

A STUDY OF DEPRESSION IN ADULTS
AS RELATED TO SOME SOCIO-
ECONOMIC FACTORS

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A STUDY OF DEPRESSION IN ADULTS AS RELATED TO SOME SOCIO- ECONOMIC FACTORS

A Dissertation

Submitted to the University of Dhaka in partial fulfillment of the requirements for
the degree of Master of Philosophy in Psychology.



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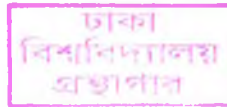
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APPROVAL SHEET

This is to certify that I have read the dissertation entitled “A study of depression in adults as related to some socio-economic factors.” submitted by Purabi Roy, in partial fulfillment for the degree of master of Philosophy in Psychology, and that is an original study carried out by her, under my supervision and guidance.

448504



10.11.2009

Dated: Dhaka

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Abstract

The purpose of the present study was to investigate depression among male and female adults as related to some socio- economic factors.

For the present study 150 respondents (75 male and 75 female) were used as the sample of the present research. Subjects were divided into three groups according to their income (Upper, middle and lower income groups). 50 respondents were selected from each group among which 25 were male respondents and remaining 25 were female respondents.

The original version of “Beck Depression Inventory-Second Edition (BDI-II) translated into by Rahman, (2001) was used to measure the depression of the respondents.

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2X3 ANOVA was used to see if depression varied as a function of gender and different income groups. One way ANOVA was used to see if depression varied as a function of education, family type, marital status and age.

Findings of 2X3 ANOVA showed that gender had significant effect on depression. Female respondents suffer from depression more than male respondents. Significant difference was also found in depression among the different income groups. The respondents of the lower income groups suffered from depression more than those of middle and higher income groups. The respondents of higher income groups suffered less than those of middle income groups.

One way ANOVA showed significant effect of education, marital status, and family type on depression. The respondents of lower education level suffered from depression more than those of higher education level. In the case of marital status it was found that unmarried respondents suffer from depression more than married respondents. Significant difference was also found in depression with family type. Respondents living in single families suffered more from depression than those living in joint family. A result indicated no significant difference in depression between two age groups (below 35 age group & 35 and above age group).

Acknowledgement

I express my deep and sincere gratitude to my respected supervisor, Dr. Parveen Huque, Professor, Department of Psychology and University of Dhaka for her constant supervision, invaluable resourceful guidance, suggestions, and constructive criticism in the planning and at different stages of this entire work and for going through the manuscript. I am also thankful to her for helping me with research materials to write my dissertation. Without her profound encouragement, inspiration and sincere help it was not possible for me to complete the present study. Her perseverance inspired me a lot to workout with tenacity my tender interest and finding in the shape of the present study.

I am also grateful to Prof. Niharanjan Sarker and Dr. Shaheen Islam of the Department of Psychology for their valuable suggestions and help during this research.

I owe my humble gratitude to all the respondents from whom the data were collected, because without their help it would not have been possible for me to complete the research work.

Very personal thanks to my husband and son for encouraging and supporting my efforts to complete this research. I must express my personal feelings of debt for their sympathetic considerations to pursue this work.

Dated, Dhaka
January, , 2009

Purabi Roy

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INTRODUCTION

Chapter - I

INTRODUCTION

People have recorded instances of depression since antiquity. It is a part of normal experience to feel unhappy at times of adversity. Depression is unpleasant when we are in it, but it usually, does not last long. Some times experiencing depression may be in some sense useful: when an individual is struck, then he or she can move on; what bothered one is easier to get out of than one thought it could be, and one's new perspective may offer new possibilities. Mild depression may actually be adaptive in the long run; that much of the "work" of depression seems to involve facing images, thoughts, and feelings that one would normally avoid; and that depression may sometimes be self-limiting. These considerations suggest that the capacity to experience depression may be normal even desirable if the depression is brief and mild. psychologists and other mental health professionals identify depression as a depressive disorder when depression seriously endangers a person's welfare. The depressive disorder is far more painful and disruptive than the relatively normal depression. Depressive disorder involves feelings of extraordinary sadness and dejection.

The central features of depressive disorder are:

- * depressed mood
- * negative thinking
- * lack of enjoyment
- * reduced energy
- * slowness.

Of these, depressed mood is the most prominent symptom.

Whether depression is normal or clinical, this diagnosis is based on the severity of the symptoms and the degree of impairment in the personal, social and occupational functioning.

In the following sections, an attempt is made to differentiate between normal depression & depressive disorder.

1.1 NORMAL DEPRESSION

Normal depressions are almost always the result of recent stress. Normal depression occurs in anyone from undergoing painful but common life events, such as significant personal, interpersonal or economic losses. Some of the milder forms of normal depression have been discussed below.

1.2 GRIEF AND GRIEVING PROCESS

Grief is a psychological process- one goes through following the death of a loved one- a process that appears to be more damaging for men than women (Stroebe & Stroebe, 1983). Although this may be the most common and intense cause of grieving, many other types of loss will give rise to a similar state. Loss of a favored status or position, separation or divorce, financial loss, the break up of a romantic affair, retirement, separation from a friend, absence from home for the first time, or even the loss of a cherished pet may all give rise to symptoms of acute grief.

Whatever its source, grief has certain characteristic qualities. Indeed, Bowlby (1980) has observed that there are usually four phases of responses to the loss of a spouse close family member: (a) a phase of numbing and disbelief that may last from a few hours to a week; (b) a phase of yearning

and searching for the dead person, which may last for months or occasionally for year; (c) a phase of disorganization and despair; (d) a phase of some level of reorganization. The third phase of despair sets in when the person finally accepts the loss as permanent and finds it is necessary to discard old patterns of thinking, feeling, and acting, including establishing a new identity (e.g., as a widow or widower). During this phase the person may meet the criteria for a major depressive disorder. Gradually, however, most people pass into the fourth phase and begin to rebuild their lives.

Clayton (1982) estimated that the process of grieving following bereavement is normally completed within one year. Some people however, become stuck somewhere in the middle of the sequence and if depressive symptoms persist beyond the first year after loss, therapeutic intervention may be called for.

