Faculty of Medicine

University of Dhaka

Factors Influencing Mental Health of the Final-year Students at a Rehabilitation Profession Institute in Bangladesh

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We the undersigned certify that we have carefully read and recommended to the Faculty of Medicine, University of Dhaka, for the acceptance of this dissertation entitled

"Factors Influencing Mental Health of The Final-year Students At a Rehabilitation Profession Institute in Bangladesh"

Submitted by **Md. Jonaied Alam**, for the partial fulfillment of the requirement for the degree of Bachelor of Science in Physiotherapy (B.Sc. PT).

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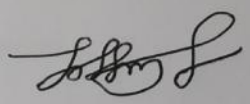
DECLARATION

I declare that the work presented here is my own. All sources used have been cited appropriately. Any mistakes or inaccuracies are my own. I also declare that any publication, presentation or dissemination of information of the study. I would oblige to take consent from the department of Physiotherapy of Bangladesh Health Profession Institute (BHPI).

Signature: 

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Acronyms

ASS: Academic stress scale

BHPI: Bangladesh Health Profession's Institute

BMRC: Bangladesh Medical Research Council

CRP: Centre for the Rehabilitation of the Paralysed

DMC: Dhaka medical collage

IRB: Institutional Review Board

MH: Mental Health

USA: United States of America

WHO: World Health Organization

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Abstract

Introduction: Study in Health science institute can act as a contributing factor in developing stress in final year rehabilitation professional students which may have possible negative academic and professional consequences. Studies on psychological problems such as academic stress, anxiety and depression among medical students have seen that these disorders are under diagnosed and under treated. In this background the present study was carried out with an aim to assess the magnitude of stress and its associated factors in rehabilitation professional students in BHPI. **Objective**: The objective of this study was to find out the level of stress of the final year rehabilitation professional students and the factor associated with it. **Materials and Methods:** This descriptive type of cross sectional study was carried out in BHPI, Savar, Dhaka, Bangladesh. Stress was assessed by Academic stress scale (ASS-40) and conduct face to face interview in BHPI campus. The study was conducted by using quantitative descriptive analysis through using SPSS software 25.0 version. **Results:** Among 79 participants' overall response in five category of Academic stress scale (ASS) 31.40% (n=25) was normal state and others 68.60% (n=54) stressful state. That's means every 2 out 3 students were in stressful state. Among the five categories of Academic stress scale (ASS) highest level of stressful area was fear of failure and second highest level of stressful area is personal inadequacy. Teacher- pupil relationship/ Teaching Method is found as an Addressable Stressful Area. **Conclusion:** Most of the factors of all five categories (personal inadequacy, fear of failure, Teacher – Pupil Relationship/ Teaching Methodology, interpersonal difficulties with teachers and inadequate lab and library facilities) in Academic stress scale (ASS) were found as stressful. It implies that the arrangement of educational providence, the way of disseminating lessons, provision of teaching aids and materials and the services provided by the teachers as well as institutions cannot provide a congenial atmosphere of effective learning as well as secured future which addresses being academic stress that a learner is encountering due to our poor arrangement of educational and institutional systems.

Key words: Academic influencing factor (AIF), Mental health (MH)

CHAPTER – I INTRODUCTION

1.1 Background:

Mental distress is an intellectual fitness trouble which manifests with exclusive stages of depressive, anxiety, panic or somatic symptoms. It additionally offers with burdened emotions, hallucination and associated symptoms except simply being sick in a scientific sense (BaoGiang et al., 2010). College is an annoying time in the lives of many students. Findings from latest research point out that the incidence of mental health problems, which includes melancholy and anxiety, among university college students is growing (Eisenberg et al., 2013). Further, visits to college counseling centers have expanded drastically in universities across the United States (Beiter et al., 2015). Most of the research that has been conducted on the fitness of university college students has specifically targeted on their mental health, which includes substance use, and has mostly been carried out on students aged 18–22 in their bachelor's diploma applications (Taylor et al., 2013). This trouble has a direct and indirect outcome on the individual's psychology, social functioning and affects many components of existence which include relationships, work and fitness. Some research records the burnout, stress, and despair of specific health sciences expert students such as those in scientific and dental faculty (Elani et al., 2014). Yet, there is a paucity of research that take an extra complete strategy to describing the intellectual health, healthy life-style beliefs and behaviors, and bodily health of graduate health sciences college students from more than one disciplines. Understanding the relationships amongst these variables also is essential in order to enhance tremendous interventions to enhance the fitness and way of life behaviors of experts (Mazurek et al., 2016). These students will be turning in care to people in the course of their profession and serving as function models and coaches to assist beautify their patients' healthy life-style behaviors. Recent studies highlighting the high rates of melancholy and burnout amongst scientific students have to be motive for problem as medical colleges try to produce distinctly certified and knowledgeable graduates who will finally enter the physician workforce. In a learn about conducted at six clinical schools at some stage in 2003–2004, the average charge of depression among college students was once 21% (Goebert et al., 2009). 1 in contrast with a charge of 8% to 15% in different

graduate students and in a similar fashion aged adult (Katz et al., 2006). Stress is a major contributing factor of many psychological illnesses that plagues today's society. As results from the American Psychological Association (APA) and American Institute of Stress survey in 2014, found 73% of people experience some level of psychological symptoms caused by stress. In addition, results from 2009 revealed that young people are highly stressed as a result of school pressure related to academic performance. Other research has proven that misery in scientific college students is related with cynicism, a lack of empathy, and an unwillingness to care for chronically ill patients (Crandall et al., 2007).

Health and well-being are linked to ability for success, as intellectual and emotional fitness issues interfere with learning and regularly result in negative tutorial overall performance (Richardson et al., 2012). Emotional misery additionally has been found to interfere with a fitness professional's ability to deliver tremendous care (Shanafeltet al., 2002).In 2012, University of Science and Technology and Student of the College of Applied Arts (COSTAATT) were disappointed with her academic performance, and committed suicide because she could not cope with the stress of her exam. According to the 2012 Lancet Report, students at University in India find it difficult for to deal with exam failures. In a latest study, findings with clinical students indicated that higher degrees of physical pastime had been related with excessive personal success and low emotional exhaustion (Cecil et al., 2014).

Study in Medical College can act as a contributing factor in developing depression in medical students which may have possible negative academic and professional consequences. Study in any medical course is perceived as being inherently stressful across the globe. Studies on psychological problems such as academic stress, anxiety and depression among medical students have seen that these disorders are under diagnosed and under treated. Significant share of the world populace is affected with the aid of mental misery of which tertiary schooling college students are the once (Mitchell &LaGory, 2002). Studies printed that more than 1/2 of students in extraordinary countries like Singapore and United States of America (USA) had experienced emotional misery.

In the identical aspect, 41.9% of students in Malaysia and 53.0% in Australian said to have psychological misery (Stallman, 2008).

1.2 Rationale

Mental health is the stage of psychological well-being or an absence of mental illness. It is the state of any person who is "functioning at a high-quality stage of emotional and behavioral adjustment". In today's ultra-competitive environment, college students face extra stress than ever be, it associated to studies, examination, peer, instructors or parent's pressure. The present find out about aimed to explore whether educational stress, suicidal ideation, mental well-being differs appreciably in phrases of closing year students of clinical college. The fundamental goals of this research are to decide the relationship between academic workload and academic stress on the intellectual health of remaining 12 months' college students in the Bangladesh health expert institute (BHPI). Mental distress is becoming a common health problem among university students. There is limited information in this regard in Bangladesh. This study was aimed to determine the prevalence and associated factors of mental distress among students in BHPI. The aim of this find out about is to exhibit how variables in tutorial stress and academic workload can be utilized to show impact on the students' mental health. The results from the lookup can be a precious fact for the college in adjusting the academic workload to decrease educational stress for the students in this program. Meanwhile, students can recognize the signs of academic stress on their mental fitness and be in a position to be searching for expert help.

1.3 Research Question

What is factors influencing mental health of the final-year students at a rehabilitation profession institute in Bangladesh?

1.4 Aim

The aim of this study was to assess the mental health status of final year students and the factors affecting their mental health.

1.5 Objective

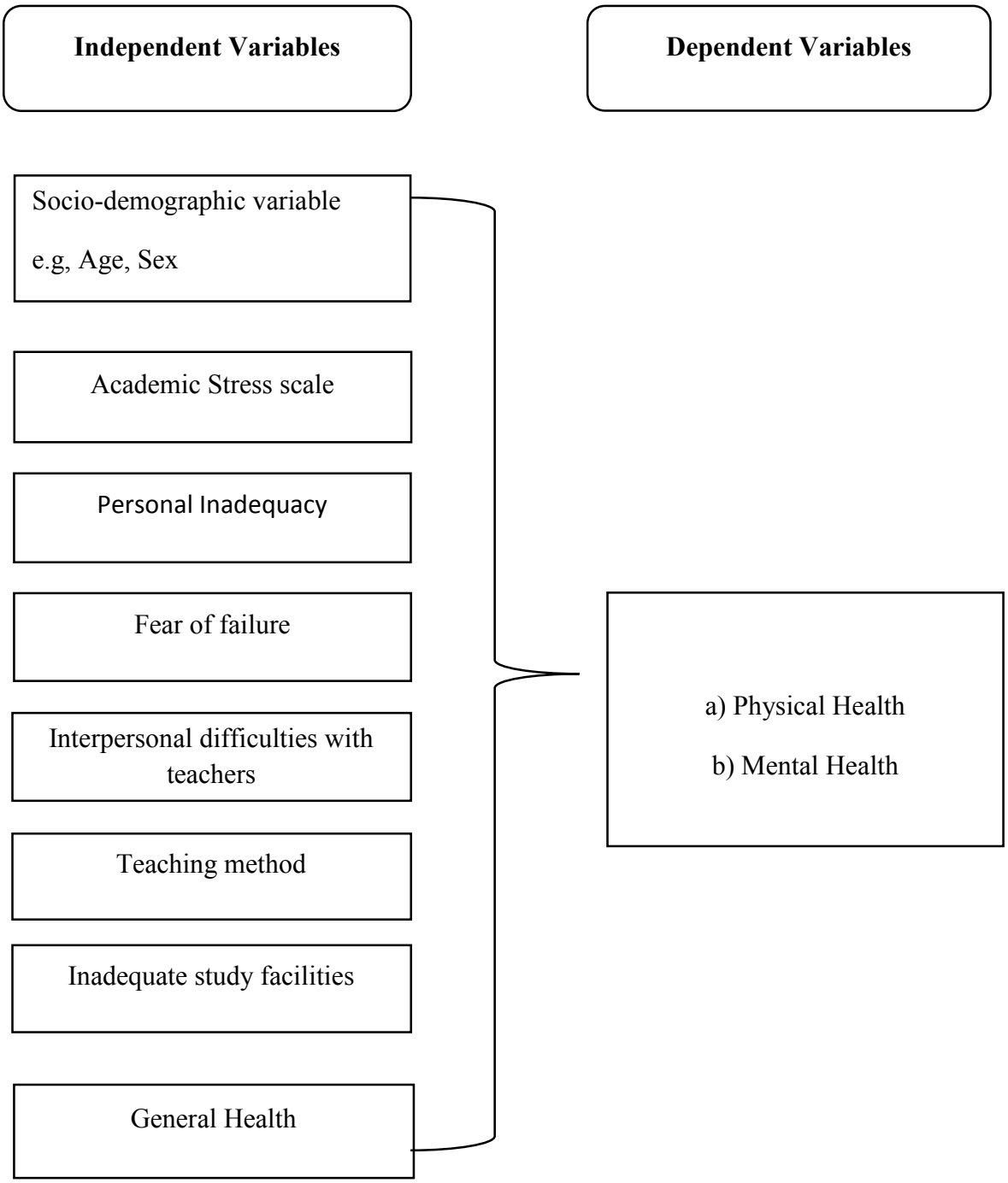
The final year of Rehabilitation Professional Students is a particularly stressful period and can impact academic performance and students' health. The objective of this study was to find out the level of stress of the final year health professional students and the factor associated with it.

1.6 Specific objective

The specific objective in this study which is:

There is a relationship between academic stress and Rehabilitation professional institutional arrangements.

1.7 List of Variables



1.8 Operational Definition

Mental health: Mental health is the stage of psychological well-being or an absence of mental illness. It is the state of any person who is "functioning at a high-quality stage of emotional and behavioral adjustment".

Rehabilitation professional: The rehabilitation workforce is made up of different health workers, including but not limited to physiotherapists, occupational therapists, speech and language therapists and audiologists, orthotists and prosthetists, clinical psychologists, physical medicine and rehabilitation doctors, and rehabilitation nurses.

Academic stress: Academic stress is mental distress with respect to some anticipated frustration associated with academic failure or even unawareness to the possibility of such failure. Students have to face many academic demands, for example, school examination, recitations in the class, showing progress in school subjects, understanding what the teacher is teaching, competing with other classmates, fulfilling teachers and parent's academic expectations.

CHAPTER – II LITERATURE REVIEW

Mental health issues refer to signs and symptoms of inadequate depth or duration to meet the standards for any intellectual disease according to US Department of Health and Human Services. Most humans have skilled intellectual health problems at some factor in their life. The experience of feeling low and dispirited in the face of a worrying job is a familiar example. Mental disorders are estimated to account for nearly one half of the total burden of ailment for younger adults in the United States. Most frequent sources of stress were high parental expectations, the vastness of the courses, overcrowded lecture halls, and dissatisfaction with type lectures (Mazureket al., 2015).Mental health is the stage of psychological well-being or an absence of mental illness. It is the state of any person who is "functioning at a high-quality stage of emotional and behavioral adjustment. The students also face other stressing factors like social, environmental, physical, and family problems, which may additionally affect their educational overall performance and may also end result in substance use (Pariat et al., 2014). Research research that have examined the sources of stress amongst clinical college students normally grouped into three predominant areas: tutorial pressures, social issues, and financial problems (Alsubaie et al., 2019).

