
	Others	3	2.5%

Table 4.3 presents the types of leisure activities among the participants (n = 120). Among structured activities, music therapy and indoor games are the most commonly participated in, with 87.5% of participants engaging in each. Arts and crafts are moderately chosen (54.2%), while gardening (33.3%) and outdoor games (30.0%) are less frequent. A small proportion of participants (5.0%) did not engage in any structured activity. For unstructured activities, chatting in person is the most frequent (74.8%), followed by Outdoor Mobility (65.5%) and using a mobile phone or the internet (47.1%). Watching TV is less common (35.0%), while few participants reported no activity (6.7%) or other activities (2.5%).

Table 4.4

Distribution of Enjoyed Leisure Activities and Daily Leisure Time Among Participants

Variable	**Category**	**Frequency (n=120)**	**Percentage (%)**
Enjoyed Leisure Activity	Music Therapy	30	25.0
	Indoor Games	23	19.2
	Chatting in Person	18	15.0
	Using Mobile phone/Internet	17	14.2
	Outdoor Mobility	16	13.3
	Arts and Crafts	11	9.2
	Outdoor Games	5	4.2
Average Daily Leisure Time (hours)	1-2 hour	110	91.7
	>2 hours	10	8.3

Table 4.4 shows the distribution of the most enjoyed leisure activities and daily leisure time among participants (n = 120). Music therapy is the most enjoyed activity (25.0%), followed by indoor games (19.2%), chatting in person (15.0%), using a mobile phone or the internet (14.2%), and outdoor mobility (13.3%). Arts and crafts (9.2%) and outdoor games (4.2%) are less favored. In terms of average daily leisure time, most participants spend 1–2 hours on leisure activities (91.7%), while a small proportion spend more than 2 hours (8.3%).

Table 4.5

Frequency and Percentage Distribution of LSM Items

Items	Level of Leisure Satisfaction				
	Almost Never True % (n)	**Seldom True % (n)**	**Somewhat True % (n)**	**Often True % (n)**	**Almost Always True % (n)**
Q. 1	0.0% (0)	0.8% (1)	2.5% (3)	41.7% (50)	55.0% (66)
Q. 2	0.0% (0)	2.5% (3)	7.5% (9)	45.8% (55)	44.2% (53)
Q. 3	0.0% (0)	4.2% (5)	10.8% (13)	42.5% (51)	42.5% (51)
Q. 4	1.7% (2)	4.2% (5)	14.2% (17)	40.0% (48)	40.0% (48)
Q. 5	0.0% (0)	3.3% (4)	25.8% (31)	47.5% (57)	23.3% (28)
Q. 6	0.0% (0)	5.0% (6)	15.0% (18)	53.3% (64)	26.7% (32)
Q. 7	0.0% (0)	3.3% (4)	18.3% (22)	54.2% (65)	24.2% (29)
Q. 8	0.8% (1)	0.8% (1)	17.5% (21)	55.0% (66)	25.8% (31)
Q. 9	0.0% (0)	2.5% (3)	8.3% (10)	34.2% (41)	55.0% (66)
Q. 10	0.0% (0)	2.5% (3)	8.3% (10)	35.8% (43)	53.3% (64)
Q. 11	0.0% (0)	3.3% (4)	1.7% (2)	34.2% (41)	60.8% (73)
Q. 12	0.8% (1)	1.7% (2)	6.7% (8)	30.8% (37)	60.0% (72)
Q. 13	0.0% (0)	0.8% (1)	5.8% (7)	30.8% (37)	62.5% (75)
Q. 14	0.0% (0)	0.8% (1)	5.0% (6)	30.8% (37)	63.3% (76)
Q. 15	0.0% (0)	0.8% (1)	6.7% (8)	28.3% (34)	64.2% (77)
Q. 16	1.7% (2)	5.0% (6)	5.0% (6)	28.3% (34)	60.0% (72)
Q. 17	79.2% (95)	12.5% (15)	8.3% (10)	0.0% (0)	0.0% (0)
Q. 18	0.0% (0)	0.8% (1)	5.8% (7)	33.3% (40)	60.0% (72)
Q. 19	0.0% (0)	0.8% (1)	5.8% (7)	32.5% (39)	60.8% (73)
Q. 20	0.0% (0)	0.8% (1)	5.8% (7)	31.7% (38)	61.7% (74)
Q. 21	0.0% (0)	0.8% (1)	5.8% (7)	35.8% (43)	57.5% (69)
Q. 22	0.0% (0)	1.7% (2)	7.5% (9)	35.8% (43)	55.0% (66)
Q. 23	0.0% (0)	1.7% (2)	9.2% (11)	35.8% (43)	53.3% (64)
Q. 24	0.0% (0)	0.8% (1)	6.7% (8)	38.3% (46)	54.2% (65)

Table 4.5 shows that participants generally experience leisure activities in a positive way. Nearly all participants (96.7%) report that *"their leisure activities are very interesting"* (Item 1), indicating that leisure is largely enjoyed. Activities related to relaxation are also strongly valued, as over 90% of participants state that leisure *helps them relax* (Item 13) and *relieve stress* (Item 14). Social interaction through leisure is another important aspect, with 89.2% of participants agreeing that they interact with others during leisure activities (Item 9). In contrast, leisure is less often associated with physical challenge. A large majority (79.2%) report that *"their leisure activities are physically challenging"* (Item 17) is *almost never true*, and activities related to physical fitness (Item 18) receive comparatively lower agreement. Overall, these findings suggest that participants mainly value leisure for enjoyment, relaxation, and social connection rather than for physical challenge or fitness.

Table 4.6

Subscale Wise Levels of Leisure Satisfaction and Mean ± SD Values

Subscale	Mean	±SD
Psychological	4.2958	±.66893
Educational	3.9896	±.65417
Social	4.4542	±.68368
Relaxation	4.5188	±.66907
Physiological	3.7229	±.52740
Aesthetic	4.4500	±.66389

Table 4.6 presents the subscale-wise levels of leisure satisfaction among the participants. The highest scores are observed in the relaxation domain (Mean = 4.52 ± 0.67), followed by social and aesthetic domains (Mean = 4.45 ± 0.68 and 4.45 ± 0.66), with psychological scores also remaining relatively high (Mean = 4.30 ± 0.67). In contrast, educational scores are lower (Mean = 3.99 ± 0.65), while the physiological domain records the lowest level (Mean = 3.72 ± 0.53).

Figure 4.7

Overview of Leisure Satisfaction Among Participants

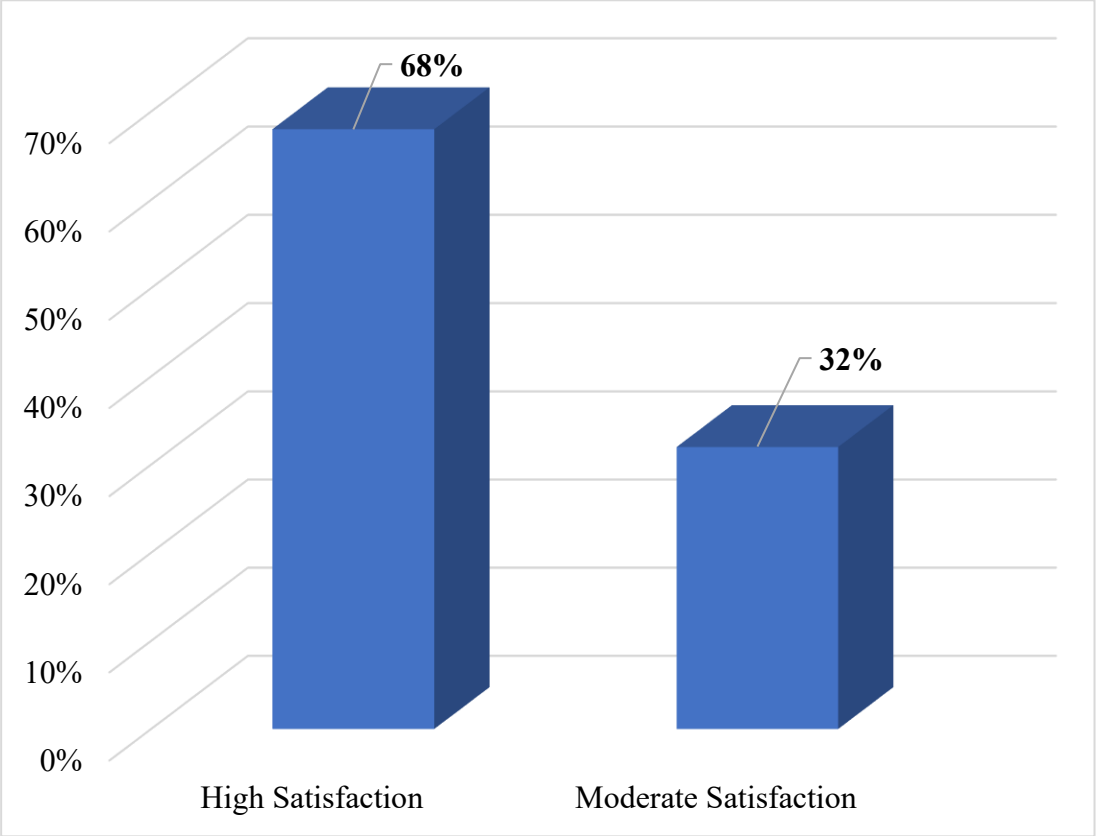


Figure 4.7 indicates that the majority of participants report high leisure satisfaction (68%, n=82). In contrast, 32% (n=38) experience a moderate level of satisfaction, suggesting an overall favorable level of leisure satisfaction among the participants.