1.3 OTHER NORMAL DEPRESSION

Many situations other than obvious loss can provoke depressive feeling and it is seen that some people seem especially prone to develop depression. It is common observation, for example, that some doctoral candidates become depressed after completing their final oral exams.

Many students also experience mild or serious depression during their college years of supposed freedom carefree personal. Normal depressions among college students were studied by Blatt, D'Afflitti, and Quinlan (1976) in an effort to determine the basic dimensions of the experience. In brief, they found that depression was similar for males and females and that it mainly involved three psychological variables: (a) dependency, the sense that one is in dire of help and support from others; (b)

self- criticism, the tendency to exaggerate one's faults and to engage in self-devaluation; (c) inefficacy, the sense that important events in the world are happening independent of --not contingent on- one's own actions or efforts.

1.4 DEPRESSIVE DISORDER

Depressive disorder is included in the mood disorder. It is common for people to feel happy and energized at times and sad and apathetic at other times, almost everyone experiences periodic mood fluctuations. Feelings of depression (and joy) are universal, which makes it all the more difficult to understand disorders of mood that can be so incapacitating that violent suicide may seem by far the better option than living. A mood disorder involves a disturbance in a person's emotional state or mood. People can experience this disturbance in the form of extreme depression, excessive elation or a combination of these emotional states. People with mood disorders involve elation which act in the ways that are out of character for them, possibly acting wild and uncontrolled. In mood disorders that involve serious depression is outside the boundaries of normal experience by virtue of its intensity and duration. Then individuals experience pain so intense that they feel immobilized. Suicide is a distressingly frequent outcome of significant depression.

To understand the nature of mood disorders, it is important to understand the concept of an episode, a time-limited period during which specific intense symptoms of disorder are evident. In some instances, an episode is quite lengthy, perhaps 2 years or more. People with mood disorders experience episodes of dysphoric or euphoric symptoms, or a mixture of both.

There are two kinds of mood disorder, such as, unipolar mood disorder and bipolar mood disorder. Individuals who experience either depression or mania are said to suffer from a unipolar mood disorder, because their mood remains at one “pole” of the usual depression- mania continuum. Mania by itself is extremely rare; almost every one with a unipolar mood disorder suffers from unipolar depression. So it can be said that unipolar mood disorder means unipolar depressive disorder. Some one who alternates between depression and mania is said to have a bipolar mood disorder traveling from one “pole” of the depression- mania continuum to the other and back again. Of the two types of serious mood disorders, unipolar depressive disorder is much more frequent than bipolar disorder and occurrence of unipolar depressive disorder has apparently increased in recent years (Lewinsohn et al., 1993). The most recent results from the co morbidity survey (Kessler et al., 1994) found lifetime prevalence rates of major depression for males at nearly 13 percent and lifetime prevalence rates for females at 21 percent.

1.5 CLINICAL DESCRIPTIONS OF DEPRESSIVE DISORDER

Unipolar depressive disorder is one of the most common types of psychopathology. The DSM –IV recognizes two categories of unipolar depressive disorder: major depressive disorder and dysthymic disorder. Major depressive disorder involves acute but time-limited episodes of depressive symptoms. People with dysthymic disorder, on the other hand , struggle with more chronic but less severe depression.

Diagnostic Features of a Major Depressive Episode

The most commonly diagnosed and most severe depression is called major depressive episode. Diagnostic features of a major depressive episode are given below:-

The formal DSM- IV diagnosis of a major depressive episode requires the presence of five of the following symptoms for at least two weeks. Either depressed mood or loss of interest and pleasure must be one of the five symptoms.

- * Sad, depressed mood, most of the day, nearly everyday.
- * Loss of interest and pleasure in usual activities.
- * Difficulties in sleeping (insomnia); not falling asleep initially, not returning to sleep after awakening in the middle of the night and early morning awakenings; or, in some patients, a desire to sleep a great deal of the time .
- * Shift in activity level, becoming either lethargic (psychomotor retardation) or agitated.
- * Poor appetite and weight loss or increased appetite and weight gain.
- * Loss of energy, great fatigue.
- * Negative self-concept; self-reproach and self-blame; feelings of worthlessness and guilt.
- * Complaints or evidence of difficulty in concentrating, such as slowed thinking and indecisiveness.
- * Recurrent thoughts of death or suicide.

The emotional symptoms of a major depressive episode involve dysphoric mood of an intensity that far outweighs the ordinary

disappointments and occasional sad emotions of everyday life. Such dysphoria may appear as extreme dejection or a dramatic loss of interest in previously pleasurable aspects of life.

Physical signs of a major depressive episode are called somatic, or bodily, symptoms. Lethargic and listless, the person may experience a slowing down of bodily movement, called psychomotor retardation. Alternatively, some depressed people show the opposite symptom, psychomotor agitation; as a result their behavior has frenetic quality. When these behaviors are bizarre and extreme, they may be characterized as catatonic. Eating disturbance is also common as the individual deviates from usual appetite patterns, either avoiding food or overindulging, usually with sweets or carbohydrates. People in a depressive disorder also show a significant change in their sleeping patterns, either sleeping much more than usual which is called hypersomnia, or sleeping much less than usual which is called insomnia.

In addition, people in a major depressive episode have cognitive symptoms that include an intensely negative self-view reflected by low self-esteem and feelings that they deserve to be punished.

The symptoms of a major depressive episode usually arise gradually over the course of several days or weeks. If untreated, most major depressive episodes seem to run their course some time after 6 months and after then most people return to normal functioning. There are two type of major depressive disorder, such as major depressive disorder, single episode and major depressive disorder, recurrent episode.

The most easily recognized mood disorder is major depressive disorder, single episode, which is defined by the absence of manic or

hypomanic episodes before or during the episode. An occurrence of just one isolated depressive episode in a lifetime is rare (Angst & Preizig, 1996; Judd, 1997). If two or more major depressive episodes occurred and were separated by a period of at least 2 months during which the individual was not depressed, major depressive disorder, recurrent, is diagnosed. Otherwise, the criteria are the same as for major depressive disorder, single episode. Recurrence is very important in predicting the future course of the disorder as well as in choosing appropriate treatment. Individuals with recurrent major depression usually have a family history of depression, unlike people who experience single episodes.