While there is no one definition of stress, it is acknowledged as tension or any state of affairs that arouses emotional stress and terrible feeling from a person (Stallman, 2008). Stress can come from in all places and each time or is the emotional and bodily pressure brought about by means of the response to pressure from the backyard world. Stress is also defined as the body's non-specific response to any demand placed upon it (Jayakumar & Sulthan, 2013). The responses may be physical like a headache, or an emotional response such as fear or depression or a behavioral response such as anxiousness or worry. A stressor is an environmental thing that is perceived by way of the character as menacing and mendacious to his or her well-being (Thuraiselvam & Thang, 2015). Some assume that zero stress means joyful and healthy, but this is wrong. If stress is well-managed, it can make humans stimulated and productive. If mismanaged, stress can harm and kill someone. However, when stress goes beyond the amount which a character is not in a position to handle, then stress stops being helpful and begins

inflicting damage to health, productivity, relationships and first-rate of work (Stallman, 2008). Stress can be divided into two elements which are interior and external. External stress appears when the stress comes from outdoor like surroundings or event and interior elements consist of nutritional status, anticipation, imagination, standard health, reminiscence and health levels, emotional well-being, and the amount of relaxation you get (Melvin, 2014). On the different hand, exterior factors which affect your functionality include the social relationship, familial relationship, bodily environment, financial troubles and so on. In this study, the lookup will Factors That Affect Students' Mental Health: A Study at Taylor's University focus on the inside stress which is educational stress on scholar intellectual health (Thuraiselvam & Thang, 2015). According to American National Institute for Mental Health, there are 4 categories of warning signs and symptoms which are cognitive signs, emotional signs, physical signs and symptoms and behavioral signs. Cognitive signs are the lack of ability to concentrate, memory problems, poor thinking, terrible judgement and constant worrying. The moodiness, feeling overwhelmed, despair and brief temper are the emotional symptoms of stress (Stallman, 2008). Examples of physical sign are headaches, constipation, chest pain and dizziness. The behavioral signs and symptoms encompass consuming more or less, sleeplessness, and overdoing things to do such as exercising and shopping, creating frightened habits such as nail biting or pacing and the use of drugs or alcohol to release their stress (Stallman, 2008).

There has been a quantity of researches on academic stress. Academic stress is a intellectual distress with appreciate to frustration related with academic failure, apprehension of such failure or even an attention of the possibility of such failure (Ali et al., 2015). For the longest time, humans assumed that the pupil populace was once the least affected by using any sort of stress or problems. Stress is now understood as a lifestyle disaster affecting any person regardless of their developmental stage. (Reddy et al., 2017) Academic stress is mental distress with respect to some anticipated frustration associated with academic failure or even unawareness to the possibility of such failure. Students have to face many academic demands, for example, school examination, recitations in the class, showing progress in school subjects, understanding what the teacher is teaching, competing with other classmates, fulfilling teachers and parent's academic

expectations (Banerjee & Chatterjee, 2016). The solely project college students have been predicted to undertake was to study and studying was never perceived as stressful. What proved to be traumatic was the expectations dad and mom had for their children, which in flip grew into larger burdens that these kids could now not elevate anymore. According to the records published with the aid of National Crime Records Bureau, there is one student each hour that commits suicide (Saha, 2017). The bureau registered 1.8% students who committed suicide due to failing in examinations and an 80% rise in suicide prices all through a one-year time frame. A 2012 Lancet report additionally quoted that the 15-29 age crew bracket in India has the absolute best rate of suicide in the world as referred to in "India has the Highest Suicide Rate and these numbers show no sign of dropping. Academic stress has been recognized as the important purpose of these alarming figures. Stress as an interplay between environmental stressors, student's appraisal and reactions for the same. It has now grown to be a grave actuality that is termed as a "career stopper" (Kadapatti & Vijayalaxmi, 2012). It consequently, becomes a big cause of issue as it is symptomatic of rising mental fitness concerns in India (Nandamuri & Gowthami, 2011).

There are 55 percent students have to pass one difficulty for the preparation of the other subject, 42.5 percent students pronounced reasonable stage of stress, whereas in 27 %, the stress stage was beyond a manageable level (Bean & Hammer, 2006). It has been recognized the following as frequent academic stress factors – incorrect teaching, lack of facts to be learnt, opposition for scoring marks, universal examinations, long hours of tutorial work, boundaries in communication, heavy workload, inadequate resources, irregular attendance, dilemma in selecting the self-discipline and insufficient library amenities and also identified tutorial stress as being triggered by tutorial work (Jayakumar & Sulthan, 2013).

There are robust hyperlinks between academic stress and suicidal ideation amongst university students. The examination durations are height season for suicide instances every year where students perceive an excessive stage of stress (Dahlin et al., 2005). In the tutorial world, suicide is viewed as a 'pathological behavior'. In addition to depression, suicidal ideation is a sturdy predictor of attempted and dedicated suicide Students who have experienced an excessive stage of academic stress have been greater

probably to think about suicide instead than those students who did not experience academic stress. In a find out about which has investigated 1,800 college students at four universities, there are 24 % of college students who had critically considered suicide when in college, and 5 % had attempted suicide when in college. The suicidal behavior is based on psychological, social and environmental factor. In Singapore, Ho Kong Wai (1999) cited that the reasons for suicide attempts had been conflicts with household members (24.5%); conflicts in interpersonal relationships with, for example, spouse, parents, siblings and pals (23.6%); troubles at school (11.0%); work stress (2.4%); and monetary difficulties (1.0%). Interestingly, drug and alcohol abuse were diagnosed in only 0.5% of the instances (Thuraiselvam & Thang, 2015).

There are 24 articles that met the criteria for inclusion in their find out about of depression occurrence amongst university students (Ibrahim et al., 2013). They located that college student's skilled fees of melancholy that are drastically higher than these located in the widely wide-spread population. Recent reviews on depression amongst college students have also observed that depressive temper is linked with low academic achievement or academic problems (Abdulghani et al., 2011). One of the most famous mental issues is depressive disorder. Undergraduate students are at a difficult duration of their lives, making life-changing decisions about their training which can affect their future. A study located that despair and different intellectual fitness disorders are a widespread public fitness trouble on college campuses. Many college students ride their first psychiatric episode while at college, and 12–18 percent of students have a diagnosable intellectual illness. Epidemiological studies advice that the 15–21 age class (typical university years) has the absolute best past-year occurrence charge of intellectual illness at 39 p.c (Mackenzie et al. 2011).

Mental health problem has turn out to be the most frequent and great hassle amongst the scholar population in contrast with the familiar population. University college students are thought to be prone to high-level stressors due to the transition to college life and a need for scholastic success. Some frequent intellectual health problems as explained by various literatures are lack of sleep, bipolar disorder and eating disorders (Thuraiselvam & Thang, 2015).

It is critical to recognize the factors of stress degree in the students' life in particular the academic workload which is often misunderstood. In order to graduate, the scholar desires to take up a full load of rigorous classes. The relationships of workload and fitness have been investigated by many researchers the usage of a range of study designs and methodological approaches. learn about workload consists of the time wanted for contact and independent study, the kind and timing of assessments, the extent and stage of subject of the work, the institutional elements such as instructing and assets and pupil characteristics such as motivation and effort (Bowyer, 2012). A common weekly foundation such as lecture hours, study hours at some stage in semester, time spent in library, doing challenge at home, finding information and meeting educational needs has been assessed as tutorial workload. In this study, the researcher divides the academic work to assignment, presentation, take a look at or quiz, examination, lecture hours, activities and things to do which are academically related.

The majority of the college students do experience adjustments in the level of workload and stress over the semester with a particular hyperlink between their said levels of stress and workload on the week of semester. Around forty p.c of college students studying 5 h and less report much less than regular stress levels; around 20 p.c of college students analyzing 10–20 h file much less than regular stress level, whereas this percentage is around 10 % for the categories of college students who are studying 21 h and above. The students who felt greater traumatic than normal are related with the hours of studied per week. About 20 % of students who studied more than 15 h per week reported being greater careworn than usual. Based on this study, the researcher realizes that the college students who are reading less hours have much less stress than the college students who are analyzing extra hours (Lindsay & Rogers, 2010).

CHAPTER – III METHODOLOGY

3.1 Study design

A cross-sectional descriptive study was performed with structured questionnaires and interviews were conducted with Final year students of BHPI. This study design was appropriate to find out the objectives. The data was collected all at the same time or within a short time frame.

3.2 Study area

Data was collected from final Students of BHPI which is academic institute of Center for the Rehabilitation of the Paralysed, Savar, Dhaka. CRP is the biggest hospital and renowned rehabilitation Centre for Spinal Cord Injury (SCI) among South Asia.

3.3 Study Period

Sample was taken from Bangladesh Health Profession's Institute (BHPI) from 15th june 2021 to 1st October 2021.

3.4 Study population

A population is the total group or set of events or totality of the observation on which a research is carried out. It is the group of interest to the researcher, the group whom the researcher would like to generalize the result of the study. In this study the Final year students of BHPI was chosen as a sample population to carry out this study. About 79 samples were selected for this study.

3.5 Sample size

When the sample frame is finite,

The equation of finite population correction in case of cross sectional study

$$n = \frac{NZ^2P(1-p)}{d^2(N-1)+Z^2P(1-p)}$$

$$n = \frac{120(1.96)^2 \times .81(1-.81)}{(.05)^2(120-1)+(1.96)^2(1-.81}$$

$$n = 79$$

Where,

n = sample size with finite population correction,

N (Population size) = 120

Z (statistic for a level of confidence) = 1.96

P Expected proportion (in proportion of one) = 81% (SM Abu Hena Mostafa et al., 2015)

And

d (prevalence) = .05

The actual sample size was, n= 236. As it is academic thesis, self-funding and data was collected from a single student by considering the feasibility and COVID-19 situation 79 sample were selected conveniently.

3.6 Sample selection

The target population for this study had been students who are currently enrolled in final Students of BHPI both male and female had been used to collect the data. For this study, a convenience sampling had been used to carry out the research and students had been randomly chosen to participate in the study. These students had been asked to fill out and complete a structured questionnaire to gather specific information The 79 participants responded to the questionnaire. These 79 respondents comprised of 34 male participants and 45 female participants. Participants in this study are selected through a convenience sampling procedure, the 79 students willingly complied with the researchers were from BHPI students who are currently enrolled in final year.

3.6.1 Inclusion Criteria

Final year students of B.Sc. in Physiotherapy, B.Sc in occupational therapy, B.sc in speech & language therapy in BHPI. I took only final year students because in data collection time (July 2021 – September 2021) due to COVID-19 only final year students was present due to their academic placement was open.

3.6.2 Exclusion criteria

1. Students with having Mental illness (Psychosis)

2. Students with speech problem prior to building collapse

3. Students who were not interested to participate in the study at the time of data collection.

3.7 Data collection Tools

To gather the data needed for answering the question of whether there is a relationship between academic stress and academic performance and where the students face stress and to what level they face the same, the instrument was the Academic Stress Scale

(ASS). This (ASS) consists of 40 items and each item has five alternative responses as follow; “No Stress” (NS), “Slightly Stress” (SS), “Moderate Stress” (MS), “Highly Stress” (HS) and “Extremely High Stress” (ES). The Academic Stress Scale questionnaire was originally developed by Kim (1970) and was used by several researchers such as Gill, N.K., (2017); Alam & Halder, (2018); Porwal & Kumar,(2014).

3.8 Data collection procedure

The questions will be asked in face to face interviews. It is useful because this technique ensures that the researcher will obtain all the information required, while at the same time it gives the participants freedom to respond and illustrated concepts.

3.9 Measurement tools

The information was gathered by providing a survey questionnaire scale to BHPI's final year students. The participants were requested to fill out a self-administered questionnaire with 40 questions on the (ASS) scale. 79 participants reacted, and the data was collected as a result. After gathering the data, scoring and analysis were done using Ratio Scale Criteria, and stratification was done using Ordinal Scale Criteria for mixed method analysis.

3.10 Data Analysis Plan

Statistics is essential in research since it allows you to summarize the data you've collected and offer it to others. The researchers gathered descriptive statistics for this study's purposes. The purpose of this form of statistics is to describe the data that will be used in the investigation. The researchers employed the quantitative survey method to conduct this type of analysis, delivering questionnaires to students in Bangladesh receiving tertiary education. Data was categorically presented using an ordinal scale, which was transferred from a ratio scale stratification of the responses, and then a mixed approach was used to evaluate the data. According to the ASS (Academic Stress Scale), the first response (NS/ No Stress) is scored ‘0’, second response (SS/ Slight Stress) is scored ‘1’, third response (Moderate Stress) is scored ‘2’, fourth response (High Stress/ HS) is scored ‘3’ and the final response (Extreme Stress/ ES) is scored ‘4’. If eight

questions are considered a category the choice of first eight questions is counted ‘0’ (as ‘0’ for every first response makes 0×8=0) and the selection of fifth response for the category is counted ‘32’ (as ‘4’ for every fifth response makes 4×8=32) for every category. So, the lowest point for a category is ‘0’ stress point and the highest point for a category is ‘32’ stress point and the median stress point for every category is (32+0=32/2) 16 and there are 79 respondents for this research that designates that the median stress point for this research is (16×79) = 1264 stress point. Determining this 1264 as the median stress point, every five categories had been compared to justify whether any category belongs to lower degree or higher degree of stress. Then, a qualitative analysis had been added in order to justify the effect of intervening variables (teaching materials, lab and library facilities) in the case of aggravating academic stress among the students.

