Mental health of garment factory personnel in Bangladesh

The thesis submitted to the Department of Clinical Psychology, University of Dhaka, in partial fulfillment of the requirements for the degree of M. Phil. in Clinical Psychology

Submitted by
Sadeka Hossain
M Phil (Part II)
Registration No: 217
Session: 2013-2014

Department of Clinical Psychology
University of Dhaka, Bangladesh

Mental health of garment factory personnel in Bangladesh

Sadeka Hossain
M Phil (Part II)
Registration No: 217
Session: 2013-2014

Department of Clinical Psychology
University of Dhaka, Bangladesh

Dedicated to

My parents and My Son

Approval Sheet

This is to certify that I have read the thesis entitled "Mental health of Garments Factory Personnel in Bangladesh" submitted by Sadeka Hossain in partial fulfillment of the requirement for the degree of M Phil in Clinical Psychology, University of Dhaka and the research was carried out by her under my supervision and guidance.

Supervisor

Dated, Dhaka
3rd April, 2022

Dr Mohammad Mahmudur Rahman
Professor
Department of Clinical Psychology
University of Dhaka, Bangladesh

ACKNOWLEDGEMENT

First of all, I would like to express my deep gratitude to my respected supervisor Dr Mohammad Mahmudur Rahman, Professor, Department of Clinical Psychology, University of Dhaka. His guidance, direction, constructive suggestion and feedback helped me to carry out this research.

I want to convey my gratitude to all of my teachers at the Department of Clinical Psychology, University of Dhaka. Without the thoughtful inputs by honorable teachers, such work couldn't be possible. I must mention about respected teacher, Mst Nazma Khatun, Chairman, Department of Clinical Psychology, University of Dhaka, to precisely review the detail of the research and provided a valuable opinion to make it scientifically sound work.

I would like to thank the authorities and participants of garments factories in Dhaka and Chittagong. Their cooperation was crucial to complete the research. The research team along with the compliance committee of garments enormously worked hard all through the data collection procedure to ensure the authenticity of data collection.

My special thanks to my family and husband for their never-ending encouragement to continue the journey despite of various unavoidable hassles during the research work.

Dated, Dhaka. 3rd, April, 2022 Sadeka Hossain

INDEX

LIST OF TABLES

LIST OF FIGURES

ABBREVIATIONS

APA	American Psychological Association
BGMEA	Bangladesh Garments Manufacturer and Exporter Association
Brief COPE	Brief Coping Orientation to Problem Experienced
CMD	Common Mental Illness
DALY	Disability Adjusted Life Year
DASS 21	Depression Anxiety Stress Scale 21
DSM5	Diagnostic and Statistical Manual 5
GBD	Global Burden of Disease
LEAPS	Lame Employment Absenteeism and Presentism Scale
MDD	Major Depressive Disorder
QOL	Quality Of Life
RMG	Ready Made Garments
SMI	Severe Mental Illness
WFMH	World Federation of Mental Health
WHO	World Health Organisation

Abstract

ABSTRACT

Background: Impaired mental health conditions in the workplace reduce the productivity of the workers, officials and organization as well. In Bangladesh, currently, more than four million workforces involved in garments factories and these workplaces concentrated mainly in Dhaka and Chittagong. This female predominant sector contributes more than 80% of export in our country. Psychological wellbeing, Stress and Depressive illness negatively influence the productivity of garments personal. There are several local pieces of research conducted in past to explore specific issues of mental health of garments workers only. The objective of the study is to assess the mental health status of the garments factory personnel including officials, supervisors and workers in a quantitative manner. **Methods:** This cross-sectional study conducted among 300 participants of 06 different garments factories located in Dhaka and Chittagong district. The data collected with the help of 1) Sociodemographic questionnaire 2) Depression Anxiety and Stress Scale (DASS-21) 3) Brief COPE scale 4) Psychological wellbeing scale 5) Lam Employment Absenteeism and presentism Scale (LEAPS) and the statistical analysis was done by SPSS 16 version. The DASS-21, Brief COPE and Psychological wellbeing scales are locally adapted and validated scales along with good psychometric properties. **Results:** The overall mean of the total psychological wellbeing score of garments employee found 212.12 and among them, 28.3% were below the normal mean score (normal mean 216). The 23.3% (n=70) of garments personnel having at least one or more mental health conditions like depression, anxiety or stress. The mean score of maladaptive coping techniques is 20.99 (normal mean 30) and the mean scores of adaptive coping techniques are 50.88 (normal mean 40). The study also found that 16% of the employee having presentism and 18% showed absenteeism (within the last 02 weeks of the interview).

It revealed that for personnel who have been suffering from depression; anxiety and stress, their total psychological wellbeing mean score and productivity are significantly ($p<0.001$) lower than healthy colleagues. The adaptive stress-coping positively (correlation coefficient= 0.590) and maladaptive stress-coping inversely (correlation coefficient= - 0.300) correlated with total psychological wellbeing. The employee who practices maladaptive stress coping, having significant ($p<0.001$) lower productivity than their counterpart and such type of stress coping significantly ($p<0.001$) higher among the low-income group comparing others. **Conclusion:** The study found that productivity is influenced by the mental health conditions of the employee of Bangladeshi garments. So, the provision of mental health assessment and care in the garments sector can play the role to raise the productivity of garments personnel.

Chapter 1

INTRODUCTION

Mental health is an important determinant of the wellbeing of a person and mental health issues negatively influence a person's personal, social and professional life. Bangladesh is a lower-middle-income country of almost 17 million people, where national growth hugely depends on the garments sector. After the Rana Plaza disaster, the western part of the globe has been forcing Bangladesh to ensure health and safety in the garments sector and since then most of the local garment factories following the compliance guideline. In midst of physical health compliance practice, mental health is the area that is unnoticed by the policymakers in this garments sector. But this issue has a great impact on the productivity of the worker, officials or overall organization. Currently, there are no available local pieces of evidence of Bangladesh that depicts the mental health status of garments personnel though various researches conducted in South East Asia and other parts of the world in this regard. With this view, the researcher segmented the mental health concept into four domains: Psychological wellbeing, Stress coping ability, Common mental issues (Depression, Anxiety and Stress) and Productivity based on the World Health Organization's (WHO) mental health definition. Following sections will be discussed in detail on these four phenomena for better conceptualization before reaching overall study design, findings and relevant discussion.

BACKGROUND OF THE STUDY

The history of mental health has been evolving from the concept of the demonic procession and Freudian psychoanalysis (an interview technique to detect the remote cause of existing mental abnormality and intervene accordingly) to the era of deinstitutionalization or psychopharmacology and neuroscientific approach (GUEVARA, 1961). Nowadays, with the

advancement of brain research, it is evident that complex neural circuits conduct mental functions and, on the whole, the brain is the seat of the mind (Saleh Uddin & Mashrur Ahmed, 2016). Humane behavior is the complex bidirectional interaction of gene and the environment (Rey, Bella-awusah, & Liu, 2015). Though the concept of mind or mental activity hypothesized in a different part of the globe (Asia, Europe, Arica), Europe is the forerunner of the emergence of brain research, behavioral science and modern mental health concept. The modern concept of mental health was evolved after 1946 and "mental hygiene" was first appeared in English literature in 1843 (Bertolete, 2008). Mental hygiene refers to all the activities and techniques which encourage and maintain mental health. The first mental health international conference was held in 1948 organized by the British Association of Mental Hygiene and at the end of the conference, the "mental hygiene" terminology was replaced by "mental health" (Bertolete, 2008). The journal of psychiatry first published in the USA and UK in the early nineteenth century and the American Psychology Association (APA) and American Psychiatrist association also established in the same decade. In a nutshell, it can be said that the nineteenth century is the era of modern mental health practice in the world, which started to evolve since the eighteenth century.

The World Health Organisation (WHO) defines mental health as "A state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community. WHO globally assess mental health by observing four specific domains in countries and these are: a) effective leadership and governance b) comprehensive, integrated, responsive mental health care service (community-based) c) Promotive and preventive strategies d) Information, evidence and research (WHO, 2017). Among all members of WHO, 72% of countries having national mental health

plan or policy (WHO, 2017). Globally, 1% of health workers involved in mental health and among these worker s, 8% psychiatrist, 7% psychologist, 3% social worker, 1.5% occupational therapist, 43% nurses and 33% others (WHO, 2015). Authorities invest in mental health 2USD for each person in low and middle-income countries and 50USD in high-income countries (WHO, 2015). Regarding promotive strategies of mental health, the majority of measures by the global community focused on awareness program (40%) and among the other leading measures, suicide prevention and school mental health are prevalent (22%) (WHO, 2017).

In the British period (before 1947), the first mental health service in Bangladesh was built near the Central Jail, Dhaka and in 1957 Mental hospital, Pabna was established(S. M.Yasir Arafat, 2019). The central institution of mental health service, training, and research are the National Institute of Mental Health (NIMH), Dhaka which was built in 1992(S. M.Yasir Arafat, 2019). In Bangladesh, school science textbooks having very little information about basic mental health concept than physical health and in medical graduation mental health teaching and training is negligible in comparison with other medical disciplines (Uddin, 2020; Arafat et al., 2016). Even psychiatric nursing in graduation training has the same flaws like less teaching span like medical graduation, recently post-graduation nursing course launched for specialized training on mental health nursing (Arafat, 2019;Uddin, 2020). In 1956, "Psychology" as a graduation course was started first in Bangladesh in Rajshahi University and later in Dhaka University, Chittagong University and Jagannath University consecutively (Sufi et al, 2015). In Bangladesh for every 100000 population, the total number of the psychologist is 0.13 and psychiatrists is 0.12 and for this huge 16 billion peoples' country, the total number of mental health professionals are 1893 (WHO, 2017).

Reviewing the overall mental health concept from ancient period to modern practices, the researcher considered the WHO mental health definition and its four components as the fundamental basis or concept of this study.

STATEMENT OF THE PROBLEM

Mental health of garments personnel in Bangladesh

Due to poverty many rural female migrate from village to city which causes stress, anxiety, restlessness and depression and there should be health and wellbeing intervention to keep them healthy (Akhter et al., 2017). A study conducted among garments worker revealed that, 15% of the workers suffer anxiety, depression and sleep disorder and psychosocial factors significantly correlated to these mental health conditions (Nahian, Rahat, & Yesmin, 2021). Intimate Partner Violence (IPV) and workplace violence (WPV) work as risk factors to develop depressive symptoms among female garments worker (Parvin, Mamun, Gibbs, Jewkes, & Naved, 2018). Apart from mental health issues, RMG workers also suffer from musculoskeletal pain, headache, fever and abdominal pain (Hasan et al., 2021). In the RMG factories, there are few gaps in health care system and these are: lack of skill and qualification among nurses, less attention to health education and promotion, lack of updated clinic facilities according to need, weakness in health care management and insufficiency to respond emergency health condition (BSR, 2014). Unfortunately there is lack of evidences of other employees like supervisors, managers or owners of RMG regarding mental health issues in Bangladesh.

Mental health service in garments in Bangladesh

According to Universal Declaration for Human Rights (UDHR) healthy workplace is a foundational right for the workers (Mia et al., 2020). A system called, "Health Enables Return (HER)" which provides a group of health and financial service in garments and can effectively raise the knowledge and help seeking behaviour in garments factories (Chace Dwyer, Hossain, Bajracharya, & Jain, 2021). The introduction psychosocial counselors at workplace improve the mental health situation in factories (Khan, 2019). Counseling service can reduce workplace harassment among female workers of garments industries (Zaman, 2020). In the low resourced countries like Bangladesh, telepsychiatric services (mobile phone based psychotherapy, treatment of mental disorders) could be a good option to provide mental health service (Akhter et al., 2017). The facility of maternity leave for the unconfirmed female employee provides social and economic security and act as protective factor developing mental health issue like depression (Roy & Rikta,2008.). Reviewing these local evidences regarding mental health interventions, it seems that there is no uniform mental health service throughout the country which explores, detects and provides mental health support to RMG employees of Bangladesh.

Impact of mental health issues on productivity of Bangladeshi garments

Workplace mental health is directly link with productivity of employee and the organization as well. Though there are available global evidences regarding impact of mental health issues over productivity, yet there is gap of researches which explored this important aspect which is crucial for the growth for the RMG sector in this competitive global market.

.SCOPE OF THE STUDY

In Bangladesh the majority of the garments are located in Dhaka and Chittagong and a huge manpower of diverse disciplines work in concert here to achieve the targets of the buyers of different countries. Besides, the quality of excellence among different garments industries is predominantly located in these two areas of Bangladesh. Moreover, the awareness of relevant stakeholders, policy makers and owners of the industries are one of the key factors which act as a persistent force to conduct such type of research in these locations. Furthermore, the employees of all categories are also cooperative to be involved in such scientific exploration which could be an encouraging issue for any researcher. Overall, the positive attitude of the garments authority and employee along with huge number of quality garments factories are the major areas which encourages assessment process from any context.

PRACTICAL CONTRIBUTION

The study will be able to provide a baseline data regarding predominant mental health disorders, psychological wellbeing condition, stress coping abilities and productivity status of garments personnel of Bangladesh. It can be exemplified by the availability of frequency or percentage of the disorders like depression, anxiety and stress and will also provide the pattern of healthy and unhealthy stress coping techniques that are adopted by the employees. Moreover it will provide the information about the productivity in the form of absenteeism and presentism among employee which is related to those above mentioned mental health conditions also. Furthermore, the owner, policy makers or government can take national initiative to install mental health service uniformly throughout the country so that the strong contribution of garments sector could be sustained more efficiently by ensuring wellbeing of the employee.

This study will not only provide the data for the stakeholders, it will also guide the mental health researcher to search for the possible associative or causal factors behind the mental health conditions from qualitative and quantitative perspective. Even can allow researchers to conduct such research in broader area or sample for reviewing the overall findings whether aligned or different from this study and help to identify the gaps in existing research also. In the long run, the pooled research outcome will enable all the relevant professionals to reach a consensus to develop a evidence based mental health guideline for Bangladeshi garments as a whole.

DEFINITION OF THE KEY TERMS

Mental health:

Mental health is a state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community (WHO, 2017).

Psychological wellbeing:

The concept of wellness or psychological wellbeing include six dimensions of wellness are: 1) Autonomy (ability to resist social pressures and to make and pursue one's own decision), 2) Environmental mastery (the capacity to effectively manage one's life and the surrounding world), 3) Personal growth (individual's sense of continued growth and development as a person as well as openness to new experiences), 4) Positive relations with others (the ability to have warm satisfying and trusting relationships with others), 5) Purpose in life-is the belief that one's life is purposeful ad meaningful and 6) Self-acceptance (being able to have a positive evaluation of one's past life) (Joria & Mehta, 2013).

Depression:

Depression is a common mental disorder that presents with depressed mood, loss of interest or pleasure, decreased energy, feelings of guilt or low self-worth, disturbed sleep or appetite, and poor concentration (WHO, 2012). The Diagnostic Statistical Mannual-5 outlines Depressive Disorder or Major Depressive Disorder (MDD) the following criterion to make a diagnosis and these are : 1. Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day, 2. Significant weight loss when not dieting or weight gain, or decrease or

increase in appetite nearly every day, 3. A slowing down of thought and a reduction of physical movement (observable by others, not merely subjective feelings of restlessness or being slowed down), 4. Fatigue or loss of energy nearly every day, Feelings of worthlessness or excessive or inappropriate guilt nearly every day, 5. Diminished ability to think or concentrate, or indecisiveness, nearly every day, 6. Recurrent thoughts of death, recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide. The individual must be experiencing five or more symptoms during the same 2-week period and at least one of the symptoms should be either (1) depressed mood or (2) loss of interest or pleasure .Depressed mood most of the day, nearly every day (APA, 2017).

.

Anxiety:

Anxiety is an emotion characterized by feelings of tension, worried thoughts and physical changes like increased blood pressure (APA) and excessive anxiety and worry (apprehensive expectation), occurring more days than for at least 6 months, about a number of events or activities (such as work or school performance) can be defined as Anxiety Disorder. (APA, 2017)

Stress:

Stress is a usual phenomenon of daily life that acts as a tool of existence and may also influence negatively health. Hans Selye stated that 'Stress is the nonspecific response of the body to any demand '(Butler, 1993). There are various definitions of stress and one of the common types is, "Imbalance between appraisal of environmental demand and individual resources "(Fong, 2008).

Another widely used definition of stress is “The reaction people may have when presented with work demands and pressures that are not matched to their knowledge and abilities and which challenge their ability to cope " (Anandi, Rajaram, Aravind, Sukumar, & Radhika, 2017).

Stress coping:

According to American Psychological Association, stress coping is an action, a series of actions, or a thought process used in meeting a stressful or unpleasant situation or in modifying one’s reaction to such a situation (APA, 2022).

Productivity:

The typical view of productivity is comparing the input with output and in another way, how well a system uses its resource to achieve a goal (Public Health England, 2015). The concept of productivity having two components and these are presentism and absenteeism. Presentism can be defined as decreased productivity and below-normal work quality when physically present at work" (Thompson et al., 2010). On the other hand, absenteeism can be defined as the failure to report for scheduled work (Johns 2010).

RATIONALE OF THE STUDY

The available local studies exclusively conducted among garments worker rather than a different type of positions. It has been found that the garments worker suffers Depression and Anxiety (Mozumder, 2017). They have been facing different types and causes of stress like job

insecurity, bad behavior of a co-worker, communication problem, housing problem, attack by criminals, harassed by police, insufficient allocated time and inability to job demand and responsibility, poor working environment and sexual harassment (Begum, Ali, Hossain, & Shahid, 2011; Ornek & Sevim, 2018; Hoque, 2015). Female workers experience more stress than male and lower-income having a significant relation with stress (Dey & Rahman, 2017). Experience of Verbal and physical abuse is another dimension of stress factors found among garments workers (Siddiqi, 2003). The financial burden is also an important stress factor among them (Mozumder, 2017). Walkability (ability to walk as a means to reach garments or home) of garments worker is an important local issue having an impact on their quality of life (Shumi, Zuidgeest, Martinez, Efroymson, & Maarseveen, 2015). Most of the worker in Dhaka city having a low work-related quality of life (Islam et al., 2014). Among the survivors (garments workers) of the Rana Plaza disaster, 19.6% having poor quality of life following the incident (Alve, 2014). It has been found that absenteeism in garments workers is significantly correlated with employee stress and mental health condition (Hoque & Islam, 2003). A study observed that available psychosocial coinselor's presence in job place reduced stress and anxiety among the workers (Khan & Islam, 2018).

Though these studies explored different mental health domain individually, none included all domain of mental health altogether. Moreover, most of the previous studies conducted among garments worker only. With this view, the researcher explored quantifying the areas as a whole to visualize an overall status

RESEARCH QUESTIONS

General: What is the status of the mental health of garments factory personnel in Bangladesh?

Specific:

1. What is the status of the overall psychological wellbeing of garments factory personnel in Bangladesh as assessed by psychological wellbeing, emotional wellbeing, work-related wellbeing, family wellbeing, social wellbeing, life satisfaction and physical wellbeing?
2. Do garments factory personnel of Bangladesh suffer from Stress, Depression, and Anxiety?
3. What are the stress-coping techniques (adaptive coping and maladaptive coping) applied by garments factory personnel in Bangladesh?
4. What's the status of productivity of garments factory personnel of Bangladesh as assessed by presentism and absenteeism?
5. Does the Psychological well-being of garments factory personnel have any association with Stress, Depression and Anxiety?
6. Does the Psychological well-being of garments factory personnel of Bangladesh have any association with productivity (presentism and absenteeism)?
7. Do coping techniques (adaptive and maladaptive) of garments factory personnel have any association with psychological wellbeing?
8. Do coping techniques (adaptive and maladaptive) of garments factory personnel have any association with Stress, Depression and Anxiety?
9. Do Stress, Depression, and Anxiety of garments factory personnel in Bangladesh associate with Productivity (presentism and absenteeism)?

10. Is there any association between coping techniques (adaptive and maladaptive) and productivity (presentism and absenteeism) among garments factory personnel of Bangladesh?
11. Is there any association between socio-demographic variables of garments factor personnel of Bangladesh with Psychological wellbeing, depression, anxiety, stress, coping techniques (adaptive and maladaptive) and productivity (presentism and absenteeism)?

OBJECTIVES OF THE STUDY

General: To assess the mental health status of garments factory personnel in Bangladesh

Specific:

1. To detect overall psychological wellbeing status (psychological wellbeing, emotional, work-related wellbeing, family wellbeing, social wellbeing, life satisfaction and physical wellbeing) of garments factory personnel in Bangladesh.
2. To detect Depression, Anxiety and Stress of garments factory personnel in Bangladesh
3. To identify the different types of Coping techniques (adaptive and maladaptive) applied by garments factory personnel in Bangladesh.
4. To identify the Productivity status (Presentism and absenteeism) of garments factory personnel in Bangladesh.
5. To detect any association between psychological wellbeing and Depression, Anxiety, Stress.
6. To detect any association between psychological wellbeing and Productivity (presentism and absenteeism).
7. To detect any association between depression, anxiety, stress and productivity (presentism and absenteeism).
8. To detect any association between Stress coping techniques (adaptive and maladaptive) and psychological wellbeing .
9. To detect any association between Stress coping techniques (adaptive and maladaptive) and depression, anxiety, stress.
10. To detect any association between Stress coping techniques (adaptive and maladaptive) and Productivity (presentism and absenteeism).

To find any association between sociodemographic variables and psychological well-being, Depression, Anxiety, Stress, Stress Coping techniques and Productivity (absenteeism and presentism).

Chapter-2

LITERATURE REVIEW

A. MENTAL HEALTH

1.1 Mental health

Mental health can be defined as, "'A state of well-being whereby individuals recognize their abilities, can cope with the normal stresses of life, work productively and fruitfully, and make a contribution to their communities" (WHO, 2003). It's a condition, subject to fluctuations due to biological and social factors, which enables the individual to achieve a satisfactory synthesis of his own potentially conflicting, instinctive drives; to form and maintain harmonious relations with others; and to participate in constructive changes in his social and physical environment (Bertolete, 2008). It also includes the conditions that may evolve problems or marked impairments in daily life which are called mental problems and or disorders. Mental health problems may arise when a person is faced with a much larger stressor than usual and occur as an expected part of normal life and are not mental illnesses (Wei, McGrath, Hayden, & Kutcher, 2017). When faced with these large stressors, everyone experiences strong negative emotions (such as sadness, grief, anger, demoralization, etc.) and these emotions are also accompanied by substantial difficulties in thought, physical and behavioral problems (Wei et al., 2017). Mental disorders are different from mental problems and the definition provided by different organizations in different ways though the core elements are similar. According to American Psychiatric Association, Mental illnesses are health conditions involving changes in emotion, thinking or behavior (or a combination of these). On the other side, the diagnostic manual of psychiatric disorder (APA, DSM5) defines mental disorder as, "A syndrome characterized by clinically significant disturbance in an individual's cognition, emotion regulation, or behavior that reflects a dysfunction in the psychological, biological or developmental processes

underlying mental functioning (APA, DSM5). It can be said that mental health status incorporates different inter-related domains like a person's well-being for a productive life, impaired health conditions for daily life stressors and specific clinical conditions having marked negative impact on functioning life.