Table 4.8

Factors Associated with Leisure Satisfaction (Kruskal–Wallis H Test)

Variable	Category	n (Frequency)	Leisure Satisfaction			
			Mean Rank	**df**	X^2	***P* value**
Phase of Rehab	Acute	5	11.90	3	15.707	**.001**
	Active	30	56.60			
	Rehabilitation	64	69.20			
	Community Re-integration	21	51.12			
Enjoyed Leisure Activity	Music Therapy	30	61.02	6	24.756	**.001**
	Indoor Games	23	68.96			
	Chatting in Person	18	64.36			
	Using Mobile Phone/Internet	17	24.62			
	Outdoor Mobility	16	77.53			
	Arts and Crafts	11	58.23			
	Outdoor Games	5	77.10			

Table 4.8 shows that leisure satisfaction differs significantly across the phases of rehabilitation and the types of leisure activities enjoyed by the participants. Higher levels of leisure satisfaction are observed during the rehabilitation phase and among participants who engage in outdoor mobility and outdoor games, whereas participants who enjoy using mobile phones or the internet reported the lowest levels of satisfaction (p = .001).

Table 4.9

Post Hoc Analysis of Phase of Rehabilitation and Most Enjoyed Leisure Activity on Leisure Satisfaction (Bonferroni)

	Groups	Mean Differences	*P* value
Phase of Rehab			
Acute	Active	-.80278*	**.001**
	Rehabilitation	-.94076*	**.001**
	Community Re-integration	-.68254*	**.013**
Enjoyed Leisure Activity			
Using Mobile Phone/Internet	Music Therapy	-.56471*	**.001**
	Arts and Crafts	-.49577	.063
	Indoor Games	-.67413*	**.001**
	Outdoor Games	-.77304*	**.010**
	Outdoor Mobility	-.75169*	**.001**
	Chatting in Person	-.64434*	**.001**

Table 4.9 presents the post hoc Bonferroni pairwise comparisons following the significant Kruskal–Wallis test. The results indicate that participants in the acute phase demonstrate significantly different levels of leisure satisfaction compared to those in the active, rehabilitation, and community reintegration phases ($p < .05$), whereas no significant differences are observed among the latter three phases. The analysis further indicates that participants who enjoy using mobile phones or the internet report a significant difference in leisure satisfaction compared to those engaged in music therapy, indoor games, outdoor games, and outdoor mobility activities ($p < .05$). However, no significant differences are observed between mobile phone/internet use and arts and crafts.

CHAPTER V: DISCUSSION

This study examined leisure satisfaction among 120 in-patient persons with SCI at CRP and found generally high overall leisure satisfaction, with relaxation, social, and aesthetic domains scoring highest, and the physiological domain scoring lowest. Overall, 68% of participants reported high leisure satisfaction, and 32% reported moderate satisfaction. This aligns with longitudinal evidence indicating that leisure and recreation contribute significantly to life satisfaction among individuals with SCI, and that leisure related well-being can remain stable or improve over time despite functional decline (Zhao & Cole, 2023).

The highest satisfaction was observed in the relaxation, social, and aesthetic domains. These findings are consistent with previous research showing that leisure activities provide stress relief, emotional regulation, and social connection during rehabilitation (Shandra, 2021). Structured activities such as music therapy and small-group indoor games, commonly offered in rehabilitation settings, facilitate both relaxation and social bonding. In the Bangladeshi context, these findings are particularly relevant, as indoor, low-cost, and socially interactive leisure activities are more accessible and culturally common for people with disabilities. Many patients at CRP come from rural or low income backgrounds, where active or equipment-based leisure is limited even before injury, making group-based and low-resource activities more enjoyable and satisfying.

By contrast, the lower satisfaction in the physiological domain reflects a wider pattern of low participation in leisure-time physical activity among people with SCI, constrained by pain, fatigue, secondary conditions, and lack of adaptive equipment or accessible programs (Hwang et al., 2016; Skovbjerg et al., 2025). Items related to

physical challenge and fitness scored particularly low, consistent with systematic reviews highlighting that physical activity participation in SCI populations is limited and targeted exercise interventions are needed to improve fitness and health outcomes. This gap between leisure enjoyment and physiological benefits presents an opportunity in rehabilitation: maintaining enjoyable, social leisure while enhancing access to safe, adaptive physical activities (Martin Ginis et al., 2018; Ponzano et al., 2024).

Phase of rehabilitation was significantly associated with leisure satisfaction, with participants in the acute phase reporting lower satisfaction than those in later phases. This aligns with longitudinal evidence showing that leisure participation and its subjective rewards evolve over time post-injury ((Waller et al., 2024). Early-stage participants face physical instability, emotional distress, and medical restrictions, limiting meaningful leisure engagement. As patients progress into active rehabilitation, participation in enjoyable leisure activities increases (Hwang et al., 2016; I. T. Kim et al., 2011).

Participants reporting mobile phone and internet use as their most enjoyed activity showed higher leisure satisfaction, consistent with evidence that digital leisure can enhance social connection, information access, and subjective well-being for people with mobility-limiting conditions (Lee, 2024; Yang et al., 2021). Similarly, music therapy and indoor games, frequently reported as enjoyable structured activities, are supported by rehabilitation literature for improving mood, social bonding, and relaxation in inpatient populations (Lapa, 2013).

The study also highlights barriers to physical leisure well documented in prior research, including chronic pain, bladder/bowel issues, fatigue, lack of energy, transportation difficulties, expensive adaptive equipment, and social stigma (Mat Rosly et al., 2018). These challenges are particularly pronounced in Bangladesh, where many

individuals with SCI live in rural areas with poor infrastructure, limited community rehabilitation services, and financial constraints that restrict access to adaptive leisure programs.

It is important to note that this study involved exclusively inpatient participants, most of whom were recently injured and wheelchair-dependent. Leisure experiences in this setting may differ from those of community dwelling individuals, who often have more opportunities for diverse physical activities post-discharge (Skovbjerg et al., 2025). Nonetheless, the inpatient period at CRP may represent a critical window when structured leisure opportunities are most accessible, explaining the high satisfaction observed in relaxation and social domains. The use of LSM, a validated tool, strengthens the reliability of these findings (S. H. Kim & Cho, 2022; Köse et al., 2024).

Overall, this study demonstrates that people with SCI in inpatient rehabilitation in Bangladesh experience high satisfaction from leisure activities that provide relaxation, social interaction, and aesthetic enjoyment, while physiological aspects remain challenging due to well-recognized barriers. Rehabilitation programs can further enhance outcomes by incorporating adaptive physical leisure, expanding group-based psychosocial activities, and integrating accessible digital leisure opportunities, thereby supporting a more holistic recovery and quality of life for individuals with SCI.

These findings emphasize the need for rehabilitation services and policies in Bangladesh to expand access to structured, low-cost, and culturally appropriate leisure activities, integrate adaptive physical programs, and utilize digital platforms to promote social participation and well-being for people with SCI.

CHAPTER VI: CONCLUSION

6.1 Strength and Limitation

6.1.1 Strengths

- The study addressed an important and underexplored area by examining leisure satisfaction among persons with SCI during inpatient rehabilitation in the Bangladeshi context.
- A standardized and widely used instrument, the Leisure Satisfaction Measure, was employed, which enhanced the reliability and credibility of the findings.
- Data were collected through face-to-face interviews, allowing clarification of questions and ensuring complete responses from participants.
- Ethical procedures were strictly followed, and the research was conducted in a recognized rehabilitation center, which strengthened the trustworthiness of the study.
- Inclusion of participants from different phases of rehabilitation provided a broader perspective on leisure satisfaction across the recovery process.

6.1.2 Limitations

- The sample size was smaller than initially planned due to time constraints, which may limit the generalizability of the findings.
- Data were collected only from in-patient rehabilitation; therefore, the results may not fully represent the experiences of persons with SCI living in the community.
- The cross-sectional design captured leisure satisfaction at one point in time and did not allow assessment of changes across different stages of rehabilitation.

- Leisure satisfaction was measured using self-reported responses, which may have been influenced by participants' personal perceptions or emotional state at the time of data collection.
- The sample consisted predominantly of male participants, which may have limited the representation of leisure satisfaction experiences among female participants. However, this gender distribution reflects the higher prevalence of SCI among males in Bangladesh.