3.11 Informed Consent

Written consent (appendix) was given to all participants prior to completion of the questionnaire. The researcher explained to the participants about his or her role in this study and aim and objective of this study. The researcher received a written consent from every participants including signature. So the participant assured that they could understand about the consent from and their participation was on voluntary basic. The participants were informed clearly that their information would be kept confidential. The researcher assured the participants that the study would not be harmful to them. It was explained that there might not a direct benefit from the study for the participants but in the future cases like them might be get benefit from it. The participants had the rights to withdraw consent and discontinue participation at any time without prejudice to present or future care BHPI. Information from this study was anonymously coded to ensure confidentiality and was not personally identified in any publication containing the result of this study**.**

3.12 Ethical consideration

The research proposal was presented to the BHPI Institutional Review Board (IRB) for oral defense, and the IRB approved it. The proposal was then approved by the IRB. The researcher followed the guidelines set forth by the Bangladesh Medical Research Council (BMRC) and the World Health Organization (WHO). This protocol presentation was first presented to the BHPI Institutional Review Board (IRB), which granted preliminary approval. Before collecting data, permission was obtained from the Head of the Department of Physiotherapy, BHPI, and the Head of the Department of Physiotherapy, CRP. The confidentiality of the data was maintained by the researcher.

CHAPTER – IV RESULTS

The findings of this study were presented in the form of bar graphs, pie charts, and tables.

4.1 Male Female Ratio

Females made up 57 percent (n=45) of the 79 participants, while males made up 43 percent (n=34).

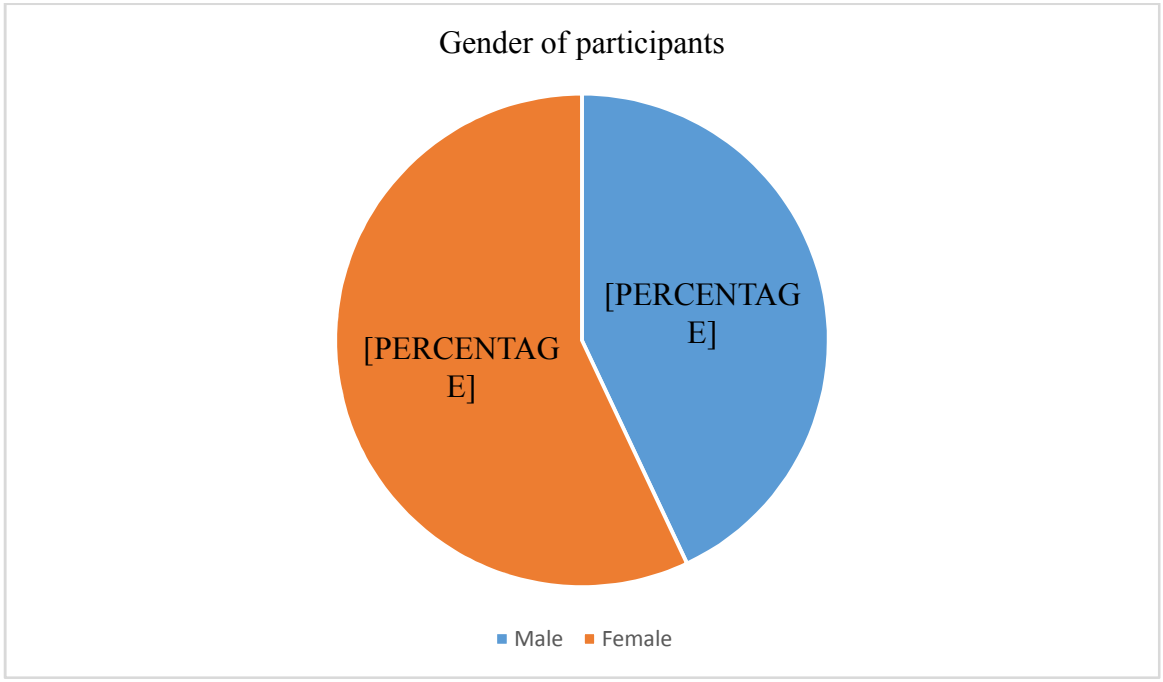


Figure-01: Gender of participants.

4.2 Age of the participants

Among the 79 participants where 1.30% (n=1) participants of age 22 years 0ld, 21.50% (n=17) participants of age 23 years old, 31.60% (n=25) participants of age 24 years old, 30.40% (n=24) participants of age 25 years old, 10.10% (n=8) participants of age 26 years old, 3.80% (n=3) participants of age 26 years old, 1.30% (n=1) participants of age 28 years old.

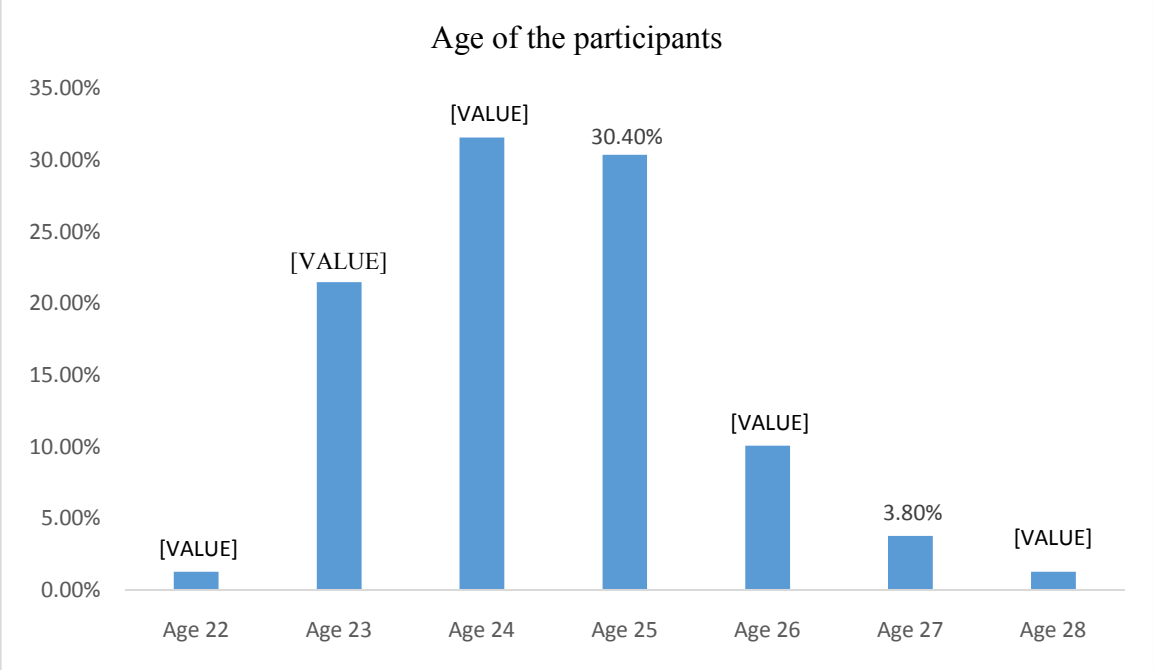


Figure-02: Age of the participants

Among the 79 participants, minimum age was 22, maximum age 28, mean 24.43, median 24 and standard deviation 1.162.

Table 1: Age of the participants

	N	Minimum	Maximum	Mean	Median	standard deviation
students age	79	22	28	24.43	24	1.162
Valid N (list wise)	79					

4.3 Marital status of the participants

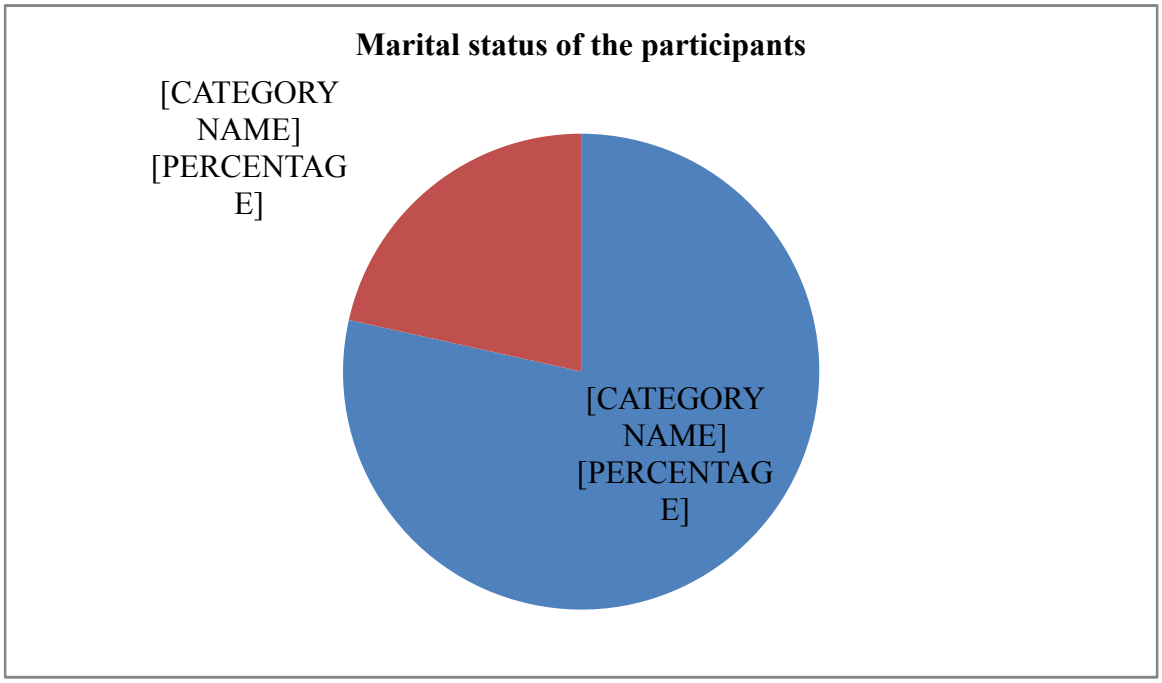


Figure-03: Marital status of the participants

Among the participants almost 78.52% (n=62) were unmarried and 21.52% (n=17) were married.

4.4 Living area

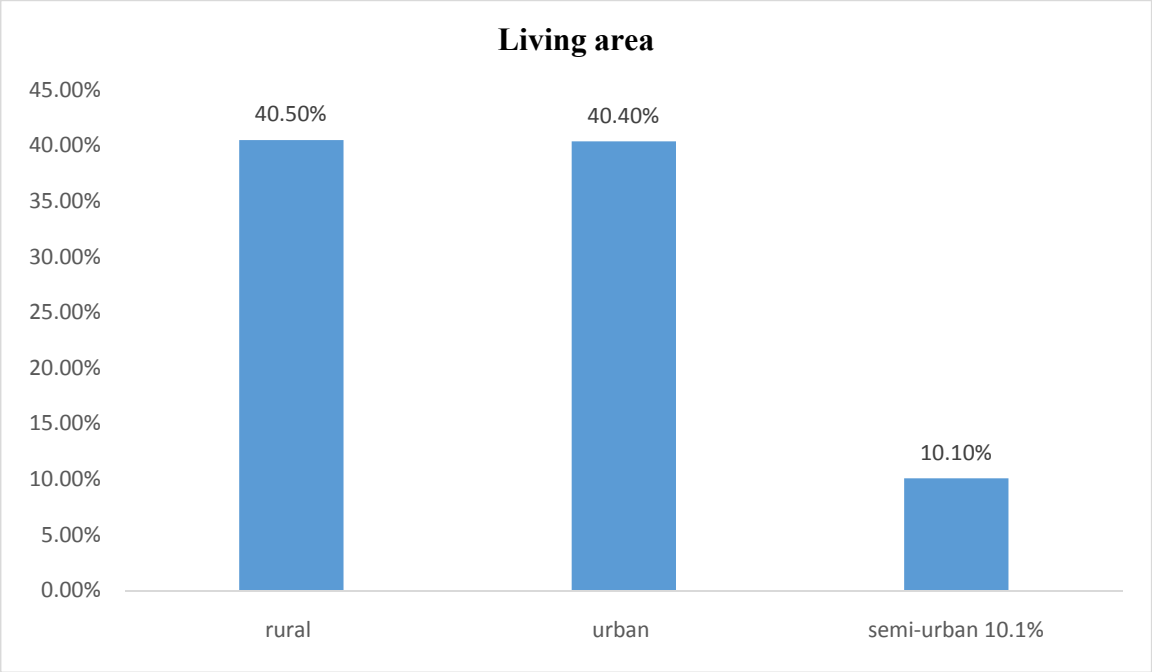


Figure-04: Living area.

Out of 79 participants, where 40.50% (n=32) participants were rural area, 40.40% (n=39) participants are urban area, 10.10% (n=8) participants were semi-urban of living area.

4.5 Why they choose in this course

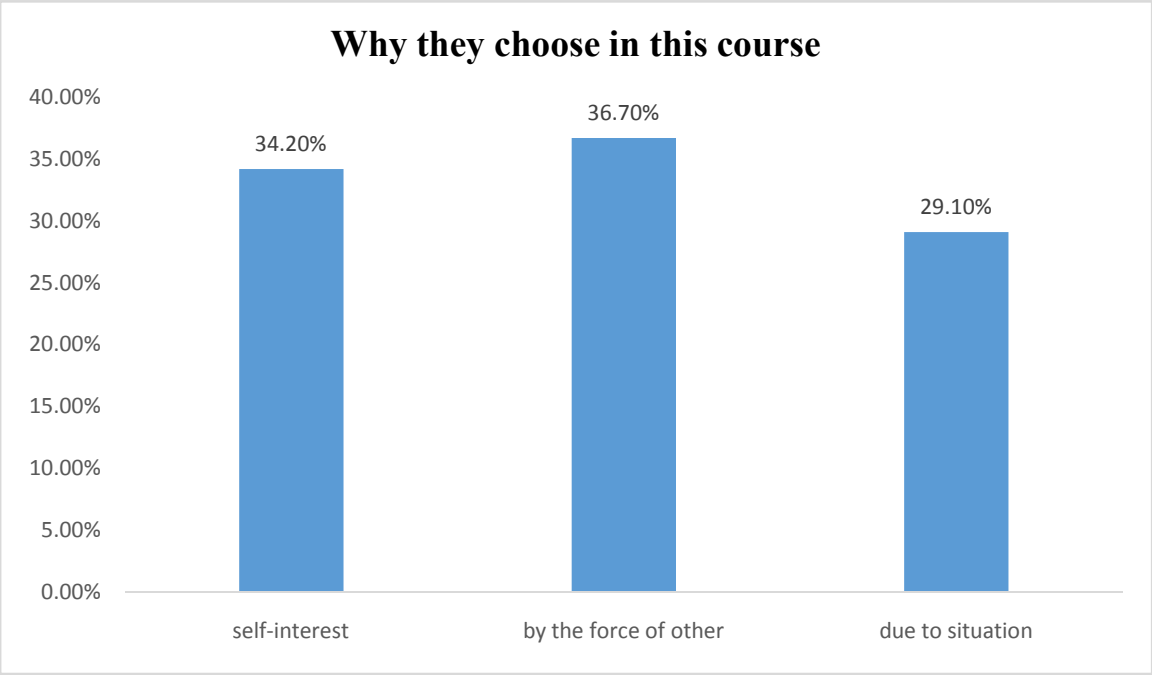


Figure-05: Why they choose in this course

Out of 79 participants, where 34.20% (n=27) participants were chosen this course self-interest, 36.70% (n=29) participants chosen this course by the force of other, 29.10% (n=23) participants were chosen this course due to situation.