Mental health is a part of health condition and the newer concept of "Health" shifted from the earlier concept of "absence of disease or illness" to "wellness or wellbeing" of the person as a whole and eventually, World Health Organization (1948) declares health as "Physical, mental and social wellbeing, not merely absence of disease". Numerous studies revealed that persons having higher wellbeing status are predictive of their higher income, better health and positive events in life (Diener et al, 2002; Marks & Fleming, 1999; Danner et al, 2001; Magnus & Diener, 1991).

1.2 Psychological wellbeing

Wellbeing can be defined as, a dynamic state characterized by a balance between individuals need, ability, expectations and environmental demands and opportunities (Vijaya & Manjula, 2012). Psychological well-being can also be defined as a positive mental state like happiness and the effective functionality of an individual (Deci & Ryan 2008). Happiness evolved from the "hedonic" concept of well-being and the "eudaimonic" model of wellbeing concept indicates effective functionality or purposefulness of work. Recently the paradigm of research trends shifted from the concept of dysfunction or disorder to wellbeing or positive mental health. Other than the hedonic and eudaimonic model, there are other few concepts of psychological well-being like Quality of Life and Wellness (Manderscheid et al., 2010). Carol Ryff later proposed

another concept of wellness which include six dimensions of wellness are: 1)Autonomy (ability to resist social pressures and to make and pursue one's own decision), 2) Environmental mastery (the capacity to effectively manage one's life and the surrounding world), 3) Personal growth (individual's sense of continued growth and development as a person as well as openness to new experiences), 4) Positive relations with others (the ability to have warm satisfying and trusting relationships with others), 5) Purpose in life-is the belief that one's life is purposeful ad meaningful and 6) Self-acceptance (being able to have a positive evaluation of one's past life) (Joria & Mehta, 2013).

Another term used invariably when people talk about wellbeing is Quality Of Life (QOL). According to WHO the quality of life (QOL) can be defined as, "individual's perception of their position in life in the context of the culture and value systems in which they live and about their goals, expectations, standards and concern". Another systematic review concluded that QOL can be defined as a measure of an individual's ability to function physically, emotionally and socially within his or her environment at a level consistent with his or her expectations (Church, 2004).

There are various tools to assess psychological wellbeing globally to adolescent and adult age group. In a systematic review, Steptoe et al (2015) mentioned about 17 tools that can assess various domains of psychological wellbeing like positive affect, emotional awareness, interpersonal communication and personal adaptation. According to Winefield et al (2012), there are 99 measuring tools to assess an adult person's psychological wellbeing and the tools are focused on different areas like physical, mental, social, spiritual, personal etc. In Bangladesh, a psychometric tool is also available, which can assess psychological wellbeing based on seven domains like Psychological, Physical, Work-related, Family, Social, Emotional and Life

satisfaction (Haque & Begum, 2005). The tool has good psychometric properties and can be applied in non-clinical subject to assess overall psychological wellbeing status.

The issue of psychological wellbeing in the workplace has been developed last fifteen to twenty years as physical work converted to mental work and people more involved with mental activity; are more prone to develop psychological pressure more at work (Aryan & Kathuria, 2017). It is now evident from the research findings that, employees' wellbeing is directly linked with work performance (Alvi, 2017). It was found that the employees having high psychological well-being perform better in work (Taneva, 2016). Moreover, psychological wellbeing of employee and business outcome of the organization is correlated with each other (Harter et al, 2003; Wright & Cropanzano, 2004). In another model of performance and workers wellbeing; authors proposed a model which is composed of three domain-like: 1) Job resource 2) Job demand and 3) Resources in life and they mentioned that job resource influence work performance and the latter two impacts on the wellbeing of employee (Darota et al, 2019). The researchers also found that job satisfaction and work performance is positively correlated with worker wellbeing and job control, trust, respect, recognition is significantly correlated with work outcome.

1.3 Impact of mental health problems

The global burden of mental health issues stands within the top ten non-communicable diseases (Kyu et al., 2018). Global Burden of Disease (GBD) implies epidemiological data like morbidity, mortality and risk factors to quantify the impact of any disease or injury. Disability Adjusted Life Year or DALY is a way to measure GBD by evaluating health loss due to illness or injuries (GBD collaborators, 2017). In 2017, among the leading diseases of DALY globally, depression

is in the eleventh position for women, self-harm is the sixteenth position of the list (GBD collaborators, 2017). In 2017, depressive disorder is the 3rd leading cause of disability in Bangladesh (healthdata.org). Like physical illness, mental disorders also cost a financial burden and an economic analysis by Canada shows that the expense for mental illness will be increased six times than now and could exceed 2.8 trillion AUD. In another study, it found that the Quality Of Life (QOL) of people having Severe Mental Illness (SMI) is worse than healthy population and here the quality of life includes: work, leisure, finance, living situation, safety, family, social life and health (including mental health) (Evans et al, 2006). Among different mental disorders, Depression and anxiety disorders are the top morbidities having a significant impact on the personal, social and economic domain of a person and his or her family (Hansson, 2002).

1.4 Prevalence of mental disorders

The lifetime prevalence of common mental disorder (CMD) all over the glove is 29.2% and the 12-month prevalence is 17.6% (Steel et al., 2014). Women suffer more mood disorders (depression), anxiety disorder and male suffer more substance use disorder(Steel et al., 2014). In conflict-affected people, the prevalence of the common mental disorder is 22.1% and the disorders are depression, anxiety, post-traumatic stress disorder, bipolar disorder and schizophrenia. The lifetime prevalence of depression in the adult is 3-24.4% and higher prevalence in female (Netterstrom et al, 2008). Depression is the leading cause of economic burden and manageable mental health condition (Dietrich et al, 2012). It was predicted that by 2020, depression will be the second leading cause of disability globally and among 60% of suicide globally, it is considered a major risk factor (Kazdin, 1981).

In an Indian study, the researchers found the prevalence of stress among residents is 26% (Sing et al, 2019). In another study among undergraduate students, the researcher found that the students experience stress 25% (Miron et al, 2019). A study conducted among a working group of people and revealed that 59% of them suffer stress (Weigner et al, 2015). Many researchers explored depression, anxiety and stress altogether with the help of the psychometric DASS-21 which can identify the presence of depression, anxiety and stress and at the same time can assess severity. Among young male student the prevalence of Depression 24.4%, Anxiety 20% stress 18.5%, (Sahoo & Khess, 2010). Among medical students, the researcher found that they suffer from depression 39.2%, anxiety 34.5%, Stress 51.3% (Sharkar et al, 2017). In another study among graduate and post-graduate students, authors observed that student suffers depression 11.5%, anxiety 11%, and stress 10.5% (Sadiq et al, 2019). In a study among adults in Malaysia, the researcher found that the study population suffers from depression 20.5%, Anxiety 31.6%, Stress 10.1% (Rahman et al, 2017). A research conducted among primary health care users and the analysis showed that, Depression in 40.52%, Anxiety in 43.48%, Stress in 45.06% (Apostolo et al, 2011). Though the evidence shows that there is a wide range of prevalence due to the sample characteristics and study design, still depression, anxiety and stress are the common morbidities of mental health.

According to a systematic review, the prevalence of mental disorders among the people of Bangladesh is 6.5-31.0% and the prevalence in the adult is 16% and among children, adolescents are 18% (Hossain et al, 2014). The recently accomplished national mental health survey (2018-2019) revealed that the overall prevalence of mental disorders in the adult is 16.8% and among children, adolescents are 13.6% (NIMH, 2020). The survey also found that the prevalence of the depressive disorder is 6.7% and anxiety disorder is 4.5% among adult participants. Suicide is one

of the fatal outcomes of depressive disorders and 39% of global suicides occur in South East Asia (Ahmed et al, 2017).

A. GARMENTS SECTOR

The garments sector is the major area of the workforce who directly connected with national productivity and it's important to understand the readymade garments sector situation in Bangladesh prior dig down their mental health scenario overall.

1.1 Background

An early landmark moment in the Industrial Revolution came near the end of the eighteenth century, when Samuel Slater brought new manufacturing technologies from Britain to the United States. Many of the mills and factories that sprang up in the next few decades, was powered by water, which confined industrial development to the northeast at first (Library of Congress, 2018). The process of industrialization that pioneered by the UK in the eighteenth century gradually diffused all over the world (Tilly, 2009). Bangladesh started the exportation in the ready-made garments sector in late 1970 (Adnan, 2016). It is now a basket of wonder rather than a bottomless basket as mentioned by Henry Kissinger (Khan, 2009).

1.2 Resources

At present, 75 million people workers employed in industries globally (Chain, 2017.) and almost 80% of workers are female (Clean Clothes Campaign, 2015). According to BGMEA, in the 2018-2019 session: the registered industries were 4621 though many of the researchers say that actually, it's around 6000 in total including other non-registered industries. Among the 4621 industries, the total number of enlisted garments in the capital city Dhaka are 2960 (Adnan,

2016; Haider, 2007; Hoque, Debnath, & Sohel, 2006) and the majority (90%) of them are female workers. (Adnan, 2016 ; S. Hoque et al., 2006; Hoque et al., 2006). Most of the garment's factory concentrated in few areas of Bangladesh like Dhaka, Dhaka EPZ, Narayanganj, Gazipur industrial area, Chittagong and Chittagong EPZ(Rahman & Siddiquee, 2018).

2.3 National growth

Bangladesh, a south Asian country of 158.9 million people (Bangladesh Bureau of Statistics, 2014) recently achieved the status of a low middle-income country(Snapshot & Overview, 2010). The "Made in Bangladesh" tag of the readymade garments sector is now the symbol of the pride of Bangladesh which contributing a significant role in the economy of Bangladesh for the last two decades (Khan et al, 2015; Hasan et al., 2016). Along with China and Vietnam, Bangladesh surprisingly did exceptionally well during the post MFA period (Joarder et al, 2010) and currently the second-largest garments exporter to Europe (Wiig, 2018; BGMEA, 2020). Ready-made garments contributed 81.13% of total country export in 2016-2017 (Adnan, 2016; Development, 2018; Hasan et al., 2016) and in the 2018-2019 session, BGME data source shows its actually 84.21% of total export. It has been predicted that the contribution of the garment sector or manufacturing sector to GDP will be 40 per cent by 2020(Fitch et al., 2017). RMG exports have contributed $34.13 billion to Bangladesh's total export earnings in 2019, growing by 11.49% compared to last fiscal year. According to Export Promotion Bureau (EPB) data, the RMG sector has contributed total exports of $40.53 billion, growing by 10.55% in FY19. In the last 5 years, the RMG exports added additional 10 billion dollars to the export basket that means growing at a rate of on average 2 billion each year. Though the growth rate is impressive it is too

optimistic to reach the 50 billion marks by 2021 which is the target set by the government but not impossible (Ishaque & Akhter, 2019).

C. MENTAL HEALTH AND WORKPLACE

Work contributes to personal fulfillment, financial, social prosperity and one in five people experience mental health condition in the workplace (WFMH, 2017; Euro, 2014). Worker's health, safety and wellbeing are the core concern of hundreds of millions of workers globally (WHO, 2010). In the mid-1970 Employee Assistance Program (EPA) was launched to assist the employee to combat their issues that influence their work performance, health and wellbeing. In the year 1993, Lowman proposed an integrated approach between clinical psychology and organizational psychology while exploring the dysfunctional employees (Sheron and Jayan, 2013).

A worker may have a mental illness before employment or during employment and a small portion of them need organizational support and a tiny part need ongoing workplace strategies (Australian Human Rights Commission, 2016). Poor mental health is an important issue that causing over 70 million lost working days each year (Mental health foundation, 2014). Common mental health problem like depression, anxiety and stress cost 60 million lost working days per year in the UK (Knifton et al., 2011). Among the workplace managers, 50% think that no one in his workplace suffers mental health conditions (Blackdog Institute, 2016). The common mental health conditions like depression and anxiety costing Australian business about 11 billion dollars each year due to absenteeism, reduced work performance, increased turnover rate and compensation claims. Mental illness cost employers of the country like America by direct health

care costs and indirectly in the form of loss of productivity, absenteeism and disability costs (Brennan et al, 2016).

The causes to develop mental health strategy in the workplace are: the healthy workplace is good for business, nobody is immune from a health condition or mental health conditions, it improves productivity, its constitutionally or legally bound obligation to provide a healthy and safe environment (Black Dog Institute, 2016). A mental health workplace supports the employer, employee and the company (WHO, 2010). Mental health promotion and prevention program is effective in the workplace when mental health and physical health measures provided together (cdc.gov). Job design, team factors, organizational factors, home-work conflict, individual bio psychosocial factors are the six risk and protective factors that influence mental health in the workplace (Harvey et al., 2014). In a systematic review, it was found that the return on investment (ROI) of workplace mental health intervention is significantly positive (Deloitte, 2017).

Reviewing the workplace mental health researches, it's evident that, workplace mental health is a crucial domain for the productivity of the organization and investing in this domain is cost-effective. Depression, anxiety and stress are the three major areas to be prioritized in the workplace especially due to their high prevalence and great negative impact.

2.2 Depression and anxiety in the workplace

The workplace is one of the important areas which influence our mental health or wellbeing (WHO, 2017). Mental health problems such as major depressive disorder, anxiety disorder and psychological distress are common in working place and have an impact on the organization

through increased absenteeism, reduced presentism and increased expense (LaMontagne et al., 2014; WHO, 2005). One in five people suffer mental health issues in the workplace and depression is the leading cause of disability and cause of lost productivity in the workplace (WHO, 2017). Depression, anxiety and stress-related problems occur in every six workers in job place (Seymour, 2010). Anxiety is a common mental health issue in the workplace (Chopra, 2009). There is substantial evidence that workplace factor contributes to developing anxiety along with depression (Henderson, Harvey, Øverland, Mykletun, & Hotopf, 2012). In Canada, 8.4% of the working population suffers anxiety-related problems (Dewa, 2003). People having stress in the workplace are more vulnerable to develop depression as a consequence which is correlated with presentism than absenteeism of worker or employee (Sandarson & Andrews, 2006).

The common feature of depressive disorders is a sad, empty or irritable mood that accompanied by somatic and cognitive changes which interfere with the persons daily functioning and these differ from one another on the cause, period and onset. Though the etiology is yet not specified, biological and psychosocial factors are responsible for developing depression (Netterstrøm et al., 2008). Behavioral genetics supports that, risk of depression after a stressful situation is elevated among people who are at high genetic risk and diminished among those at low genetic risk (Talati, Weissman, & Hamilton, 2013). Many studies found that depression is one of the topmost prevalent disorders having a link with stress and the impairment due to depression is huge. In Canada, 29% of people having a history of depression reported reduced activities at work in comparison with 10% of people who didn't suffer from depression (Lam, Michalak, & Yatham, 2009). In a study regarding global health metrics, the author mentioned that depression is one of the top ten non-communicable disorders (NCD) which causes a global burden in society and

loses a person's productivity in the personal, social and professional domain (Interventions & Options, 2004) (Kyu et al., 2018).

Researchers developed more than twenty psychometrics globally to assess depression and among them, few have been locally validated and these are PHQ-9, BDI, MADRS and DASS 21. (El-Den, Chen, Gan, Wong, & O'Reilly, 2018). Among these locally validated scales, DASS21 can assess anxiety and stress severity along with depression. As the researcher objected to assess depression, anxiety and stress, DASS21 is suitable which can assess all three conditions together and is easily applicable and less time-consuming. Apart from depression and anxiety, stress is another important mental health issue in working place which has a great impact on the worker, employee or the organization as a whole. This important mental health domain influences a persons' wellbeing in any way and has a significant impact on the person, profession and society (Winefield, Gill, Taylor, & Pilkington, 2012; Wersebe et al, 017). The next section will be discussed on this vital mental health issue.

2.3 Stress in the workplace

There are different types of stress like acute stress, episodic acute stress and chronic stress (Arafat et al, 2018). Acute stress and episodic stress are most common form which comes from the demands and pressure of recent past and anticipated demands and pressure of near future (APA, 2019 Hammen et al., 2009). The common symptoms of acute stress are emotional distress, muscular problems, gut problems and symptoms of over-arousal (APA, 2019). Chronic stress can be defined as the response to emotional pressure experienced for a prolonged period when the individuals have the feeling of having little or no control (Carlson & Bitsch, 2018).

Work-related or workplace stress is another important specific type, associated with increased burn out and causes absenteeism(Hatch, Winefield, Christie, & Lievaart, 2011). It reduces efficiency at work and causes large costs for society (Carlson & Bitsch, 2018; Khosla, 2009, Kalia, 2002). In a systematic review (Burman, 2018), it was found that the major workplace stressors are: "Role ambiguity, Job dissatisfaction, Poor peer relationships, Unsupportive family, Poor individual beliefs and values, Unsound organizational policies, Poor physical environment, Workload, Inadequate reasons to complete the allotted task, Low income, Long working hours, Job insecurity, Lack of resources and opportunities to improve job skill, Fewer opportunities to career growth". Gender may be an important demographic factor for experiencing stress in the workplace (Gyllensten & Palmer, 2005). Women face stressful conditions like multiple roles, lack of career progress, discrimination and stereotyping (Gyllensten & Palmer, 2005). According to(Hatch et al., 2011), work overload, lack of control, insufficient reward, breakdown in community, absence of fairness and conflicting values in the workplace, can influence the wellbeing of a person. Underutilization of skill, lack of meaning, lack of participation in decision making, lack of personal control can even cause depression and other psychological disorders among the garment's employee(Chen, Siu, Lu, Cooper, & Phillips, 2009).

Stress can influence persons' cognition (disturbed attention and judgment etc.), behavior (sleep and eating disturbance, substance intake, irresponsibility/job negligence etc.), emotion (short temper, restlessness, impatient, depression, isolation) and physical health (back and neck pain, heart disease, blood pressure, nausea, anxiety etc.) (Burman, 2018). Many health problems (physical and mental) and unhealthy behaviors can arise from stress (Peer-reviewed, 2018). Even stress in the workplace is an important risk factor for developing mental disorders like Depression, Anxiety and other stress-related conditions (Ali, Am, Jamaldeen, & Emmwky, 2015;

Akhtar & Shimul, 2012). Abusive supervision causes bad consequences on worker like aggressive behaviour, psychological distress, lower self-esteem and lower work performance or productivity (Burton, Hoobler, & Scheuer, 2012). In a nutshell, a person's personality pattern, social factors, workplace factors are the correlates of stress among garments workers or employee and can impact negatively on mental health.

There is various psychometrics available to assess stress which can be a crucial step to identify the issue for taking preventive or curative measures. There are different types of stress assessing tools globally and in Bangladesh, there are few locally developed or adapted tools for assessing stress. Currently, in Bangladesh available tools to assess stress are the Perceived Stress Scale (PSS), Dhaka Stress Scale (DSS) and Depression Anxiety Stress Scale 21(DASS-21) ((Mozumder, 2017; Alim, 2014; Mullick et al, 2019) and the first two scales can assess stress and pattern of stress. The DASS 21 can assess depression and anxiety along with stress intensity. These three-tool having good psychometric properties and DASS-21 is widely used tools globally and Bangladesh as well.

It's physiological that, if a person feels stress, he adopts a stress coping style invariably to face stress and at the same time, he or she applies different types of strategies or techniques to resolve the stress. It's very important to know the detail about stress and at the same time, people must know the basic difference between healthy and unhealthy stress coping to combat the situation. The following section will describe different types of coping techniques or strategies for better conceptualization.

2.4 Stress coping in the workplace

There are various types of coping strategies like pharmacological and non-pharmacological (Crider, 1999). Many types of research proved that there are five healthy techniques to reduce stress in the short and long term and these are: taking a break, exercise, smile and laugh, get social support and meditate (APA, 2019). A systematic review by (Burman, 2018), mentioned some coping techniques like counseling, mindfulness (Yoga or meditation), recreational activities, sports, vacation, restructuring the workplace, compatible work, job rotation, clear job description and promotion policy, proper communication, stress management workshops, restructuring salary package, emotional support from organization and performance evaluation program. There are a few stress coping strategies seen in the community which are unhealthy like: Deliberately Harming Self (by drug overdosing, sharp cutting, and insecticides ingestion), Substance Abuse etc. There is a conventional way to assess coping ability and strategies by taking the history of premorbid personality and apply assessment tools to find out coping style and techniques.

Many authors classified stress coping techniques in a different way and among them, emotion-focused and problem-focused stress coping techniques are widely discussed classification. Up-to-date there are more than fifty tools to assess stress coping techniques and most of them having limitation of applicability as they developed for different professionals and age group. But researcher found that the Brief COPE scale is the most suitable one, which has good psychometric properties along with its comprehensive variables that can assess both adaptive and maladaptive coping techniques of a person invariably of his or her profession. The Brief COPE scale had evolved from the original COPE scale with larger items and was not easy to apply in a short duration. The Brief COPE contains only 28 items and can assess the common 14 types of

coping techniques which are an adaptive or healthy type of coping and maladaptive coping as well. It has been found in many studies that, stress coping ability associated with mental health outcome and most commonly depression, anxiety can develop among person having less stress coping ability and these conditions can reduce the productivity of an employee in the workplace.

2.5 Productivity in the workplace

In jobs with a high degree of contacts such as teachers, customer service managers, salespeople, and consultants, workers may have limitations in handling mental (keep the mind on work, think, do precise work, handle demanding/ stressful work, etc.), interpersonal (speak on the phone, communicate well, maintain contacts, etc.), and physical (lift/carry/move objects, use handled tools/equipment, get to work from parking/ bus/train, etc.) demands (Nicholus et al, 2012).