1.6 DYSTHYMIC DISORDER

Dysthymic disorder is a less severe form of depressive disorder than major depression but it is more chronic. Dysthymic disorder is defined as a persistently depressed mood that continues for at least two years, during which the patient cannot be symptom free for more than 2 months at a time. Dysthymic disorder shares many of the symptoms of major depressive disorder but differs in its course. The symptoms are somewhat milder but remain relatively unchanged over long periods of time sometimes 20 or 30 years or more (Akiskal & Cassano, 1997, Keller, Baker, Russel, 1993, J.A. Rush, 1993). Dysthymic disorder differs from a major depressive disorder only in the severity, chronicity and number of its symptoms, which are milder and fewer but last longer. Approximately 8 percent of women and nearly 5 percent of men will develop this disorder in the course of their lives (Kessler et al., 1994).

Recently, individuals have been studied who suffer from both major depressive disorder and dysthymic disorder and who are therefore said to

have double depression. Typically, dysthymic disorder develops first perhaps at an early age and then one or more major depressive episodes occur later (Eaton, 1997).

1.7 : SUBTYPES OF DEPRESSION

There are several variations on depression-different forms the disorder can take. These subtypes apply both to major depression and to the depressive phase of a bipolar disorder.

First, in depression with melancholic features, the physiological symptoms of depression are particularly prominent. The diagnosis requires that the person show the inability to experience pleasure plus at least three of the following symptoms: distinct quality of depressed mood, depression that is regularly worse in the morning, early morning awakening, marked psychomotor retardation or agitation, significant anorexia or weight loss and excessive or inappropriate guilt. Melancholic depressions are thought to be biologically caused rather than caused by environmental events or personality characteristics.

Second, there is depression with psychotic features, in which people experience delusions and hallucinations during a major depressive episode. Delusions are beliefs with no basis in reality, and hallucinations involve seeing, hearing, or feeling things that are not real.

Third, people with depression with catatonic features show a variety of strange behaviors. They may develop catalepsy, a condition characterized by trancelike states and a waxy rigidity of the muscles, so that they tend to

remain in any position in which they are placed. For example, if one positioned a cataleptic's arm in the air as if he were saying "halt", he might leave his arm in that position for hours, until it was moved to another position. People in this category may assume bizarre postures, it may be impossible to move them out of the postures. Catatonia can also involve excessive motor activity, such as fidgeting hands, foot tapping, rocking back and forth and pacing, all without any apparent purpose. People with catatonia may show disturbance in their speech, becoming completely mute or only repeating what others say. It is interesting that catatonia was observed in patients more often in the early part of the twentieth century than it has been observed in the last 20 years. The reasons for this are unclear.

Fourth, there is depression with atypical features. The criteria for this subtype are an odd assortment of symptoms. To receive this diagnosis the individual must show positive mood reactions to positive events and at least two of these four features: significant weight gain or increase in appetite, hypersomnia (sleeping 10 hours or more per day), heavy or leaden feelings in the arms or legs and a long standing pattern of sensitivity to interpersonal rejection.

The fifth subtype is depression with postpartum onset. This diagnosis is given to women when the onset of a major depressive episode occurs within four weeks of delivery of a child. It is important to distinguish between postpartum mood disorders and what is known as the postpartum blues. The most prominent symptoms of postpartum blues are emotional lability (unstable and quickly shifting mood), frequent crying, irritability, and fatigue. As many as 30 percent of women experience the postpartum blues.

Women who are diagnosed with major depression with postpartum onset meet the full criteria for a major depressive disorder. This disorder is much less common than the postpartum blues.

The final subtype of major depressive disorder is depression with seasonal pattern, sometimes referred to a seasonal affective disorder, or SAD. People with SAD have a history of at least two years of experiencing major depressive episodes and fully recovering from them. The symptoms seem to be tied to the number of hours of daylight in a day. People become depressed when the day light hours are short and recover when the daylight hours are long. SAD occurs at the same time of the year (most commonly the winter) and full remission must also have occurred at the same time of the year (most commonly the spring). Prevalence rates suggest that winter seasonal affective disorder, is more common in people living at higher latitude (northern climates) and in younger people

1.8 : ANXIETY AND DEPRESSION

One of the mysteries faced by psychopathologists is the apparent overlap of anxiety and depression. Several theorists have concluded that the two moods are more alike than different. It is seen that almost everyone who is depressed, particularly to the extent of having a disorder, is also anxious (Barlow, in press; Di Nardo & Barlow, 1990; Sanderson, Di Nardo, Rapee & Barlow, 1990) but not everyone who is anxious is depressed. This means that certain core symptoms of depression are not found in anxiety and therefore reflect what is “pure” about depression. These core symptoms are the inability to experience pleasure (anhedonia) and a depressive “slowing” of both motor and cognitive functions until they are extremely labored and

effortful (Brown, Chorpita & Barlow, 1998; L.A. Clark & Watson, 1991; Moras et al., 1996; Tellegen 1985; Watson & Kendall, 1989). Cognitive content (What is thought about) is usually more negative in depressed individual than in anxious ones (Greenberg & Beck, 1989).

Many people with depression also have symptoms of anxiety or panic. In panic, the symptoms reflect primarily automatic activation (excessive physiological symptoms, such as, heart palpitations and dizziness), muscle tension and apprehension (excessive worrying about the future) which seem to reflect the essence of anxiety (Brown et al. 1997; Zinberg & Barlow, 1996 Zinbarg et al. 1994). It is more important that a large number of symptoms help define both anxiety and depressive disorders. Because these symptoms are not specific to either kind of disorder, they are called symptoms of negative affect (Brown et al. 1998, Telegen, 1985). With these symptoms it is diagnosed as mixed anxiety and depression. Negative affect includes distress, anger, fear, guilt, and worry. Both depressed and anxious individuals show high levels of negative affect and can not be distinguished on this basis. But the researchers have shown that anxiety and depression can be distinguished on the basis of a second dimension of mood and personality known as positive affect, which includes affective states such as excitement, delight, interest and pride. Depressed persons tend to be characterized by low levels of positive affect but anxious individuals are not.