6.2 Practice Implication

6.2.1 Recommendations for Future Practice

- The findings highlight the importance of leisure as a meaningful component of inpatient rehabilitation for persons with SCI, particularly in supporting psychological well-being, relaxation, and social interaction.
- Occupational therapists should routinely assess individual leisure interests and preferences and include leisure satisfaction as part of client-centered rehabilitation planning.
- Greater emphasis can be placed on leisure activities that promote enjoyment, stress relief and social engagement, especially during the early phases of rehabilitation.
- The lower satisfaction related to physical aspects of leisure indicates a need for therapists to gradually introduce safe, adaptive, and ability-appropriate leisure activities to support physical engagement.
- Interdisciplinary collaboration among rehabilitation professionals can support the integration of leisure-based interventions alongside therapeutic goals, thereby enhancing overall quality of life for persons with spinal cord injury.

6.2.2 Recommendations for Future Research

- Future studies should include a larger sample size to improve the generalizability of findings related to leisure satisfaction among persons with SCI.
- Research conducted across multiple rehabilitation centers would provide a broader understanding of leisure satisfaction in different clinical and social settings.
- Longitudinal studies are recommended to examine changes in leisure satisfaction over different phases of rehabilitation and after community reintegration.
- Future research may explore gender specific experiences of leisure satisfaction, given the unequal representation of male and female participants in the present study.
- Qualitative or mixed-method studies could be conducted to gain deeper insight into personal meanings, preferences, and barriers related to leisure participation among persons with SCI.
- Further studies may investigate the effectiveness of structured leisure-based interventions in improving physical, psychological, and social outcomes during rehabilitation.

6.3 Conclusion

This study explored leisure satisfaction among persons with SCI receiving inpatient rehabilitation at CRP, with the aim of understanding leisure experiences within a rehabilitation context in Bangladesh. By focusing on leisure satisfaction and its associated factors, the study addressed an important but often underrepresented component of rehabilitation research.

The findings highlight that leisure is a meaningful aspect of everyday life for individuals with spinal cord injury during inpatient rehabilitation. Leisure experiences contribute to emotional well-being and social engagement, underscoring the importance of considering psychosocial dimensions alongside physical recovery. At the same time, the study draws attention to existing gaps in leisure participation, suggesting that leisure remains an area requiring greater recognition within rehabilitation services.

In conclusion, this study reinforces the view that rehabilitation should adopt a holistic and person centered approach, where leisure is recognized as an integral part of recovery rather than a secondary concern. By emphasizing leisure satisfaction, the study contributes valuable insight for rehabilitation professionals and provides a foundation for enhancing practice and guiding future research. Recognizing and supporting leisure participation may ultimately promote more comprehensive rehabilitation outcomes and improve the overall quality of life for persons with spinal cord injury.

CHAPTER VII: REFERENCE

Beard, J. G., & Ragheb, M. G. (1980). Measuring leisure satisfaction. *Journal of Leisure Research*, *12*(1), 20–33. https://doi.org/10.1080/00222216.1980.11969416

Creswell, J. W. (2008). Research design: Qualitative, quantitative, and mixed methods approaches (3rd ed.). *SAGE Publications.*

Furlan, J. C., Sakakibara, B. M., Miller, W. C., & Krassioukov, A. V. (2013). Global Incidence and Prevalence of Traumatic Spinal Cord Injury. In *Can J Neurol Sci* (Vol. 40).

Hwang, E. J., Groves, M. D., Sanchez, J. N., Hudson, C. E., Jao, R. G., & Kroll, M. E. (2016). Barriers to Leisure-Time Physical Activities in Individuals with Spinal Cord Injury. *Occupational Therapy in Health Care*, *30*(3), 215–230. https://doi.org/10.1080/07380577.2016.1183180

Kim, I. T., Mun, J. H., Jun, P. S., Kim, G. C., Sim, Y.-J., & Jeong, H. J. (2011). Leisure Time Physical Activity of People with Spinal Cord Injury: Mainly with Clubs of Spinal Cord Injury Patients in Busan-Kyeongnam, Korea. *Annals of Rehabilitation Medicine*, *35*(5), 613. https://doi.org/10.5535/arm.2011.35.5.613

Kim, S. H., & Cho, D. (2022). Psychometric properties of Leisure Satisfaction Scale (LSS)-short form: a Rasch rating model calibration approach. *BMC Psychology*, *10*(1). https://doi.org/10.1186/s40359-022-00861-1

Köse, E., Gökçe, H., Toktaş, N., Yerlisu Lapa, T., & Tercan Kaas, E. (2024). Measurement invariance of the satisfaction with leisure satisfaction scale by gender, marital status, and age. *Psicologia: Reflexao e Critica*, *37*(1). https://doi.org/10.1186/s41155-023-00282-y

Lapa, T. Y. (2013). Life Satisfaction, Leisure Satisfaction and Perceived Freedom of Park Recreation Participants. *Procedia - Social and Behavioral Sciences*, *93*, 1985–1993. https://doi.org/10.1016/j.sbspro.2013.10.153

Lee, J. (2024). *THE IMPACT OF DIGITAL TECHNOLOGIES ON WELL-BEING: MAIN INSIGHTS FROM THE LITERATURE OECD PAPERS ON WELL-BEING AND INEQUALITIES*.

Levin, K. A. (2006). Study design III: Cross-sectional studies. *Evidence-Based Dentistry*, *7*(1), 24–25. https://doi.org/10.1038/sj.ebd.6400375

Liu, H., & Yu, B. (2015). Serious Leisure, Leisure Satisfaction and Subjective Well-Being of Chinese University Students. *Social Indicators Research*, *122*(1), 159–174. https://doi.org/10.1007/s11205-014-0687-6

Martin Ginis, K. A., Van Der Scheer, J. W., Latimer-Cheung, A. E., Barrow, A., Bourne, C., Carruthers, P., Bernardi, M., Ditor, D. S., Gaudet, S., De Groot, S., Hayes, K. C., Hicks, A. L., Leicht, C. A., Lexell, J., MacAluso, S., Manns, P. J., McBride, C. B., Noonan, V. K., Pomerleau, P., … Goosey-Tolfrey, V. L. (2018). Evidence-based scientific exercise guidelines for adults with spinal cord injury: An update and a new guideline. *Spinal Cord*, *56*(4), 308–321. https://doi.org/10.1038/s41393-017-0017-3

Mat Rosly, M., Halaki, M., Hasnan, N., Mat Rosly, H., Davis, G. M., & Husain, R. (2018). Leisure time physical activity participation in individuals with spinal cord injury in Malaysia: barriers to exercise. *Spinal Cord*, *56*(8), 806–818. https://doi.org/10.1038/s41393-018-0068-0

Nejati-Koshki, K., Mortazavi, Y., Pilehvar-Soltanahmadi, Y., Sheoran, S., & Zarghami, N. (2017). An update on application of nanotechnology and stem cells in spinal cord injury regeneration. In *Biomedicine and Pharmacotherapy* (Vol. 90, pp. 85–

92). Elsevier Masson SAS. https://doi.org/10.1016/j.biopha.2017.03.035

Özkan, A., Yaşartürk, F., & Elçi, G. (2021). The relationship between leisure satisfaction, physical activity level and healthy life-style behaviors of sport science students during the COVID-19 pandemic. *Physical Education of Students*, *25*(5), 257–264. https://doi.org/10.15561/20755279.2021.0501

Ponzano, M., Buren, R., Adams, N. T., Jun, J., Jetha, A., Mack, D. E., & Ginis, K. A. M. (2024). Effect of Exercise on Mental Health and Health-related Quality of Life in Adults With Spinal Cord Injury: A Systematic Review and Meta-analysis. In *Archives of Physical Medicine and Rehabilitation* (Vol. 105, Number 12, pp. 2350–2361). W.B. Saunders. https://doi.org/10.1016/j.apmr.2024.02.737

Raj, J. T., Manigandan, C., & Jacob, K. S. (2006). Leisure satisfaction and psychiatric morbidity among informal carers of people with spinal cord injury. In *Spinal Cord* (Vol. 44, Number 11, pp. 676–679). https://doi.org/10.1038/sj.sc.3101899

Schönherr, M. C., Groothoff, J. W., Mulder, G. A., & Eisma, W. H. (2005). Participation and satisfaction after spinal cord injury: Results of a vocational and leisure outcome study. In *Spinal Cord* (Vol. 43, Number 4, pp. 241–248). https://doi.org/10.1038/sj.sc.3101683

Schröder, J. (2016). *GESIS Survey Guidelines Face-to-Face Surveys*. https://doi.org/10.15465/gesis-sg_en_005

Setia, M. S. (2016). Methodology series module 3: Cross-sectional studies. *Indian Journal of Dermatology*, *61*(3), 261–264. https://doi.org/10.4103/0019-5154.182410

Shandra, C. L. (2021). Disability and Patterns of Leisure Participation across the Life Course. *Journals of Gerontology - Series B Psychological Sciences and Social Sciences*, *76*(4), 801–809. https://doi.org/10.1093/geronb/gbaa065