Presentism: It "reflects the phenomenon of loss of work productivity in terms of quantity or quality of work done due to illness or injury in people who are present at their job and is often referred as at work productivity loss or work disability" (Ahola et al., 2014). Presentism due to mental illness costs the UK economy about 15 billion per year(Chou, Chao, Yang, Yeh, & Lee, 2011)

Absenteeism: During the economic assessment, productivity loss due to absenteeism can be quantified easily by counting the number of days off work (Nicholus, 2012). It is also associated with other counterproductive behaviors such as lateness, reduced personal productivity and turnover (Johns, 2002). Increased absenteeism, employee turnover, decreased productivity and rising health care cost can be caused by workplace stress (Kitronza & Mairiaux, 2015). Worker

stress is one of the major factors that contribute to higher labor turnover and absenteeism in the apparel industry(Ali et al., 2015).

Workplace stress contributes to increasing compensation claim, health care, disability and productivity (Hansini et al, 2010). Improved mental health and psychological well-being directly linked with productivity (Bovopoulos et al., 2016) and untreated mental disorder results in diminished productivity in work and almost 60-70 million workdays lost annually due to mental illness globally (Bovopoulos et al., 2016; Organization, 2017). World economic forum estimated that between 2011 and 2030, there will be a loss of 16.3 trillion dollar due to mental disorder globally (Organization, 2017). The productivity and quality of life are negatively influenced by common mental disorder like depression (Goldber & Steury, 2001; Netterstrøm et al., 2008). Depressive disorder is highly prevalent in the workplace and many researchers find that, depression link with impaired work performance, workplace safety, high level of absenteeism, disability cost and early retirement (Ahola et al., 2014; Bender & Farvolden, 2008) Anxiety and depression are more than 10% among the workers who take sick leave (Bender & Farvolden, 2008). In Australia, Major depressive disorder in the workforce costs 12.6 billion annually due to absenteeism, presentism, turnover and treatment costs (McTernan, Dollard, & LaMontagne, 2013). The psychological strain seems to be associated with the development of future depression and social support at the workplace found to reduce the prevalence of depression (Netterstrøm et al., 2008).

Productivity can be assessed variously and one of the commonest ways is assessing absenteeism of the employee. Though previously absence of employee was the prime indicator of productivity recently presentism added in the evaluation process of an employees' productivity (Ahola et al., 2014) (Roy et al, 2010). Several studies explored existing tools that can assess

productivity; the authors found 16 studies to measure presentism in musculoskeletal disorders. In another systematic review authors reviewed 212 pieces of research of various instruments that can measure presentism and among them, LEAPS is the only scale which can assess presentism due to depression in employee (Thompson et al., 2010). Productivity of employee is the crucial ingredient which directly linked up with the growth of an organization.

2.6 Work place mental health in Global Context

Workplace mental health is one of the preventives, promotive measures throughout the globe which influence the productivity of an employee or organization as a whole. It has been found that having specific workplace mental health guideline is an essentially helpful approach to keep mental health positive or raise the productivity of the organization. Garments are one of the important workplaces throughout the globe and especially important for developing countries like Bangladesh, which has been shifting its agro-based economy to industrialization. The RMG sector is one of the major domains of industrialization in Bangladesh, which has been contributing hugely to the export sector. Moreover, the current status of a lower middle-income country wouldn't be possible without the astonishing growth of the RMG sector.

There is very limited prevalence study among garments worker or personals for psychiatric disorders though in a study the prevalence of depressive disorder was found 23.5% (Fitch et al., 2017). 17 to 21 percent of workers in the USA experience short term disability due to depression (McTernan et al., 2013). Though the gender ratio of the population in Bangladesh is almost equal (BBS, 2017), the majority (almost 90 per cent) of garments personal are female (Adnan, 2016). As a result, these human resources are already at risk of suffering mental disorders and loss of

productivity, which can negatively influence the growth of garments industries (WFMH, 2017). Garment's worker suffer from Depression and Anxiety and financial burden is an important stress factor among them (Mazumder et al., 2015). The higher prevalence of depression or mental disorders in women suggests that the psychological wellbeing of garments personnel is crucial for their functioning life (BPS, 2010). Up-to-date in Bangladesh, the mental health research among garments employee limited to the topics like stress, stressors, psychosocial intervention, quality of life and productivity. Moreover, in these studies, study samples are invariably worker rather different level of employee.

2.7 Work place mental health in Bangladesh context

Raised work-related demand and poor interpersonal resources are the key components of stress and determinant of the poor health of garments worker in Bangladesh (Steinisch et al, 2013). Hair Cortisol Concentration (HCC) found significantly higher due to stress in garments worker (Steinisch et al, 2014). It has been seen that workers stress perception varies individually (K. M. F. Hasan et al., 2016). Bangladeshi garments workers have been facing different types and causes of stress like job insecurity, bad behavior of a co-worker, communication problem, housing problem, attack by terrorists, attack by touts, harassed by police, insufficient allocated time and inability to job demand and responsibility, poor working environment and sexual harassment (Begum , Hossain, & Shahid. 2011, Ornek & Sevim, 2018; S. Hoque, Debnath, & Sohel, 2006). Female employee experience more stress than male and lower-income having a significant relation with stress (Dey & Rahman, 2017). Experience of Verbal and physical abuse is another dimension of stress factors found among garments workers (Siddiqi, 2003). A study

observed that available psychosocial councilors' presence in job place reduced stress and anxiety among the workers (A. Khan et al., 2019).

Though there are many pieces of research regarding physical illness among garments employee, cognitive symptoms were not explored specifically in past. Fatigability is higher among garments female than healthy counterpart (L. N. Islam, Sultana, & Ferdous, 2014). The garments worker also suffers numbness of fingers and arms along with multiple somatic problems like headache, body ache, common cold etc. (Ahmed & Islam, 2017). 88.8% of garments employee experience workplace health hazards like fatigue, headache, body pain, minor cut injury etc.(Rajat et al, 2015). The majority of the worker in Dhaka city having a low work-related quality of life (Islam et al, 2011). Among the survivors (garments workers) of the Rana Plaza disaster, 19.6% having poor quality of life following the incident (Alve, 2014). Walkability (ability to walk as a means to reach garments or home) of garments worker is an important local issue having an impact on their quality of life (Sabrina Shumi, 2013). Garment's worker feels satisfied if they got monthly payment on time, having well-mannered officials and health facility (Ferdous, 2015). Very few studies explored the impact on functional status among garments employee and in a study, authors found that absenteeism is significantly positively correlated with employee stress and inversely related to a mental health condition(M. E. Hoque & Islam, 2003). The above-mentioned narrative review of local research of mental health in the garments sector, clearly shown the paucity of integrated exploration of mental health or visualized the research gap and justifies conducting further research which can address the unmet issues altogether.

Chapter 3

RESEARCH METHODOLOGY

Study design: This is a cross sectional study. As an academic course there is a specific time frame to complete the research and that is why researcher conducted this study in cross sectional manner to overcome the time constrain of the study.

Study place: Study conducted among six garments factories located in Dhaka city and Chittagong city. The study places were purposively selected due to time and fund constrain. But researcher found that each study place having a similar organogram of human resources which was good for the sample inclusion according to research design (Haque,2015). All of the studies place having specific compliance group to assist the research team, which made the process easier. Moreover, such commonality indicates the discipline in the garments sector.

Study period: The study was conducted from February 2019 to March 2020. The study period includes pre-testing of the questionnaires, data collection,analysis and finally manuscript preparation.

Sample size: Sample size was calculated by using G*Power which suggested 200 and later after discussion with supervisor, 300 sample size was decided.

Sampling technique: The researcher went to the study places and purposively selected the participants who were available and agreed to take part in the study.

Inclusion criteria: The participants were the personnel (male and female) who are directly linked with production and the data were categorized into three groups (Haque,2015).The first group is the top officials like Chief Executive or Chairman Manager or Managing Director and the second group consists of mid-level employee like the Assistant manager, Supervisors. The

third group includes all types of worker or operators working in the garments who are directly involved in the production.

Exclusion criteria: The other workers like Security, Cleaning staff, Electrician, etc. were excluded as they are not directly linked with production and also those employees who were not available in the production site due to their physical or mental disease or other causes.

Research tools

To collect data, the researcher used five instruments which were: 1. Structured questionnaire for sociodemographic variables for the study titled "Mental health status of garments personal of Bangladesh" 2. Psychological Well-being Scale 3. Depression Anxiety and Stress Scale (DASS-21-Bangla) 4. Brief COPE (Coping Orientation to Problems Experienced)-Bangla 5. Lam Employment Absenteeism and Productivity Scale (LEAPS)-Bangla

a. Structured questionnaire for sociodemographic and other variables

The researcher developed a questionnaire that included variables like age, sex, religion, marital status, education, designation, monthly salary, mental health service availability, mental health training, and stressor in the workplace. These variables are included to analyze the association with the mental health of the garment's personnel.

b. Psychological wellbeing scale

The psychological wellbeing scale consists of 72 items and among them, 36 items are positive and 36 negatives. The scales' response options were self-report Likert type. There are seven domains like Psychological Wellbeing (normal score range: 16-80, Normal mean: 48), Emotional Wellbeing (normal score range: 8-40, normal mean: 24), Work-related well-being (normal score

range: 12-60, normal mean: 36), Physical Wellbeing (normal score range: 9-45, Normal mean: 27), Social Wellbeing (normal score range: 14-70, normal mean: 42), Family Wellbeing (normal score range: 5-25, normal mean: 15), Life Wellbeing (normal score range: 8-40, normal mean: 24) and domains having variability in the respective item number, score range and mean score. The total scale score range is 72-360 and the normal mean is 216. It can be interpreted that, any score below the normal range or mean is not satisfactory. The test-retest reliability is 0.88 (Haque & Begum, 2005)

c. Depression Anxiety and Stress Scale (DASS-21)

The original and the Bangla version of the questionnaire consist of 21 Items with three domains like Depression, Anxiety, and Stress. (Lovibond SH and Lovibond PH, 1995; Alim SMA, 2014). Each of the three categories contains 7 items and those further divided into subscales with similar contents. The depression scale assesses dysphoria, hopelessness, devaluation of life, self-deprecation, lack of interest or involvement, anhedonia and inertia. The anxiety scale assesses autonomic arousal, skeletal muscle effects, situational anxiety, and subjective experience of anxious affect. The stress scale is sensitive to levels of chronic nonspecific arousal. It assesses difficulty relaxing, nervous arousal, and being easily upset or agitated, irritable or over-reactive and impatient. The adapted and validated Bangla version of DASS 21 having satisfactory properties and the Cronbach's Alpha for Depression, Anxiety and Stress subscales were 0.987, 0.957, 0.964 respectively.

d. Brief Coping Orientation to Problem Experienced (Brief COPE)

The original English version consists of 28 items extract 14 types of coping and the psychometric properties like Cronbach's alpha are 0.71 to 0.82 (Carver CS. 1997). Among the 14 types of coping, eight are adaptive or healthy coping techniques and six are maladaptive or unhealthy coping techniques. The internal consistency of subscales are as follows: Religion (α=0.82) and Substance use (α=0.90)7, Active coping (α=0.68), Planning (α=0.73), Positive Reframing (α=0.64), Acceptance (α=0.57), Humor (α=0.73), Using Emotional Support (α=0.71), Using Instrumental Support (α=0.64), Self-distraction (α=0.71), Denial (α=0.54), Venting (α=0.50), Behavioral disengagement (α=0.65) and Self-blame (α=0.69). The Bangla version adapted and validated and found satisfactory reliability (Cronbach's alpha 0.7-0.9) (Hossain and Mullick.2019).

e. Lam Employment Absenteeism and Productivity Scale (LEAPS)

The original questionnaire consists of 8 items and the internal consistency is satisfactory (Cronbach's alpha 0.89) (Lam RW, 2009). The two main factors of the scale are Absenteeism and Presentism. Absenteeism can be interpreted as present or absent within the last two weeks. Presentism interpreted as Mild, Moderated, Severe, and Profound within last two weeks. The original author developed the scales based on depressive symptomatology as depression is the prime cause of reduced productivity. The Bangla version LEAPS was initially translated and later reviewed by senior colleagues who have experience in adaption process and finalized after inclusion of the review comments. The reliability of the scale is 0.7 and in future validation study will be done.

2. Data collection procedure and analysis

The researcher approached purposively different garments factories of Dhaka and Chittagong city to conduct the research. Those garments factories that consented to take part in the study were included. With the help of the compliance group (member consist of a physician, manager, assistant manager) of garments factories, participants were selected randomly and those who consented to take part in the interview were interviewed face to face and data were collected with help of previously mentioned tools. Research assistants, who collected data, were trained prior to interview to apply psychometrics, scoring to interpret outcome and also having previous research experience of data collection. Data collected from 3 different groups. In the first week, data were collected from CEO or Managing Director level. In the next week, data collected from to manager and or assistant manager to the supervisor level. Finally, data collected from worker or operator level. After data collection, data were analyzed through SPSS software and researcher thinks that chi square test and Pearson's correlation test are most suitable for analyzing the data to assess association and correlation according to the research objectives.

3. Ethical issue:

This study protocol was approved by the Ethical Committee of Dept.of Clinical Psychology, University of Dhaka and maintained all ethical issues according to the guideline provided by the deparment.. Before data collection, every participant was informed about the ethical issues, objectives, method and expected outcome of the research. All the documents and data of the research kept in the locker to ensure the privacy of the relevant data of participants and the study places. The study result was not shared publicly or privately with the third party or any other agencies during or after research completion.

Chapter 4

RESULTS

The study aimed to assess the mental health status of the garments factory personnel in Bangladesh and to reach the aim researcher fixed eleven objectives. Initial four objectives explored the distribution of psychological wellbeing, mental health issues (depression, anxiety, and stress), the pattern of stress coping techniques (adaptive and maladaptive) and productivity (absenteeism, presentism) of the garment's personnel. The information about these areas were collected with the help of the psychological wellbeing scale, DASS-21 scale, Brief COPE scale and LEAP scale. Descriptive analysis was done to find the distribution of these above-mentioned variables in the form of frequency, percentage, mean value, standard deviation (SD), minimum value and maximum value.

The remaining seven objectives explored the association between different variables like a) psychological wellbeing and mental health issues (depression, anxiety, stress); b) psychological wellbeing and productivity; c) mental health issues (depression, anxiety, stress) and productivity d) stress coping pattern and psychological wellbeing e) stress coping pattern and mental health issues (depression, stress, anxiety) f) stress coping pattern and productivity g) sociodemographic variables and psychological wellbeing/mental health issues (depression, anxiety, stress)/stress-coping/productivity. To identify the significant association or correlation between two variables, Chi-square test and Pearson's correlation test were done consecutively (where $p=<0.001$ considered level of significance).

The initial objective of the study was to psychological wellbeing status of garments factory personal assessed by psychological wellbeing scale which having seven subscales: psychological wellbeing, emotional wellbeing, works related wellbeing, family wellbeing, social wellbeing, life wellbeing and physical wellbeing.

Table 1.1: Distribution of Psychological wellbeing scores of garments factory personnel (n=300)

Psychological WB scores	Mean±SD	Minimum	Maximum
Psychological WB	43.55±8.19	16	60
Emotional WB	16.93±3.20	6	30
Work WB	26.78±4.40	13	48
Family WB	19.68±2.48	12	25
Social WB	38.26±8.02	16	52
Life WB	37.76±6.13	12	40
Physical WB	29.16±3.83	17	40
Total PWB	212.12±29.18	127	251

WB: Wellbeing; **SD:** Standard deviation

Table 1.1 shows that, with the help of descriptive analysis (frequencies) the mean of total wellbeing score found among participants is 212.12 (normal mean 216) and the mean score of different domains of Psychological Wellbeing Score are: a) Psychological Wellbeing 43.55 (normal mean 48) b) Emotional Wellbeing 16.92 (normal mean 18) c) Work related Wellbeing 26.77 (normal mean 30) d) Family Wellbeing 19.68 (normal mean 15) e) Social Wellbeing 38.26 (normal mean 33) f) Life satisfaction Wellbeing 37.76 (normal mean 45) g) Physical Wellbeing 29.16 (normal mean 27).

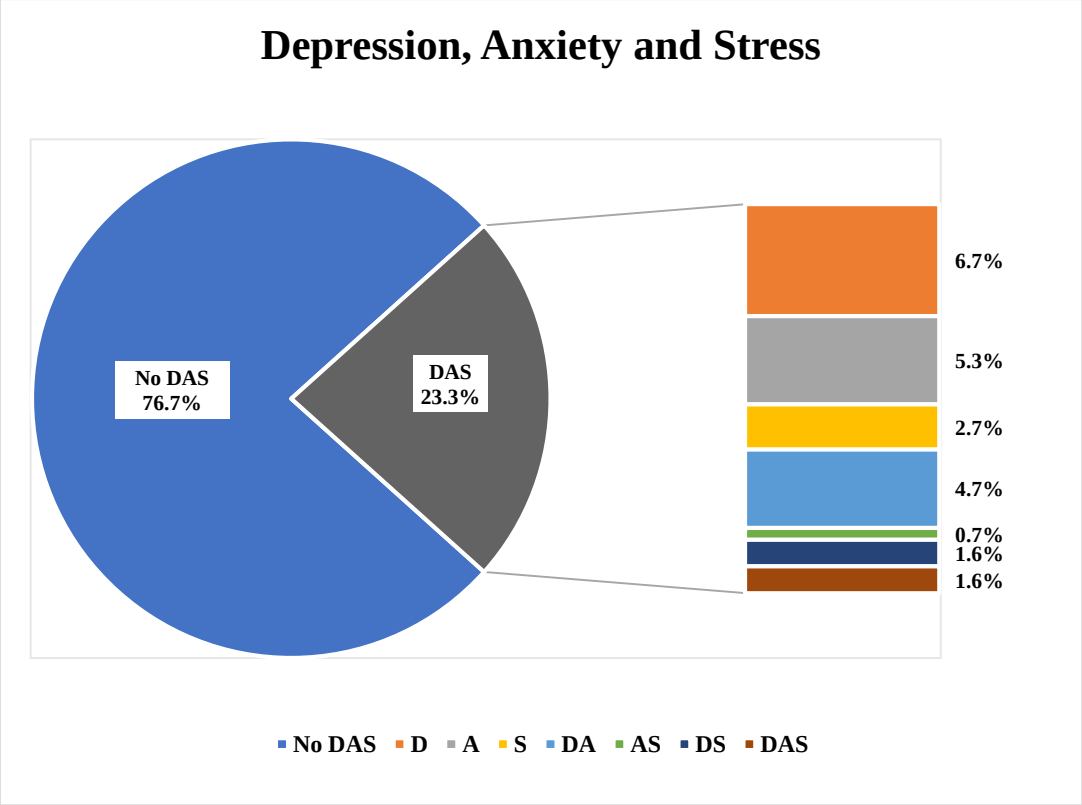
Table 1.2 Psychological wellbeing subscales mean (lower than normal mean scores) of garments factory personnel (n=300)

Psychological WB scores	Below normal mean n (%)	Above or equal normal mean n (%)
Psychological WB	207 (69.0)	93 (31.0)
Emotional WB	157 (52.3)	143 (47.7)
Work WB	221 (73.7)	79 (26.3)
Life WB	238 (79.3)	62 (20.7)
Total PWB	85 (28.3)	215 (71.7)

Table 1.2 shows that, 28.3% of garments personnel's total psychological wellbeing mean score is below normal mean score. The proportion of personnel's' (sub scale mean score which are below normal mean) in different subscales are psychological wellbeing (69%), emotional wellbeing (52.3%), work related wellbeing (73.7%), and life wellbeing (79.3%).

The second objective of this study is to detect Depression, Anxiety and Stress of garments factory personnel in Bangladesh.

Figure 1: Distribution of depression, anxiety and stress among garments personnel (n=300)



***No DAS:** no Depression/Anxiety/Stress; **D**: Only depression; **A:** Only Anxiety; **S:** Only Stress; **DA:** Depression and Anxiety; **AS:** Anxiety and Stress **DS:** Depression and Stress; **DAS:** Depression, Anxiety and Stress

Figure 1. The frequency distribution tables show that, 23.3% (n=70) of garments personnel having any one or more mental health conditions like depression, anxiety or stress comparing 76.7% (n=230), who don't have any mental health issues. Among the 23.3%who suffers mental health issues, 6.7% suffer only depression, 5.3% suffer only anxiety, 2.7% suffer only stress. But 4.7% of the garments personnel suffer both depression and anxiety together, 1.7% suffers depression and stress together and 0.7 suffer anxiety and stress together. Only 1.7% of the garments personnel suffer depression, anxiety and stress all together.

Table 2: Severity of Depression, Anxiety and stress among garments factory personnel (n=300)

DASS 21	No disorder n (%)	Disorder present n (%)
Depression	256 (85.3)	44 (14.7)
Anxiety	264 (88.0)	36 (12.0)
Stress	280 (93.3)	20 (6.7)

Table 2 shows that, by doing descriptive analysis (frequency distribution), among the study population 14.7% suffer depression, 12% suffer anxiety and 6.7% suffer stress.

The third objective of the study was to identify the different types of coping techniques (adaptive and maladaptive) applied by garments factory personnel in Bangladesh.

Table 3.1a: Distribution of stress coping techniques adopted by the garment's factory personnel (n=300)

Item	Coping technique	N=300, n (%)
Maladaptive coping		
1	DISTRACTION	260 (86.7)
2	SELF BLAMING	243 (81.0)
3	DENIAL	134 (44.7)
4	DISENGAGEMENT	84 (28.0)
5	HUMOR	79 (26.3)
6	SUBSTANCE USE	22 (7.3)
Adaptive coping		
7	PLANNING	289 (96.3)
8	RELIGIOUS PRACTICE	288 (96.0)
9	ACCEPTANCE	286 (95.3)
10	ACTIVE COPING	283 (94.3)
11	EMOTIONAL SUPPORT	282 (94.0)
12	POSTIVE REFRAMING	280 (93.3)
13	VENTING	248 (82.7)
14	INSTRUMENTAL SUPPORT	192 (64.0)

Table 3.1 shows the frequency distribution of different stress coping techniques that were applied by the garments personnel. The participants used maladaptive coping techniques like: distraction, self-blaming, denial, disengagement, humor, substance use and the frequency are 86.7%, 81.0%, 44.7%, 28.0%, 26.3% and 7.3% respectively. On the other side, they used adaptive coping techniques also and these are planning, religious practice, acceptance, active coping, emotional support, positive reframing, venting and instrumental support. The frequency of those coping techniques are 96.3%, 96.0%, 95.3%, 94.0%, 93.3%, 82.7% and 64.0% respectively.