1.9 : SUICIDE AND DEPRESSION

The risk of suicide-taking one's own life is a significant factor in all depressive states. Suicide is a distressingly frequent outcome (and always a potential outcome) of significant depressions both unipolar and bipolar. In

fact, depressive episodes are undoubtedly the most common of predisposing causes leading to suicide.

Paradoxically, the suicide often occurs at a point appears to be emerging from the deepest phase of the depressive attack. The risk of suicide is about 1 during the year in which a depressive episodes occurs, but the life time risk for someone who has recurrent depressive episode is about 15 percent (Clark & Fowcett, 1992, Klerman, 1982). Suicide now ranks among the tenth leading causes of death in most western countries. In the United States it is the eight leading cause of death with current estimates of 30000 (Clark & Fawcelt, 1992)

1.10 : GENDER DIFFERENCES IN DEPRESSION

Depression is one of the most common psychological problems. At some time in the United States, 17 percent of Americans experience an episode of major depression and 6 percent experience dysthymic disorder (Kessler et al., 1994). There are large gender differences in the prevalence of depression. Most studies show that women are about twice as likely as men to experience both depressive symptoms and severe depressive disorders (Nolen-Hoeksema, 1990). These differences occur in most countries around the world, with the few exceptions coming from developing and rural countries, such as tribes in Nigeria and Iran. Gender difference is found in most ethnic groups and in all adult age group. Reflected in this statistics is the fact that women are much more likely than men to experience this disorder (Spaner, Bland & Newman, 1994). The most recent results from the National Co morbidity Survey (Kessler et al., 1994) found lifetime prevalence rates of major depression for males at

nearly 13 percent and life time prevalence rates for females at 21 percent (12 months prevalence rates were nearly 8 percent for men and nearly 13 percent for women) . Interestingly, children do not show this gender difference in depression but around age 14 or 15 girls begin to show dramatic increases in their rates of depression, while boy's rates remain quite stable (Nolen – Hoeksema, 1990; Nolen – Hoeksema & Girgus, 1994).

Research conducted in Bangladesh revealed that females belonging to low socio-economic states had poorer mental health than males (Begum & Inahmuda, 1997; Jahan, 1996); Khaleque and Sarcar, 1992; Sarcar and Rahman, 1993).

1.11 : ETHNICITY, CULTURE AND DEPRESSION

In one large study done in the United States, people of Hispanic Origins showed the highest prevalence of depression in the previous year followed by whites, with the lowest prevalence among African Americans (Blazer et al., 1994). It might seem puzzling that Africans Americans had the lowest prevalence of depression even their disadvantaged status in U.S. society. Other studies have found extremely high rates of depression among Native Americans especially the young (Manson et al., 1996). Depression among these youths is tied to poverty, hopelessness and alcoholism.

One cultural group within the United States that has especially low prevalence of unipolar depression is the Old Order Amish of central Pennsylvania. The Amish are a religious community of people who maintain a very simple life style oriented around farming and their church and who reject modern conveniences (such as automobiles, electricity).

Essentially, the Amish live as people did in nineteenth century in rural America. Extensive research on the mood disorders among the Amish has suggested that their prevalence of major depression is only one tenth of that in mainstream groups in the United States (Egeland et al. 1987). Perhaps the simple agrarian life style of the Amish, with its emphasis on family and community, helps to protect its members against depression.

Similarly cross national studies have suggested that the prevalence of major depression is lower among less industrialized and less modern countries (Cross – National collaborative group, 1992). Again, it may be that fast paced life styles of people in modern industrialized societies, with their lack of stable social support and community values are toxic to mental health. In contrast, the community and family-oriented life styles of less-modern societies may be beneficial to mental health, despite the physical hardships that many people in those societies (in less modern countries) face because of their lack of modern conveniences.

Alternately, some researchers have suggested that people in less-modern cultures may tend to manifest depression with physical complaints rather than psychological symptoms of depression, such as sadness, loss of motivation, and hopelessness about the future. In China, people facing severe stress often complain of neurasthenia, a collection of physical symptoms such as chronic headaches, pain in the joints, nausea, lack of energy and palpitations.

1.12 : SOCIO-ECONOMIC FACTORS IN DEPRESSION

For unipolar depressive disorder, there are suggestions that the poor have higher rates of depressive symptoms, but not necessarily of diagnosable mood disorder (Hirschfeld & Cross 1982). However, for bipolar

disorder, the findings are opposite with a number of studies showing that bipolar disorder is more common in the higher socio-economic classes (Goodwin & Jamson, 1990)

Monroe and Simons (1991) concluded that poverty may be associated with an increase in depressive symptoms but probably not major depression. Few studies conducted in Bangladesh on mental health revealed that people of low socio-economic group had significantly poorer mental health than that of middle and high socio-economic groups (Begum & Mahmud, 1997). Depression is a one kind of poorer mental health.

1.13 : ONSET AND DURATION

Major depressive disorder is a relatively common psychological disorder. The mean age of onset for major depressive disorder is 25 years in community samples at subjects who are not in treatment (Burke, Regier & Roe, 1990) and 29 years for patients who are in treatment (Judd et al. in press) but the average age of onset seems to be decreasing (Weissman, Bruce, Leaf, Florio & Holzer, 1991). A frightening finding is that the incidence of depression and consequent suicide seem to be steadily increasing (Cross – National collaborative Group, 1992; Lewinsohn, Rohde, Seeley and Fischer, 1993).

In 1989, Myrna Weissman and her colleagues published a survey of people in five different U.S. cities and that revealed a greatly increased risk of developing depression in younger Americans. A later Study based on very similar surveys conducted in Puerto Rico. Canada, Italy, Germany, France, Taiwan, Lebanon and New Zealand suggests that this trend toward

developing depression at increasingly earlier ages is occurring worldwide (Cross – National Collaborative group, 1992).