Skovbjerg, F., Stabel, H. H., Wouda, M. F., Stubbs, P. W., & Nielsen, J. F. (2025). Participation in leisure-time activities among people living with Spinal Cord Injuries. A cross-sectional survey. *Spinal Cord Series and Cases*, *11*(1). https://doi.org/10.1038/s41394-025-00722-0

Stendell, L., Stubbs, P. W., Rogers, K., Verhagen, A. P., Middleton, J. W., Davis, G. M., Arora, M., Marshall, R., Geraghty, T., Nunn, A., & Quel de Oliveira, C. (2024). Leisure-Time Physical Activity Participation in Middle-Aged and Older Adults With a Spinal Cord Injury in Australia. *International Journal of Public Health*, *69*. https://doi.org/10.3389/ijph.2024.1607276

Tian, H. B., Qiu, Y. J., Lin, Y. Q., Zhou, W. T., & Fan, C. Y. (2020). The Role of Leisure Satisfaction in Serious Leisure and Subjective Well-Being: Evidence From Chinese Marathon Runners. *Frontiers in Psychology*, *11*. https://doi.org/10.3389/fpsyg.2020.581908

Uddin, T., Islam, M. T., Hossain, M., Hossain, M. S., Salek, A. K. M., Islam, M. J., Haque, S., Rahim, H. R., Hossain, M. S., Hassanuzzaman, M., Islam, M., Khan, M. U. H., Ahmed, S., Mahmud, K., Hasan, M. R., Tasnim, A., & Haque, M. A. (2023). Demographic and Clinical Characteristics of Persons With Spinal Cord Injury in Bangladesh: Database for the International Spinal Cord Injury Community Survey 2023. *Neurotrauma Reports*, *4*(1), 598–604. https://doi.org/10.1089/neur.2023.0040

Urbański, P. K., Conners, R. T., & Tasiemski, T. (2021). Leisure time physical activity in persons with spinal cord injury across the seasons. *Neurological Research*, *43*(1), 22–28. https://doi.org/10.1080/01616412.2020.1819071

Waller, M., Lexell, J., Martin Ginis, K. A., & Jörgensen, S. (2024). Leisure time physical activity in middle-aged and older adults aging with long-term spinal cord

injury: Changes over six years. *Disability and Health Journal*, *17*(4). https://doi.org/10.1016/j.dhjo.2024.101648

Wang, X., & Cheng, Z. (2020). Cross-Sectional Studies: Strengths, Weaknesses, and Recommendations. In *Chest* (Vol. 158, Number 1, pp. S65–S71). Elsevier Inc. https://doi.org/10.1016/j.chest.2020.03.012

Watson, P. K., Stendell, L., Quel de Oliveira, C., Middleton, J. W., Arora, M., & Davis, G. M. (2024). Leisure-time physical activity motives and perceived gains for individuals with spinal cord injury. *Spinal Cord*, *62*(9), 546–552. https://doi.org/10.1038/s41393-024-01013-5

Yang, H. L., Wu, Y. Y., Lin, X. Y., Xie, L., Zhang, S., Zhang, S. Q., Ti, S. M., & Zheng, X. D. (2021). Internet Use, Life Satisfaction, and Subjective Well-Being Among the Elderly: Evidence From 2017 China General Social Survey. *Frontiers in Public Health*, *9*. https://doi.org/10.3389/fpubh.2021.677643

Zhao, H., & Cole, S. (2023). Leisure, Recreation, and Life Satisfaction: A Longitudinal Study for People with Spinal Cord Injury. *Topics in Spinal Cord Injury Rehabilitation*, *29*(4), 61–72. https://doi.org/10.46292/sci23-00020

APPENDICES

Appendix A: Approval Permission Letter

IRB Approval Letter

BANGLADESH HEALTH PROFESSIONS INSTITUTE

বাংলাদেশ হেলথ্ প্রফেশন্স ইনস্টিটিউট (বিএইচপিআই)

Bangladesh Health Professions Institute (BHPI)

(The Academic Institute of CRP)

Ref: CRP-BHPI/IRB/07/2025/1101 Date: 21.07.2025

To
Jannatul Ferdous
4th Year, B.Sc. in Occupational Therapy
Session: 2020-21, Student ID: **122200433**
BHPI, CRP, Savar, Dhaka-1343, Bangladesh

Subject: Approval of the thesis proposal **Level of Leisure Satisfaction among Persons with Spinal Cord Injury: A Quantitative Study** by ethics committee.

Dear Jannatul Ferdous,
Congratulations.
The Institutional Review Board (IRB) of BHPI has reviewed and discussed your application to conduct the above mentioned dissertation, with yourself, as the principal investigator and Md. Habibur Rahman, Assistant Professor and Course Coordinator, M.Sc. in OT, Department of Occupational Therapy, Bangladesh Health Professions Institute (BHPI), CRP as thesis supervisor. The Following documents have been reviewed and approved:

SL No.	Name of the Documents
1	Research Proposal
2	Leisure Satisfaction Measure (LSM) (English & Bangla)
3	Information sheet & consent form

The purpose of the study is to determine the level of leisure satisfaction and its associated factors among individuals with spinal cord injury. The study involves use of a Leisure Satisfaction Measure (LSM) to identify the level of leisure satisfaction and its associated factors among individuals with spinal cord injury that may take 20 to 25 minutes to fill in the questionnaire and there is no likelihood of any harm to the participants. There is no benefit to the participants. The members of the Ethics committee have approved the study to be conducted in the presented form at the meeting held at 08:30 AM on 17 June, 2025 at BHPI (50th 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, World Medical Association Declaration of Helsinki, 1964 - 2013 and other applicable regulation.

Best regards,

Millat Hossain

Muhammad Millat Hossain
Associate Professor, Project and Course Coordinator, MRS
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

Permission from the Head of Medical Services Wing - CRP

Date: 27.08.25
To
The Head of the Department
Medical Services Wing
Centre for the Rehabilitation of the Paralysed (CRP)
Chapain, Savar, Dhaka-1343
Through: Research & Evaluation Department

Subject: Application for Access and Collect Data from the In-Patient unit of CRP.

Sir,
With due respect I would like to draw your kind attention that I am a student of 4th Year B.Sc. in Occupational Therapy at Bangladesh Health Professions Institute (BHPI) which is an academic institute of Centre for the Rehabilitation of the Paralysed (CRP), affiliated to Faculty of Medicine, University of Dhaka. According to my course curriculum, I have to conduct thesis, and my thesis title is **"Level of Leisure Satisfaction among Persons with Spinal Cord Injury: A Quantitative Study"** with myself & Md. Habibur Rahman as my thesis supervisor. The purpose of the study is to determine the level of leisure satisfaction and its associated factors among individuals with spinal cord injury. To identify the level of leisure satisfaction and its associated factors among individuals with spinal cord injury I am using **Leisure Satisfaction Measure (LSM).** In order to fulfill the objectives of this study, I need some information such as name, age, address, contact number, level of injury, AIS classification and date of admission about the potential participants in the In-patient Unit of CRP, Savar. I assure you that collected information will be used solely for academic purpose and confidentiality will be maintained in accordance with ethical guideline. I am looking for your kind approval to get details on the initial list of potential participants who are currently receiving inpatient rehabilitation services.

So, I therefore, pray and hope that you would be kind enough to grant me permission to access and collect data for my study and oblige thereby.

Sincerely yours,
Jannatul
Jannatul Ferdous
4th Year, B.Sc. in Occupational Therapy
Session: 2020-21, Student ID: **122200433**

"Forwarded to the head of MSW for his Consent and Approval for data Collection."
29.8.25

Recommendation from the Head of the Department:

Prof. Sk. Moniruzzaman
Professor & Head
Department of Occupational Therapy
Bangladesh Health Professions Institute (BHPI)
CRP-Chapain, Savar, Dhaka-1343

Forwd to Research Unit N/A.
29.8.25
Dr. Sayeed Uddin Helal
MBBS, MPH, MS (Neurosurgery)
Senior Consultant & Head
Medical Services Wing, CRP
BMDC Reg. No 40223

Attachments: Copy of IRB Approval Letter & Research Proposal.

Permission from the Head of Occupational Therapy Department - CRP

Date: 03.09.25
To
The Head of the Department
Occupational Therapy Department
Centre for the Rehabilitation of the Paralysed (CRP)
Chapain, Savar, Dhaka-1343

Subject: Application for access and collect data from the Halfway Hostel.

Sir,
With due respect I would like to draw your kind attention that I am a student of 4th Year B.Sc. in Occupational Therapy at Bangladesh Health Professions Institute (BHPI) which is an academic institute of Centre for the Rehabilitation of the Paralysed (CRP), affiliated to Faculty of Medicine, University of Dhaka. According to my course curriculum, I have to conduct thesis, and my thesis title is **"Level of Leisure Satisfaction among Persons with Spinal Cord Injury: A Quantitative Study"** with myself & Md. Habibur Rahman as my thesis supervisor. The purpose of the study is to determine the level of leisure satisfaction and its associated factors among individuals with spinal cord injury. To identify the level of leisure satisfaction and its associated factors among individuals with spinal cord injury I am using **Leisure Satisfaction Measure (LSM).** In order to fulfill the objectives of this study, I need some information such as name, age, address, contact number, level of injury, AIS classification and date of admission about the potential participants in the halfway hostel of CRP, Savar. I assure you that collected information will be used solely for academic purpose and confidentiality will be maintained in accordance with ethical guideline. Your permission and support would be invaluable in facilitating the successful completion of my study.