Table 3.2: Distribution of scores of different types of maladaptive coping among garments factory personnel in Bangladesh (n=300)

Mal-adaptive Coping	Mean±SD	Minimum	Maximum
Distraction score	6.07±1.01	4	8
Self-blaming score	3.48±1.49	2	8
Denial score	3.35±1.65	2	8
Disengagement score	3.22±1.89	2	8
Humor score	2.72±1.33	2	8
Substance use score	2.14±0.69	2	8

The table 3.2 shows the distribution of scores of different mal adaptive coping and it finds that, distraction techniques having highest mean score (6.07) which is above the normal mean (5). The mean value found lower than normal mean value (5) in the rest of the techniques' (Denial 3.35, Substance 2.14, Disengagement 3.22, Humor 2.72 and Self-blame 3.48).

Table 3.3: Distribution of scores of different types of adaptive coping among garments factory personnel in Bangladesh (n=300)

Adaptive Coping	Mean±SD	Minimum	Maximum
Religious practice score	6.97±1.39	3	8
Instrumental support score	6.66±1.17	4	8
Emotional support score	6.5±1.63	2	8
Acceptance score	6.50±1.33	2	8
Venting score	6.40±1.19	2	8
Positive reframing score	6.09±1.69	2	8
Active coping score	5.96±1.12	2	8
Planning score	5.79±1.13	2	8

Table 3.3, shows the descriptive analysis (frequencies) of different types of adaptive coping use by participants. Among the different adaptive coping techniques, mean scores of Religious practices is 6.97 (normal mean 5) which is highest and Planning mean score is 5.79 (normal mean 5) which is lowest mean score comparing others. The other mean scores of different adaptive coping techniques range from 5.9633 to 6.6600.

Table 3.4: Mean score of adaptive and maladaptive coping among garments factory personnel (n=300)

Coping score	Mean±SD	Minimum	Maximum
Mal Adaptive Coping score	20.99±4.66	16	39
Adaptive Coping score	50.88±6.89	31	60

SD: Standard deviation

The table 3.4 shows that, with the help of descriptive analysis (frequencies), mean score of maladaptive coping techniques is 20.99 (normal mean 30) and the mean scores of adaptive coping techniques is 50.88 (normal mean 40).

The fourth objective was to identify productivity status (Presentism and absenteeism) of garments factory personnel in Bangladesh.

Figure 2: Frequency of Absenteeism among garments factory personnel (n=300)

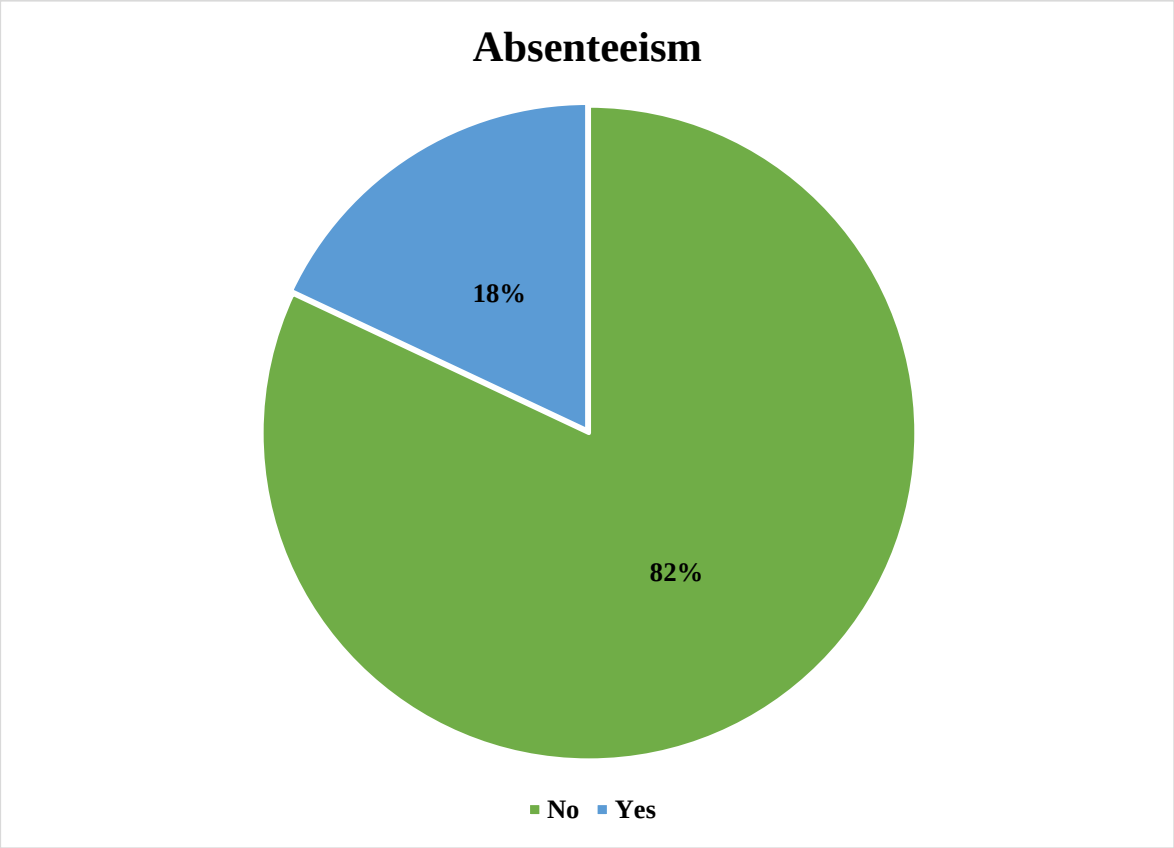
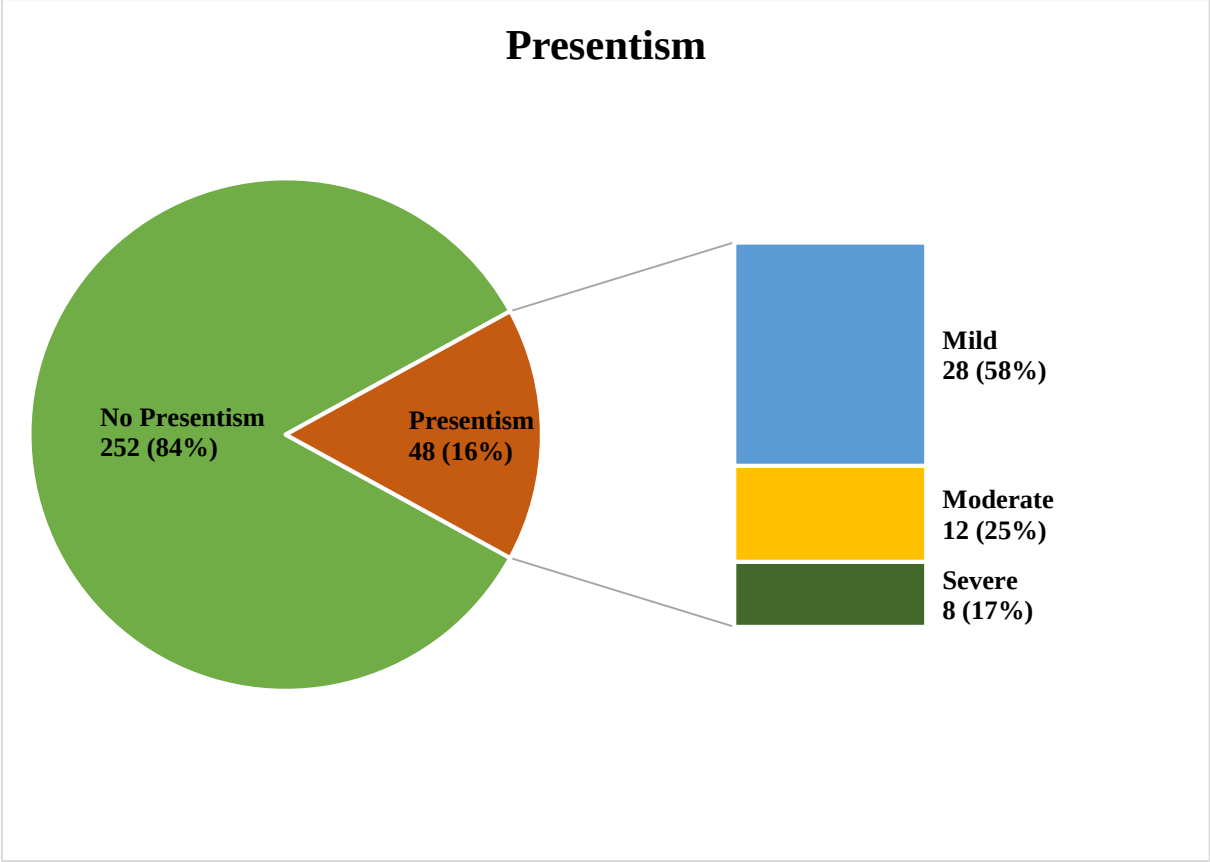


Figure 2 shows the frequency distribution of absenteeism shows that, majority (82.0%) didn't have absenteeism.

Figure 3: Frequency of presentism among garments factory personnel (n=300)



The figure 3 shows, the frequency distribution of presentism among garments personnel and it found that, majority (84%) didn't have presentism and 16% having presentism.

The next objective was to detect any association between Psychological wellbeing and Depression, Anxiety, Stress among garments factory personnel.

Table 4.1: Association between Total Psychological wellbeing score and Depression, among garments factory personnel (n=300)

Total Psychological wellbeing	Depression		Chi-square value	P value
	Yes n (%)	No n (%)		
Below normal mean	44 (100.0)	41 (16.0)	**130.423[a]**	**<0.001**†
Equal or Above normal mean	0	215 (84.0)		
Mean±SD	147.43±14.21	223.24±10.87		**<0.001**‡

†p value determined by Chi-square (χ^2) test
‡p value determined by Student's dependent t-test

Table 4.1, Chi square test shows that, the garments personnel who have been suffering from depression, have total psychological wellbeing mean score (147) significantly (p=<0.001) lower than the counterpart who don't have depression (223). [The normal mean value of Total psychological wellbeing is 216]. Here p<0.001 considered significant

Table 4.2 Association between Total Psychological wellbeing score and Anxiety, among garments factory personnel (n=300)

Total Physical wellbeing	Anxiety		Chi-square value	P value
	Yes	No		
Below normal mean	36 (100.0)	49 (18.6)	**103.476[a]**	**<0.001**†
Equal or Above normal mean	0	215 (81.4)		
Mean±SD	171.83±27.24	217.62±24.83		**<0.001**‡

†p value determined by Chi-square (χ^2) test
‡p value determined by independent Student's t-test

Table 4.2, Chi square test shows that, the garments personnel who have been suffering from anxiety, have total psychological wellbeing mean score (171) significantly (p=<0.001) lower than the counterpart who don't have anxiety (217). [The normal mean value of Total psychological wellbeing is 216] Here p<0.001 considered significant

Table 4.3 Association between Total Psychological wellbeing score and stress among garments factory personnel (n=300)

Total Physical wellbeing	Stress		Chi-square value	P value
	Yes	No		
Below normal mean	20 (100.0)	65 (23.2)	**54.202[a]**	**<0.001**†
Equal or Above normal mean	0	215 (76.8)		
Mean±SD	163.83±27.24	218.62±24.83		**<0.001**‡

†p value determined by Chi-square (χ^2) test
‡p value determined by independent Student's t-test

Table 4.3, Chi square test shows that, the garments personnel who have been suffering from stress, have total psychological wellbeing mean score (163) significantly (p=<0.001) lower than the counterpart who don't have stress (218). [The normal mean value of Total psychological wellbeing is 216] Here p<0.001 considered significant

The seventh objective was to detect association between PWB and Productivity

Table 5.1 Association between Total Psychological wellbeing score and Absenteeism among garments factory personnel (n=300)

Total Psychological wellbeing	Absenteeism		Chi-square value	P value
	Yes n (%)	No n (%)		
Below normal mean	54 (100.0)	31 (12.6)	**166.571[a]**	**<0.001[†]**
Equal or Above normal mean	0	215 (87.4)		
Mean±SD	156.04±22.33	224.44±9.26		**<0.001[‡]**

†p value determined by Chi-square (χ^2) test
‡p value determined by independent Student's t-test

Table 5.1 The Chi square test shows that, the garments personnel who have shown absenteeism, have total psychological wellbeing mean score (156) significantly (p=<0.001) lower than the total psychological wellbeing mean (224) of counterpart who don't have history of absenteeism.

Table 5.2 Association between Total Psychological wellbeing and Presentism among garments factory personnel (n=300)

Total Psychological wellbeing	Presentism		Chi-square value	P value
	Yes n (%)	No n (%)		
Below normal mean	32 (66.7)	53 (21.0)	**41.352[a]**	**<0.001**†
Equal or Above normal mean	16 (33.3)	199 (79.0)		
Mean±SD	178.77±39.11	218.48±21.79		**<0.001**‡

†p value determined by Chi-square (χ^2) test
‡p value determined by independent Student's t-test

Table 5.2, The Chi square test shows that, the garments personnel who have shown presentism, have total psychological wellbeing mean score (178) significantly (p=<0.001) lower than the total psychological wellbeing mean (218) of counterpart who don't have history of presentism.

The eighth objective was to detect any association between depression, anxiety, stress and productivity (presentism and absenteeism) of garments factory personnel of Bangladesh.

Table 6.1: Association between Depression and Absenteeism among garments factory personnel (n=300)

Absenteeism	Depression		Chi-square value	P value†
	Yes n (%)	No n (%)		
Yes	44 (100.0)	10 (3.9)	**234.896[a]**	**<0.001**
No	0	246 (96.1)		
Total	44 (100.0)	256 (100.0)		

†p value determined by Chi-square (χ^2) test

Table 6.1 The Chi square test shows that, among the depressed employee all 44 (100%), shown significantly (p=<0.001) higher absenteeism comparing counterpart who didn't have absenteeism.

Table 6.2 Association between Anxiety and Absenteeism among garments factory personnel (n=300)

Absenteeism	Anxiety		Chi-square value	P value†
	Yes n (%)	No n (%)		
Yes	28 (77.8)	26 (9.8)	**99.041[a]**	**<0.001**
No	8 (22.2)	238 (90.2)		
Total	36 (100.0)	264 (100.0)		

†p value determined by Chi-square (χ^2) test

Table 6.2 The Chi square test shows that, among the anxious employee 77.8% (36) had shown absenteeism which is significantly (p=<0.001) higher comparing counterpart 22.2% (08) who didn't have absenteeism.

Table 6.3 Association between Stress and Absenteeism among garments factory personnel (n=300)

Absenteeism	Stress		Chi-square value	P value†
	Yes n (%)	No n (%)		
Yes	13 (65.0)	41 (14.6)	**32.070[a]**	**<0.001**
No	7 (35.0)	239 (85.4)		
Total	20 (100.0)	280 (100.0)		

†p value determined by Chi-square (χ^2) test

Table 6.3 The Chi square test shows that, among the stressed employee (20), 13 (65%) had shown absenteeism which is significantly (p=<0.001) higher comparing counterpart 7 (35%) who didn't have absenteeism.

Table 6.4 Association between Depression and Presentism among garments factory personnel (n=300)

Presentism	Depression		Chi-square value	P value†
	Yes n (%)	No n (%)		
Yes	26 (59.1)	22 (8.6)	**71.237[a]**	**<0.001**
No	18 (40.9)	234 (91.4)		
Total	44 (100.0)	256 (100.0)		

†p value determined by Chi-square (χ^2) test

Table 6.4 The Chi square test shows that, among the depressed employee (44), 59% (26) had shown presentism which is significantly (p=<0.001) higher comparing counterpart 18 (40.9%) who didn't have presentism.

Table 6.5 Association between Anxiety and Presentism among garments factory personnel (n=300)

Presentism	Anxiety		Chi-square value	P value†
	Yes n (%)	No n (%)		
Yes	14 (38.9)	34 (12.9)	**15.947[a]**	**<0.001**
No	22 (61.1)	230 (87.1)		
Total	36 (100.0)	264 (100.0)		

†p value determined by Chi-square (χ^2) test

Table 6.5 The Chi square test shows that, among the anxious employee (36), 61.1% (22) had shown no presentism which is significantly (p=<0.001) higher comparing counterpart 14 (38.9%) who have presentism.

Table 6.6 Association between Stress and Presentism among garments factory personnel (n=300)

Presentism	Stress		Chi-square value	P value†
	Yes n (%)	No n (%)		
Yes	8 (40.0)	40 (14.3)	**9.184[a]**	**0.002**
No	12 (60.0)	240 (85.7)		
Total	20 (100.0)	280 (100.0)		

†p value determined by Chi-square (χ^2) test

Table 6.6 The Chi square test shows that, among the stressed employee 60% (12) had shown no presentism which is significantly (p=<0.001) higher comparing counterpart 40% (08) who have presentism.

The ninth objective of the study was to detect any association between Stress coping techniques (adaptive and maladaptive) and Psychological wellbeing.

Table 7.1 Correlation between Stress coping technique mean score (Mal-adaptive) and Psychological wellbeing mean score among garments factory personnel (n=300)

		MEAN_MAC	Total PWB
MEAN_MAC	Pearson Correlation	1	-.300**
	Sig. (2-tailed)		.000
	N	300	300
Total PWB	Pearson Correlation	-.300**	1
	Sig. (2-tailed)	.000	
	N	300	300
**. Correlation is significant at the 0.01 level (2-tailed).			

Table 7.1, The bivariate analysis reveals that the mal adaptive coping score mean is significantly (p=000) inversely (correlation coefficient= - 0.300) correlated with total psychological wellbeing mean score.

Table 7.2: Correlation between Stress Coping technique mean score (Adaptive) and Total Psychological Wellbeing mean score among garment factory personnel

		MEAN_ACTIVE	Total PWB
MEAN_ACTIVE	Pearson Correlation	1	.590**
	Sig. (2-tailed)		.000
	N	300	300
Total PWB	Pearson Correlation	.590**	1
	Sig. (2-tailed)	.000	
	N	300	300
**. Correlation is significant at the 0.01 level (2-tailed).			

Table 7.2, The bivariate analysis reveals that the adaptive coping score mean is significantly (p=000) positively (correlation coefficient= 0.590) correlated with total psychological wellbeing mean score.

The next objective was to detect any association between Stress coping techniques (adaptive and maladaptive) and depression, anxiety, stress.

Table 8.1 Association between Adaptive coping technique and Depression among garments factory personnel (n=300)

Adaptive coping	Depression		Chi-square value	P value
	Yes n (%)	No n (%)		
Below normal mean	2 (4.5)	22 (8.6)	0.836[a]	0.361†
Above or equal normal mean	42 (95.5)	234 (91.4)		
Adaptive coping score	51.98±6.15	50.69±6.99		0.252‡

†P value determined by Chi-square (χ^2) test

‡P value determined by Student's t-test

Table 8.1 The Chi Square test shows that, among the depressed garments personnel (n=44), those having adaptive coping mean score below normal mean (n=2) are not significantly (p=0.361) higher in proportion comparing counterpart (n=42) having coping mean score equal or above normal mean. (Adaptive Coping mean in depressed and non-depressed personnel are 51.98 and 50.69 consecutively)

Table 8.2 Association between Adaptive coping technique and Anxiety among garments factory personnel (n=300)

Adaptive coping	Anxiety		Chi-square value	P value
	Yes n (%)	No n (%)		
Below normal mean	34 (94.4)	250 (94.7)	0.332[a]	0.950[†]
Above or equal normal mean	2 (5.6)	14 (5.3)		
Adaptive coping score	52.69±6.48	50.63±6.92		0.091[‡]

†P value determined by Chi-square (χ^2) test

‡P value determined by independent Student's t-test

Table 8.2 The Chi Square test shows that, among the Anxious garment's personnel (n=36), those having adaptive coping mean score below normal mean (n=34) are not significantly (p=0.950) higher in proportion comparing counterpart (n=02) having coping mean score equal or above normal mean. (Adaptive Coping mean of anxious and non-anxious personal are 52.69 and 50.63 consecutively)

Table 8.3 Association between Adaptive coping technique and Stress among garments factory personnel (n=300)

Adaptive coping	Stress		Chi-square value	P value
	Yes n (%)	No n (%)		
Below normal mean	1 (5.0)	23 (8.2)	0.262[a]	0.609[†]
Above or equal normal mean	19 (95.0)	257 (91.8)		
Adaptive coping score	53.10±6.20	50.72±6.92		0.135[‡]

†P value determined by Chi-square (χ^2) test

‡P value determined by independent Student's t-test

Table 8.3 The Chi Square test shows that, among the Stressed garments personnel (n=20), those having adaptive coping mean score below normal mean (n=01) are not significantly (p=0.609) higher in proportion comparing counterpart (n=019) having coping mean score equal or above normal mean. (Adaptive Coping mean of stressed and non-stressed personal are 53.10 and 50.2 consecutively)

Table 8.4 Association between Mal-adaptive coping technique and Depression among garments factory personnel (n=300)

Mal-adaptive coping	Depression		Chi-square value	P value
	Yes n (%)	No n (%)		
Below normal mean	43 (97.7)	241 (94.1)	0.957[a]	0.001†
Above or equal normal mean	1 (2.3)	15 (5.9)		
Mal-adaptive coping score	10.16±4.69	20.96±4.67		0.001‡

†P value determined by Chi-square (χ^2) test

‡P value determined by independent Student's t-test

Table 8.4 The Chi Square test shows that, among the depressed garments personnel (n=44), those having mal adaptive coping mean score below normal mean (n=43) are significantly (p=0.001) higher in proportion comparing counterpart (n=01) having coping mean score equal or above normal mean. (Maladaptive Coping mean of depressed and non-depressed personal are 10.16 and 20.96 consecutively)

Table 8.5 Association between Mal-adaptive coping technique and Anxiety among garments factory personnel (n=300)

Mal-adaptive coping	Anxiety		Chi-square value	P value
	Yes n (%)	No n (%)		
Below normal mean	34 (94.4)	250 (94.7)	0.004[a]	0.950[†]
Above or equal normal mean	2 (5.6)	14 (5.3)		
Mal-adaptive coping score	20.75±4.63	21.02±4.67		0.091[‡]

†P value determined by Chi-square (χ^2) test

‡P value determined by independent Student's t-test

Table 8.5 The Chi Square test shows that, among the anxious garment's personnel (n=36), those having mal adaptive coping mean score below normal mean (n=34) are not significantly (p=0.950) higher in proportion comparing counterpart (n=02) having coping mean score equal or above normal mean. (Maladaptive Coping mean of anxious and non-anxious personal are 20.75 and 21.02 consecutively)

Table 8.6 Association between Mal-adaptive coping technique and Stress among garments factory personnel (n=300)

Mal-adaptive coping	Stress		Chi-square value	P value
	Yes n (%)	No n (%)		
Below normal mean	20 (100.0)	264 (94.3)	1.207[a]	0.272[†]
Above or equal normal mean	0	16 (5.7)		
Mal-adaptive coping score	19.35±3.90	21.10±4.70		0.135[‡]

†P value determined by Chi-square (χ^2) test

‡P value determined by independent Student's t-test

Table 8.6 The Chi Square test shows that, the stressed garments personnel (n=20), those having mal adaptive coping mean score below normal mean (n=20) are not significantly (p=0.272) higher in proportion comparing the counterpart (n=280) who don't suffer stress. (Maladaptive Coping mean of stressed and non-stressed personal are 19.35 and 21.10 consecutively)

The next objective was to detect any association between Stress coping techniques (adaptive and maladaptive) and Productivity (presentism and absenteeism).