The length of depressive episodes lasting as little as 2 weeks; in more severe cases an episode might last for several years, with the average duration of the first episode being 6 to 9 months if untreated (Eaton et al., 1997; Tollefson, 1993).

Recent evidence also identifies important subtypes of dysthymic disorder. Although the typical age of onset of dysthymia has been estimated to be in the early 20s, Klein and his colleagues (1988) found that onset before 21 years of age, and often much earlier, is associated with three characteristics; (a) greater chronicity (it lasts longer), (b) relatively poor prognosis (response to treatment), and (c) a stronger likelihood of the disorder running in the family of the affected individual.

THEORIES OF DEPRESSIVE DISORDER

Chapter II

THEORIES OF DEPRESSIVE DISORDER

For centuries, people have tried to gain an understanding of the causes of depressive disorder and the ways in which people with these conditions should be treated. Due to the intense focus on this disorder, researchers and theorists have made considerable progress in recent years. Although no single theory is sufficient, together they provide important insight into the depressive disorder, which may lead to more effective treatments.

2.1: Biological theories

It has been known that a variety of disease and drugs can affect mood sometimes leading to depression. Indeed this idea goes back to Hippocrates, who hypothesized that depression was caused by an excess of "black bile" in the system (c 400 B.C) Thus it is not surprising that researchers have sought to determine whether there is a biological basis for at least some of the depressive disorders. Investigation attempting to establish a biological basis for unipolar disorders has considered genetic and constitutional factors as well as neurophysiological , neuroendocrinological, and biochemical alterations. A good deal of attention has also been focused on disturbances in many of our biological rhythms, including the effects of seasonal variations in light and darkness.

(a) The Role of Genetics

The most compelling evidence supporting a biological model of mood disorders involves the role of genetics. Family history studies and twin studies both suggest that the mood disorders can be genetically transmitted.

Perris (1992) reviewed eight studies examining the risk for mood disorders in the relatives of unipolar depressives and estimated that about 15 percent of first degree relatives had also experienced unipolar depression, substantially higher than would be expected in the general population. Some studies have suggested that this higher prevalence of mood disorders in first degree relatives is especially true for endogenous or melancholic depression (relative to other types of unipolar depression), but other studies have not found such a difference (Katz & Mc Guffin, 1993). Because of the difficulties of disentangling hereditary and environmental influences, however, a higher rate of disorder among family members can never in itself be taken as conclusive proof of genetic causation.

Twin studies have also suggested that there may be a moderate genetic contribution to unipolar depression. Katz and Mc Guffin (1993) reviewed evidence from four studies showing that monozygotic co-twins of a twin with unipolar major depression are about twice as likely to develop major depression as are dizygotic co-twins of a depressed twin. The evidence for a genetic contribution is much less consistent for milder forms of unipolar depression, such as neurotic depression or dysthymia (Katz & Mc Guffin, 1993), and indeed some twin studies have not found evidence of a genetic contribution to these milder but more chronic forms of unipolar depression.

Based on the evidence so far, the case for some hereditary contribution in the caused patterns of unipolar major depression is quite strong although not as strong as for bipolar disorder (Katz & Mc Guffin 1993; Ritkin Gurling, 1991).

(b) Biochemical theories

Most of the biochemical theories of mood disorders have focused on neurotransmitters. Neurotransmitters are those biochemicals which facilitate the transmission of impulse across the synapses between one neuron and another. Starting in the 1960s the view that depression may arise from disruptions in the delicate balance of neurotransmitter substances that regulate and mediate the activity of the brain's nerve cells, or neurons has received a great deal of attention. The specific group of neurotransmitters that has been implicated in the mood disorders is called the monoamines and the specific monoamines that have been implicated are norepinephrine, serotonin and dopamine. These neurotransmitters are found in large concentrations in the limbic system, a part of the brain associated with the regulation of sleep, appetite and emotional process. Since depression and mania involve disturbances in sleep, appetite and emotions, it would make sense that this disorders was caused by dysfunction in the limbic system.

Most of the research on depression, however, has focused on norepinephrine and serotonin. The early theory of the roles of these neurotransmitters was that depression is caused by a reduction in the amount of norepinephrine or serotonin in the synapses between neurons (Glassman, 1969, Schildkraut, 1965). This depletion could result from numerous mechanisms: decreased synthesis of the neurotransmitter from its precursors, increased degradation of the neurotransmitters by enzymes, or impaired release or reuptake of the neurotransmitter.

The level of a neurotransmitter in the brain can not be measured directly in live human beings. It must be assessed indirectly, usually by measuring levels of the by- products of the neurotransmitter in the blood or urine of subjects.

Studies that have attempted to examine the biochemical patterns specific to certain forms of mood disorders have been somewhat successful. For example, one study suggested that depressed people who have many aggressive and suicidal impulses are especially likely to show evidence of low serotonin levels (Malone & Mann, 1993).

More recent studies of the monoamine theories have focused on the number and functioning of receptors for the monoamines on neurons in people suffering from mood disorders. Neurotransmitter and their receptors interact like locks and keys. Each neurotransmitter will fit into a particular type of receptors on the neuronal membranes. If there is the wrong number of receptors for a given type of neurotransmitter or the receptors for that neurotransmitter are too sensitive or not sensitive enough, then the neurons do not efficiently use the neurotransmitter that is available in the synapse. Several studies suggest that people with major depressive disorder or bipolar disorder may have abnormalities in the number and sensitivity of receptor sites for the monoamine neurotransmitters (Malone & Mann, 1993; MC Birde et al., 1994). In major depressive disorder receptors for serotonin and norepinephrine appear to be too few or insensitive. The drugs that relieve depression and probably work primarily by changing the sensitivity of neuronal receptors for the monoamines like norepinephrine & serotonin have an effect that takes at least a couple of weeks (Fava & Rosenbaum, 1995).

As the technology for determining the functioning of neurotransmitter system develops, our understanding of the relationship between neurotransmitters and mood disorders will no doubt increase.