4.6 Stress level of academic factor:

Based on the questionnaire prepared by Kim (1970), the data collected from 79 participants (34 male respondents and 45 female respondents) cover five categories: (1) Personal inadequacy (covering question no. 01 to 08), (2) Fear of Failure (covering question no. 09 to 16), (3) Interpersonal difficulties with Teachers (covering question no. 17 to 24), and (4) Teacher – Pupil Relationship/ Teaching Method (Covering question no. 25 to 32), and the last category (5) Inadequate Study Facilities (Covering question no. 33 to 40). The point of each category is determined by the designed value of each response according to the ASS (Academic Stress Scale).

4.6.1Personal inadequacy

4.6.1.1 according to Choice:

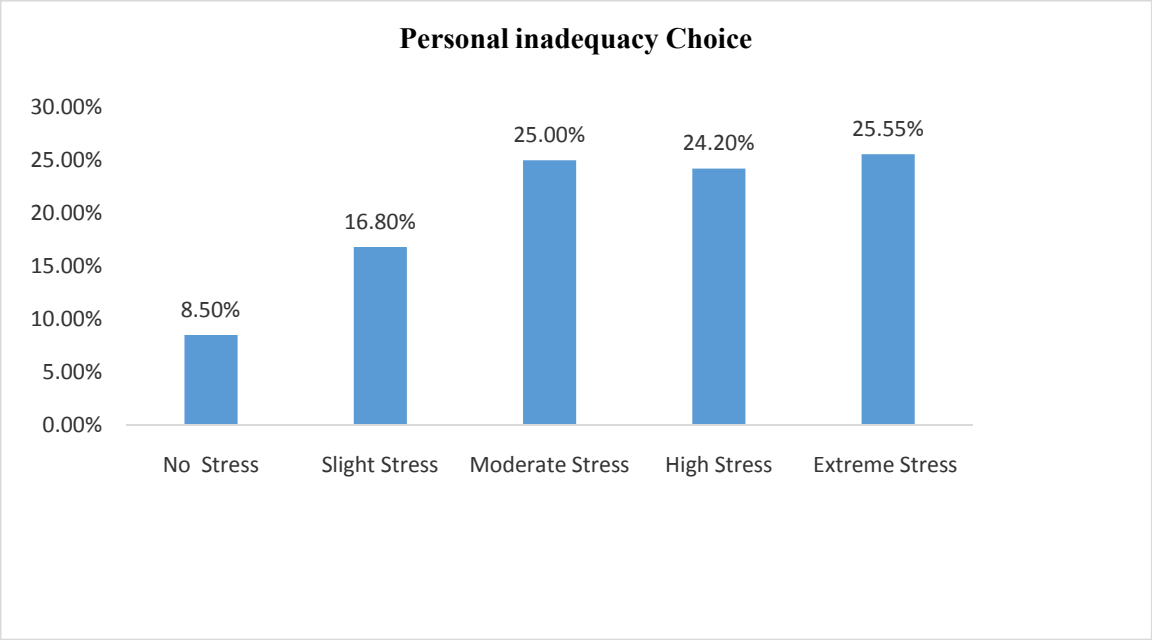


Figure-06: Personal inadequacy choice.

Personal inadequacy covering question no. 01 to 08. That's mean one person can give 8 responses by choosing most appropriate one option out of five. So, total chosen option for 79 participants was N= 632. Among those 8.50% (N=54) was chosen no stress, 16.80% (N=106) was chosen slight stress, 25% (N=158) was chosen moderate stress, 24.20% (N=153) was chosen high stress, 25.50% (N=161) was chosen extreme stress.

According to Academic stress sale (ASS) sore for total 79 participants in Personal inadequacy area is:

Table 2. Shows that respondents selected option ‘4' nearly 161 times, the greatest frequency of selection in the Personal Inadequacy category. Because there are 79 respondents, the highest point of ASS for each category is (32×79) = 2528 if all 79 respondents choose ‘4'. The median score for these replies is (2528÷2) = 1264, indicating that the average stress level of the respondents is 1264, and that means if the grand total of Personal Inadequacy area cross the median point then it will be count as stressful condition. This level's grand total 1525, which higher than median score.

Table 2. Personal inadequacy

Choice	Responses	ASS point	Total point
0 (No Stress)	54	0	0
1 (Slight Stress)	106	1	106
2 (Moderate Stress)	158	2	316
3 (High Stress)	153	3	459
4 (Extreme Stress)	161	4	644
Total	632	0-4	1525

4.6.1.2 according to respondents

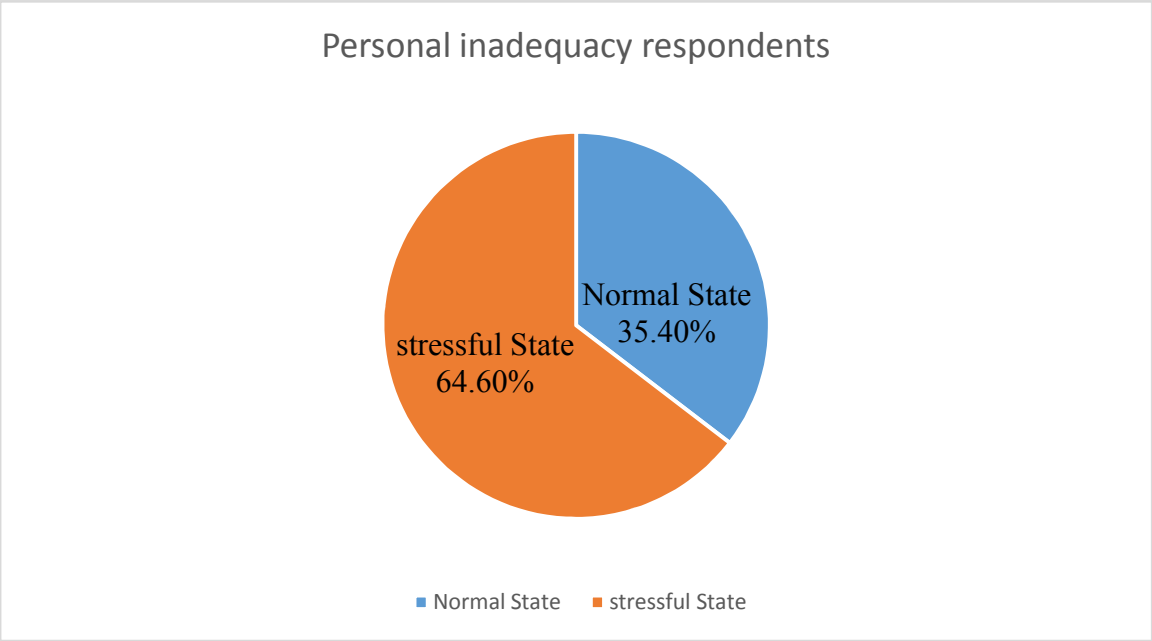


Figure-07: Personal inadequacy respondents.

In this area 79 participant 35.40% (n=28) was normal state and 64.60% (n=51) was stressful State.

4.6.2 Fear of failure

4.6.2.1 according to Choice

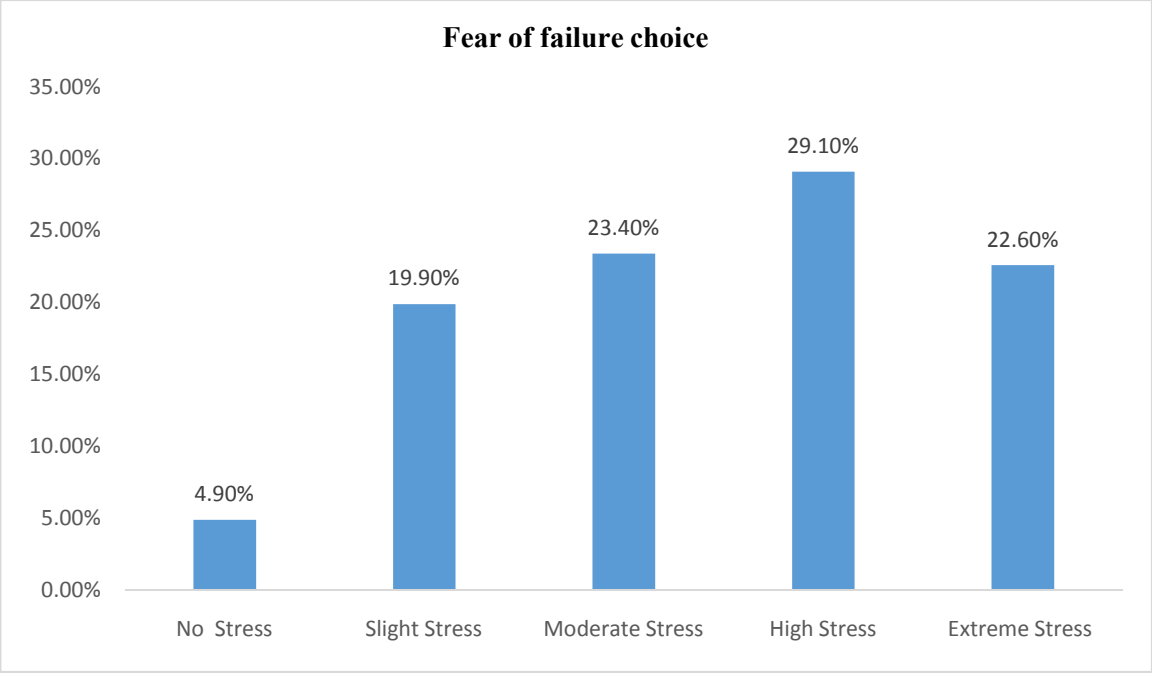


Figure-08: Fear of failure choice

Fear of failure covering question no. 09 to 16. That's mean one person can give 8 responses by choosing most appropriate one option out of five. So, total chosen option for 79 participants was N=632. Among those 4.90% (N=31) was chosen no stress, 19.90% (N=126) was chosen slight stress, 23.40% (N=148) was chosen moderate stress, 29.10% (N=184) was chosen high stress, 22.60% (N=143) was chosen extreme stress.

According to Academic stress sale (ASS) sore for total 79 participants in Fear of failure area is:

Table 3. Shows that respondents selected option ‘3' nearly 184 times, the greatest frequency of selection in the Fear of failure category. Because there are 79 respondents, the highest point of ASS for each category is (32×79) = 2528 if all 79 respondents choose ‘4'. The median score for these replies is (2528÷2) = 1264, indicating that the average stress level of the respondents is 1264, and that means if the grand total of Fear of failure area cross the median point then it will be count as stressful condition. This level's grand total 1546,which higher than median score.

Table 3. Fear of failure

Choice	Responses	ASS point	Total point
0 (No Stress)	31	0	0
1 (Slight Stress)	126	1	126
2 (Moderate Stress)	148	2	296
3 (High Stress)	184	3	552
4 (Extreme Stress)	143	4	572
Total	632	0-4	1546

4.6.2.2 according to respondents

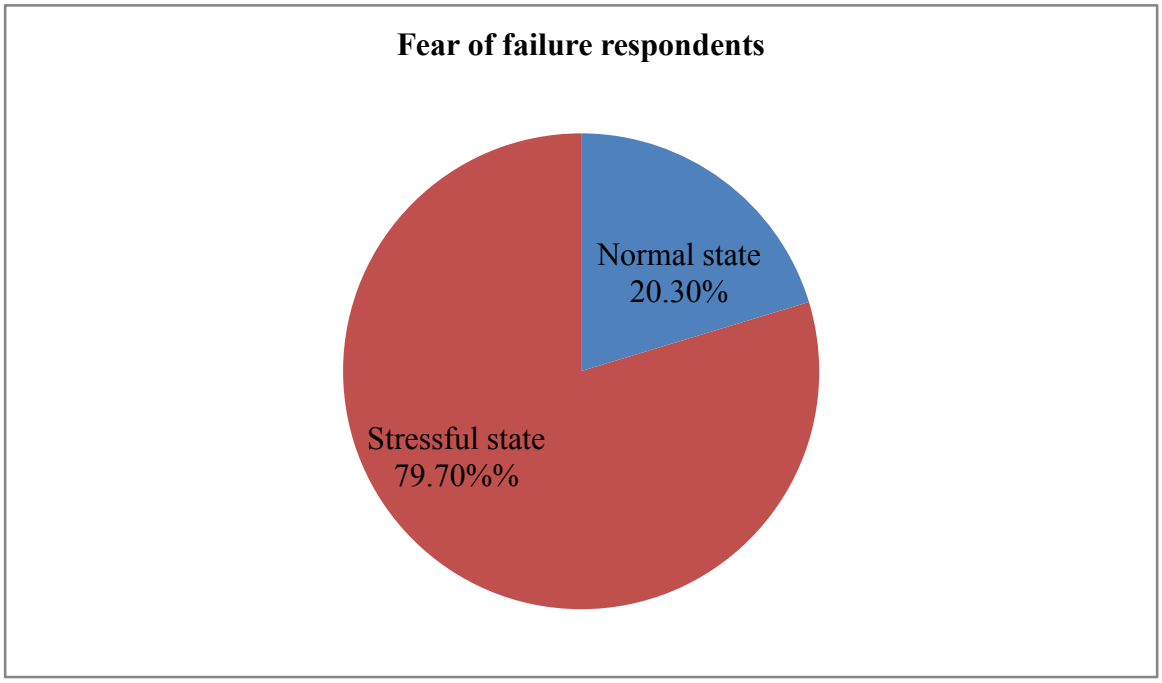


Figure-09: Fear of failure respondents

In this area 79 participant 20.30% (n=16) was normal state and 79.70% (n=63) was stressful State.