Table 9.1 Association between Adaptive coping technique and Absenteeism among garments factory personnel (n=300)

Adaptive coping	Absenteeism		Chi-square value	P value
	Yes n (%)	No n (%)		
Below normal mean	5 (9.3)	19 (7.7)	0.142[a]	0.706[†]
Above or equal normal mean	49 (90.7)	227 (92.3)		
Adaptive coping score	51.26±7.25	50.79±6.82		0.653[‡]

†P value determined by Chi-square (χ^2) test

‡P value determined by independent Student's t-test

Table 9.1 The Chi Square test shows that, among the garment's personnel having absenteeism history (n=54), those having adaptive coping mean score below normal mean (n=05) are not significantly (p=0.706) higher in proportion comparing the counterpart (n=49) having adaptive coping mean equal or above normal mean. (Adaptive Coping mean of absent and present personal are 51.26 and 50.79 consecutively)

Table 9.2 Association between Mal-adaptive coping technique and Absenteeism among garments factory personnel (n=300)

Mal-adaptive coping	Absenteeism		Chi-square value	P value
	Yes n (%)	No n (%)		
Below normal mean	51 (94.4)	233 (94.7)	0.006[a]	0.001[†]
Above or equal normal mean	3 (5.6)	13 (5.3)		
Mal-adaptive coping score	10.50±4.87	20.87±4.61		0.001[‡]

†P value determined by Chi-square (χ^2) test

‡P value determined by independent Student's t-test

Table 9.2 The Chi Square test shows that, among the garment's personnel having absenteeism history (n=54), those having mal adaptive coping mean score below normal mean (n=51) are significantly (p=0.001) higher in proportion comparing the counterpart (n=03) having mal adaptive coping mean equal or above normal mean. (Mal adaptive Coping mean of absent and present personal are 10.50 and 20.87 consecutively)

Table 9.3 Association between Adaptive coping technique and Presentism among garments factory personnel (n=300)

Adaptive coping	Presentism		Chi-square value	P value
	Yes n (%)	No n (%)		
Below normal mean	3 (6.3)	21 (8.3)	0.238[a]	0.626†
Above or equal normal mean	45 (93.8)	231 (91.7)		
Adaptive coping score	52.08±6.34	50.65±6.97		0.186‡

†P value determined by Chi-square (χ^2) test

‡P value determined byindependent Student's t-test

Table 9.3 The Chi Square test shows that, among the garment's personnel having presentism history (n=252), those having adaptive coping mean score below normal mean (n=21) are not significantly (p=0.626) higher in proportion comparing the counterpart (n=231) having adaptive coping mean equal or above normal mean. (Adaptive Coping mean of personnel having presentism and without presentism are 52.08 and 50.65 consecutively)

Table 9.4 Association between Mal-adaptive coping technique and Presentism among garments factory personnel (n=300)

Mal-adaptive coping	Presentism		Chi-square value	P value
	Yes n (%)	No n (%)		
Below normal mean	48 (100.0)	236 (93.7)	0.329[a]	0.073[†]
Above or equal normal mean	0	16 (6.3)		
Mal-adaptive coping score	19.96±3.44	21.18±4.84		0.095[‡]

†P value determined by Chi-square (χ^2) test

‡P value determined by independent Student's t-test

Table 11.4 The Chi Square test shows that, among the garment's personnel having presentism history (n=252), those having mal adaptive coping mean score below normal mean (n=236) are not significantly (p=0.073) higher in proportion comparing the counterpart (n=16) having mal adaptive coping mean equal or above normal mean. (Mal adaptive Coping mean of personnel having presentism and without presentism are 19.96 and 21.18 consecutively)

Association between sociodemographic variables and PWB, DAS, Coping, Productivity

The final objective was to find any association between socio-demographic variables and Psychological wellbeing, Depression, Anxiety, Stress, Stress Coping techniques and Productivity (absenteeism and presentism).

Table 10.1 Association between gender and adaptive coping of garments factory personnel (n=300)

Gender	Adaptive Coping		Chi-square value	P value†
	Below normal mean n (%)	Equal or above normal mean n (%)		
Male	0	135 (48.9)	**21.344[a]**	**<0.001**
Female	24 (100.0)	141 (51.1)		

†P value determined by Chi-square (χ^2) test

Table 10.1 the Chi square test shows that, between two groups of adaptive coping score mean (below normal mean and above normal mean), female shown significantly(p=<0.001) higher in proportion (100%) having mean value below normal adaptive mean comparing the male garments personnel. Means adaptive coping practiced less by females than male.

Table 10.2 Association between marital status and adaptive coping of garments factory personnel (n=300)

Marital status	Adaptive coping		Chi-square value	P value†
	Below normal mean n (%)	Equal or above normal mean n (%)		
Married	3 (12.5)	175 (63.4)	26.254[a]	**<0.001**
Unmarried	21 (87.5)	95 (34.4)		
Divorced	0	3 (1.1)		
Widow/Widower	0	3 (1.1)		

†P value determined by Chi-square (χ^2) test

Table 10.2 the Chi square test shows that, between two groups of adaptive coping score mean (equal or above normal mean and below normal mean), married personnel shown significantly (p=<0.001) higher proportion having adaptive coping mean comparing unmarried garments personnel.

Table 10.3 Association between educational status and adaptive coping of garments factory personnel (n=300)

Educational status	Adaptive coping		Chi-square value	P value†
	Below normal mean n (%)	Equal or above normal mean n (%)		
Graduation and above	15 (62.5)	36 (13.0)	38.275[a]	**<0.001**
HSC and below	9 (37.5)	240 (87.0)		

†P value determined by Chi-square (χ^2) test

Table 10.3 The Chi square test shows that, among the employee having equal or above normal mean adaptive coping score, higher proportion (62.5%) of more qualified employee adopt adaptive coping significantly(p=<0.001) higher than counterpart..

Table 10.4 Association between monthly income and adaptive coping of garments factory personnel (n=300)

Monthly income	Adaptive coping		Chi-square value	P value†
	Below normal mean n (%)	Equal or above normal mean n (%)		
5000-15000 bdt	9 (37.5)	223 (80.8)	72.921[a]	**<0.001**
15001-25000 bdt	2 (8.3)	30 (10.9)		
25001-35000 bdt	11 (45.8)	8 (2.9)		
350001-45000 bdt	2 (8.3)	7 (2.5)		
>45000 bdt	0	8 (2.9)		

†P value determined by Chi-square (χ^2) test

Table 10.4 Chi square test shows that, among the employee having adaptive coping mean below the normal mean, higher proportion (80.8%) of least income group (5000-15000) significantly (p=<0.001) have adaptive coping mean below normal mean value.

Table 10.5 Association between job position and adaptive coping of garments factory personnel (n=300)

Job position	Adaptive coping		Chi-square value	P value†
	Below normal mean n (%)	Equal or above normal mean n (%)		
Chairman / CEO	0	3 (1.1)	79.937[a]	**<0.001**
Manager level	15 (62.5)	15 (5.4)		
Operator / Worker	9 (37.5)	258 (93.5)		

†P value determined by Chi-square (χ^2) test

Table 10.5 The Chi square test shows that, among the garments personnel having adaptive mean score below normal mean (n=276), higher proportion (93.5%) of operators significantly (p=<0.001) have adaptive mean below normal mean.

Table 10.6 Association between educational status and Mal-adaptive coping of garments factory personnel (n=300)

Educational status	Mal-adaptive coping		Chi-square value	P value†
	Below normal mean n (%)	Equal or above normal mean n (%)		
Graduation and above	140 (46.7)	9 (37.5)	**13.044[a]**	**<0.001**
HSC and below	160 (53.3)	15 (62.5)		

†P value determined by Chi-square (χ^2) test

Table 10.6 the Chi square test shows that, among the employee having maladaptive coping mean equal or above normal mean (n=24), less qualified employee group having significantly (p=<0.001) higher proportion (n=15, 62.5)of maladaptive coping mean score comparing counterpart with higher academic qualification

Table 10.7 Association between job position and Mal-adaptive coping of garments factory personnel (n=300)

Job position	Mal-adaptive coping		Chi-square value	P value†
	Below normal mean n (%)	Equal or above normal mean n (%)		
Chairman / CEO	3 (1.1)	0	21.458[a]	**<0.001**
Manager level	23 (8.1)	7 (43.8)		
Operator / Worker	258 (90.8)	9 (56.3)		

†P value determined by Chi-square (χ^2) test

Table 10.7 the Chi square test shows that, among the employee who having maladaptive coping mean equal or above normal mean (n=284), workers were significantly higher in proportion (n=258, 90.8%) comparing other positions of the employee.

Table 10.8 Association between monthly income and Presentism of garments factory personnel (n=300)

Monthly income	Presentism		Chi-square value	P value†
	Yes n (%)	No n (%)		
5000-15000 bdt	32 (66.7)	200 (79.4)	**16.520[a]**	
15001-25000 bdt	6 (12.5)	26 (10.3)		
25001-35000 bdt	4 (8.3)	15 (6.0)		**<0.001**
350001-45000 bdt	0	9 (3.6)		
>45000 bdt	6 (12.5)	2 (0.8)		

†P value determined by Chi-square (χ^2) test

Table 10.8 Chi Square test shows that, monthly income of employee significantly (p=<0.001) associated with presentism of employee. Among the employee who showed history of presentism (n=48), low-income group was the highest proportion (66.7%, n=32)

Chapter 5

DISCUSSION

This research aimed to assess the mental health of the garments factory personnel in Bangladesh in light of the mental health definition in the World Health Organization. In this connection, the research objective was to evaluate the distribution of psychological wellbeing, depression, anxiety and stress, stress coping pattern and the productivity of the garments personnel along with possible correlates.

Psychological Wellbeing

Psychological wellbeing has been assessed in various ways in different researches and many tools have been used to assess the domain (Weziak-Bialowolska, McNeely, & VanderWeele, 2019). As in Bangladesh, Psychological Wellbeing Scale Bangla is the only adapted and validated measure, this tool has been used to explore this area and it assesses seven subdomains: psychological wellbeing, emotional wellbeing, work-related wellbeing, life wellbeing, physical wellbeing, social wellbeing and family wellbeing to extract psychological wellbeing status.

Among the study participants, 28.3% of garments personnel's total psychological wellbeing mean score is 212.12 which is less than the scale value (216) [See Table 1.1]. The mean scores of five subscales of the tool are found below the normal limit and those domains are psychological wellbeing, emotional wellbeing, work-related wellbeing, social wellbeing and life wellbeing [See table 1.2]. On the other side, the mean score of family wellbeing and physical wellbeing are above the normal limit and these are 19.68 (normal mean 15) and 29.16 (scale mean 27) consecutively [See table1.1].

Though the similar measure has not been applied by other relevant studies, in an Indian study the psychological well-being means of garments worker also found low which measured by the Carl

Ryff's scale (S, K, & G, 2019) and this match of finding could be explained by the homogenous socioeconomic condition of the employee of both countries. A Mexican study assessed the well-being of industry employee with the help of the Flourish Index (FI), which included five domains like (life satisfaction, physical and mental health, meaning and purpose, character and virtue, and close social relationships) and the flourishing index of employees found 8.93 where each domain score range is 0-10. Though FI score is incompatible to compare with psychological wellbeing Bangla scale score, overall wellbeing condition of Mexican employee found satisfactory which do not match current study findings. This variation of finding is due to the construct of measure along with socio-demographic variables (Węziak-Białowolska, Białowolski, & McNeely, 2019).

It is complicated to reach an inference comparing different studies which having heterogeneous methods locally and globally. Overall, it can be concluded from this study that, psychological wellbeing of one third study population is not satisfactory in Bangladesh.

Depression, Anxiety and Stress

Mental disorders are one of the extreme negative outcomes of mental health. As depression, anxiety and stress are the most common mental health issues in garments employee or among the working-age groups. This study objected to explore these disorders with the help of locally adapted and validated tool DASS 21 which is a widely used measure globally.

In this study, 23.3% (n=70) of garments personnel having any one or more mental health conditions like depression, anxiety or stress [See Figure 1] which is higher than the findings of a recent national survey (16.8%) conducted in 2018-2019 (“Nimh-Fact-Sheet, 2019.). This variation could be due to research design as the national survey included 13 different mental

disorders among the community, whereas this study included only three common and prevalent mental health issues in garments personnel.

Among the proportion of employee having mental health issues, 14.3% of the depression [see table 2] which is lower than other two local studies where prevalence is 33.5% and 23.5% consecutively (Islam, 2016; Fitch et al., 2017). Though Indian prevalence is 6.8% which is lower than the current study, it matches with national community prevalence (6.7%). This difference is due to different research designs of the studies (Shanbagh & Josheph, 2012). The current study also found that 12.7% of garments personnel suffer anxiety whereas the recent national survey found the prevalence of anxiety was 4.5% [See Table 2]. On the other side, in Indian research, the prevalence found 7.6% (Shanbagh & Josheph, 2012) and such discrepancy due to heterogeneous research methods. The existing study also found that 6.7% of garments worker suffer stress. In a study among similar population in India, 137 subjects reported mild occupational stress and 48 reported moderates to severe occupational stress (Kiran et al, 2011). In another study in India, 26% of garments employees suffer stress(Anandi et al., 2017). In Congo, 28% of garments personnel found suffering from stress(Kitronza & Mairiaux, 2015).

It can be interpreted that, there is a wide range of variability of the distribution of mental disorders among garments employee globally and locally. But in a nutshell, it can be said that one-quarter of the study population suffer mental health issues at the disorder level.

Stress coping pattern

This study found that the participants predominantly apply healthy or adaptive coping comparing maladaptive coping [See Table 3.4]. Among the different types of adaptive coping, “Planning” and "Religious practices" were the top two techniques that were applied predominantly by the garment’s personnel [See Table 3.1]. On the other hand, “Venting” and “Instrumental support” are techniques that were used less frequently by the garment’s employee [See Table 3.1]. In Indian research among female workers of selected apparel, "religion" also found the highest applied coping technique and the score mean was almost similar (6.36) to this study (Azmi, Husain, Vashist, & Usmani, 2014). Another Indian study found that “stress management program” and “prayer” are the top two measures that adopted by garments employees (Karthic, 2017). This partial match of the findings can be explained by the similarity of sociodemographic context.

On the other side, among the different types of maladaptive coping techniques, "Distraction" is predominantly applied and "substance use" is the least applied stress coping technique [See Table 3.1]. Though poor community primarily adopt “smoking" and "disengagement from work" as the way of stress coping, such pattern does not predominantly exist in this study population (Krueger & Chang, 2008).

The discussion suggests that planning and religious practices are the prevailing adaptive coping techniques among garments personnel and distraction is the predominant maladaptive stress-coping measures among garments employee in Bangladesh.

Productivity (absenteeism and presentism)

Now a day, from an economical perspective, employees' health is rapidly becoming a key business factory (Kirsten, 2010). The productivity of the garment's personnel can be influenced by various factors and its costs a huge amount annually to any organization and nation. This study revealed that, 18% of the employee having a recent history of absenteeism and 16% of them having presentism [See Figure3]. Though there is no available local data, in a Sri Lankan study, 85% of garments employee talked about, absenteeism, presentism or both (Woo et al., 2011). This huge disparity between the two countries is due to the variation of inclusion criteria of the study place. In Sri Lanka, the study conducted in an area where substances use was prevalent. On the other side, the study area of this research doesn't have such vulnerable characteristics. Though there is a variation of absenteeism and presentism of garments employee in a different country, a section of Bangladeshi garments personnel indeed shows low productivity.

Sociodemographic characteristics of the study population

The study conducted among six garments factories of Dhaka and Chittagong and 300 employees of different categories (worker, manager, chairman) interviewed to assess their mental health status. In Bangladesh, majorities of the garment's factories are concentrated in Dhaka and Chittagong, which convinced the researcher to select study places. Regarding the participants' socio-economic profile, it was found that most of the employees are Muslim (96%), married (59.3%), young aged; 18 to 27yrs (72%), female (55%), workers (89%), less educated (83%) and less paid (77%).

Education, Income, Job position: The available local data reveals that there are no previous studies that explored mental health of all three categories of the employee rather worker or low-income group solely. The pattern of less educated and low paid workers also found in another local study where no employee found educated more than HSC and salary was only 9000 BDT monthly (Mehedi , Sujahangir & Sadeka, 2014).

Gender: There are more than 5000 factories in Bangladesh and over 4 million employees working here, where more than 80% are female (Farhana, 2015). This female dominancy also observed globally as three-quarters of huge work (60-75 million) force are female which also matches local data (Zondlo, Wang, & Feuerstein, 2002). In another study in Bangladesh, the female workers found 66.66% comparing male counterpart (Farhana, 2015).

Age: Another local study where 64.44% of garments employee were in the age range of 18-25 (Farhana, 2015).

It can be concluded that, like neighboring countries or subcontinent, the majority of the workforce in the garments sector belongs to low socio-economic background.

Association between psychological wellbeing and mental disorders

The study found that garments personnel who have been suffering from depression; anxiety and stress have total psychological wellbeing mean score significantly lower than the counterpart who doesn't have the disorders [See Table 4.1, 4.2, 4.3]. This association suggests that psychological wellbeing can be negatively influenced by these common mental disorders, which also supported by a study conducted in the USA that found a correlation between mental illness and psychological wellbeing (Slade, 2010). In another study, it revealed that anxiety and depression are correlated with low psychological wellbeing (French, 2013).

Association between psychological wellbeing and productivity

The garments personnel who have shown absenteeism and presentism, have low total psychological wellbeing mean scores comparing counterpart who doesn't have a history of absenteeism and presentism consecutively [See table 5.1, 5.2]. In another study, it also found that, 5% higher absenteeism among employee who has poor mental health (Bubonya, Cobb-Clark, & Wooden, 2017).

Association between mental disorders and productivity

The study revealed that people suffer from mental disorders (depression, anxiety and stress) are less productive than a counterpart who are healthy [See table 6.1, 6.2, 6.3, 6.4, 6.5, 6.6]. The review work done by the Center for Understanding Sustainable Prosperity (CUSP) found that poor mental health is highly linked with productivity in term of presentism and absenteeism (ISHAM, MAIR, & JACKSON, 2020). Though an Indian study found that, depression and anxiety having associations with the productivity of the employee, it was not statistically significant (Rao & Ramesh, 2015). In 2010, Lerner D et al found that absenteeism and presentism significantly worse for the depressed employee (Lerner et al., 2010) and in another study it also found that, reduced productivity significantly higher among the workers with Major Depressive Disorder (Woo et al., 2011).

Overall, this study finding suggests that mental disorders in garments employee reduce their productivity.

Association between stress coping pattern and psychological wellbeing

The study found that stress coping pattern having an impact on psychological wellbeing and it proved that maladaptive coping having a negative outcome, whereas adaptive coping having a positive outcome on psychological wellbeing [See Table 7.1-7.2]. In another study, it found that maladaptive coping significantly correlated with poor psychological wellbeing and in Nigeria authors concluded that, coping strategies significantly impact the psychological wellbeing of university students (Guiyuan et al, 2011) (Ukeh & Hassan, 2018). In addition, a research found that adaptive coping style work as a resource for psychological wellbeing during fighting against academic stress (Freire, Ferradás, Valle, Núñez, & Vallejo, 2016). Moreover, different study also found that adaptive coping correlated with wellbeing (García Reyes, 2013). Furthermore, in another study it was found that stress coping strategies significantly correlated with psychological wellbeing (Hayat & Zafar, 2015)

In brief, it can be summarized that, among the garment's employee, the types of stress coping techniques having both positive and negative impact on psychological wellbeing.

Association between stress coping pattern and mental disorders

Overall, the research found that maladaptive coping pattern significantly associated with depression and anxiety. But the employee did not show any association with stress disorder [See Table 8.1-8.4]. In a study among family members of ICU patient, it was found that adaptive coping significantly related with depression, anxiety and stress level (Olabisi et al., 2020). In China, a study conducted among university student, found that stress is associated with coping strategies and depressive symptoms and passive strategies mediate the relationship between stress and depressive symptoms(Chou et al., 2011). In another study among Egyptian physicians,

it was found that depression, anxiety and stress significantly negatively correlated to adaptive coping (Khalaf, Khalil, & Abdelmaksoud, 2020). Another study found that female with higher maladaptive coping pattern also show depressive symptom more than those who adopt higher adaptive stress coping strategies (Thompson et al., 2010).

The discussion suggests that, like other studies, this study also observed the association between the pattern of stress coping techniques with mental disorders (depression and anxiety) among garments employee of Bangladesh.

Association between stress coping pattern and productivity

This research found that maladaptive coping pattern significantly associated with absenteeism but the adaptive coping pattern is not significantly associated with absenteeism or presentism [See Table 9.1-9.4]. In a Slovenian study among managers, it was found that managers who use problem-focused coping strategies are significantly less absent from work and experienced lower levels of stress than managers who use emotion-focused stress coping strategies (Erenda, 2013). It indicates that, adaptive coping works as a protective factor in case of absenteeism. Contrary to these findings, a study among American nurses, found that occasional absenteeism may help to maintain physical and psychological states at manageable levels even if they do not result in immediately noticeable improvements on the part of returning employee (Hackett & Bycio, 1996).

Though there are contradictory pieces of evidence regarding stress coping pattern and productivity in various researches, existing research found the link between maladaptive stress-coping practice and reduced productivity among Bangladeshi garments employee.

Association between socioeconomic variables and mental health

The study observed the gender difference in the case of stress coping techniques. The female employees show less adaptive coping practice than counterpart [See Table 10.1]. This finding also matches with another study, where the researcher found that though there is no significant difference between male and female regarding perceiving stress, female more likely to use adaptive coping than male and male adopt maladaptive coping more(Gentry et al., 2007). On the other hand, the married employee showed a significantly higher proportion of adaptive coping practice than unmarried employees [See Table 10.2] but such disparity did not find significant between these two groups in another study(Krueger & Chang, 2008).