(c) Neuroendocrine Abnormalities

The neuroendocrine system regulates a number of important hormones that, in turn, affect basic functions such as sleep, appetite, sexual drive and the ability to experience pleasure. These hormones also help the body respond to environmental stressors. Three key components of the neuroendocrine system, - the hypothalamus, pituitary, and adrenal cortex – work together in a feedback system that is richly interconnected with the limbic system and the cerebral cortex. This system is often referred to as the hypothalamic pituitary adrenal axis or HPA axis.

Normally, when we are confronted with a stressor, the HPA axis becomes more active, then it releases increasing levels of hormones like cortisol, which help the body to respond to the stressor by making it possible to fight the stressor or flee from it. Once the stressor is gone, the HPA axis returns to homeostasis.

Depressed people tend to show chronic hyperactivity in the HPA axis and an inability grows for the HPA axis to return to normal functioning following a stressor (Holsboer, 1992). In turn the excess hormones produced by heightened HPA activity seem to have an inhibiting effect on receptors for the monoamines. Blood plasma levels of cortisol are known to be elevated from 50 percent to 60 percent of seriously depressed patients (Holsboer, 1992), suggesting a possible clue of etiological significance. Even more intriguing, however, is the finding that a potent suppression of plasma cortisol in normal individuals, dexamethasone, either fails entirely to suppress or fails to sustain suppression of cortisol in about 45 percent of seriously depressed patients (Shelton et al., 1991). These findings in themselves essentially undisputed gave rise some years ago to widespread

use of the dexamethasone suppression test (DST) in assessing depressed individuals. One model for the development of depression is that people exposed to chronic stress may develop poorly regulated neuroendocrine systems. Then when they are exposed even to minor stressors later in life, the HPA axis over reacts and does not easily return to homeostasis. This creates change in the functioning of the monoamine neurotransmitters in the brain and an episode of depression is likely to ensure (Weiss, 1991).

People with low thyroid levels (a condition known as hypothyroidism) often become depressed. In addition, administration of thyrotropin releasing hormone (which through a complex sequence of steps leads to increased level of thyroid hormone) improves the mood and sense of motivation and coping for both normal and & psychiatric subjects (Loosen, 1986; shelton et al., 1991)

(d) Neurophysiological Abnormalities

A number of neurophysiological abnormalities have been documented in people with mood disorders, although the significance of these abnormalities is not yet clear (Thase & Howland, 1995).

One exciting neurophysiological research in recent years has followed up on earlier neurological findings showing that lesions at the left (but not the right) anterior or prefrontal cortex (as for example, from having a stroke in that region) often leads to depression (e.g. Robinson et. al 1984). When one measures the electron encephalographic (EEG) activity of both cerebral hemispheres in depressed patients, one finds that there is an asymmetry or imbalance in the EEG activity of the two sides of the anterior (prefrontal) regions of the brain.

One of the most common neurophysiological abnormalities is the altered brain wave activity during sleep. Depressed people have less slow wave sleep, a type of sleep that helps people feel rested and restored. They go into another form of sleep, rapid eye movement sleep, earlier in the night than do non depressed people and they have more of this type of sleep during the night. Accompanying these brain wave changes, which can be seen in an electroencephalogram (EEG), are the subjective sleep disturbances of depressed people. They report having trouble going to sleep or remaining asleep, they wake early in the morning and cannot go back to sleep and they do not feel rested after they sleep.

EEG recording in awaking depressed people also shows some abnormalities : it seems that the non dominant side of these people's brains may be over activated (Banich, Stolar, Heller, & Goldman, 1992). This is interesting because other research on non depressed people suggests that the non dominant side of the brain (the right side in most people) is particularly active when people are processing information that has a negative emotional tone (Coffey, 1987, Otto, Yeo & Dougher, 1987). Whether over activation of the non-dominant side of the brain is a cause of depression or simply a symptom of depression is unclear.

Neuroimaging studies using CT scans and MRI scans have found atrophy or deterioration in the cerebral cortex and cerebellum in severe cases of unipolar depression and bipolar disorder (Andreason, Swayze, Flaum & Alleger, 1990; Coffey, Wilkinson, Weiner, & Ritchie , 1993). PET scans show decreased metabolic activity in the frontal area of the cerebrum of people with severe depression.

2.2 : Psychosocial theories

There are many psychosocial theories which focus on the depressive disorders. For the most part, however the psycho-social theories have focused on characteristics of individuals and their environments that put them at risk to develop depression. Most prominent psychological theories are discussed below:

(a) Stress as a causal factor

Many people believe that depression often arises as a reaction to stressful negative events, such as the break up of a relationship, the death of a loved one, job loss or a serious medical illness.

Depressed people are also more likely to have chronic life stressors , such as financial strain or a bad marriage, than non depressed people. In a sophisticated study, Dohrenwend and colleagues (1986) found that depressed patients had three types of negative life events of in the year before the onset of their depression than did non-depressed controls: physical illness and injury, fateful loss events and events that disrupted their social network.

One way in which stressors may act is through their effects on biochemical and hormonal balances, and on biological rhythms. Barchas, and his colleagues (1978) in a summary of research in this area, suggest that psychosocial stressors may cause long-term changes in brain function and that these changes may play a role in the development of mood disorders.

Psychopathology researchers have long advocated the use of diathesis-stress models for understanding the development of certain kinds of

psychopathology, such as, schizophrenia and recently have begun to do so for depression as well. The idea is that people who eventually develop a disorder differ in some underlying way from those who do not and this underlying difference is known as their diathesis (or predisposition). However, among those with the diathesis, only those who experience stress will actually develop this disorder. Originally it was assumed that the diathesis was constitutional or biological in origin (e.g Meehl, 1962; Rosenthal, 1963) but more recently depression researchers have also begun to propose diathesis for depression that are cognitive and social rather than constitutional (e.g. Metalsky et al., 1982).

Types of Diathesis stress models for unipolar depression

One kind of diathesis stress model for depression has already been discussed on the context of biological causal factors. There is substantial evidence for some heritability for unipolar depression. Yet even among monozygotic twins there is only about 50 percent concordance, suggesting that a large role is left for environmental factors such as stressful life events in determining which of those who inherit the predisposition will develop the disorder. Moreover, at present it is not known what the nature of this genetic predisposition is. It may be some kind of constitutional weakness, for example, or it may be a personality trait.