4.6.3 Interpersonal difficulties with teachers

4.6.3.1 according to Choice

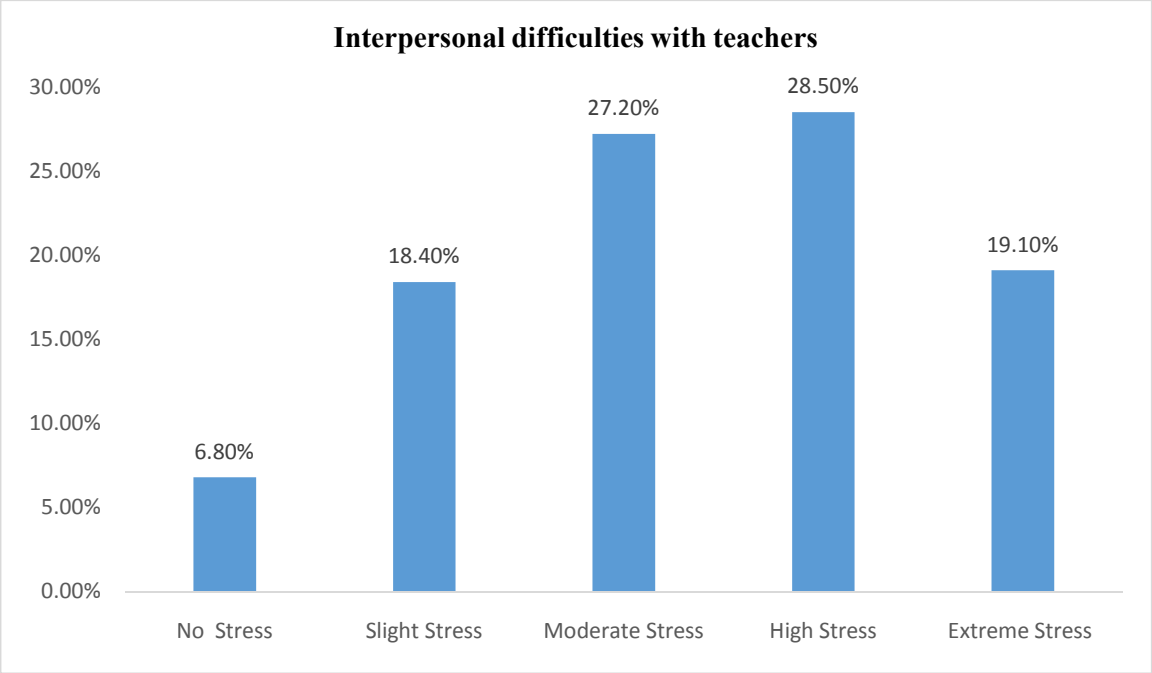


Figure-10: Interpersonal difficulties with teacher's choice

Interpersonal difficulties with teachers covering question no. 17 to 24. That's mean one person can give 8 responses by choosing most appropriate one option out of five. So, total chosen option for 79 participants was N=632. Among those 6.80% (N=43) was chosen no stress, 18.40% (N=116) was chosen slight stress, 27.20% (N=172) was chosen moderate stress, 28.50% (N=180) was chosen high stress, 19.10% (N=121) was chosen extreme stress.

According to Academic stress sale (ASS) sore for total 79 participants in Interpersonal difficulties with teacher's area is:

Table 4. Shows that respondents selected option '3' nearly 180 times, the greatest frequency of selection in the Interpersonal difficulties with teacher's category. Because there are 79 respondents, the highest point of ASS for each category is (32×79) = 2528 if all 79 respondents choose '4'. The median score for these replies is (2528÷2) = 1264, indicating that the average stress level of the respondents is 1264, and that the excess of this score indicates that means if the grand total of Interpersonal difficulties with teachers area cross the median point then it will be count as stressful condition. This level's grand total 1484,which higher than median score.

Table 4. Interpersonal difficulties with teachers

Choice	Responses	ASS point	Total point
0 (No Stress)	43	0	0
1 (Slight Stress)	116	1	116
2 (Moderate Stress)	172	2	344
3 (High Stress)	180	3	540
4 (Extreme Stress)	121	4	484
Total	632	0-4	1484

4.6.3.2 according to respondents

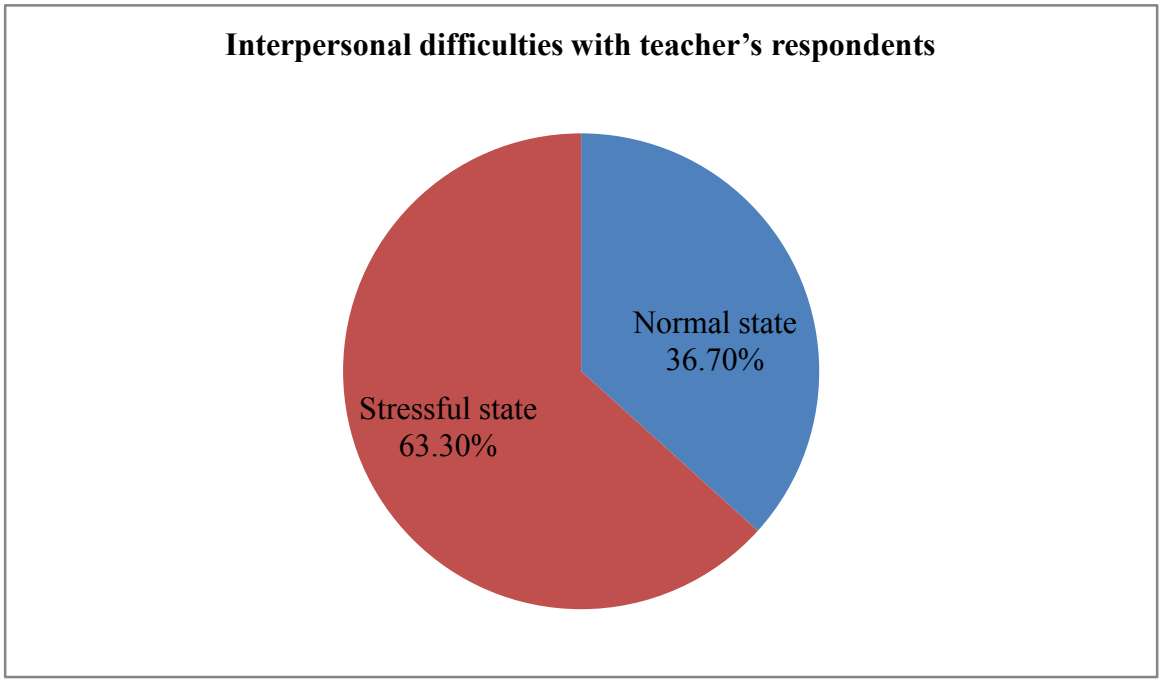


Figure-11: Interpersonal difficulties with teacher's respondents

In this area 79 participant 36.70% (n=29) was normal state and 63.30% (n=50) was stressful State.

4.6.4. Teacher –pupil relationship/ Teaching method

4.6.4.1 according to Choice

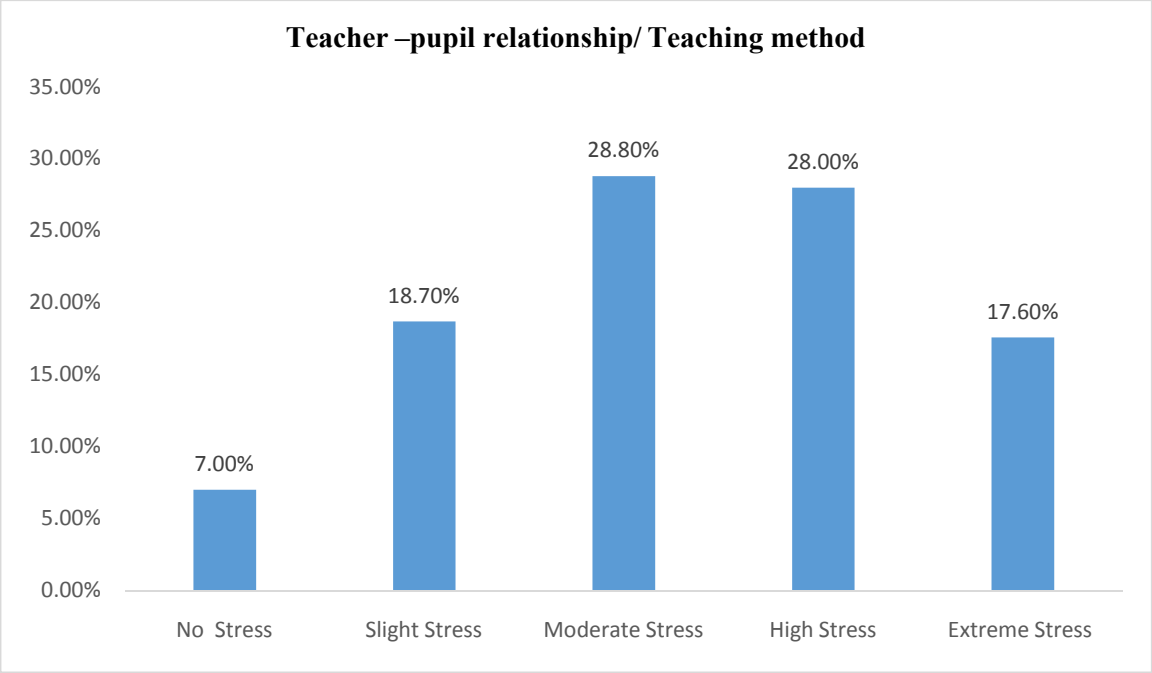


Figure-12: Teacher –pupil relationship/ Teaching method choice

Teacher –pupil relationship/ Teaching method covering question no. 25 to 32. That's mean one person can give 8 responses by choosing most appropriate one option out of five. So, total chosen option for 79 participants was N=632. Among those 7% (N=44) was chosen no stress, 18.70% (N=116) was chosen slight stress, 28.80%% (N=182) was chosen moderate stress, 28% (N=177) was chosen high stress, 17.60%% (N=111) was chosen extreme stress.

According to Academic stress sale (ASS) sore for total 79 participants in Teacher –pupil relationship/ teaching method area is:

Table 5. Shows that respondents selected option ‘3' nearly 177 times, the greatest frequency of selection in the Teacher –pupil relationship/ Teaching method category. Because there are 79 respondents, the highest point of ASS for each category is (32×79) = 2528 if all 79 respondents choose ‘4'. The median score for these replies is (2528÷2) = 1264, indicating that the average stress level of the respondents is 1264, and that the excess of this score indicates that means if the grand total of Teacher –pupil relationship/ Teaching method area cross the median point then it will be count as stressful condition. This level's grand total 1457, which higher than median score.

Table 5. Teacher –pupil relationship/ Teaching method

Choice	Responses	ASS point	Total point
0 (No Stress)	44	0	0
1 (Slight Stress)	118	1	118
2 (Moderate Stress)	182	2	364
3 (High Stress)	177	3	531
4 (Extreme Stress)	111	4	444
Total	632	0-4	1457

4.6.4.2 according to respondents

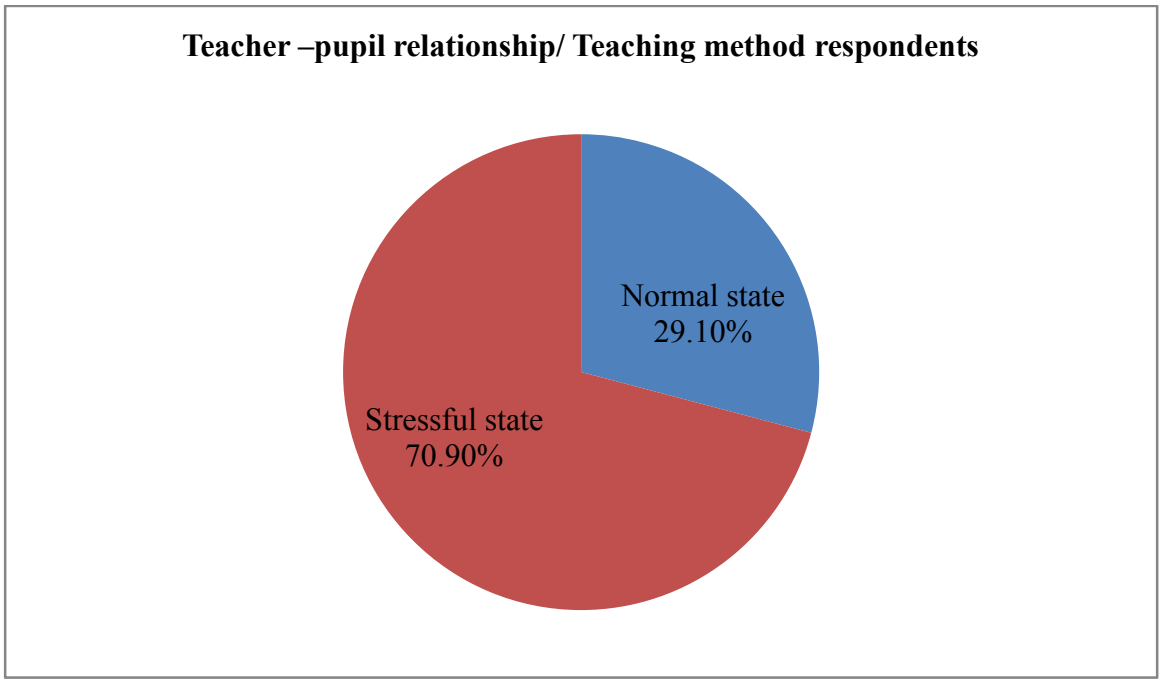


Figure-13: Teacher –pupil relationship/ Teaching method respondents

In this area 79 participant 29.10% (n=23) was normal state and 70.90% (n=56) was stressful State.