So, I therefore, pray and hope that you would be kind enough to grant me permission to access and collect data for my study and oblige thereby.

Sincerely yours,

Jannatul

Jannatul Ferdous
4th Year, B.Sc. in Occupational Therapy
Session: 2020-21, Student ID: **122200433**

To, Syed Shakawat Hossain
Approved
1360
08/09/2025
MD. TAUHIDUL ISLAM
Consultant-OT & Head
Occupational Therapy Dept.
CRP Savar, Dhaka-1343

Recommendation from the Head of the Department:

Prof. Sk. Moniruzzaman
Professor & Head
Department of Occupational Therapy
Bangladesh Health Professions Institute (BHPI)
CRP-Chapain, Savar, Dhaka-1343

Attachments: Copy of IRB Approval Letter.

Permission from Idyll Arbor for using Leisure Satisfaction Measure

NOTE: No copies of any of Idyll Arbor's testing tools may be made until Idyll Arbor, Inc. returns a signed contract that contains the signature of the student, the signature of the student's university supervisor, and the signature of one of Idyll Arbor's executive staff.

Date: 03.07.2025 Jannatul
Student Signature

Jannatul Ferdous
Student printed name

4th Year, B.Sc. in Occupational Therapy, BHPI

CRP-Chapain, Savar, Dhaka-1343, Bangladesh
Student's Address:

Date: 03.07.25
Signature of University Advisor

Md. Habibur Rahman
Advisor printed name

Bangladesh Health Professions Institute (BHPI)
Name of University

CRP-Chapain, Savar, Dhaka-1343, Bangladesh
Address of University

Date: 7-7-25
Lorena A. Barnes, Idyll Arbor, Inc. Co-President:
2432 39th St., Bedford, IN 47421 USA

Please return this contract with the appropriate information completed to Lori Barnes Lori@idyllarbor.com or Idyll Arbor, Inc., 2432 39th St., Bedford, IN 47421 USA.

Appendix B: Information Sheet (English and Bangla Version)

BANGLADESH HEALTH PROFESSIONS INSTITUTE (BHPI)

Department of Occupational Therapy

CRP- Chapain, Savar, Dhaka-1343, Tel: 02-7745464-5, 7741404, Fax: 02-7745069

Participants Information sheet

Research Title: ‘‘Level of Leisure Satisfaction among Persons with Spinal Cord Injury: A Quantitative Study.”

Researcher: Jannatul Ferdous, B.Sc. in Occupational Therapy, 4th Year, Session: 2020-2021, Bangladesh Health Professions Institute (BHPI).

Supervisor: Md. Habibur Rahman, Assistant Professor and Course Coordinator, M.Sc. in Occupational Therapy Department of Occupational Therapy, Bangladesh Health Professions Institute (BHPI).

Place of research: The study will be conducted in the inpatient rehabilitation unit of the Centre for the Rehabilitation of the Paralysed (CRP) in Savar, Dhaka.

Introduction:

I am Jannatul Ferdous, a 4th-year student (Session 2020–2021) of the B.Sc. in Occupational Therapy under the Faculty of Medicine at the University of Dhaka, studying at Bangladesh Health Professions Institute. To complete my B.Sc. degree, I have to conduct a research project, which is a part of my academic requirement. This research project will be conducted under the supervision of Md. Habibur Rahman, Assistant Professor and Course Coordinator, Department of Occupational Therapy, Bangladesh Health Professions Institute. The purpose of the research project is the collection of data and how it will be related to the research and this will be presented to you in detail through this participant paper. If you are willing to participate in this research, in that case, a clear idea about the research topic will be easier for decision-

making. Of course, you do not have to make sure you participate now. Before taking any decision, you can discuss it with your relatives, or guardians about this. On the other hand, after reading the information sheet if you feel a problem understanding the content or if you need to know more about something, you can freely ask.

Research Background and Objectives:

You are invited to be a part of this research because, in Bangladesh, there is currently no research on the leisure satisfaction among persons with spinal cord injury. The aim of the research is to assess the level of leisure satisfaction and its associated factors among individuals with spinal cord injury. Your information will be helpful to assess the leisure satisfaction among persons with SCI and reveal the associated factors that influence leisure satisfaction through your voluntary participation in this study.

Let's Know about the topic related to participation in this research work:

Before signing the consent form from you, the details of managing the research project will be presented to you in detail through this participation note. If you want to participate in this study, you will have to agree to participate in the study. If you ensure participation, you will be given a copy of the consent form to keep. Later, someone from the research team will contact you. They will collect information from you through a questionnaire at a time that suits you. Your participation in this research project is optional. If you do not agree then you do not have to participate. Despite your consent, you can withdraw your participation at any time without giving any explanation to the researcher.

The Benefits and Risks of Participation:

You will not get any benefit directly to participate in this research project. Participation in this study can lead to many difficulties in your daily work. However, we are hopeful that the benefits direct from the results of this research will remove the disadvantages.

Don't worry about your identity, it's request. Patient's name, address will not be included in the data analysis software to reduce the risk of uncover identity.

Confidentialities of Information:

By signing this agreement, you are allowing the research staff to study this research project to collect and use your resources. Any information gathered for this research project, which can identify you, will be confidential. The information collected about you will be able to access this information directly. Symbolic ways identified data will be used for the next data analysis. Information sheets will be kept in a locker drawer. The Electronics versions of the data analysis will be collected in BHPI's Occupational Therapy department and on the research's laptop. It is expected that the results of this research project will be published and presented in different forums. In any publication and presentation, the information will be provided in such a way that you cannot be identified in any way without your consent.

Information about Promotional Result:

The result of this study will be published in various social media, websites, conference, discussion, and reviewed journals.

Participant's Fees:

There is no stimulus and remuneration for participation in this study.

Source of Funding to Manage Research:

The cost of this research will be spent entirely by the researcher's funds. This study will be done in small areas and no money comes from an external source.

Information about Withdrawal from Participation:

Despite your consent, you can withdraw your participation within one week after giving information without giving any explanation to the researcher. If the information can be used after the cancellation, its permission will be mentioned in the participant's

withdrawal letter (application only volunteer withdrawal).

Complaints:

If there is any complaint regarding the conduct of this research project, contact with the Association of Ethics (77454645). This proposal has been reviewed by the institutional Reviewed 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, Bangladesh.

Student Researcher:

Jannatul Ferdous

B.Sc. in Occupational Therapy (4th year)

Bangladesh Health Professions Institute (BHPI)

Session: 2020-2021

Phone: +8801759014095

Email: jannatulferdousot@gmail.com

Supervisor:

Md. Habibur Rahman

Assistant Professor and Course Coordinator, M.Sc. in Occupational Therapy

Department of Occupational Therapy

Bangladesh Health Professions Institute (BHPI)

Phone: +8801670896325

Email: habiburbhpi@gmail.com

বাংলাদেশ হেলথ প্রফেশনস ইনস্টিটিউট (বিএইচপিআই)

অকুপেশনাল থেরাপি বিভাগ

সিআরপি-চাপাইন, সাভার, ঢাকা-১৩৪৩ ফোন: ০২-৭৭৪৫৪৬৪-৫, ৭৭৪১৪০৪, ফ্যাক্স: ০২-৭৭৪৫০৬৯

অংশগ্রহণকারীর তথ্যপত্র

গবেষণার শিরোনাম:

"মেরুরজ্জুতে আঘাতপ্রাপ্ত ব্যক্তিদের অবসর সন্তুষ্টির মাত্রা: একটি পরিমাণগত গবেষণা"

গবেষক:

জান্নাতুল ফেরদৌস, বি.এস.সি ইন অকুপেশনাল থেরাপি, ৪র্থ বর্ষ, সেশন: ২০২০-২০২১, বাংলাদেশ হেলথ প্রফেশনস ইনস্টিটিউট (বিএইচপিআই)

তত্ত্বাবধায়ক (সুপারভাইজার):

মোঃ হাবিবুর রহমান, সহকারী অধ্যাপক এবং কোর্স কো-অর্ডিনেটর, এম.এস.সি ইন অকুপেশনাল থেরাপি, অকুপেশনাল থেরাপি বিভাগ, বিএইচপিআই, সিআরপি, সাভার, ঢাকা

গবেষণার স্থান:

এই গবেষণাটি ঢাকার সাভারে অবস্থিত পক্ষাঘাতগ্রস্তদের পুনর্বাসন কেন্দ্র (সিআরপি) এর ইনপেশেন্ট পুনর্বাসন ইউনিটে পরিচালিত হবে।

ভূমিকা:

আমি জান্নাতুল ফেরদৌস, অকুপেশনাল থেরাপি অনুষদের ৪র্থ বর্ষের ছাত্রী (সেশন: ২০২০–২০২১)। বি.এস.সি শেষ করতে একটি গবেষণা প্রকল্প সম্পন্ন করা বাধ্যতামূলক। এই গবেষণা প্রকল্পটি সহকারী অধ্যাপক মোঃ হাবিবুর রহমানের তত্ত্বাবধানে পরিচালিত হবে। গবেষণার উদ্দেশ্য ও তথ্য সংগ্রহ পদ্ধতি এই অংশগ্রহণকারী তথ্যপত্রের মাধ্যমে বিস্তারিতভাবে উপস্থাপন করা হয়েছে। আপনি যদি গবেষণায়

অংশ নিতে আগ্রহী হন, তবে বিষয়টি সম্পর্কে পরিষ্কার ধারণা সিদ্ধান্ত গ্রহণ সহজ করবে। আপনি এখনই অংশগ্রহণ নিশ্চিত করতে বাধ্য নন। সিদ্ধান্ত নেওয়ার পূর্বে আপনি আপনার আত্মীয়স্বজন বা অভিভাবকের সাথে পরামর্শ করতে পারেন। তথ্যপত্রটি পড়ে কোনো অংশ না বুঝলে বা আরও জানতে ইচ্ছুক হলে, আপনি নির্দ্বিধায় জিজ্ঞেস করতে পারেন।

গবেষণার প্রেক্ষাপট ও উদ্দেশ্য

আপনাকে এই গবেষণার অংশ হতে আমন্ত্রণ জানানো হচ্ছে কারণ বাংলাদেশে বর্তমানে মেরুরজ্জুতে আঘাতপ্রাপ্ত ব্যক্তিদের অবসর সন্তুষ্টি সম্পর্কিত কোনো গবেষণা নেই। এই গবেষণার লক্ষ্য হলো মেরুরজ্জুতে আঘাতপ্রাপ্ত ব্যক্তিদের মধ্যে অবসর সন্তুষ্টির মাত্রা এবং এর সাথে সংশ্লিষ্ট কারণসমূহ মূল্যায়ন করা। এই গবেষণায় আপনার স্বেচ্ছাসেবী অংশগ্রহণের মাধ্যমে আপনার তথ্য মেরুরজ্জুতে আঘাতপ্রাপ্ত ব্যক্তিদের অবসর সন্তুষ্টি মূল্যায়নে সহায়ক হবে এবং অবসর সন্তুষ্টি প্রভাবিতকারী সংশ্লিষ্ট কারণসমূহ প্রকাশ করবে।

এই গবেষণা কর্মটিতে অংশগ্রহণের সাথে সম্পৃক্ত বিষয় সমূহ কি সে সম্পর্কে জানা যাক:

গবেষণায় অংশগ্রহণের পূর্বে এই অংশগ্রহণ নোটের মাধ্যমে আপনাকে গবেষণা প্রকল্পের প্রাসঙ্গিক তথ্য প্রদান করা হবে। আপনি অংশগ্রহণে সম্মত হলে, সম্মতিপত্রে স্বাক্ষর করতে হবে এবং সম্মতিপত্রের একটি কপি আপনাকে দেয়া হবে। পরবর্তীতে গবেষণা দলের একজন সদস্য আপনার সুবিধাজনক সময়ে একটি প্রশ্নপত্রের মাধ্যমে তথ্য সংগ্রহ করবেন। এই গবেষণায় অংশগ্রহণ সম্পূর্ণরূপে স্বেচ্ছাসেবী। আপনি অংশগ্রহণ না করতেও পারেন এবং অংশগ্রহণের পরেও যেকোনো সময় কোনো কারণ ব্যাখ্যা ছাড়াই তা প্রত্যাহার করতে পারেন।

অংশগ্রহণের সুবিধা ও ঝুঁকিসমূহ কি?

এই গবেষণায় অংশগ্রহণের মাধ্যমে আপনি সরাসরি কোনো উপকার পাবেন না, তবে এর ফলাফল ভবিষ্যতে জিবিএস রোগীদের ঘুম সংক্রান্ত সমস্যা সমাধানে সাহায্য করবে। আপনার নাম ও ঠিকানা গবেষণার ডেটা বিশ্লেষণে অন্তর্ভুক্ত করা হবে না, যাতে পরিচয় গোপন রাখা যায়।

তথ্য গোপনীয়তা কি নিশ্চিত থাকবে?

এই সম্মতিপত্রে স্বাক্ষরের মাধ্যমে, আপনি গবেষণা দলের সদস্যদের আপনার তথ্য সংগ্রহ ও ব্যবহার করার অনুমতি প্রদান করছেন। আপনার পরিচয় শনাক্তযোগ্য যেকোনো তথ্য গোপন রাখা হবে এবং শুধুমাত্র গবেষণা সংশ্লিষ্টরা এ তথ্যের অ্যাক্সেস পাবেন। বিশ্লেষণের জন্য সাংকেতিকভাবে শনাক্তযোগ্য তথ্য ব্যবহৃত হবে। কাগজপত্র লকারে এবং ইলেকট্রনিক তথ্য বিএইচপিআই-এর অকুপেশনাল থেরাপি বিভাগ ও গবেষণার ল্যাপটপে সংরক্ষিত থাকবে।গবেষণার ফলাফল প্রকাশ ও উপস্থাপিত হতে পারে, তবে কোনো প্রকাশনা বা উপস্থাপনায় আপনার সম্মতি ছাড়া পরিচয় প্রকাশ করা হবে না।

গবেষণার ফলাফল সংক্রান্ত তথ্য:

এই গবেষণার ফলাফল সামাজিক যোগাযোগ মাধ্যম, ওয়েবসাইট, সম্মেলন, আলোচনাসভা এবং পর্যালোচনাধীন জার্নালে প্রকাশিত হতে পারে।

অংশগ্রহণের জন্য পারিশ্রমিক

এই গবেষণায় অংশগ্রহণের জন্য কোনো পারিশ্রমিক বা উপহার প্রদান করা হবে না।

গবেষণার অর্থায়ন

এই গবেষণার সমস্ত ব্যয় গবেষক নিজে বহন করবেন। কোনো বাহ্যিক অর্থায়ন নেই।

গবেষণা থেকে নিজেকে প্রত্যাহার করা যাবে কি?

আপনি সম্মতি দেওয়ার পরেও এক সপ্তাহের মধ্যে অংশগ্রহণ প্রত্যাহার করতে পারবেন এবং এর জন্য আপনাকে কোনো কারণ জানাতে হবে না। আপনি যদি তথ্য ব্যবহারে অনুমতি দেন, তাহলে তা অংশগ্রহণ প্রত্যাহারপত্রে (শুধুমাত্র স্বেচ্ছায় প্রত্যাহারের আবেদনপত্র) উল্লেখ করা হবে।

অভিযোগের ক্ষেত্র:

এই গবেষণা সংক্রান্ত কোনো অভিযোগ থাকলে আপনি বিএইচপিআই-এর এথিকস অ্যাসোসিয়েশনে (০২-৭৭৪৫৪৬৪৫) যোগাযোগ করতে পারেন। এই প্রস্তাবটি ইনস্টিটিউশনাল রিভিউ বোর্ড (IRB), বিএইচপিআই কর্তৃক পর্যালোচিত হয়েছে। IRB নিশ্চিত করে যে গবেষণার অংশগ্রহণকারীরা যেন কোনো ক্ষতির সম্মুখীন না হন। IRB সম্পর্কিত তথ্যের জন্য যোগাযোগ করতে পারেন: **বাংলাদেশ হেলথ প্রফেশনস ইনস্টিটিউট (বিএইচপিআই), সিআরপি, সাভার, ঢাকা-১৩৪৩**।

গবেষক:

জান্নাতুল ফেরদৌস

বি.এস.সি ইন অকুপেশনাল থেরাপি, (৪র্থ বর্ষ)

বাংলাদেশ হেলথ প্রফেশনস ইনস্টিটিউট

(বিএইচপিআই)

সেশন: ২০২০-২০২১

ফোন: +৮৮০১৭৫৯০১৪০৯৫

ইমেইল: jannatulferdousot@gmail.com

তত্ত্বাবধায়ক (সুপারভাইজার):

মোঃ হাবিবুর রহমান

সহকারী অধ্যাপক এবং কোর্স কো-অর্ডিনেটর,

এম.এস.সি ইন অকুপেশনাল থেরাপি

অকুপেশনাল থেরাপি বিভাগ

বাংলাদেশ হেলথ প্রফেশনস ইনস্টিটিউট

(বিএইচপিআই)

ফোন: +৮৮০১৬৭০৮৯৬৩২৫

ইমেইল: habiburbhpi@gmail.com

Appendix C: Consent Form (English and Bangla Version)

Consent Form **Code No: _____**

Assalamu Alaikum. I am **Jannatul Ferdous,** a 4th-year student (Session 2020–2021) of the B.Sc. in Occupational Therapy under the Faculty of Medicine at the University of Dhaka, studying at Bangladesh Health Professions Institute. To complete my B.Sc. degree, I have to conduct a research project, which is a part of my academic requirement.