This study found that the low-income group adopts maladaptive stress-coping more and adaptive coping lesser than other income or position of the employee. It also found that less educated, workers or operators and lowest income show significantly lower adaptive coping practice comparing well educated (graduate or postgraduate), higher positions and highly paid officials. [See Table 10.3-10.6]. In addition, a higher portion of less qualified employee adopts maladaptive coping styles than advanced literate colleagues.

The finding of this study also echoed other studies, where poor socioeconomic status (SES) group do smoke and disengaged from work as the way of stress coping techniques which are maladaptive (Krueger & Chang, 2008). At the same time, it also found that employee with low income shows a higher frequency of presentism than other income groups [See table 10.6] [See table 10.7].

On the whole, the sociodemographic factors like gender, marital status, academic qualification, job position and monthly income significantly associated with stress coping techniques among

the participants of this research. In brief, people from poor economic background practice maladaptive stress-coping more and adaptive coping less comparing the middle or high-income group of garments employees.

Summary

From the above discussion, it can be said that a segment of garments employee of Bangladesh suffer mental disorders like depression, anxiety and stress and their psychological wellbeing is not satisfactory. Moreover, poor psychological wellbeing makes the employee less productive though mental disorders are associated with low productivity. Most of the garment's employee applies healthy stress coping techniques comparing with the unhealthy techniques. Religious practice is one of the prevalent healthy stress coping techniques and distraction is one of the prevalent unhealthy techniques among the garment's employee. In this study, majority of the employee belongs to low economic status and among them, maladaptive stress coping is more prevalent than other income groups. This study also found that the pattern of stress coping (adaptive and maladaptive) influences psychological wellbeing in both positive and negative way. Finally, maladaptive coping pattern significantly associated with depression, anxiety and productivity (absenteeism) of the garment's employee of Bangladesh.

Conclusion

Most of the available pieces of evidence in Bangladesh regarding the mental health of garments population related to worker group and individual domain of mental health. This study uncovered the overall mental health condition of garments factory personnel in the context of psychological wellbeing, common mental disorders, stress coping pattern and productivity. It found that a noticeable portion of the employee suffers from depression, anxiety and stress. Moreover, they hold unsatisfactory psychological well-being. Furthermore, poor socioeconomic condition, unhealthy stress coping, presence of mental disorders and poor psychological well-being found important associates that influenced negatively their productivity.

Limitations

In this study, the garments were purposively selected and it would be better if they were randomly included. Due to the budget and time constrain, the study could not be conducted on a broader scale which could be representative of our country context. As the data were collected anonymously, the detected clinical population could not be communicated to refer them for receiving mental health services. Finally, the researcher was unable to compare the current study findings with other studies, as there were no previous national or global findings that followed a similar research design.

Implication and Recommendation

The findings will be able to provide a glimpse of the current mental health status of garments factory personnel in Bangladesh. Based on this study finding, authorities or stack holders can realize the importance of mental health assessment, service and training facilities for the employee to ensure their productivity. In future, the research outcome may be helpful to formulate extended research nationwide to get an accurate impression of the area. It will also guide the other researchers in this field to conduct a qualitative study of relevant domains which will be able to provide a complete scenario of the mental health of garments employee.

References

Adnan, A. (2016). Ready-Made Garments Sector of Bangladesh: Its Contribution and Challenges towards Development *. *J. Asian Dev. Stud*, *Vol. 5*(November). https://doi.org/10.1016/j.pain.2008.01.007

Ahola, A., Aiash, H. M., Al-abbasi, A., Haji, H., Al-adsani, R., Alameedy, W., … Bhatti, J. A. (2014). NIH Public Access. *Diabetes Care*, *2*(1), 1–5. https://doi.org/10.1007/s00125-005-0024-3

Akhter, S., Rutherford, S., Akhter Kumkum, F., Bromwich, D., Anwar, I., Rahman, A., & Chu, C. (2017). Work, gender roles, and health: Neglected mental health issues among female workers in the ready-made garment industry in Bangladesh. *International Journal of Women's Health*, *9*, 571–579. https://doi.org/10.2147/IJWH.S137250

Ali, H., Am, M., Jamaldeen, A., & Emmwky, E. (2015). The Relationship between Occupational Stress and Job Satisfaction of Employees : Special Reference to AMES Textiles (Pvt .) Ltd . in Ampara. *4th Annual International Research Conference*, 52–58.

Alvi, U. (2017). The Effect of Psychological Wellbeing on Employee Job Performance: Comparison between the Employees of Projectized and Non-Projectized Organizations. *Journal of Entrepreneurship & Organization Management*, *06*(01), 8–12. https://doi.org/10.4172/2169-026X.1000206

Anandi, B. S., Rajaram, D., Aravind, B. A., Sukumar, G. M., & Radhika, K. (2017). Work-related stress assessment among a garment factory employees in Bangalore suburban locality, *4*(10), 3870–3876.

Arafat, S. M.Yasir. (2019). History of psychiatry in Bangladesh. *Asian Journal of Psychiatry*, *46*(September), 11–12. https://doi.org/10.1016/j.ajp.2019.09.024

Arafat, S M Y, Uddin, M. S., Chowdhury, E. Z., Huq, N., Choudhury, S. R., & Chowdhury, M. H. R. (2016). Demography and Diagnosis of Patients Received Emergency Medical Service from Two Private Psychiatric Hospital in Dhaka City. *International Journal of Neurorehabilitation*, *03*(06), 240. https://doi.org/10.4172/2376-0281.1000240

Aryan, R., & Kathuria, D. (2017). Psychological Wellbeing at Workplace:-An Analytical Study on It Sector. *International Journal of Advanced Research in Computer Science and Software Engineering*, *7*(6), 223–228. https://doi.org/10.23956/ijarcsse/V7I6/0150

Australian Human Rights Commission. (2016). 2010 Workers with Mental Illness: a Practical Guide for Managers. *Mental Health in the Workplace*. Retrieved from https://www.humanrights.gov.au/publications/2010-workers-mental-illness-practical-guide-managers/1-mental-health-workplace

Azmi, F., Husain, M., Vashist, S., & Usmani, J. A. (2014). In Defense of Defensive Nursing Practice. *International Journal of Nursing Care*, *2*(2), 11. https://doi.org/10.5958/2320-8651.2014.01262.9

Bangladesh Bureau of Statistics. (2014). Population & Housing Census-2011.

BBS. (2017). Bangladesh Statistics Report 2017.

Begum, F., Ali, R., Hossain, M., & Shahid, S. B. (2011). Harassment of women garment workers in Bangladesh. *Journal of the Bangladesh Agricultural University*, *8*(2), 291–296. https://doi.org/10.3329/jbau.v8i2.7940

Bender, A., & Farvolden, P. (2008). Depression and the workplace: A progress report. *Current Psychiatry Reports*, *10*(1), 73–79. https://doi.org/10.1007/s11920-008-0013-6

Black Dog Institute. (2016). Workplace Mental Health Toolkit Practical Guide & Resources. Retrieved from https://blackdoginstitute.org.au/docs/default-source/education-resources/black-dog-institute-mental-health-toolkit-2017.pdf

Bovopoulos, N., Jorm, A. F., Bond, K. S., LaMontagne, A. D., Reavley, N. J., Kelly, C. M., … Martin, A. (2016). Providing mental health first aid in the workplace: a Delphi consensus study. *BMC Psychology*, *4*(1), 41. https://doi.org/10.1186/s40359-016-0148-x

BSR. (2014). Healthcare Delivery in RMG Factories in Bangladesh: What are the Missed Opportunities?, (November). Retrieved from https://www.bsr.org/reports/BSR_Healthcare_Delivery_in_RMG_Factories_in_Bangladesh.pdf

Bubonya, M., Cobb-Clark, D. A., & Wooden, M. (2017). Mental health and productivity at work: Does what you do matter? *Labour Economics*, *46*, 150–165. https://doi.org/10.1016/j.labeco.2017.05.001

Burman, R. (2018). A Systematic Literature Review of Work Stress, *3*(July), 112–132.

Burton, J. P., Hoobler, J. M., & Scheuer, M. L. (2012). Supervisor Workplace Stress and Abusive Supervision: The Buffering Effect of Exercise. *Journal of Business and Psychology*, *27*(3), 271–279. https://doi.org/10.1007/s10869-011-9255-0

Butler, G. (1993). Definitions of stress. *Occasional Paper (Royal College of General Practitioners)*, (61), 1–5. https://doi.org/10.1093/nq/s11-VI.132.16-a

Carlson, L. A., & Bitsch, V. (2018). Social sustainability in the ready-made-garment sector in Bangladesh: An institutional approach to supply chains. *International Food and Agribusiness Management Review*, *21*(2), 269–292. https://doi.org/10.22434/IFAMR2017.0114

Chace Dwyer, S., Hossain, M. I., Bajracharya, A., & Jain, A. (2021). Reaching women at work with health programming in Bangladesh: results of difference-in-differences analysis among female factory workers. *Sexual and Reproductive Health Matters*, *29*(1). https://doi.org/10.1080/26410397.2021.1991116

Chain, V. (n.d.). The Global Textile and Garments Industry : The Global Textile and Garments Industry : The Role of Information.

Chen, W. Q., Siu, O. L., Lu, J. F., Cooper, C. L., & Phillips, D. R. (2009). Work stress and depression: The direct and moderating effects of informal social support and coping. *Stress*

and Health, *25*(5), 431–443. https://doi.org/10.1002/smi.1263

Chopra, P. (2009). Mental health and the workplace: Issues for developing countries. *International Journal of Mental Health Systems*, *3*, 1–9. https://doi.org/10.1186/1752-4458-3-4

Chou, P. C., Chao, Y. M. Y., Yang, H. J., Yeh, G. L., & Lee, T. S. H. (2011). Relationships between stress, coping and depressive symptoms among overseas university preparatory Chinese students: A cross-sectional study. *BMC Public Health*, *11*. https://doi.org/10.1186/1471-2458-11-352

Clean Clothes Campaign. (2015). Facts on The Global Garment Industry, 1–21. Retrieved from https://cleanclothes.org/resources/publications/factsheets/general-factsheet-garment-industry-february-2015.pdf

Deloitte UK. (2017). Mental health and employers: The case for investment. A supporting study for the Independent Review | Deloitte UK. *Monitor Deloitte*, (October). Retrieved from https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/public-sector/deloitte-uk-mental-health-employers-monitor-deloitte-oct-2017.pdf%0Ahttps://www2.deloitte.com/uk/en/pages/public-sector/articles/mental-health-employers-review.html

Dey, B. K., & Rahman, A. (2017). Garments Worker ' s Job Stress and Mental Health, (December).

El-Den, S., Chen, T. F., Gan, Y. L., Wong, E., & O'Reilly, C. L. (2018). The psychometric properties of depression screening tools in primary healthcare settings: A systematic review. *Journal of Affective Disorders*, *225*(August 2017), 503–522. https://doi.org/10.1016/j.jad.2017.08.060

Erenda, I. (2013). Relationship between stress coping strategies and absenteeism among middle level managers Relationship between stress coping strategies and absenteeism among middle - level managers « Relationship between stress coping strategies and absenteeism among mid, (May 2015).

Farhana, K. (2015). PRESENT STATUS OF WORKERS IN READY- MADE GARMENTS INDUSTRIES IN BANGLADESH, *11*(7), 564–574.

Ferdous, S. R. (2015). Factors promoting work satisfaction of readymade garment (RMG) worker in Bangladesh : An empirical analysis. *Journal of Scientific Research and Development*, *2*(8), 39–47.

Fitch, T. J., Moran, J., Villanueva, G., Sagiraju, H. K. R., Quadir, M. M., & Alamgir, H. (2017). Prevalence and risk factors of depression among garment workers in Bangladesh. *International Journal of Social Psychiatry*, *63*(3), 244–254. https://doi.org/10.1177/0020764017695576

Fong, B. (2008). Fong's industries shows support to University of Hong Kong (HKU) with the donation of HK$15 million. *Pakistan Textile Journal*, *57*(4), 56–57.

https://doi.org/10.1080/02678370500144831

Freire, C., Ferradás, M. D. M., Valle, A., Núñez, J. C., & Vallejo, G. (2016). Profiles of psychological well-being and coping strategies among university students. *Frontiers in Psychology*, *7*(OCT), 1–11. https://doi.org/10.3389/fpsyg.2016.01554

French, J. (2013). Department of Health. *IT in Business: A Business Manager's Casebook*, 44–52. https://doi.org/10.5749/j.cttts72q.17

García Reyes, L. E. (2013). 済無No Title No Title. *Journal of Chemical Information and Modeling*, *53*(9), 1689–1699.

Gentry, L. A., Chung, J. J., Aung, N., Keller, S., Heinrich, K. M., & Maddock, J. E. (2007). Gender Differences in Stress and Coping Among Adults Living in Hawai`i. *Californian Journal of Health Promotion*, *5*(2), 89–102. https://doi.org/10.32398/cjhp.v5i2.1235

GUEVARA, J. E. (1961). History of psychiatry. *Nicaragua Médica*, *17*(6), 281–286. https://doi.org/10.5005/jp/books/14227_83

Gyllensten, K., & Palmer, S. (2005). The role of gender in workplace stress: A critical literature review. *Health Education Journal*, *64*(3), 271–288. https://doi.org/10.1177/001789690506400307

Hackett, R. D., & Bycio, P. (1996). An evaluation of employee absenteeism as a coping mechanism among hospital nurses. *Journal of Occupational and Organizational Psychology*, *69*(4), 327–338. https://doi.org/10.1111/j.2044-8325.1996.tb00619.x

Haider, M. Z. (2007). Competitiveness of the Bangladesh Ready-made Garment Industry in Major International Markets. *Asia-Pacific Trade and Investment Review*, *3*(1), 3–27.

Harvey, S., Joyce, S., Tan, L., Johnson, A., Nguyen, H., Modini, M., & Groth, M. (2014). Developing a mentally healthy workplace : A review of the literature, (November), 1–76. Retrieved from http://www.headsup.org.au/docs/default-source/resources/developing-a-mentally-healthy-workplace_literature-review.pdf?sfvrsn=2

Hasan, K. M. F., Mia, M. S., Md, A., Rahman, M. M., Ullah, A. N. M. A., & Ullah, M. S. (2016). Role of Textile and Clothing Industries in the Growth and Development of Trade & Business Strategies of Bangladesh in the Global Economy. *International Journal of Textile Science*, *5*(3), 39–48. https://doi.org/10.5923/j.textile.20160503.01

Hasan, M. T., Amin, A., Chowdhury, M. U., Faizul Islam, K., Huq, S. M., Parvin, R., … Rashid, S. F. (2021). Health sufferings, healthcare seeking behavior, awareness about health insurance, and health related rights of ready made garments workers in Bangladesh: Findings from a cross-sectional study. *Journal of Occupational Health*, *63*(1), 1–9. https://doi.org/10.1002/1348-9585.12256

Hatch, P. H., Winefield, H. R., Christie, B. A., & Lievaart, J. J. (2011). Workplace stress, mental health, and burnout of veterinarians in Australia. *Australian Veterinary Journal*, *89*(11), 460–468. https://doi.org/10.1111/j.1751-0813.2011.00833.x

Hayat, I., & Zafar, M. (2015). Relationship between Psychological Well-Being and Coping Strategies among Parents with Down syndrome children. *International Journal of Humanities and Social Science*, *5*(71), 109–117.

Henderson, M., Harvey, S. B., Øverland, S., Mykletun, A., & Hotopf, M. (2012). Work and common psychiatric disorders. *Journal of the Royal Society of Medicine*, *105*(7), 198–207. https://doi.org/10.1258/jrsm.2011.100231

Hoque, M. E., & Islam, M. M. (2003). Contribution of Some Behavioural Factors to Absenteeism of Manufacturing Workers in Bangladesh. *Pakistan Journal of Psychological Research*.

Hoque, M. M. (2015). Violence against Women Workers in the Ready-made Garments Industry in Bangladesh, *9*(1).

Hoque, S., Debnath, A. K., & Sohel, S. M. (2006). IMPACT OF GARMENT INDUSTRIES ON ROAD SAFETY IN METROPOLITAN DHAKA Dr. *International Conference on Traffic Safety in Developing Countries*, (January), 489–498.

HRM_Practices_in_Garments_Industry. (n.d.).

Interventions, E., & Options, P. (2004). Prevention of Mental Disorders Prevention of Mental Disorders. *World Health*, 68 pags. https://doi.org/10.1016/j.cbpra.2007.11.001 LK - http://vu.on.worldcat.org/atoztitles/link?sid=EMBASE&issn=10777229&id=doi:10.1016%2Fj.cbpra.2007.11.001&atitle=Prevention+of+Mental+Disorders&stitle=Cogn.+Behav.+Pract.&title=Cognitive+and+Behavioral+Practice&volume=15&issue=1&spage=1&epage=2&aulast=Whittal&aufirst=Maureen+L.&auinit=M.L.&aufull=Whittal+M.L.&coden=CBPRF&isbn=&pages=1-2&date=2008&auinit1=M&auinitm=L.

ISHAM, A., MAIR, S., & JACKSON, T. (2020). Wellbeing and productivity, 23–27.

Islam, L. N., Sultana, R., & Ferdous, K. J. (2014). Occupational Health of the Garment Workers in Bangladesh. *Journal of Environments*, *1*(1), 21–24. Retrieved from http://www.asianonlinejournals.com/index.php/JOEN/article/view/24

Islam, M., Ahmed, S., Sarker, R., Farjana, S., Akter, A., & Saha, S. (2014). Health-related Quality of Life Among Adult Migrant Garment Workers in Dhaka City. *Bangladesh Medical Journal*, *40*(3), 14–17. https://doi.org/10.3329/bmj.v40i3.18651

Joria, K. L., & Mehta, R. (2013). Major health risk factors prevailing in garment manufacturing units of Jaipur. *Textile Trends*, *56*(2), 41–44. https://doi.org/10.4172/2165-7556.1000102

Karthic, U. (2017). Stress Management and Coping Strategies With Reference To Garment Employees in Coimbatore District, (April), 1–6.

Kazdin, A. E. (1981). Assessment Techniques for Childhood Depression: A Critical Appraisal. *Journal of the American Academy of Child Psychiatry*, *20*(2), 358–375. https://doi.org/10.1016/S0002-7138(09)60994-8

Khalaf, O. O., Khalil, M. A., & Abdelmaksoud, R. (2020). Coping with depression and anxiety

in Egyptian physicians during COVID-19 pandemic. *Middle East Current Psychiatry*, *27*(1). https://doi.org/10.1186/s43045-020-00070-9

Khan, A., Uddin, R., Alam, N., Sultana, S., Alam, M.-U., & Ahmed, R. (2019). Psychometric properties of the Bangla version of the Kessler Psychological Distress Scale (K6). *Global Psychiatry*, *0*(0), 183–193. https://doi.org/10.2478/gp-2019-0016

Khan, M. N., & Mofizul Islam, M. (2018). Women's attitude towards wife-beating and its relationship with reproductive healthcare seeking behavior: A countrywide population survey in Bangladesh. *PLoS ONE*, *13*(6), 1–13. https://doi.org/10.1371/journal.pone.0198833

Khosla, N. (2009). The ready-made garments industry in Bangladesh: A means to reducing gender-based social exclusion of women? *Journal of International Women's Studies*, *11*(1), 289–303.

Kirsten, W. (2010). Making the link between health and productivity at the workplace -A global perspective. *Industrial Health*, *48*(3), 251–255. https://doi.org/10.2486/indhealth.48.251

Kitronza, P. L., & Mairiaux, P. (2015). Occupational Stress among Textile Workers in the Democratic Republic of Congo. *Tropical Medicine and Health*, *43*(4), 223–231. https://doi.org/10.2149/tmh.2015-24

Knifton, L., Verona, W., Gründemann, R., Dijkman, A., Besten, H. den, & Ten Have, K. (2011). A guide for employers. To promote mental health in the workplace. *European Network for Workplace Health Promotion*. Retrieved from www.enwhp.org

Krueger, P. M., & Chang, V. W. (2008). Being poor and coping with stress: Health behaviors and the risk of death. *American Journal of Public Health*, *98*(5), 889–896. https://doi.org/10.2105/AJPH.2007.114454

Kyu, H. H., Abate, D., Abate, K. H., Abay, S. M., Abbafati, C., Abbasi, N., … Murray, C. J. L. (2018). Global, regional, and national disability-adjusted life-years (DALYs) for 359 diseases and injuries and healthy life expectancy (HALE) for 195 countries and territories, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017. *The Lancet*, *392*(10159), 1859–1922. https://doi.org/10.1016/S0140-6736(18)32335-3

Lam, R. W., Michalak, E. E., & Yatham, L. N. (2009). A new clinical rating scale for work absence and productivity: Validation in patients with major depressive disorder. *BMC Psychiatry*, *9*, 3–9. https://doi.org/10.1186/1471-244X-9-78

LaMontagne, A. D., Martin, A., Page, K. M., Reavley, N. J., Noblet, A. J., Milner, A. J., … Smith, P. M. (2014). Workplace mental health: Developing an integrated intervention approach. *BMC Psychiatry*, *14*(1), 1–11. https://doi.org/10.1186/1471-244X-14-131

Lerner, D., Adler, D. A., Rogers, W. H., Chang, H., Lapitsky, L., McLaughlin, T., & Reed, J. (2010). Work performance of employees with depression: The impact of work stressors. *American Journal of Health Promotion*, *24*(3), 205–213. https://doi.org/10.4278/ajhp.090313-QUAN-103

Manderscheid, R. W., Ryff, C. D., Freeman, E. J., McKnight-Eily, L. R., Dhingra, S., & Strine, T. W. (2010). Evolving definitions of mental illness and wellness. *Preventing Chronic Disease*, *7*(1), 5–10.

Mazumder, A., Alam, M., Yoshii, H., Kortesluoma, R.-L., Mullick, M. ., & Chowdhury, M. . (2015). Positive and negative symptoms in patients of schizophrenia: A cross sectional study. *Acta Medica International*, *2*(1), 48. https://doi.org/10.5530/ami.2015.1.7

McTernan, W. P., Dollard, M. F., & LaMontagne, A. D. (2013). Depression in the workplace: An economic cost analysis of depression-related productivity loss attributable to job strain and bullying. *Work and Stress*, *27*(4), 321–338. https://doi.org/10.1080/02678373.2013.846948

Mehedi Hasan Sikdar Assistant professor, M., Sujahangir Kabir Sarkar, M., & Sadeka Research Fellow, S. (2014). Socio-Economic Conditions of the Female Garment Workers in the Capital City of Bangladesh. *International Journal of Humanities and Social Science*, *4*(3).