4.6.5. Inadequate study facilities

4.6.5.1 according to Choice

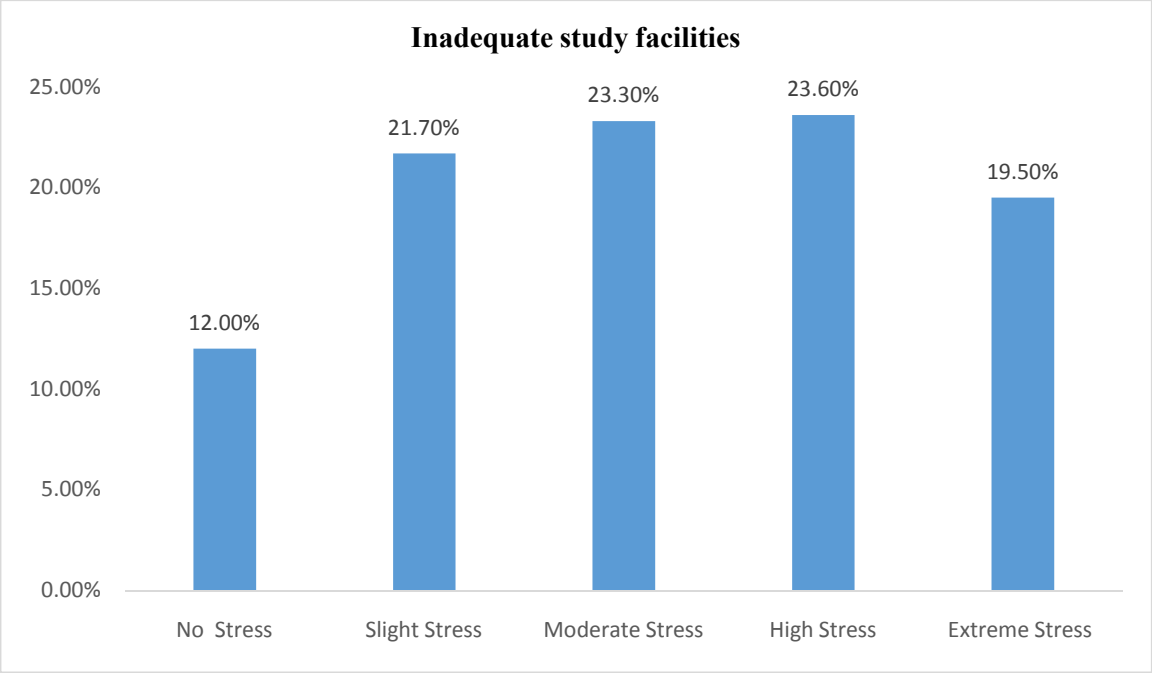


Figure-14: Inadequate study facilities choice

Inadequate study facilities covering question no. 33 to 40. That's mean one person can give 8 responses by choosing most appropriate one option out of five. So, total chosen option for 79 participants was N=632. Among those 12% (N=76) was chosen no stress, 21.70% (N=137) was chosen slight stress, 23.30% (N=147) was chosen moderate stress, 23.60% (N=149) was chosen high stress, 19.50% (N=123) was chosen extreme stress.

According to Academic stress sale (ASS) sore for total 79 participants in Inadequate study facilities area is:

Table 6. Shows that respondents selected option ‘3' nearly 149 times, the greatest frequency of selection in the inadequate study facilities category. Because there are 79 respondents, the highest point of ASS for each category is (32×79) = 2528 if all 79 respondents choose ‘4'. The median score for these replies is (2528÷2) = 1264, indicating that the average stress level of the respondents is 1264, and that the excess of this score indicates that means if the grand total of Inadequate study facilities area cross the median point then it will be count as stressful condition. This level's grand total 1352, which higher than median score.

Table 6. Inadequate study facilities

Choice	Responses	ASS point	Total point
0 (No Stress)	76	0	0
1 (Slight Stress)	137	1	137
2 (Moderate Stress)	147	2	294
3 (High Stress)	149	3	429
4 (Extreme Stress)	123	4	492
Total	632	0-4	1352

4.6.5.2 according to respondents

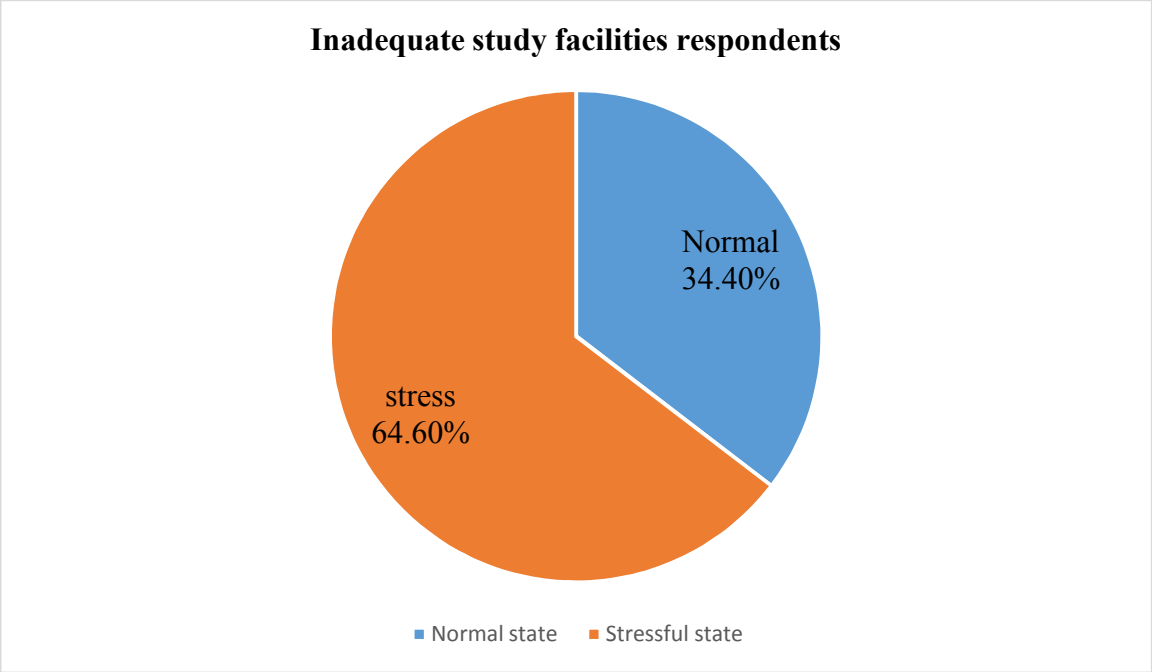


Figure-15: Inadequate study facilities respondents

In this area 79 participant 35.40% (n=28) was normal state and 64.60% (n=51) was stressful State.

4.7 Overall sore of Academic stress sale (ASS) and stress level of students

4.7.1 according to Choice

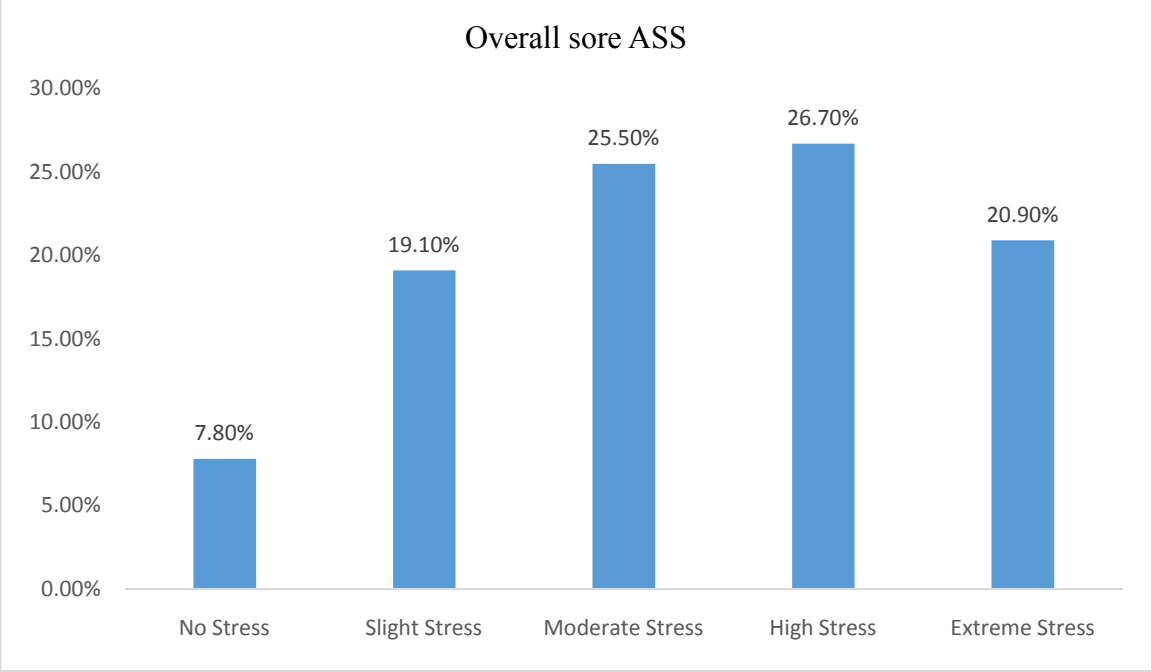


Figure-16: Overall sore ASS according to choice

Overall 1-40 question. That's mean one person can give 40 responses by choosing most appropriate one option out of five. So, total chosen option for 79 participants was n=3160. Among those 7.80% (n=248) was chosen no stress, 19.10% (n=603) was chosen slight stress, 25.50%% (n=807) was chosen moderate stress, 26.70% (n=843) was chosen high stress, 20.90% (n=659) was chosen extreme stress.

4.7.2 according to respondents

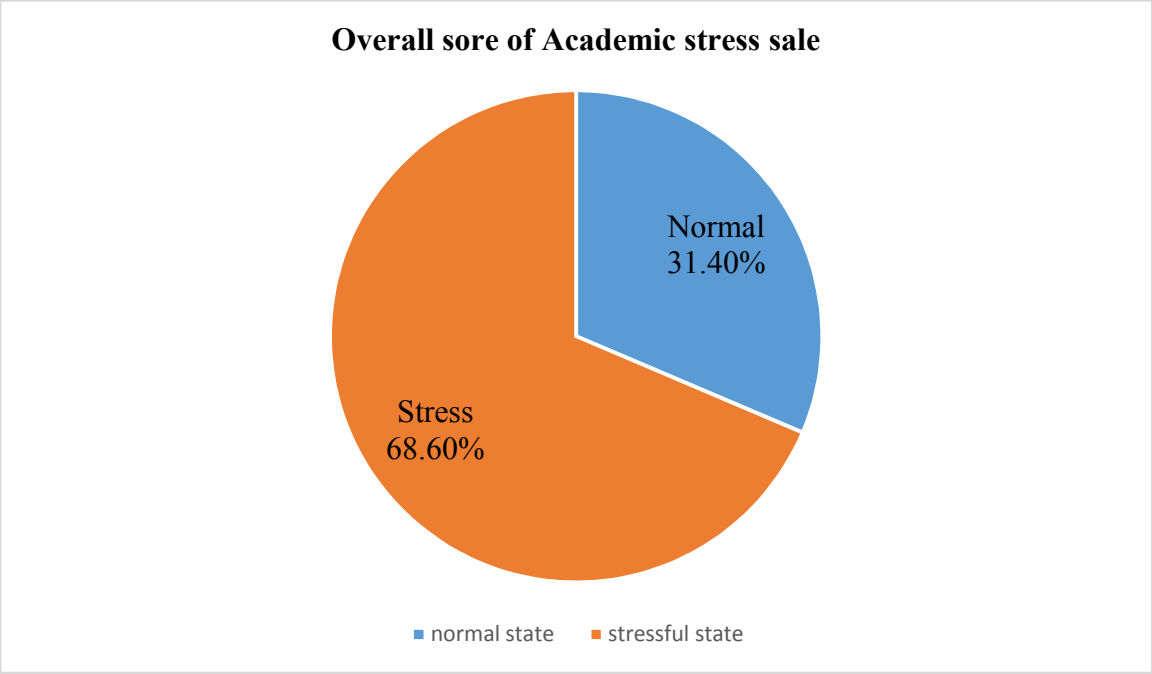


Figure-17: Overall sore ASS according to respondents

Among 79 participant's overall response in five category of ASS 31.40% (n=25) was normal state and others 68.60% (n=54) stressful state. That's means every two students out of three is in stressful state.

4.8Correlation between Gender group of the participants and Components Academic stress sale (ASS) category.(Personal inadequacy, Fear of Failure, Interpersonal difficulties with Teachers, Teacher – Pupil Relationship/ Teaching Method and Inadequate Study Facilities.):

H_0: There is no association between Gender group of the participants and Components Academic stress sale (ASS) category. (Personal inadequacy, Fear of Failure, Interpersonal difficulties with Teachers, Teacher – Pupil Relationship/ Teaching Method and Inadequate Study Facilities.)

H_a: There is no association between Gender group of the participants and Components Academic stress sale (ASS) category. (Personal inadequacy, Fear of Failure, Interpersonal difficulties with Teachers, Teacher – Pupil Relationship/ Teaching Method and Inadequate Study Facilities.).

Test assumption:

1. Two continuous variable
2. Normally distributed
3. Presence of linear association

Level of significance (P value < .05)

In between among the 79 participant's gender and five domains of ASS Pearson's R value was observed. Pearson's R value for four domains PI .056, FOF .198, IDTT .187, TM .118, ISF .051 and Approximate Significance (P-value) is 0.623, 0.080, 0.100, 0.299, and 0.657. All 5 domains did not established significant relationship with gender. That means Null-hypothesis was accepted and Alternative hypothesis was rejected. So the result was not significant that indicate that there didn't have strong Correlation between gender and stress of the five domains of academic stress scale (ASS).