The title of my research is**: "Level of Leisure Satisfaction among Persons with Spinal Cord Injury: A Quantitative Study."** The purpose of the research is to assess the level of leisure satisfaction and its associated factors among individuals with spinal cord injury. For this research, you may need to participate in an interview where some of your information will be collected. The interview will be conducted face-to-face, and it will take approximately 15–20 minutes.

I would like to inform you that this research is being conducted solely for academic purposes and will not be used for any other reason. All the information you provide will be kept strictly confidential.

Your participation is completely voluntary. If you wish, you can withdraw your consent within one week of data collection. However, after one week, it will no longer be possible to do so.

If you have any questions regarding this research, you may contact the researcher, **Jannatul Ferdous,** or the supervisor, **Md. Habibur Rahman** (Assistant Professor and Course Coordinator, M.Sc. in Occupational Therapy, Department of Occupational Therapy, BHPI, CRP, Savar, Dhaka).

Then, may I have your consent to proceed with the interview?

☐ Yes ☐ No

Participant's Name:

Participant's Mobile Number:

Participant's Address:

Participant's Signature: _____ Date: _____

Researcher's Signature: _____ Date: _____

সম্মতিপত্র

কোড নং: _____

আসসালামু আলাইকুম। আমি **জান্নাতুল ফেরদৌস,** ঢাকা বিশ্ববিদ্যালয়ে চিকিৎসা অনুষদের অধীনে বাংলাদেশ হেলথ প্রফেশন্স ইনস্টিটিউটে বি.এস.সি ইন অকুপেশনাল থেরাপি বিভাগের ৪র্থ বর্ষের শিক্ষার্থী হিসেবে (২০২০-২০২১) সেশনে অধ্যয়নরত আছি। আমার বি.এস.সি ডিগ্রী সম্পন্ন করতে, আমাকে একটি গবেষণা প্রকল্প পরিচালনা করতে হবে এবং এটি আমার অধ্যয়নের একটি অংশ। আমার গবেষণার শিরোনাম হলো: **মেরুরজ্জুতে আঘাতপ্রাপ্ত ব্যক্তিদের অবসর সন্তুষ্টির মাত্রা: একটি পরিমাণগত গবেষণা।** এই গবেষণার উদ্দেশ্য হলো মেরুরজ্জুতে আঘাতপ্রাপ্ত ব্যক্তিদের অবসর সন্তুষ্টির মাত্রা এবং এর সাথে সংশ্লিষ্ট কারণসমূহ মূল্যায়ন করা। গবেষণার জন্য আপনাকে একটি সাক্ষাৎকারে অংশগ্রহণ করতে হতে পারে, যেখানে আপনার কিছু তথ্য সংগ্রহ করা হবে। সাক্ষাৎকারটি সরাসরি (সামনা-সামনি) গ্রহণ করা হবে এবং আনুমানিক ১৫–২০ মিনিট সময় লাগবে।

আমি আপনাকে জানাতে চাই যে, এই গবেষণা শুধুমাত্র একাডেমিক উদ্দেশ্যে করা হচ্ছে এবং অন্য কোনো কাজে ব্যবহার করা হবে না। আপনি যে সকল তথ্য দিবেন, তা সম্পূর্ণ গোপন রাখা হবে।

আপনার অংশগ্রহণ সম্পূর্ণ স্বেচ্ছামূলক। আপনি ইচ্ছা করলে তথ্য সংগ্রহের এক সপ্তাহের মধ্যে আপনার সম্মতি প্রত্যাহার করতে পারেন। তবে এক সপ্তাহ পেরিয়ে গেলে তা আর সম্ভব হবে না।

যদি আপনার এই গবেষণা সম্পর্কে কোনো প্রশ্ন থাকে, তাহলে আপনি গবেষক **জান্নাতুল ফেরদৌস** অথবা সুপারভাইজার **মোঃ হাবিবুর রহমান** (সহকারী অধ্যাপক এবং কোর্স কো-অর্ডিনেটর, এম.এস.সি ইন অকুপেশনাল থেরাপি, অকুপেশনাল থেরাপি বিভাগ, বিএইচপিআই, সিআরপি, সাভার, ঢাকা) এর সাথে যোগাযোগ করতে পারেন।

তাহলে, সাক্ষাৎকারটি নেওয়ার জন্য আমি কি আপনার সম্মতি পেতে পারি?

☐ হ্যাঁ ☐ না

অংশগ্রহণকারীর নাম:

অংশগ্রহণকারীর মোবাইল নাম্বার:

অংশগ্রহণকারীর ঠিকানা:

অংশগ্রহণকারীর স্বাক্ষর: _____ তারিখ: _____

গবেষকের স্বাক্ষর: _____ তারিখ: _____

Appendix D: Withdrawal Form (English and Bangla Version)

Withdrawal form

Research Title: "Level of Leisure Satisfaction among Persons with Spinal Cord Injury: A Quantitative Study"

Name of the Researcher: Jannatul Ferdous, 4th year student, B.Sc. in Occupational Therapy

I, _____(Participant), wish to withdraw

my consent to the use of data arising from my participation.

Name of the participant _____

Signature of the Participant _____ Date_____

Signature of the Researcher _____ Date_____

প্রত্যাহার পত্র

(শুধুমাত্র স্বেচ্ছায় প্রত্যাহারের জন্য প্রযোজ্য)

গবেষণার বিষয়: মেরুরজ্জুতে আঘাতপ্রাপ্ত ব্যক্তিদের অবসর সন্তুষ্টির মাত্রা: একটি পরিমাণগত গবেষণা।

গবেষক: জান্নাতুল ফেরদৌস, ৪র্থ বর্ষ, বি.এস. সি ইন অকুপেশনাল থেরাপি বিভাগ।

আমি _____ (অংশগ্রহণকারী), আমার অংশগ্রহণ থেকে উদ্ভূত তথ্য ব্যবহারের জন্য আমার সম্মতি প্রত্যাহার করতে চাই।

অংশগ্রহণকারীর নাম:

অংশগ্রহণকারীর স্বাক্ষর: _____ তারিখ: _____

গবেষকের স্বাক্ষর: _____ তারিখ: _____

Appendix E: Sociodemographic Questionnaire (English and Bangla Version)

Socio Demographic Questionnaire

SL No.	Questions & Filters	Responses	Code
1.	**Gender**	Male Female	**1** **2**
2.	**Your Age in Years**		
3.	**What is your educational level?**	Illiterate Primary school Secondary school Higher secondary school Bachelor's degree or higher	**1** **2** **3** **4** **5**
4.	**What is your marital status?**	Single Married Widowed Divorced/Separated	**1** **2** **3** **4**
5.	**Which residential area you live in?**	Rural Urban Semiurban	**1** **2** **3**
6.	**What was your previous employment status?**	Employed Student Homemaker Self-employed Unemployed Others	**1** **2** **3** **4** **5** **6**
7.	**Monthly income of your family**		
8.	**Type of admission at CRP**	Newly admitted Readmitted	**1** **2**
9.	**Months since your injury**		
10.	**Level of spinal cord injury**	Cervical (C1-C8) Thoracic (T1-T12) Lumbar (L1-L5) Sacral (S1-S5)	**1** **2** **3** **4**
11.	**Type of spinal cord injury**	Complete injury Incomplete injury	**1** **2**
12.	**Cause of Spinal Cord Injury**	Traumatic Non-traumatic	**1** **2**

13.	**ASIA Impairment Scale (AIS) classification**	ASIA A ASIA B ASIA C ASIA D ASIA E	**1** **2** **3** **4** **5**
14.	**Which phase of rehabilitation services are you currently in?**	Acute Active Rehabilitation Community Re-integration	**1** **2** **3** **4**
15.	**Which leisure activities do you usually participate in during CRP office hours (8am-5pm)?**	Music Therapy Arts and Crafts Gardening Indoor Games Outdoor Games Watching TV N/A	**1** **2** **3** **4** **5** **6** **7**
16.	**Which leisure activities are you usually involved in outside of CRP office hours (after 5 pm)?**	Using mobile phone/internet Outdoor Mobility (walking/wheelchair) Chatting in Person Others N/A	**1** **2** **3** **4** **5**
17.	**Which leisure activity do you enjoy the most?**	Using mobile phone/internet Music Therapy Arts and Crafts Gardening Indoor Games Outdoor Games Outdoor Mobility (walking/wheelchair) Chatting in Person Watching TV Others	**1** **2** **3** **4** **5** **6** **7** **8** **9** **10**
18.	**How many hours per day do you spend on your leisure activities?**		
19.	**What kind of mobility device do you use?**	Wheelchair Walking Frame Cane/Crutch N/A	**1** **2** **3** **4**