Another general kind of diathesis stress model for depression indeed proposes that personality variables play a role in predisposition to depression. Early clinical observations suggested that depressive patients are very concerned about what others think of them and they also appear to be somewhat obsessive, anxious, and self deprecatory. Some of these observations of the personality features of depressives may be colored by

their depressive symptoms (e.g. Hirschfeld et al., 1983). In a recent study L.A Clark and colleagues (1994) concluded that there was good evidence that neuroticism is the primary personality variable that serves as a vulnerability factor for depression. L A Clark and his colleagues (1994) also concluded that there is some evidence that low levels of extraversion or positive affectivity may also serve as a vulnerability factor for depression. Positive affectivity involves a disposition to feel joyful, energetic, bold, proud, enthusiastic and confident; people low on this disposition tend to feel unenthusiastic, unenergetic, dull, flat and bored. It is therefore not surprising that this might make them more prone to depression.

Two other cognitive personality dimensions have also been associated with a vulnerability to depression. Both Blatt (1974) and Beck (1983) have identified two different types of people who may be prone to depression when negative life events occur to which their personality makes them particularly sensitive. First, there are people high on sociotropy, who are excessively concerned with interpersonal dependency and who are overly sensitive to interpersonal losses or rejections. Second, there are people high on autonomy, who are excessively concerned with achievement issues and who tend to be highly self-critical; these people are especially sensitive to achievement failures.

Two other diathesis stress models propose that cognitive diathesis is important vulnerability factors for depression. The first was proposed by Beck (1957), who argues that psychological stressors provoke severe depressive reactions only in people who already have negative dysfunctional belief that are rigid, extreme, and counterproductive. According to this hypothesis, a stressor merely serves to activate these depressogenic schemas that have previously been dormant. An example of a dysfunctional belief

(that the person may not be consciously aware of) is "If everyone doesn't love me, then my life is worthless". According to Beck and others, such a belief would predispose the person holding it to develop depression if he or she perceived social rejection.

The second cognitive diathesis that has been proposed as creating vulnerability to depression is one's attribution style for important negative events. Abramson and colleagues (1978) theorized that people with a depressive or pessimistic attribution style, which involves a tendency to make internal stable and global attributions for negative life events, are prone to experience depression following negative life events.

A final diathesis stress model is based on evidence that early parental loss through death or permanent separation can create vulnerability for depression.

It should be understood that none of these models are mutually exclusive and some may simply be describing the same diathesis in different terms or at different levels of analysis. For example, there is probably a genetic basis for neuroticism (Carey & Di Lala, 1994), and neuroticism seems to be highly correlated with depressive attributional style (L.A. Clark et al., 1994, Luten, Ralph & Mineka, 1995) and so these two proposed diatheses may be closely interrelated. Moreover, poor early parenting and parental loss have been strongly implicated in the formation of depressogenic schemas or dysfunctional beliefs (Beck, 1967, Bowlby, 1980).

Five major psychological theories of depression that have received much attention in recent years are discussed below:

(b) Psychodynamic Theories

Some people seem to find themselves in unhealthy and destructive relationships over and over again. Each time these relationships end, they vow never to get into similar relationships again. However, they do and then find themselves depressed over the problems in the relationship or when the relationships inevitably end.

Psychodynamic theorists suggest that such pattern of unhealthy relationships stem from people's childhood experiences that prevented them from developing a strong and positive sense of self, reasonably independent of others evaluations (Arieti & Bemporad, 1980, Bibring, 1953; Blatt & Zuroff, 1992; Freud, 1917). As adults, these people are constantly searching for approval and security in their relationships with others. They are anxious about separation and abandonment and may allow others to take advantage and even abuse them rather than risk losing the relationship by complaining. They are constantly striving to be "perfect" so that they will be loved. Eventually some problem in a close relationship or some failure to achieve perfection occurs and they plunge into depression.

Early psychodynamic theories of mood disorders reflected themes of loss and feeling of rejection (Abraham, 1911/1968). In Freud's classic paper "Mourning and Melancholia", Freud (1917) theorized that the potential for depression is created early in childhood. During the oral period, a child's needs may be insufficiently or over sufficiently gratified, causing the person to become fixated in this stage and dependent on the instinctual gratifications particular to it. With this arrest in psychosexual maturation, this fixation at the oral state, the person may develop a tendency to be excessively dependent on other people for the maintenance of self-esteem.

Freud (1917) pointed that when a loved one dies, the mourner regress to the oral stage of development (when the infant can not distinguish self from other) and introjects or incorporates the lost person, feeling all the same feelings toward the self as toward the lost person. These feelings were thought to include anger and hostility because Freud believed that we unconsciously hold negative feelings toward those we love, in part because of their power over us. Freud hypothesized that depression could also occur in response to imagined or symbolic losses. For example, a student who fails in school or who fails at a romantic relationship may experience this, symbolically as a loss of her parent's love. The primary difference that Freud observed between mourning and depression was that depressed people show lower self esteem and are more self critical. He further hypothesized that these self accusations are really unconsciously directed at the lost love object (real or symbolic) and do not occur in normal grief if the person has had a childhood characterized by good attachment relationships. By contrast, the person who is predisposed to becoming depressed is someone who has either experienced the loss of a mother or whose parents did not fulfill the infant's needs for nurturance and love. In both cases, the infant will grow up feeling unworthy of love, have low self esteem, and be prone to depression when faced with real or symbolic losses.

Later psychodynamic theorists, such as Klein (1934) and Jacobson (1971) emphasized even more than did Freud the importance of the quality of the early mother infant relationship in establishing a vulnerability (or invulnerability) to depression. Well known British psychologist, John Bowlby (1973, 1980), who started as a psychoanalyst and later developed an integrative approach known as attachment theory also extensively documented a child's need for a secure attachment to parental figures in order to be resistant to depression (and anxiety) in later life.