Table 7. Correlation check.

Academic stress sale (ASS)	Pearson's R	Approximate Significance (P-value)	Significance
Personal inadequacy (PI)	.056	0.623	Not significant
Fear of Failure (FOF)	.198	0.080	Not significant
Interpersonal difficulties with Teachers (IDTT)	.187	0.100	Not significant
Teacher – Pupil Relationship/ Teaching Method (TM)	.118	0.299	Not significant
Inadequate Study Facilities (ISF)	.051	0.657	Not significant

4.9Correlation between of the participant's age and Components Academic stress sale (ASS) category. (Personal inadequacy, Fear of Failure, Interpersonal difficulties with Teachers, Teacher – Pupil Relationship/ Teaching Method and Inadequate Study Facilities.):

H_0: There is no association between age group of the participants and Components Academic stress sale (ASS) category. (Personal inadequacy, Fear of Failure, Interpersonal difficulties with Teachers, Teacher – Pupil Relationship/ Teaching Method and Inadequate Study Facilities.)

H_a: There is no association between age group of the participants and Components Academic stress sale (ASS) category. (Personal inadequacy, Fear of Failure, Interpersonal difficulties with Teachers, Teacher – Pupil Relationship/ Teaching Method and Inadequate Study Facilities.).

Test assumption:

1. Two continuous variable
2. Normally distributed
3. Presence of linear association

Level of significance (P value < .05

In between among the 79 participant's gender and five domains of ASS Pearson's R value was observed. Pearson's R value for four domains PI .093, FOF .024, IDTT .079, TM .094, ISF .045and Approximate Significance (P-value) is 0.416, 0.833, 0.488, 0.410, and 0.696. All 5 domains did not established significant relationship with gender. That means Null-hypothesis was accepted and Alternative hypothesis was rejected. So the result was not significant that indicate that there didn't have strong Correlation between gender and stress of the five domains of academic stress scale (ASS).

Table 8. Correlation check.

Academic stress sale (ASS)	Pearson's R	Approximate Significance (P-value)	Significance
Personal inadequacy (PI)	.093	0. 416	Not significant
Fear of Failure (FOF)	.024	0.833	Not significant
Interpersonal difficulties with Teachers (IDTT)	.079	0.488	Not significant
Teacher – Pupil Relationship/ Teaching Method (TM)	.094	0. 410	Not significant
Inadequate Study Facilities (ISF)	.045	0.696	Not significant

CHAPTER – V DISCUSSION

In researching whether the students at the final years in BHPI feel stress in case of managing academic state of affairs, the findings provided stunning data. The 40 questions are categorized into five divisions and the findings present mixed responses from the 79 respondents

The pervasiveness of saw stress is by all accounts high among clinical understudies, which will in general influence their scholastic exhibitions as well as all parts of wellbeing and the comparable discoveries as the recurrence of stress appears to be extensive with little distinction among guys and females noticed (Babar et al, .2004). This review concerned stress of clinical understudies and tracked down that those 7.80% was no stress, 19.10% was slight stress, 25.50% was moderate stress, 26.70% was high stress, and 20.90% was outrageous stress as per ASS. Then again a cross-sectional review was directed at a College of Medicine in Saudi Arabia in 2011 saw that the complete pervasiveness of stress was 63%, and the predominance of serious stress was 25% (Abdulghani et al., 2011). Other review discovered just female clinical understudies and tracked down that 82% had moderate degree of stress as indicated by PMSS (Perceived Medical School Stress Scale), 6% had undeniable degree of stress (Farzana et al., 2016). The predominance of stress was higher ($p<0.5$) among females (75.7%) than among guys (57%). One more review was led at Dhaka Medical College during the time of April 2009 tracked down that more than 33% (34.6%) had gentle stress, (39.8%) moderate stress and around one fourth (24.9%) was experiencing extreme stress as per Kessler 10 Psychological pain scale (Sajid et al., 2015).

An alarming finding in this study was the large percentage of the subjects (68.60%) who reported elevated levels of stressful symptoms as they were final year of their health sciences graduate programs. This percentage is higher than reported in other recent research where 14,175 students at 26 campuses at public and private universities, these investigators found that the prevalence of positive screens was 17.3% for depression, 7% for generalized anxiety, and 6.3% for suicidal ideation. In our study, 4% of students report suicidal ideation. Further, 28% of the participating students had elevations in

anxiety, and correlational analyses indicated that anxiety and depression were highly associated (Eisenberg et al. 2013). Poor mental health can interfere with functioning, including the ability to fully engage in everyday life and academic performance (Hardeman et al., 2015). Therefore, screening for depression and anxiety in graduate health sciences students could facilitate identification and early intervention for these problems. Early evidence-based management of mental health disorders in health sciences students is critical as these problems have been associated with substance abuse, decreased compassion, and overall poorer health in medical students (Hardeman et al., 2015).

Some study's findings; as they found those continuing students in their final year of study also experienced higher levels of stress. This posits that the perceived academic stress is not only dependent on the year but also the nature of the course of study, for example, medical students had higher levels of stress from course requirements plausibly caused by a combination of academic and clinical work (Shaikhet et al., 2004).

Daily academic hassles were reported to be the most stressful. This finding disagrees with findings for example from (Zeidner, 1992), who used the same instrument and reported that students experienced most stress from academic overload and academic evaluation procedures. The present study's findings agreed with previous findings of (Nakalema & Ssenyonga, 2013) who also reported daily academic hassles as the most stressful among university students. Unexpectedly, personal problems such as perceived prejudice, religious activities, relationship problems, and medical problems were found to be the least stressful factor in the academic environment. The least salient stressors among university students were personal, familial, social, and administrative factors (Stowell, 2003).

The stress level in medical students is increased during academic examination and the label "academic examination stress" covers a wide range of situations that may have very different psychological and immunological consequences (Nakalema & Ssenyonga, 2013). Academic examinations in medical students are stressful enough to produce changes in blood stress and blood cells parameters caused by academic examination led

to significant changes in hematological variables (Qureshi et al., 2002). The general impression that there is considerable amount of stress found among the occupational therapy students (Sajjan & Krupa, 2005).

Among study habits of university students, motivation was identified as the most commonly used study habit. Study motivation was found to be a positive influence on general study habits of students. Most students display extrinsic motivation for obtaining good grades (Crede & Kuncel, 2008). Motivation indicators measured in this study included not giving up on a difficult assignment, enjoying learning, and belief in the ability to obtain better grades, and others. Motivation may be the most commonly identified because at the university, students are motivated to study hard so that they can get good jobs and eventually have a better life (Ang & Huan, 2006).

Studying a chapter as a study habit reflected the student's ability to do independent study through personal reading of textbooks and other academic materials beside the lecture notes. Studying a chapter was the least used study habit in this study and confirms previous study findings that students had passive reading strategies like rote memorization and reviewing texts without knowing or understanding what one is reading (Gettinger & Seibert, 2002). Undergraduate students had limited information-seeking techniques exemplified by only relying on reading their lecture notes for final examinations and their textbooks for completing assignments. However, at university level, students are expected to do independent study to enable them complete course work assignments with little or no help and enhance their knowledge base on the subject matter (Crede & Kuncel, 2008).

Female students were found to have relatively better study habits than the male students with statistically significant differences observed as per organizing time. These findings affirm previous findings where females had better study habits. Females have better time management skills with regards to control of time available, planning and organizing tasks and time control. Female students were also more recognized for taking good lecture notes, proof reading work, and having the ability to recall more facts from lectures than the male students (Suneeta et al., 2010).

Students with high CGPA/GPA, as expected, scored highest on study habits. Several research findings have continuously expounded on the fact that high achievers have better study habits than low achievers, which explains their continuous good academic performance. This is because study habits are positively related to the academic performance of students (Aluja & Blanch, 2004). In addition, the ability of students to employ appropriate study habits influences how much they are able to recall and accurately demonstrate during a test or examination, which is the yardstick of academic performance. Therefore, students with poor study habits can benefit from study habit training on goal setting, prioritization, note taking, and reading skills. There were several predictors of academic performance of university students considered in this study. Students with GPA/CGPA 4.40-5.00 were found to have better study habits than the other GPA/CGPA categories. This study finding confirms previous research that study habits positively correlate with academic performance (Aluja & Blanch, 2004). Furthermore, students with particularly higher GPA were found to have better study habits than those with lower CPA.

One study findings on academic stress, study habits and academic performance. First was that the results were based on a small sample of undergraduates. The researcher received 196 completed questionnaires from the respondents with 58.1% response rate. Also some respondents such as the third year and fifth year Bachelor of Medicine and Bachelor of Surgery students, fourth year Bachelor of Medical Laboratory Science, and Bachelor of Pharmacy students who were all in their clinical years and research semester. As a result, generalization to other universities cannot be made basing on this study prediction unless the traits are similar to target population. Finally, issues related to academic stress, study habits, and academic performance are assumed to also affect all university students including postgraduate students (Nakalema & Ssenyonga, 2013).

Academic stress in medical students may be influenced by an interaction among motivation, school grades, depression, and personality. Therefore, strategies to reduce academic stress in medical students should take into consideration the importance of these factors. Increasing motivation may occur through interventions against stress and depression. Moreover, appropriate stress management may help students to become more

motivated. Screening students once a year with self-report measures that evaluate stress, depression, and motivation may be helpful. This would identify students in need of individual counseling for stress management. Furthermore, as the number of students suffering from significant levels of stress is expected to be high, universal interventions may also be beneficial. Future studies are warranted regarding the interaction between motivation and depression (Kim et al., 2012).

5.1 Personal Inadequacy: The second highest Level of Stressful Area

In this first category, the paper tries to judge whether the learners face stressful situation in case of dealing with personal maladjustment with the formal study. This category justifies data on several key areas, such as; a. Teachers' high expectation on students, b. Poor interest in subjects, c. The teachers' unfriendly attitude towards the students, and d. lack of concentration, of self – confidence and worriedness about exams etc. In this category, the 161 responses are speculated as 'Extreme Stress' implying that the learners feel more stress in dealing with personal state of affairs. It implies that they cannot easily cope with the mode of graduate level of study as this level projects totally different style of learning unpracticed in the secondary and higher secondary levels in Bangladesh. Upon finishing this level, a student moves to the job field for earning livelihood that poses pressure to them as the maladjustment with the syllabus, routine, self-paced learning threaten them impliedly to a future of uncertainty at a certain stage. The grand total of 1264 projects this ideation true which exceeds the median level of Stress point (1525) for this study. Other study shows that The grand total in this area is of 854 projects this ideation true which exceeds the median level of Stress point (704) for this study which was most stressful area (Phillips et al., 2020)

5.2. Fear of failure: The highest Level of Stressful Area

In this first category, the paper tries to judge whether the learners face stressful situation in case of dealing with personal maladjustment with the formal study. This category justifies data on several key areas, such as; a. The teachers give value of student's ideas, b. Conflict with friend's/college authorities, c. Teachers give more punishment in the class, and d. Worry about results after examinations, e. Biased attitude of the teacher etc.

In this category, the 143 responses are speculated as 'Extreme Stress' and 184 responses are speculated 'High Stress' implying that the learners feel more stress in dealing with academic situation then personal affair state. It implies that they cannot easily cope with the mode of graduate level of study as this level projects totally different style of learning unpracticed in the secondary and higher secondary levels in Bangladesh. Upon finishing this level, a student moves to the job field for earning livelihood that poses pressure to them as the maladjustment with the syllabus, routine, self-paced learning threaten them impliedly to a future of uncertainty at a certain stage. The grand total of 1546 projects this ideation true which exceeds the median level of Stress point (1264) for this study. Other study shows that The grand total in this area is of 854 projects this ideation true which exceeds the median level of Stress point (732) for this study which was second most stressful area (Phillips et al., 2020)

5.3 Teacher- Pupil Relationship/ Teaching Method: An Addressable Area

This category must not be remained untouched from the discussion. This area reveals several stunning reports that the frequency of (Moderate Stress: High Stress: Extreme Stress) is (29:28:17) and the grand total point for this fifth category is 1457 that reveals that most of respondents (470 out of 632 respondents in ratio 74.36%) feel more than median stress in their graduate level owing to the inadequacy of study facilities. This area covers, a. inadequate subject knowledge of the teachers, b. inadequate study materials, c. inadequate lab and library facilities, d. difficulty in grasping subject matter etc. This is a revelation that the students face institutional barrier as the institutions cannot provide with requisite number of qualified teachers, quality study materials and various lab as well as library facilities which are integral part for a graduate level student to gain knowledge on various arenas. Other study shows that The grand total in this area is of 854 projects this ideation true which exceeds the median level of Stress point (652) for this study which was most lowest stressful area (Phillips et al., 2020) and did not cross median but in this study it was above the median which is 1457.