Mia, R., Ahmed, T., Tanjim, M. N., Waqar, M. A., Hasan, M. M., Das, A., … Jahan, K. (2020). An extensive analysis of the health hazards for RMG workers in apparel sector of Bangladesh. *Journal of Textile Engineering & Fashion Technology*, *6*(4), 141–146. https://doi.org/10.15406/jteft.2020.06.00242

Mozumder, M. K. (2017). Validation of Bengali perceived stress scale among LGBT population. *BMC Psychiatry*, *17*(1), 1–7. https://doi.org/10.1186/s12888-017-1482-0

Nahian, N., Rahat, M., & Yesmin, N. (2021). " Workplace Mental Health Disorders in Garment s Workers ," *3389*, 352–358. https://doi.org/10.36348/sjm.2021.v06i11.002

Netterstrøm, B., Conrad, N., Bech, P., Fink, P., Olsen, O., Rugulies, R., & Stansfeld, S. (2008). The relation between work-related psychosocial factors and the development of depression. *Epidemiologic Reviews*, *30*(1), 118–132. https://doi.org/10.1093/epirev/mxn004

Nimh-Fact-Sheet-5-11-19.Pdf. (n.d.).

Olabisi, O. I., Olorunfemi, O., Bolaji, A., Azeez, F. O., Olabisi, T. E., & Azeez, O. (2020). Depression, anxiety, stress and coping strategies among family members of patients admitted in intensive care unit in Nigeria. *International Journal of Africa Nursing Sciences*, *13*(September 2019), 100223. https://doi.org/10.1016/j.ijans.2020.100223

Ornek, O. K., & Sevim, E. (2018). Work-Related Stress and Coping Profiles among Workers in Outer Garment Sector. *COJ Nursing & Healthcare*, *3*(February), 1–7. https://doi.org/10.31031/COJNH.2018.03.000552

Parvin, K., Mamun, M. Al, Gibbs, A., Jewkes, R., & Naved, R. T. (2018). The pathways between female garment workers' experience of violence and development of depressive symptoms. *PLoS ONE*, *13*(11), 1–17. https://doi.org/10.1371/journal.pone.0207485

Practice_of_human_resource_management_of. (n.d.).

Rahman, S., & Siddiquee, S. (2018). 138 Musculoskeletal disorder among the garment workers:

a major work related health problem in a leading garment industry of bangladesh, A163.1-A163. https://doi.org/10.1136/oemed-2018-icohabstracts.461

Rajat D., Gupta S., , Debashis D., Saikat R., Sriporna D., Shah M., Y. A. (2015). Occupational Health Hazards among Workers in Garment Factories in Bangladesh:developing countries study. *BMC Public Health*, *5*(5), 92–94.

Rao, S., & Ramesh, N. (2015). Depression, anxiety and stress levels in industrial workers: A pilot study in Bangalore, India. *Industrial Psychiatry Journal*, *24*(1), 23. https://doi.org/10.4103/0972-6748.160927

Rey, J. M., Bella-awusah, T. T., & Liu, J. (2015). DEPRESSION IN CHILDREN AND adolescents. *IACAPAP Textbook of Child and Adolescent Mental Health*, 1–36.

Rikta, A. D. (n.d.). Maintenance of Health & Safety of Women Garment Employees : A Study of Chittagong Asian Apparels Ltd . . Mihir Kumar Roy * Abstract * Professor , Department of Business Administration , City University , Dhaka . ** Graduate Student , Department of Busines, 1–30.

S, A., K, S., & G, S. (2019). Psychological well- being of women workers in a garment factory of South India-A cross sectional study. *National Journal of Research in Community Medicine*, *8*(2), 189. https://doi.org/10.26727/njrcm.2019.8.2.189-191

Saleh Uddin, M., & Mashrur Ahmed, S. R. (2016). Does Mind Exist in Physician's Mind? A Brief Phone Survey in Bangladesh. *International Journal of Neurorehabilitation*, *03*(06). https://doi.org/10.4172/2376-0281.1000234

Seymour, L. (2010). Common mental health problems at work interventions . A progress review, 19.

Shumi, S., Zuidgeest, M. H. P., Martinez, J. A., Efroymson, D., & van Maarseveen, M. F. A. M. (2015). Understanding the Relationship Between Walkability and Quality-of-Life of Women Garment Workers in Dhaka, Bangladesh. *Applied Research in Quality of Life*, *10*(2), 263–287. https://doi.org/10.1007/s11482-014-9312-8

Shumi, Sabrina. (2013). Understanding the Relationship Between Walkability and Quality of Life of Women Garments Workers in Dhaka , Bangladesh Understanding the Relationship Between Walkability and Quality of Life of Women Garments Workers in Dhaka , Bangladesh. *Thesis*.

Slade, M. (2010). Mental illness and well-being: The central importance of positive psychology and recovery approaches. *BMC Health Services Research*, *10*. https://doi.org/10.1186/1472-6963-10-26

Snapshot, C., & Overview, P. (2010). Country Snapshot, (October).

Steel, Z., Marnane, C., Iranpour, C., Chey, T., Jackson, J. W., Patel, V., & Silove, D. (2014). The global prevalence of common mental disorders: A systematic review and meta-analysis 1980-2013. *International Journal of Epidemiology*, *43*(2), 476–493. https://doi.org/10.1093/ije/dyu038

Talati, A., Weissman, M. M., & Hamilton, S. P. (2013). Using the high-risk family design to identify biomarkers for major depression. *Philosophical Transactions of the Royal Society of London. Series B, Biological Sciences*, *368*(1615), 20120129. https://doi.org/10.1098/rstb.2012.0129

Taneva, S. (2016). What is psychological well-being and how it changes throughout the employment cycle ? *Work, Health and Sustainability: Building Citizenship*, 83–90. Retrieved from https://dspace.lboro.ac.uk/dspace-jspui/bitstream/2134/23567/1/Psychological wellbeing throughout the employment cycle_ST.pdf%0Ahttps://dspace.lboro.ac.uk/2134/23567%0Ahttps://dspace.lboro.ac.uk/dspace-jspui/bitstream/2134/23567/1/Psychological wellbeing

Thompson, R. J., Mata, J., Jaeggi, S. M., Buschkuehl, M., Jonides, J., & Gotlib, I. H. (2010). Maladaptive coping, adaptive coping, and depressive symptoms: Variations across age and depressive state. *Behaviour Research and Therapy*, *48*(6), 459–466. https://doi.org/10.1016/j.brat.2010.01.007

Uddin, M. S. (2020). Mental health content in school science textbooks in Bangladesh. *The Lancet Psychiatry*, *7*(3), e10. https://doi.org/10.1016/S2215-0366(20)30008-0

Ukeh, M. I., & Hassan, A. S. (2018). The Impact of Coping Strategies on Psychological Well-being among Students of Federal University, Lafia, Nigeria. *Journal of Psychology & Psychotherapy*, *08*(05). https://doi.org/10.4172/2161-0487.1000349

Wei, Y., McGrath, P. J., Hayden, J., & Kutcher, S. (2017). Measurement properties of mental health literacy tools measuring help-seeking: a systematic review*. *Journal of Mental Health*, *26*(6), 543–555. https://doi.org/10.1080/09638237.2016.1276532

Węziak-Białowolska, D., Białowolski, P., & McNeely, E. (2019). Worker's well-being. Evidence from the apparel industry in Mexico. *Intelligent Buildings International*, *11*(3–4), 158–177. https://doi.org/10.1080/17508975.2019.1618785

Weziak-Bialowolska, D., McNeely, E., & VanderWeele, T. J. (2019). Flourish Index and Secure Flourish Index–Validation in workplace settings. *Cogent Psychology*, *6*(1). https://doi.org/10.1080/23311908.2019.1598926

WFMH. (2017). The World Federation for Mental Health (WFMH) is an international membership organization founded in 1948 to advance , among all peoples and nations , the prevention of mental and emotional disorders , the proper treatment and care of those with such di.

Winefield, H. R., Gill, T. K., Taylor, A. W., & Pilkington, R. M. (2012). Psychological well-being and psychological distress: is it necessary to measure both? *Psychology of Well-Being: Theory, Research and Practice*, *2*(1), 3. https://doi.org/10.1186/2211-1522-2-3

Woo, J. M., Kim, W., Hwang, T. Y., Frick, K. D., Choi, B. H., Seo, Y. J., … Park, Y. L. (2011). Impact of depression on work productivity and its improvement after outpatient treatment with antidepressants. *Value in Health*, *14*(4), 475–482. https://doi.org/10.1016/j.jval.2010.11.006

Wright, T. A., & Cropanzano, R. (2004). The Role of Psychological Well-Being in Job Performance: *Organizational Dynamics*, *33*(4), 338–351. https://doi.org/10.1016/j.orgdyn.2004.09.002

Zaman, L. (2020). An Evaluation of Counseling Service Provided to the Female Workers of Readymade Garments : Bangladesh Perspective, *9*(7), 48–52. https://doi.org/10.35629/8028-0907024852

Zondlo, S. C., Wang, X., & Feuerstein, G. Z. (2002). Effects of orally active glycoprotein IIb/IIIa antagonists on platelet CD40 ligand (CD154) expression and platelet-heteroaggregate formation. *Thrombosis Research*, *106*(1), 35–40. https://doi.org/10.1016/S0049-3848(02)00090-7

Appendices

Research tools/Questionnaires

- Sociodemographic questionnaire
- Psychological Wellbeing Scale
- **D**epression, **A**nxiety, **S**tress **S**cale 21 (DASS 21)
- Brief **C**oping **O**rientation to **P**roblem **E**xperienced (Brief COPE)
- **L**am **E**mployment **A**bsenteeism and **P**roductivity **S**cale **(**LEAPS)

সম্মতি পত্র

সম্প্রতি বাংলাদেশ নিম্ন আয়ের দেশ থেকে নিম্ন মধ্যম আয়ের দেশে পরিণত হয়েছে এবং এক্ষেত্রে গার্মেন্টস খাতের অবদান অনস্বীকার্য। রপ্তানী খাতের ৮০ ভাগ রপ্তানী হয় গার্মেন্টস খাত হতে এবং বর্তমানে বাংলাদেশ গার্মেন্টস খাতের রপ্তানীতে বিশ্বের তৃতীয় বৃহদ রাষ্ট্র। এ খাতে বর্তমানে ৪০ লক্ষের ও বেশী লোক কাজ করছে, যার সিংহ ভাগ ই মহিলা। গার্মেন্টস খাত বাংলাদেশের অর্থনীতির মূল চালিকা শক্তি। কাজেই এ খাতে নিয়োজিত কর্মকর্তা কর্মচারীদের শারীরিক ও মানসিক সুস্থতা অত্যন্ত গুরুত্বপূর্ন।

কর্মক্ষেত্রে মানসিক স্বাস্থ্য একটি গুরুত্বপূর্ণ বিষয়, কেননা মানসিক অসুস্থতা বা সমস্যা কর্ম দক্ষতা কমায় এবং কাজে ব্যাঘাত ঘটায়। ফলে প্রতিষ্ঠানের স্বাভাবিক কর্মকান্ড ব্যাহত হয়। ফলশ্রুতিতে উক্ত প্রতিষ্ঠানের উৎপাদন হ্রাস বা আর্থিক ক্ষতি সাধিত হয়। বাংলাদেশের কিশোর কিশোরীর শতকরা ১৮ ভাগ এবং প্রাপ্ত বয়স্কদের শতকরা ১৬ ভাগ মানুষ মানসিক রোগে ভুগে থাকেন। বিশ্ব স্বাস্থ্য সংস্থার গবেষনা অনুযায়ী আগামী ২০২০ সাল নাগাদ মানুষের কর্মক্ষমতা হারানোর দ্বিতীয় প্রধান কারণ হবে, বিষন্নতা রোগ। সাধারণত, মহিলারা পুরুষের চেয়ে, বিষণ্নতা রোগে বেশী ভুগে থাকেন। কর্মক্ষেত্রে মানসিক চাপ ও তা মোকাবেলা করার পদ্ধতি, সর্বোপরি মানসিক স্বাস্থ্য সম্পর্কিত প্রাথমিক ধারণা থাকা গুরুত্বপূর্ণ। বাংলাদেশে গার্মেন্টস খাতে নিয়োজিত জনশক্তির মানসিক স্বাস্থ্য বিষয়ে এ যাবত মৌলিক গবেষণা কর্ম খুব হয়েছে।

উপরোক্ত আলোচনার প্রেক্ষিতে,**"Mental health of garments factory personnel of Bangladesh"** শীর্ষক গবেষনাকর্মটি এম ফিল (ক্লিনিক্যাল সাইকোলজি) কোর্সের অংশ হিসেবে , ঢাকা ও চট্টগ্রামের বিভিন্ন গার্মেন্টসে পরিচালিত হচ্ছে। উক্ত গবেষণা কর্মে আপনার বা প্রতিষ্ঠানের প্রদত্ত তথ্যাদি গোপন রাখা হবে এবং কর্তৃপক্ষের অনুমতি ব্যতিত তৃতীয় কোন পক্ষের কাছে তা প্রকাশ করা হবেনা। এ গবেষণা ঝুকিহীন এবং স্বেচ্ছায় অংশগ্রহণমূলক। আপনি চাইলে যেকোন সময় আপনার নাম প্রত্যাহার করে নিতে পারেন বা গবেষনায় অংশগ্রহণ থেকে বিরত থাকতে পারেন। আপনার কোন মানসিক স্বাস্থ্য সমস্যা সনাক্ত হলে, গবেষণা দল , বিনামূল্যে আপনাকে প্রয়োজনীয় সহায়তা প্রদান করবেন। আপনার কোন প্রশ্ন বা জিজ্ঞাসা থাকলে যোগাযোগ করতে পারেনঃ

সাদেকা হোসেন, এম ফিল গবেষক, ক্লিনিকাল সাইকোলজি বিভাগ, ঢাকা বিশ্ববিদ্যালয়, ঢাকা ।
ফোনঃ০১৬৭৫৬৪৩৯৫৭ hossainsadeka@gmail.com

আমি উপরোক্ত বিষয় অবগত হয়ে , স্বজ্ঞানে গবেষনায় অংশ গ্রহণে রাজি আছি।

স্বাক্ষরঃ
তারিখঃ

Questionnaire for socio demographic and other variables for the study titled "Mental health of garments factory personnel of Bangladesh"

১	বয়স	ক। <১৮ খ। >১৮ <৬০ গ। >৬০
২	লিঙ্গ	ক।পুরুষ খ। মহিলা
৩	ধর্ম	ক। ইসলাম খ। সনাতন গ। বৌদ্ধ ঘ। খৃস্টান ঙ। অন্যান্য
৪	বৈবাহিক অবস্থা	ক। বিবাহিত খ। অবিবাহিত গ। ডিভোর্স ঘ। আলাদা থাকেন ঙ। বিধবা চ। বিপত্নীক
৫	শিক্ষাগত যোগ্যতা	ক। অশিক্ষিত খ। প্রাথমিক গ। মাধ্যমিক উচ্চ মাধ্যমিক ঘ। স্নাতক বা স্নাতকোত্তর
৬	পদের নাম	১। উচ্চ ২। মধ্যম ৩। নিম্ন
৭	আয় (মাসিক)	১। পরিবারঃ ২। নিজঃ ৩। প্রধান উপার্জনকারীঃ
৮	কোন প্রধান পরিস্থিতি বা বিষয় কর্মক্ষেত্রে আপনার মানসিক চাপ তৈরী করে?	
৯	পরিবারের কেউ কি বিষন্নতা রোগে ভুগেছেন?	ক। হ্যা খ। না
১০	আপনার প্রতিষ্ঠানে কি কোন ধরণের মানসিক স্বাস্থ্যসেবা চালু আছে?	ক। হ্যা খ। না

আপনাকে অসংখ্য ধন্যবাদ

Bangla Version of the Psychological Well-being scale

নিম্নে মানসিক সুস্থ্যতা সংক্রান্তকিছু উক্তি আছে। প্রতিটি উক্তির পাশে পাঁচটি উত্তর যেমন (১) একেবারেই প্রযোজ্য নয়, (২) প্রযোজ্য নয়, (৩) অনিশ্চিত, (৪) প্রযোজ্য, (৫) সম্পূর্ণ প্রযোজ্য দেওয়া আছে। অনুগ্রহ করে প্রতিটি উক্তি পড়ে যে উত্তরটি আপনার নিজের বলে বিবেচনা করেন সে উত্তরটিতে ( ) টিক চিহ্ন দিন।

আপনার দেওয়া তথ্যেও গোপনীয়তা সম্পূর্ণভাবে রক্ষা করা হবে এবং তা কেবলমাত্র গবেষণার কাজে ব্যবহার করা হবে। ধন্যবাদ।

নং	উক্তিসমূহ	একেবারেই প্রযোজ্য নয়	প্রযোজ্য নয়	অনিশ্চিত	প্রযোজ্য	সম্পূর্ণ প্রযোজ্য
১.	আমার শারীরিক স্বাস্থ্য ভাল।					
২.	জীবন সমন্ধে আমার পুরো উৎসাহ উদ্দীপনা আছে।					
৩.	আমি নিজের উপর থেকে আস্থা হারিয়ে ফেলেছি।					
৪.	আমার সাথে আমার বন্ধু/বান্ধবীদের সম্পর্ক ভাল।					
৫.	আমার শরীরের বিভিন্ন অংশের যন্ত্রনায় আমি ভুগি।					
৬.	আমাকে সবাই পছন্দ করে।					
৭.	আমি প্রায়ই দুঃখিত ও বিষন্নতাবোধ করি।					
৮.	আমার বেশ কিছু ভাল ও বিশ্বাসী বন্ধু আছে।					
৯.	আমার পারিবারিক জীবন সুখের।					
১০.	ছোট খাট বিফলতাও আমাকে উত্তেজিত করে তোলে।					
১১.	পরিবারের সদস্য, বন্ধু-বান্ধব অথবা প্রতিবেশীদের সাথে আমি প্রয়োজনে খোলাখুলি আলাপ করতে পারি।					
১২.	আমার মাথা ঝিমঝিম করে ও বমি বমি লাগে।					
১৩.	আমি সুন্দর জীবনের স্বপ্ন দেখি বা আশা করি।					
১৪.	পরিস্থিতি আমাকে পরিবার অথবা যাদের আমি ভালবাসি তাদের কাছ থেকে আলাদা করেছে।					
১৫.	বন্ধু-বান্ধবের সাথে থেকে এবং তাদে সাথে কাজ করে আনন্দ পাই।					
১৬.	আমি অল্পতে ক্লান্তি, অনীহা এবং অস্থিরতা বোধ করি।					
১৭.	আমি আমার জীবনের যা কিছু অর্জন করেছি তা নিয়ে সুখী।					
১৮.	আমাকে বেশী পরিশ্রম করতে হয়।					

১৯.	*আমার কাজের প্রশংসা কেউ করেনা।*					
২০.	*আমি যা করতে চাই তা করার আমার পুরো স্বাধীনতা আছে।*					
২১.	*সব কিছু বিবেচনা করে আমি নিজেকে সুখী/মূল্যবান বলে মনে করি।*					
২২.	*আমার প্রায়ই মাথা, পিঠ/ঘাড়ে ব্যাথা হয়।*					
২৩.	*আমি কখনোই আমার স্বাস্থ্য সম্পর্কে উদ্বিগ্ন হইনা।*					
২৪.	*ভাল ঘুম না হওয়ার কারনে আমি অসুবিধা বোধ করি।*					
২৫.	*আমি চট করে রেগে যাই।*					
২৬.	*আমি আবেগ নিয়ন্ত্রন করতে পারি না।*					
২৭.	*বিনা কারনে আমি মাঝে মাঝে দুঃখ অনুভব করি।*					
২৮.	*আমার সাথে স্বামী/স্ত্রীর সম্পর্ক ভাল।*					
২৯.	*আমার সাথে আমার বাবা /মায়ের সম্পর্ক ভাল।*					
৩০.	*আমার সাথে আমার সন্তান/সন্ততির সম্পর্ক ভাল।*					
৩১.	*আমার পরিবারের অধিকাংশ সদস্য ঘনিষ্টভাবে একে অপরের কাছাকাছি।*					
৩২.	*সর্দি, কাশি, জ্বর আমার খুব কমই হয়।*					
৩৩.	*আমি প্রায়ই নতুন ধরণের কিছু কাজ করার চেষ্টা করি।*					
৩৪.	*দুশ্চিন্তার কারনে আমার ঘুমের ব্যাঘাত ঘটে।*					

৩৫.	*আমি যখন কিছু চিন্তা করি বা কিছু করতে চাই তখন মনোনিবেশ না করতে পেরে অস্থিরবোধ করি।*					
৩৬.	*নিজেকে একজন অপদার্থ বলে মনে হয়।*					
৩৭.	*আমি নিজেকে নিয়ে সুখী/ নিজেকে পছন্দ করি।*					
৩৮.	*আমার জীবন নিরানন্দময় বা একঘেয়েমীপূর্ণ বলে মনে করি।*					
৩৯.	*আমার জীবনকে আমি অপ্রয়োজনীয় বলে মনে করি না।*					
৪০.	*কি হবে, আমি তা নিয়ে মোটেই চিন্তা করিনা এবং আমার মনে হয় সব কিছু ছেড়ে আমি পালিয়ে যাই।*					
৪১.	*আমি সহজে আনন্দ, আরাম করতে পারি।*					

৪২.	*নিজের উপর থেকে আস্থা হারিয়ে ফেলেছি বলে আমার মনে হয়।*					
৪৩.	*দৈনন্দিন কাজকর্মে আমি ভালভাবে মনোযোগ দিতে পারি।*					
৪৪.	*অন্যেরা আমাকে প্রায়ই অপমান করে।*					
৪৫.	*আমার অনেকেই আছে যাদের উপর আমি সাহায্যের জন্য নির্ভর করতে পারি।*					
৪৬.	*পরিবার ও পাড়া প্রতিবেশীদের সাথে আমি ভালই মানিয়ে চলতে পারি।*					
৪৭.	*লোকে আমার কাজের সমালোচনা করে।*					
৪৮.	*আমার কাজ আমাকে ব্যক্তিগত সন্তুষ্টি, মর্যাদা ও গৌরববোধ করায়।*					
৪৯.	*আমার কাজ খুব সহজে, একঘেয়েমি, নিরানন্দ মনে হয়।*					
৫০.	*কাজে আমাকে টিকে থাকার জন্য সংগ্রাম করতে হয়।*					
৫১.	*আমার কাজ আমাকে গরুত্বর্পূন এবং শক্তিশালী অনুভব করায়।*					
৫২.	*যেখানে আমি কাজ করি সেখানে আমি শেখার এবং নিজের উন্নতি করার সুযোগ পেয়েছি।*					
৫৩.	*প্রয়োজনে যে কোন ধরনের চাপমূলক পরিস্থিতির সম্মুখীন হওয়ার ক্ষমতা আমার আছে।*					
৫৪.	*আমি মনে করি আমার অনেক সাহায্য উৎসাহের প্রয়োজন।*					
৫৫.	*আমাকে নিয়ে সমালোচনা করলে আমি সহজেই ভেঙ্গে পড়ি।*					
৫৬.	*কোন বিষয়ে সিদ্ধান্ত নেওয়ার ভাল ক্ষমতা আছে।*					
৫৭.	*আমি মাঝে মাঝে আমার মানসিক সুস্থ্যতা নিয়ে উদ্বিগ্ন হই।*					
৫৮.	*আমি মনে করি আমার জীবন দুঃখময়।*					
৫৯.	*আমার এমন কেউ নেই যার জন্য ভাবি অথবা সে আমার জন্য ভাবে।*					
৬০.	*আমার শিক্ষাগত যোগ্যতা নিয়ে বেশ খুশি।*					
৬১.	*আমি কিছু করতে চাইলে সবাই বাধাঁ দেয়।*					
৬২.	*আমি আমার জীবনকে মুল্যবান মনে করি।*					
৬৩.	*আমার সমস্যা আমি নিজেই মোকাবিলা করতে পারি।*					

৬৪.	*আমি অল্পতে বিরক্ত হই।*					
৬৫.	*অন্য লোকদের কাজ থেকে দূরে থাকতে পারলে এবং তাদের জন্য কিছু করতে না হলে ভাল বোধ করি।*					
৬৬.	*আমি প্রায়ই হৃদপিন্ডের ধরপারানিতে ভুগি।*					
৬৭.	*আমি মাঝে মাঝে মূর্ছা যাই*					
৬৮.	*আমি যা কিছু করি না কেন,আমি জানি তা ঠিক হবে না।*					
৬৯.	*আমি একা থাকতে পছন্দ করি।*					
৭০.	*অতিথি আপ্যায়ন পছন্দ করি।*					
৭১.	*কাজ আমাকে বিভিন্ন দিক থেকে স্বাবলম্বী করেছে ।*					
৭২.	*কাজের মধ্যে আমি আমার জ্ঞান, অভিজ্ঞতা প্রয়োগ করার সুযোগ পাই।*					

Brief COPE

We are interested in how people respond when they confront difficult or stressful events in their lives. There are lots of ways to try to deal with stress. This questionnaire asks you to indicate what you generally do and feel, when you experience stressful events. Obviously, different events bring out somewhat different responses, but think about what you usually do when you are under a lot of stress.