সমাজ জনসংখ্যাগত প্রশ্নাবলী

ক্রমিক নং.	প্রশ্নাবলী সমূহ	মতামত সমূহ	কোড
১.	লিঙ্গ	পুরুষ	১
		মহিলা	২
২.	আপনার বয়স কত বছর?	_____ বছর	
৩.	আপনার শিক্ষাগত যোগ্যতা কী?	নিরক্ষর	১
		প্রাথমিক বিদ্যালয়	২
		মাধ্যমিক বিদ্যালয়	৩
		উচ্চ মাধ্যমিক বিদ্যালয়	৪
		স্নাতক বা তদূর্ধ্ব ডিগ্রি	৫
৪.	আপনার বৈবাহিক অবস্থা কী?	অবিবাহিত	১
		বিবাহিত	২
		বিধবা/বিপত্নীক	৩
		তালাকপ্রাপ্ত/আলাদা	৪
৫.	আপনি কোন ধরনের এলাকায় বসবাস করেন?	গ্রাম	১
		শহর	২
		উপশহর	৩
৬.	আপনার পূর্ববর্তী কর্মসংস্থানের অবস্থা কী ছিলো?	চাকরিজীবী	১
		শিক্ষার্থী	২
		গৃহিণী	৩
		স্বনির্ভর	৪
		বেকার	৫
		অন্যান্য _____	৬
৭.	আপনার পরিবারের মাসিক আয় কত টাকা?	_____ টাকা	
৮.	বর্তমানে আপনার সিআরপিতে ভর্তি অবস্থার ধরন কী?	নতুন ভর্তি	১
		পুনঃভর্তি	২
৯.	আঘাতপ্রাপ্ত হওয়ার পর কত মাস হয়েছে?	_____ মাস	
১০.	আপনার মেরুরজ্জুতে আঘাতের লেভেল কী?	সারভাইক্যাল (C1–C8)	১
		থোরাসিক (T1–T12)	২
		লাম্বার (L1–L5)	৩
		স্যাকরাল (S1–S5)	৪
১১.	আপনার মেরুরজ্জুতে আঘাতের ধরন কী?	কমপ্লিট ইঞ্জুরি	১
		ইনকমপ্লিট ইঞ্জুরি	২
১২.	আপনার মেরুরজ্জুতে আঘাতের কারন কী?	ট্রমাটিক	১
		নন-ট্রমাটিক	২

১৩.	ASIA Impairment Scale (AIS) শ্রেণিবিন্যাস	ASIA A ASIA B ASIA C ASIA D ASIA E	১ ২ ৩ ৪ ৫
১৪.	বর্তমানে আপনি পুনর্বাসন সেবা গ্রহনের কোন ধাপে অবস্থান করছেন?	অ্যাকিউট অ্যাকটিভ রিহাবিলিটেশন কমিউনিটি রি-ইনটিগ্রেশন	১ ২ ৩ ৪
১৫	সিআরপির অফিস চলাকালীন সময়ে (৮টা-৫টা) আপনি সাধারণত কোন কোন অবসরকালীন কার্যক্রমের সাথে যুক্ত থাকেন?	মিউজিক থেরাপি আর্টস অ্যান্ড ক্রাফটস বাগান করা ইনডোর গেমস আউটডোর গেমস টিভি দেখা প্রযোজ্য নয়	১ ২ ৩ ৪ ৫ ৬ ৭
১৬.	সিআরপির অফিস চলাকালীন সময়ের বাহিরে (বিকেল ৫টার পর) আপনি সাধারণত কোন কোন অবসরকালীন কার্যক্রমের সাথে যুক্ত থাকেন?	মোবাইল ফোন/ইন্টারনেট ব্যবহার হালকা চলাফেরা বা হুইলচেয়ারে ঘুরে বেড়ানো অন্যদের সঙ্গে আড্ডা দেওয়া অন্যান্য _____ প্রযোজ্য নয়	১ ২ ৩ ৪ ৫
১৭.	কোন অবসরকালীন কার্যক্রমটি আপনি সবথেকে বেশি উপভোগ করেন?	মোবাইল ফোন/ইন্টারনেট ব্যবহার মিউজিক থেরাপি আর্টস অ্যান্ড ক্রাফটস বাগান করা ইনডোর গেমস আউটডোর গেমস হালকা চলাফেরা বা হুইলচেয়ারে ঘুরে বেড়ানো অন্যদের সঙ্গে আড্ডা দেওয়া টিভি দেখা অন্যান্য _____	১ ২ ৩ ৪ ৫ ৬ ৭ ৮ ৯ ১০
১৮.	প্রতিদিন আপনি অবসরকালীন কার্যক্রমে কত ঘণ্টা সময় ব্যয় করেন?	_____ ঘণ্টা	
১৯.	আপনি চলাচলের ক্ষেত্রে কোন ধরনের সহায়ক সামগ্রী ব্যবহার করেন?	হুইলচেয়ার ওয়াকিং ফ্রেম ছড়ি/ক্রাচ প্রযোজ্য নয়	১ ২ ৩ ৪

Appendix F: Supervision Contact Schedule

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

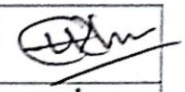
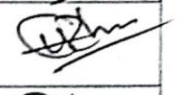
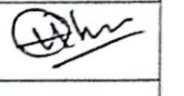
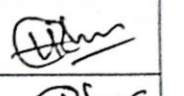
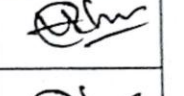
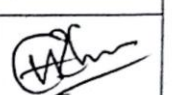
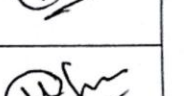
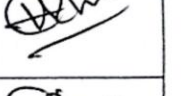
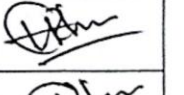
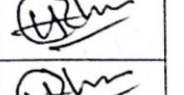
Thesis Supervisor- Student Contact; face-to-face or electronic and guidance record

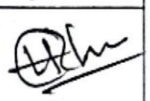
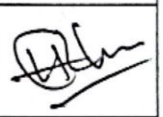
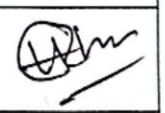
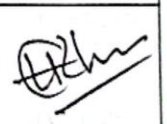
Title of thesis: Level of Leisure Satisfaction among Persons with Spinal Cord Injury: A Quantitative Study

Name of student: Jannatul Ferdous

Name and designation of thesis supervisor: Md. Habibur Rahman, Assistant Professor and Course Coordinator, MSc in OT, Department of Occupational Therapy, Bangladesh Health Professions Institute (BHPI), CRP, Chapain, Savar, Dhaka-1343

Appointment No	Date	Place	Topic of discussion	Duration (Minutes/ Hours)	Comments of student	Student's signature	Thesis supervisor signature
1	25.05.25	BHPI Office Building	Title, Aim, Objective, Scale	1 hour	Got a clear concept	Jannatul	
2	27.05.25	BHPI Office Building	Proposal Presentation Guideline	1 hour	Got a clear concept	Jannatul	
3	01.06.25	BHPI Office Building	Proposal Presentation Feedback	1 hour	Got a clear concept	Jannatul	

4	04.06.25	BHPI Building	Discussion about sample size, data collection method	1 hour	Effective discussion	Jannatul	
5	07.06.25	BHPI Building	Discussion about socio-demographic questionnaire	2 hours	Effective discussion	Jannatul	
6	09.06.25	BHPI Building	Feedback on socio-demographic questionnaire	2 hours	Effective discussion	Jannatul	
7	11.06.25	Reddaway Hall	Feedback on Bangla translation of the questionnaire	1 hour	Effective discussion	Jannatul	
8	14.06.25	BHPI Building	Guideline on literature review	1 hour	Got a clear idea	Jannatul	
9	21.06.25	BHPI Office Building	Feedback on literature review	2 hours	Got a clear idea	Jannatul	
10	06.08.25	BHPI Office Building	Guideline on data collection	2 hours	Got a clear idea	Jannatul	
11	19.08.25	BHPI Office Building	Discussion about data collection status	2 hours	Effective discussion	Jannatul	
12	30.08.25	BHPI Classroom	Discussion about data entry and data analysis	3 hours	Got a clear idea	Jannatul	
13	01.09.25	BHPI Classroom	Variables set and data entry guideline	3 hours	Got a clear idea	Jannatul	
14	10.11.25	BHPI Classroom	Data entry on SPSS	3 hours	Got a clear idea	Jannatul	
15	11.11.25	BHPI Classroom	Descriptive analysis	4 hours	Got a clear concept	Jannatul	

16	12.11.25	BHPI Classroom	Feedback on descriptive analysis and result writing	4 hours	Got a clear concept	Jannatul	
17	13.11.25	BHPI Classroom	Discussion on inferential statistics	4 hours	Effective discussion	Jannatul	
18	16.11.25	BHPI Classroom	Discussion and feedback on overall result writing	3 hours	Got a clear concept	Jannatul	
19	13.01.26	BHPI Building	Feedback on 1st draft	3 hours	Got a clear concept	Jannatul	
20	25.02.26	BHPI Building	Guidelines for defense and presentation preparation	1 hour	Useful and specific guidelines	Jannatul	

Note:

1. Appointment number will cover at least a total of 40 hours; applicable only for face-to-face contact with the supervisors.
2. Students will require submitting this completed record during submission your final thesis.