5.1 Limitations

There were a number of limitations and barriers in this research project which had affect the accuracy of the study, these are as follow:

There was little evidence to support the result of this project in the context to Bangladesh. A convenience sampling was used that was not reflecting the wider population under study. The research project was done by an undergraduate student and it was first research project for his. So the researcher had limited experience with techniques and strategies in terms of the practical aspects of research. As it was the first survey of the researcher so might be there were some mistakes that overlooked by the supervisor and the honorable teacher

CHAPTER-VI: RECOMMENDATION AND CONCLUSION

6.1 Conclusion

In this study we found 68.60% of final year students having stress which is an alarming situation. It has been stated that young rehabilitation professional should be given the same care and support that we expect them to provide to their patients. The findings of the research on 79 participants' that the final year of student's experience stress that culminates to the degree of Extremity in most of the cases which the paper finds to be true as the participant's responses scored higher than median score level of stress (1264) in all five categories (personal inadequacy, fear of failure, Teacher – Pupil Relationship/ Teaching Methodology, interpersonal difficulties with teachers and inadequate lab and library facilities). It implies that the arrangement of educational providence, the way of disseminating lessons, provision of teaching aids and materials and the services provided by the teachers as well as institutions cannot provide a congenial atmosphere of effective learning as well as secured future which addresses being academic stress that a learner is encountering due to our poor arrangement of educational and institutional systems Thus, the research proves that the learners face pressure in the final year of study due to the institutional lack of proper management, teachers' incompetence or their non co – operation as well as the learner's inability for interpersonal communication development. Along with the five categories of Academic Stress Scale, all categories experience more than median stress that needs to be addressed in order to retain smooth maintenance of study from the part of the students. The same should be extended to rehabilitation professional students in order to promote resilience and personal fulfillment and for enhancement of professionalism and patient care. These calls for in house counseling services and mentorship program at medical colleges for early detection and find out solve for those problems so that future rehabilitation professional can concentrate on their studies and become a better doctor. Therefore, an effective system for the prediction of the development of depression in medical students needs to be developed and interventions aimed at reducing the incidence of depression needs further research. In order to ensure stress free rehabilitation professional of education it is recommended that:

1. A counseling cell needs to be established in the institutions that aims at identifying and mentoring the case of personal inadequacy,

2. The institution needs to address the cultural, social barriers a student pose at the very entry of tertiary level to guide them so that they can gradually cope with the new atmosphere,

3. The authority should focus on the arrangement of teaching materials, texts, teacher training as learners face stress in the shortage of mentioned elements.

6.2 Recommendation

The aim of the study was to assess the stress of final year's students of health professional students. Though the study had some limitations but investigator identified some further step that might be taken for the better accomplishment of further research. The main recommendations would be as follow:

Find out cause of the academic stress, that mean what are the reason students feel so much pressure during academic activities.

The random sampling technique rather than the convenience sampling technique would be chosen in further in order to enabling the power of generalization the results.

The duration of the study was relatively short, so in future wider time would be taken for conducting the study.

Investigator used 79 participants as the sample of this study, in future the sample size would be more.

In this study, the investigator took the participants only from the one selected institute BHPI savar as a sample for the study. So for further study investigator strongly recommended to include the all institute of health science all over the Bangladesh to ensure the generalize ability of this study.

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APPENDICES

মৌখিক সম্মতি

আসসালামু আলাইকুম/ □□□,

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সাক্ষাৎকার গ্রহণকারীর স্বাক্ষর এবং □□□□ .....

Inform consent

Assalamu Alaikum/ Adab,

I am Md. Jonaied Alam; I am conducting this thesis for my B.Sc. In Physiotherapy program titled "**Factors Influencing Mental Health of the Final-year Students at a Rehabilitation Profession Institute in Bangladesh.**" by this I would like to know about academic factors which influence mental health of health professional students. Now I want to ask some personal and academic related question. This will take approximately 15-20 minutes.

I would like to inform you that this is a purely academic study and will not be used for any other purpose. Your participation in the research will research will have no impact on your present or future treatment in the area. All information provided by you will be treated as confidential and in the event of any report or publication it will be ensured that the source of information remains secret.

Yours participation in this study is voluntary and you may withdraw yourself at any time during this study without any negative questions. You also have the right not to answer a particular question that you don't like or do not want to answer during interview.

If you have any query about the study or your right as a participant, you may contact with me and/or my research supervisor, Assistant Professor Muhammad Millat Hossain, Department of physiotherapy, Bangladesh Health Professions Institute (BHPI), CRP-Savar, Dhaka-1343.
So, may I have your consent to proceed with the interview?

Yes Δ No Δ

Signature and date of the Participant …….

Signature and date of the Interviewer ……

Appendix - B

প্রশ্নাবলী (□□□□)

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□□□□□	কোন ধ□□ □□□□□ □□ □□।	□□□□ □□□ □□□□□ □□ □□।	মোটামুটি □□□ □□□□□ □□ □□।	বেশি ধ□□ □□□□□ □□ □□।	□□□□ বেশি ধ□□ □□□□□ □□ □□।
1. শিক্ষক খ□□ অতিরিক্ত □□□ দেয়।	□	□	□	□	□
2. □□□□□□□ □□□□ আগ্রহ □□ □□□□ □□□□ □□□।	□	□	□	□	□
3. □□□□□□□□□ □□□□□□□ অগ্রগতি সম্পর্কে □□□□□□ □□□।	□	□	□	□	□
4. শিক্ষক আন্তরিক □□ □□□।	□	□	□	□	□
5. অধ্যয়নের স□□ □□□□□□□ a □□□□ □□।	□	□	□	□	□
6. অধ্যয়ন ব□□ সমস্ত □□□□□ □□□□ □□□□ □□□।	□	□	□	□	□
7. পরীক্ষা নি□□ দুশ্চিন্তা □□□□।	□	□	□	□	□

8. আত্মবিশ্বাসের অ□□ □□□।	□	□	□	□	□
9. শিক্ষকরা অ□□□□□ পরামর্শ গুরুতব ন□ □□□□।	□	□	□	□	□
10. বন্ধু/ □□□□ কর্তৃপক্ষের স□□□ দ্বন্দ্ব □□□।	□	□	□	□	□
11. শিক্ষকরা ক্লাসে বেশি শাস্তি দি□□।	□	□	□	□	□
12. পরীক্ষার প□ □□ি□□ সম্পর্কে চিন্তা ব□□□।	□	□	□	□	□
13. কোন বি□□□ বিস্তারিত ব্যাখ্যা জ□□□□ শিক্ষককে জিজ্ঞাসা □□□□ দ্বিধা ক□□□।	□	□	□	□	□
14. শিক্ষকের পক্ষপাত □□□□□ □□□□□।	□	□	□	□	□
15. □□□□□/ হোস্টেলে অধ্যয়নের জন্য পর্যাপ্ত স্থ□□□□ □□ রুম □□ □□□□□।	□	□	□	□	□
16. পরীক্ষার জন্য নি□□□□ প্রস্তুতি নি□□ □□ □□□□ □□ □□□□□।	□	□	□	□	□
17. ক্লাসে আত্মবিশ্বাসের অ□□□ □□□।	□	□	□	□	□
18. শিক্ষকদের স□□□ দেখা স□□□ □□□□□□□ □□□□ □□□।	□	□	□	□	□
19. শিক্ষক শিক্ষার্থীদের আর্থ-স□□□□□ অবস্থা দেখে নি□□□ □□□□।	□	□	□	□	□

20. পাঠ্যক্রমের [illegible]					
21. পরীক্ষার প্রশ্নপত্র কঠিন [illegible] যথার্থ না [illegible]।					
22. [illegible] অ্যাসাইনমেন্ট সম্প [illegible] [illegible]।					
23. শিক্ষক এ[illegible] শিক্ষার্থীদের মধ্যে যোগাযোগের অভাব [illegible]।					
24. শিক্ষকের এ[illegible] (বিরক্তিকর বা ক্লান্তিকর) লেকচার এ[illegible]।					
25. ক্লাসে পর্যাপ্ত [illegible]।					
26. সহপাঠীদের মধ্যে পারস্পরিক সাহায্যের অভ[illegible]।					
27. [illegible] অন্য [illegible] [illegible]।					
28. প্রকাশ্যে কথা [illegible] (প্রাতিষ্ঠানিক বি[illegible])।					
29. শিক্ষক দ্রুত [illegible] অসুস্পষ্টভাবে [illegible]।					
30. শিক্ষকদের স[illegible] শিক্ষার্থীদের প্রতি স[illegible] আগ্রহের [illegible]।					
31. [illegible] পরীক্ষার [illegible] বেশি।					
32. হীনমন্যতার অ[illegible]।					

33. [illegible] ব্যর্থতা নিে [illegible]	□	□	□	□	□
34. [illegible]	□	□	□	□	□
35. [illegible] বহির্ভূত বা অসম্পূর্ণ [illegible] প্রকিয়া.	□	□	□	□	□
36. শেষ মুহূর্তে পরীক্ষার প্রস্তুতি নেওয়া।	□	□	□	□	□
37. [illegible]	□	□	□	□	□
38. [illegible]	□	□	□	□	□
39. শিক্ষকের [illegible]	□	□	□	□	□
40. অপর্যাপ্ত ল্যাব [illegible]	□	□	□	□	□

Questions (English)

Category A -Demographic information

[Please put √ mark to the most appropriate answer]

1- Your marital status

- Unmarried
- Married

2- What is your family type?

- Single family
- Joint family

3- What is the number of your family members?

- Less than or equal to 5
- More than 5

4- What is the monthly income of your family?

…….taka (in word……..taka only per month

5- Where do you dwell?

- Rural
- Urban
- Semi-urban

6- Do you have any physical disability?

- No.
- Yes

7- Did you have any mental health problem / diagnosis before or after starting your course at BHPI?

- No.
- Yes

Category B- Academic Stress

This scale consists of 40 items describing the stress in your institution/ college life from the various sources.

Statement	No Stress	Slight Stress	Moderate Stress	High Stress	Extreme Stress
1. Teachers make too many extra demands on students.	0	1	2	3	4
2. Poor interest in some subjects.	0	1	2	3	4
3. Progress reports to parents	0	1	2	3	4
4. The teacher is not humor towards us.	0	1	2	3	4
5. Lack of concentration during study hours.	0	1	2	3	4
6. Difficulty in remembering all that is studied.	0	1	2	3	4
7. Worrying about the examinations.	0	1	2	3	4
8. Lack of self-confidence.	0	1	2	3	4
9. The teachers do not listen to our ideas.	0	1	2	3	4
10. Conflict with friends/college authorities.	0	1	2	3	4
11. Teachers give more punishment in the class.	0	1	2	3	4
12. Worry about results after examinations.	0	1	2	3	4
13. Hesitate to ask the teacher for detailed explanation.	0	1	2	3	4

14. Biased attitude of the teacher.	0	1	2	3	4
15. Inadequate space or room for study at home.	0	1	2	3	4
16. Not knowing how to prepare for the examinations.	0	1	2	3	4
17. Lack of assertiveness (confidence) in the class.	0	1	2	3	4
18. Lack of opportunity to meet teachers.	0	1	2	3	4
19. Teacher shows socio-economic status on students.	0	1	2	3	4
20. Slow in getting along with the curriculum.	0	1	2	3	4
21. Exam papers are tough and not valued well.	0	1	2	3	4
22. Unable to complete the assignment in time.	0	1	2	3	4
23. Lack of communication between teachers and students.	0	1	2	3	4
24. Monotonous (boring or tedious) teaching style by the teacher.	0	1	2	3	4
25. Not enough discussion in the class.	0	1	2	3	4
26. Lack of mutual help among classmates.	0	1	2	3	4
27. Lack of fluency while speaking the language other than the mother tongue.	0	1	2	3	4
28. Difficulty in public speaking.	0	1	2	3	4
29. The teacher is fast and does not use blackboard legibly.	0	1	2	3	4
30. Teachers lacking interest in students.	0	1	2	3	4

31. Examination syllabus is too heavy in some subjects.	0	1	2	3	4
32. Feeling of inferiority.	0	1	2	3	4
33. Unable to discuss Academic failures with parents.	0	1	2	3	4
34. Not able to grasp the subject matter.	0	1	2	3	4
35. Incomplete and confusing study material.	0	1	2	3	4
36. Eleventh hour preparation for the examinations.	0	1	2	3	4
37. Importance of the subject matter.	0	1	2	3	4
38. Difficulty in adjusting with opposite gender.	0	1	2	3	4
39. Inadequate subject knowledge of the teacher.	0	1	2	3	4
40. Inadequate lab and library facilities.	0	1	2	3	4

Date: 15 June 2021

The Chairmen

Institutional Review Board(IRB)

Bangladesh Health Professions Institute (BHPI)

CRP-Savar, Dhaka-1343, Bangladesh

Subject: Application for review and ethical approval.

Sir,

With due respect and humble submission to state that I am Md. Jonaied Alam, student of 4th Professional B.Sc. in Physiotherapy at Bangladesh Health Professions Institute (BHPI). This is a 4(four) year full time course. Conducting thesis project is partial fulfillment of the requirement for the degree of B.Sc. in physiotherapy. I have to conduct a thesis entitled, **"Factors That Influence on Mental Health of Health Professional Students"** under the supervision of Muhammad Millat Hossain, Assistant Professor, Department of Physiotherapy, BHPI, CRP-Savar, Dhaka-1343. The purpose of this study is to explore Factors That Influence on Mental Health of Health Professional Students. I would like to assure that anything of my study will not be harmful for the participants. Informed consent will be received from all participants, data will be kept confidential.

I, therefore pray and hope that your honor would be kind enough to approve my thesis proposal and give me permission to start data collection and oblige thereby.

Sincerely,

Md. Jonaied Alam

15.06.21

Md. Jonaied Alam

4th professional B.Sc. in Physiotherapy

Roll: 32, Session: 2015-16, ID:112150303

BHPI, CRP, Savar, Dhaka-1343, Bangladesh

Recommendation from the thesis supervisor:

Muhammad Millat Hossain
Assistant Professor
Department of Rehabilitation Science
BHPI, CRP, Savar, Dhaka

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

Ref: CRP/BHPI/IRB/06/2021/460

Date: 15th June 2021

Md. Jonaied Alam
4th year B.Sc. in Physiotherapy
Session: 2015-16, Student ID: 112150303
BHPI, CRP, Savar, Dhaka-1343, Bangladesh

Subject: Approval of the thesis proposal "Factors That Influence on Mental Health of Health Professional Students" by ethics committee.

Dear Md. Jonaied Alam,
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. The Following documents have been reviewed and approved:

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

The purpose of the study is to find out the nature of practice of Physiotherapy in Bangladesh. The study involves use of a questionnaire to explore that may take 20 to 30 minutes to answer the questionnaire and there is no likelihood of any harm to the participants. Data collectors will receive informed consents from all participants. Any data collected will be kept confidential. The members of the Ethics committee approved the study to be conducted in the presented form at the meeting held at 8:30AM on 1" March, 2020 at BHPI (23 IRB Meting).

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

Best regards,

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

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