Each of us deals with things in different ways; I'm interested in how *you've* tried to deal with things. Each item says something about a particular way of coping. I want to know to what extent you've been doing what the item says. *How much or how frequently*.

Don't answer on the basis of whether it seems to be working or not—just whether or not you're doing it. Try to rate each item separately in your mind from the others. Make your answers as true FOR YOU as you can. *This information is confidential/belongs to you*; you may share if you choose.

There are no “right” or “wrong” answers! We’re looking for a general pattern, not a specific “score”

1	2	3	4
Not at all	Little bit	Medium amount	Doing a lot

1 = I haven't been doing this at all
2 = I've been doing this a little bit
3 = I've been doing this a medium amount
4 = I've been doing this a lot

Using this scale, respond to the following:

1. I've been turning to work or other activities to take my mind off things.
2. I've been concentrating my efforts on doing something about the situation I'm in.
3. I've been saying to myself "this isn't real."
4. I've been using addictive behaviors or substances to make myself feel better.
5. I've been getting emotional support from others.
6. I've been giving up trying to deal with it.
7. I've been taking action to try to make the situation better.
8. I've been refusing to believe that it has happened.
9. I've been saying things to let my unpleasant feelings escape.
10. I’ve been getting help and advice from other people.

Susan Shipp, MA, LPC, CADC III, MAC

1_____2_____3_____4
Not at all Little bit Medium amount Doing a lot

11. I've been using alcohol or other drugs to help me get through it.
12. I've been trying to see it in a different light, to make it seem more positive.
13. I've been criticizing myself.
14. I've been trying to come up with a strategy about what to do.
15. I've been getting comfort and understanding from someone.
16. I've been giving up the attempt to cope.
17. I've been looking for something good in what is happening.
18. I've been making jokes about it.
19. I've been doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping.
20. I've been accepting the reality of the fact that it has happened.
21. I've been expressing my negative feelings.
22. I've been trying to find comfort in my religion or spiritual beliefs.
23. I've been trying to get advice or help from other people about what to do.
24. I've been learning to live with it.
25. I've been thinking hard about what steps to take.
26. I've been blaming myself for things that happened.
27. I've been praying or meditating.
28. I've been making fun of the situation.

Coping strategy each question involves:

Self-distraction #s 1 &19

Active coping #s 2 & 7

Denial #s 3 & 8

Substance use #s 4 &11

Use of emotional support #s 5 &15

Use of instrumental support #s 10 & 23

Behavioral disengagement #s 6 &16

Venting #s 9 & 21

Positive reframing #s 12 & 17

Planning #s 14 & 25

Humor #s 18 & 28

Acceptance #s 20 & 24

Religion #s 22 & 27

Self-blame #s 13 & 26

From the list right above, identify the coping strategies you use most often; list them here. Next, identify whether that strategy is **problem-focused** OR **emotion-focused coping.**

1. _____

2. _____

3. _____

List **3 new/different coping strategies** you'd like to practice using:

1. _____

2. _____

Susan Shipp, MA, LPC, CADC III, MAC

3.

Brief COPE-Bangla (Translated version)

এ প্রশ্নগুলো মূলত আপনি জীবনে চাপ কিভাবে মোকাবেলা করেন সে সম্পর্কিত এবং আরো সুনির্দিষ্টভাবে বললে গত কয়েকমাসে আপনার দৈনন্দিন জীবনের যেকোন চাপ কিভাবে মোকাবেলা করেছেন তার উপর ভিত্তি করে উত্তর দিন। যেকোন সমস্যা বা চাপ মোকাবেলা করার বিভিন্ন উপায় আছে। বিভিন্ন ব্যক্তি নানান ভাবে চাপ মোকাবেলা করে থাকে কিন্তু আমি মূলত আপনি কিভাবে চাপ মোকাবেলা করেন সে ব্যাপারে আগ্রহী। প্রতিটি প্রশ্ন চাপ মোকাবেলার নির্দিষ্ট ধরণ সম্পর্কিত। আমি মূলত আপনি কি মাত্রায়, কতবার উক্ত পদ্ধতি ব্যবহার করেছেন তা সম্পর্কে জানবো। চাপ মোকাবেলার পদ্ধতিটি কি আপনার সমস্যা বা চাপের ক্ষেত্রে কার্যকরী নাকি অকার্যকর ছিলো সেটার উপর ভিত্তি করে উত্তর না দিয়ে বরং আপনি সাধারণত কি কি পদ্ধতি অবলম্বন বা প্রয়োগ করেন তার উপর ভিত্তি করে উত্তর দিন। নিম্ন লিখিত উত্তরের অপশন(১,২,৩,৪) অনুসারে উত্তর দিন। আপনি সত্যি সত্যি আপনার ক্ষেত্রে যেভাবে চাপ মোকাবেলা করেন সে অনুসারেই উত্তর দিন। ১ = আমি এটা কখনোই করিনা , ২ = আমি এটা খুব অল্প করে থাকি , ৩ = আমি এটা মোটামুটি করে থাকি , ৪ = আমি এটা প্রায়ই করে থাকি

	প্রশ্ন	উত্তর			
১	কোন বিষয়/ঘটনা থেকে মন সরিয়ে নেয়ার জন্য আমি কাজে বা অন্য কোন কিছুতে ব্যস্ত থাকি	১	২	৩	৪
২	আমি কোন পরিস্থিতিতে থাকলে, সে বিষয়ে আমার ভূমিকার দিকে মনোযোগী হই	১	২	৩	৪
৩	আমি আমাকে বলি, " এটা সত্যি না "	১	২	৩	৪
৪	নিজেকে ভালো রাখার জন্য, আমি মদ বা অন্যকোন নেশা করে থাকি	১	২	৩	৪
৫	আমি অন্যদের মানসিক সাপোর্ট পেয়ে থাকি	১	২	৩	৪
৬	আমি এক্ষেত্রে হাল ছেড়ে দেই	১	২	৩	৪
৭	আমি পরিস্থিতি মোকাবেলার জন্য কার্যকরী পদক্ষেপ নেয়ার চেষ্টা করি	১	২	৩	৪
৮	আমি এ ধরনের কিছু হয়েছে বলে বিশ্বাস করিনা	১	২	৩	৪
৯	আমার ভেতরের অস্বস্থি দূর করার জন্য কথা বলতে থাকি	১	২	৩	৪
১০	আমি অন্যদের সাহায্য ও উপদেশ পেয়ে থাকি	১	২	৩	৪
১১	এ পরিস্থিতি পার হওয়ার জন্য আমি মদ বা অন্য নেশা দ্রব্য নিয়ে থাকি	১	২	৩	৪
১২	আমি পরিস্থিতি ইতিবাচক ভাবে দেখার জন্যে বিকল্প দৃষ্টিভঙ্গি দিয়ে দেখার চেষ্টা করে থাকি	১	২	৩	৪
১৩	আমি নিজের সমালোচনা নিজে করতে থাকি	১	২	৩	৪
১৪	এ পরিস্থিতিতে কি করা যায় সেব্যাপারে কৌশল বা কর্মপন্থা খুজে বের করি	১	২	৩	৪
১৫	অন্য কেউ এক্ষেত্রে আমাকে আস্বস্থ করে এবং বিষয়টি সম্পর্কে বুঝিয়ে বলে	১	২	৩	৪
১৬	পরিস্থিতি মোকাবেলার চেষ্টা আমি করিনা	১	২	৩	৪
১৭	যা ঘটছে তার মাঝে ভালো কোন দিক আমি খুজে বের করি	১	২	৩	৪
১৮	আমি এ নিয়ে কৌতুক করে থাকি	১	২	৩	৪
১৯	এ বিষোয়ে চিন্তা না করার জন্য আমি অন্য কিছু করে থাকি যেমনঃ ফিল্ম দেখতে যাওয়া, টিভি দেখা, বই পড়া, ঘুমানো, কেনাকাটা করা ইত্যাদি	১	২	৩	৪
২০	যা ঘটে গেছে তাকে বাস্তবতার প্রেক্ষিতে মেনে নেই	১	২	৩	৪
২১	আমার মনের নেতিবাচক অনুভূতিগুলো আমি প্রকাশ করি	১	২	৩	৪
২২	আমি ধর্মীয় বা আধ্যাত্বিক চিন্তার মাধ্যমে প্রশান্তি খুজি	১	২	৩	৪
২৩	আমি অন্যদের কাছ থেকে উপদেশ বা সাহায্য পাওয়ার চেষ্টা করি	১	২	৩	৪
২৪	আমি এটাকে সাথে নিয়েই চলতে শিখি	১	২	৩	৪
২৫	কি কি পদক্ষেপ নেয়া উচিত তা নিয়ে আমি গভীর চিন্তা করি	১	২	৩	৪
২৬	যা ঘটেছে তা নিয়ে আমি নিজেকে দোষ দিতে থাকি	১	২	৩	৪
২৭	আমি ধর্ম পালন বা মেডিটেশন করি	১	২	৩	৪
২৮	পরিস্থিতি নিয়ে আমি মজা বা কৌতুক করে থাকি	১	২	৩	৪

আপনাকে অসংখ্য ধন্যবাদ

DASS 21 Bangla version

ডাস-২১ *বাংলা ভার্সন* (DASS-21 B V)

নাম: তারিখ:

অনুগ্রহ করে নিচের প্রতিটি বিবৃতি পড়ুন এবং ০, ১, ২ অথবা ৩ এর মধ্যে গত সপ্তাহ ব্যাপী আপনার জন্য প্রযোজ্য যে কোন একটি সংখ্যায় গোল চিহ্ন দিন। এখানে কোন সঠিক বা ভুল উত্তর নেই। কোন বিবৃতির জন্য বেশী সময় ব্যয় করবেন না।

মানদন্ডটি (রেটিং স্কেল) নিম্নরূপ:

০ আমার জন্য একেবারেই প্রযোজ্য নয়

১ আমার জন্য অল্পমাত্রায় বা কখনো কখনো প্রযোজ্য

২ আমার জন্য বেশ কিছুমাত্রায় বা বেশখানিকটা সময়ের জন্য প্রযোজ্য

৩ আমার জন্য খুব বেশী বা বেশীরভাগ সময়ের জন্য প্রযোজ্য

১. কোন উৎকণ্ঠা বা উত্তেজনামূলক কাজের পর আরামদায়ক অবস্থায় ফিরে আসা আমার জন্য কঠিন ছিল।	০ ১ ২ ৩
২. আমি বুঝতে পারতাম যে আমার গলা শুকিয়ে আসছে।	০ ১ ২ ৩
৩. ইতিবাচক কোন অনুভূতিই আমার মধ্যে কাজ করত না।	০ ১ ২ ৩
৪. আমার শ্বাসকষ্টের অনুভূতি হত (যেমন অতিদ্রুত শ্বাসপ্রশ্বাস, শারীরিক পরিশ্রম ছাড়াই নিঃশ্বাস বন্ধ হয়ে আসা)	০ ১ ২ ৩
৫. নিজে উদ্যোগী হয়ে কোন কাজ শুরু করা আমার জন্য কঠিন হত।	০ ১ ২ ৩
৬. আমার মধ্যে বিভিন্ন পরিস্থিতিতে অতিরিক্ত প্রতিক্রিয়া করার প্রবনতা ছিল।	০ ১ ২ ৩
৭. আমার শরীর কাঁপার অভিজ্ঞতা হয়েছিল (যেমন হাত কাঁপা)।	০ ১ ২ ৩
৮. আমার মনে হতো যে আমি খুব বেশী স্নায়ু চাপে ভুগছি।	০ ১ ২ ৩
৯. আমি এমন পরিস্থিতি সম্পর্কে দুশ্চিন্তাগ্রস্ত ছিলাম যেখানে আমি তীব্রভাবে আতঙ্কিত হতে পারি এবং এমন কোন কাজ করতে পারি যাতে অন্যরা আমাকে বোকা মনে করবে।	০ ১ ২ ৩
১০. আমার মনে হচ্ছিল , ভবিষ্যতে আমার ভালো কিছুরই আশা নাই।	০ ১ ২ ৩
১১. আমি অনুভব করতাম যে আমি খুব অস্থির হয়ে যাচ্ছি।	০ ১ ২ ৩
১২. আরাম বোধ করা আমার জন্য কঠিন হত।	০ ১ ২ ৩
১৩. আমি মনমরা এবং বিষণ্ন অনুভব করতাম।	০ ১ ২ ৩
১৪. আমার কাজে বাধা হয় এমন যে কোন জিনিসই আমার কাছে অসহ্য লাগত।	০ ১ ২ ৩
১৫. আমার মনে হত এই বুঝি আমি হঠাৎ তীব্রভাবে আতঙ্কগ্রস্ত হচ্ছি।	০ ১ ২ ৩
১৬. কোন কিছুতেই আমি বেশী আগ্রহী হতে পারতাম না।	০ ১ ২ ৩
১৭. আমি অনুভব করতাম ব্যক্তি হিসেবে আমার বিশেষ কোন মূল্য নেই।	০ ১ ২ ৩
১৮. আমি অনুভব করতাম আমি একটুতেই মনে ব্যাথা পাই।	০ ১ ২ ৩
১৯. শারীরিক পরিশ্রম না করলেও আমি হৃদপিন্ডের কাজ করা বুঝতে পারতাম (যেমন: হৃদস্পন্দন বৃদ্ধির অনুভূতি বা বুক ধড়ফড় করা, হৃদপিন্ডের স্পন্দনে ব্যাঘাত)।	০ ১ ২ ৩
২০. যথাযথ কারন ছাড়াই আমি ভীত-সন্ত্রস্ত বোধ করতাম।	০ ১ ২ ৩
২১. জীবনটা অর্থহীন বলে মনে হত।	০ ১ ২ ৩

Translated and Validated by Dr S M Abu Hena Mostafa Alim, BSMMU, Bangladesh

The Lam Employment Absence and Productivity Scale (LEAPS)

The Lam Employment Absence and Productivity Scale, or LEAPS, provides important information into how patients are functioning at work. This tool can help physicians make management decisions such as whether or not a patient should stay at work, whether work functioning improves along with symptoms, and whether changes in treatment are needed to optimize work functioning.

The LEAPS was designed specifically for the clinical practice setting. It is a 10-item, self-rated scale that takes only 3 to 5 minutes for the patient to complete. It is simple and easy to use. Patients can complete the LEAPS in the waiting room or at home, and can score it themselves.

The items were chosen based on the symptoms that have the most impact on work productivity and the most common productivity problems experienced by patients with depression. The LEAPS was recently validated in a sample of 234 consecutive working patients meeting DSM-IV criteria for MDD attending a mood disorders outpatient clinic (Lam et al, 2009).

How can the LEAPS be used to guide clinical management of working patients with depression? Since the LEAPS is not a diagnostic tool, it should be used in conjunction with a symptom rating scale such as the PHQ-9 or the QIDS-SR. A key benefit of the LEAPS scale is that the total score can provide a quick measure of the degree of impairment in a patient's occupational functioning.

The individual productivity items can also help guide treatment decisions including whether it is appropriate and/or safe for the patient to remain at work; or whether the patient should take time off work. For example, a patient in a safety-sensitive job who endorses making more mistakes at work might benefit from workplace accommodation or a leave from work.

The LEAPS can also help monitor changes in occupational functioning over time. By using a validated tool such as the LEAPS, clinicians can be assured they are monitoring functional outcomes in a standardized way. Furthermore, the LEAPS can serve as a useful charting tool to assess patient progress. The LEAPS total score provides a quick gauge of how the patient is functioning at work, which can save physicians time by eliminating the need to write notes describing how the patient is doing.

Patients can fill in the LEAPS during follow-up visits (for example, at 4-week intervals or as clinically appropriate). Ideally, improvements in work functioning should parallel improvements in symptoms, however full functional recovery may take longer to achieve than symptomatic remission.

Reference

Lam RW, Michalak EE, Yatham LN. A new clinical rating scale for work absence and productivity: validation in patients with major depressive disorder. BMC Psychiatry 2009; 9:78. Link to article

Lam Employment Absence and Productivity Scale (LEAPS)

Name: _____ Date: _____

Although all forms of work including house work, child care, and others are important, the next questions are about the employed or self-employed paid work that you may do. Please do not include house work, volunteer work, or school work.

1. What kind of paid work do you do? _____

2. **Over the past 2 weeks**, how many hours were you scheduled or expected to work? _____

3. **Over the past 2 weeks**, how many hours of work did you miss because of the way you were feeling? _____

4. **Over the past 2 weeks,** how often at work were you bothered by any of the following problems? Please limit your answers to the time when you were at work. Please circle your ratings.

	None of the time (0%)	Some of the time (25%)	Half the time (50%)	Most of the time (75%)	All of the time (100%)
a) Low energy or motivation.	0	1	2	3	4
b) Poor concentration or memory.	0	1	2	3	4
c) Anxiety or irritability.	0	1	2	3	4
d) Getting less work done.	0	1	2	3	4
e) Doing poor quality work.	0	1	2	3	4
f) Making more mistakes.	0	1	2	3	4
g) Having trouble getting along with people, or avoiding them.	0	1	2	3	4
Add up score in each column:					

Total Score (0-28) = _____

Score	Work Impairment
0-5	None to minimal
6-10	Mild
11-16	Moderate
17-22	Severe
23-28	Very severe

Lam RW et al. A new clinical rating scale for work absence and productivity. BMC Psychiatry 2009; 9:78.

Lam Employment Absence and Productivity Scale (LEAPS)-Bangla

নিচের প্রশ্নগুলো আপনার মূল কর্মস্থলের কাজ প্রসঙ্গে। ঘরের কাজ/সমাজসেবা/স্বেচ্ছাসেবী বা অন্যান্য ধরনের কাজ এক্ষেত্রে বিবেচ্য নয়।

১। গত দুসপ্তাহে সিডিউল/দাপ্তরিক নিয়ম অনুযায়ী আপনার কর্মঘন্টা কত ছিলো? .....
২। গত দুসপ্তাহে কয়ঘন্টা আপনি কাজে অনুপস্থিত ছিলেন? .....
৩। গত দু সপ্তাহ ধরে কাজ করার ক্ষেত্রে কত ঘন ঘন নিচের সমস্যাগুলো আপনার অসুবিধার সৃষ্টি করেছে?

আপনি কর্মরত অবস্থায় মানসিক অবস্থার কথা ভেবে উত্তর গুলো প্রদান করুন।

	কখনোই না (০%)	মাঝে মাঝে (২৫%)	প্রায় অর্ধেক সময় (৫০%)	বেশীর ভাগ সময় (৭৫%)	সবসময় (১০০%)
ক। দূর্বল লাগা বা কাজে আগ্রহ না পাওয়া	০	১	২	৩	৪
খ। মনোযোগ না থাকা বা মনে রাখতে সমস্যা হওয়া	০	১	২	৩	৪
গ। দুশ্চিন্তা বা মেজাজ খিটখিটে লাগা	০	১	২	৩	৪
ঘ। আগের তুলনায় কম কাজ শেষ করতে পারা	০	১	২	৩	৪
ঙ। কাজের মান ভালো না হওয়া	০	১	২	৩	৪
চ। কাজে অনেক বেশী ভুল হওয়া	০	১	২	৩	৪
ছ। সহকর্মীদের সাথে মিশতে বা চলতে অসুবিধা ও তাদেরকে এড়িয়ে চলা	০	১	২	৩	৪
মোট					

সর্বমোট (০-২৮)=.....

মোট স্কোর= ০-২৮

স্কোর	কাজের অসুবিধা
০-৫	একদম না থেকে খুব অল্প
৬-১০	মৃদু
১১-১৬	মাঝারী
১৭-২২	তীব্র
২৩-২৮	প্রকট