The modern psychodynamic theories that focus on the depressive's patterns of interpersonal relationships had led to an effective therapy for depression

(c) Behavioral Theories

One of the earliest behavioral formulations of theories of depression was that the symptoms of depression are the result of a reduction in positive reinforcements (Lazarus, 1968 ; Skinner, 1953). According to this view, depressed people withdraw themselves from life because they no longer have incentive to be active. For example, a formerly successful athlete who suffers an injury, lacking the positive reinforcement of the athletic successes to which he has become accustomed, he might retreat into a depressive state.

Another classic behavioral position maintains that deficient social skills contribute to depression. A person with poor interpersonal relationships loses the reinforcement provided by the attention and interest of other people (Lewinsohn & Shaw, 1969). Consequently, the individual is likely to become depressed and stay depressed. In time, the depressed person may derive a certain amount of secondary gain. Escape from responsibility such as work and family commitments, may be reinforcement for remaining depressed. Stressful life events are a third contributor to depression, according to behavioral models, because they disrupt the individual's ability to carry out important and relatively automatic behavior patterns (Hoberman & Lewinsohn, 1985). These patterns, called "scripts", include the many daily routines in which people engage every day, such as getting dressed in the morning and going to work. The changes in scripts that result from many different types of life events result in the mood changes that

contribute to depression. The important factor determining whether a person will become depressed is the extent to which the circumstances or events interfere with the individual's scripts. The greater the disruption, the greater the distress. Then people feel more self-conscious, when they lose the cues provided by their familiar routines and surroundings. This heightened self-consciousness can lead the person to become more self-critical to take responsibility for negative outcomes, and to withdraw from others.

For example, a lady named Martina was recently widowed. She has not only lost a close relationship but also must make vast changes in her day to-day life. Marina's life becomes less predictable, and her responsibilities are doubled. In this behavioral formulation of depression, such an interruption in Marina's daily life patterns results in a loss of positive reinforcements (the loss of a close relationship) and makes her feel more self-conscious in carrying out activities that are unfamiliar to her. For example, when she goes to a restaurant, she feels awkward and embarrassed about sitting alone; when she goes to the bank for the first time to discuss her financial situation, she feels uncomfortable and afraid of making a mistake in front of the bank personnel. Ultimately she became more self-critical and withdrew herself from others and became depressed.

One important variant of the behavioral approach to depression is the learned helplessness model, a term coined by psychologist Martin Seligman.

(d) The helplessness and hopelessness theories

Martin E.P Seligman discovered that dogs and rats have a very interesting emotional reaction to events over which they have no control. In the late 1960s, Seligman and his colleagues (Maier, Seligman & Solomon 1969;

Overmier and seligman , 1967) noted that laboratory dogs who were first exposed to uncontrollable shocks later showed major deficits in learning in a different situation that they could control shocks. Animals first exposed to equal amounts of controllable shock showed no such deficits. Indeed when the uncontrollable shocked animals were put in the new situation with potentially controllable shocks, they didn't even seem to try to learn whether there was some way to control the shocks; instead they seemed to simply passively accept the shocks.

Seligman and his colleagues proposed the learned helplessness hypothesis to explain these effects. This hypothesis states that when an organism learns that it has no control over aversive events such as shock, this learned helplessness will produce three kind of deficits:

(i) Motivational deficits:

If one has already learnt that one has no control, why bother trying? This was consistent with observations that the helpless animals did not initiate many responses on their own, they did not even try to escape the shocks in the new situation;

(ii) Cognitive deficits:

If one has learnt that one has no control, this interfere with one's future ability to learn that one can has control. This was consistent with observations that even when a dog made an occasional response to escape the shock it did not seem to notice that its response had brought relief and returned to passively accepting the shock on future trials. In cognitive deficit, it was learnt that the animal had no ability to control.

(iii) Emotional Deficit:

Learning that one has no control produces passivity and perhaps depression. It was this observation (that the animals looked depressed) that captured Seligman's attention and led ultimately to his proposing a learned helplessness model of depression.

Subsequent research demonstrated that helpless animals also show lower levels of aggression, loss of appetite and weight and a variety of physiological changes in neurotransmitter levels. After demonstrating that the learned helplessness phenomenon occurred across species, including humans (Hiroto & Seligman, 1975). Seligman went to propose that learned helplessness may, underlie some types of human depression. That is, people undergoing stressful life events over which they have little or no control develop a syndrome like the helplessness syndrome seen in animals. Seligman noted that there were many symptom similarities between human and animals in relation to helplessness and depression. For example, both helpless animals and depressed humans show lowered initiation of voluntary responses, or what is known in the depression literature as "paralysis of will". In addition, both show a negative cognitive set, and here he noted the similarities between the cognitive deficits seen in helpless animals and the pervasive negative thinking seen in depressives noted by Beck. Moreover, the lack of aggression and loss of appetite, as well as the physiological changes observed, seemed to be parallel in helplessness and depression.

By 1978, several inadequacies of the theory and unexplained aspects of depression had become apparent and a revised version of the learned helplessness model was proposed by Abramson, Seligman, and Teasdale (1978). The essence of the revised theory lies in the concept of **attribution-**

the explanation a person has for his or her behavior (Weiner et al., 1971)- and in this way it blends cognitive and learning elements. The kinds of attributions that people make about uncontrollable events are, in turn, central to whether they become depressed or not. They proposed three critical dimensions on which attributions are made: internal/external, global /specific, and stable/ unstable. A depressogenic or pessimistic attribution for a negative event would be an internal, stable and global one. For Example if a girl's boyfriend treats her badly and she conclude that "It's because I'm ugly and boring" She is much more likely to become depressed than if she conclude that "It's because he's in a bad mood today after failing his exam and he is taking it out on me." Abramsons and his colleagues also hypothesized that people have a relatively stable and consistent style for making attributions and that people who have a pessimistic or depressogenic style are at risk for depression when faced with uncontrollable negative life events. That is, the pessimistic attributional style is a diathesis for depression.

The basic premise of the learned helplessness theory is that an individual's passivity and sense of being unable to act and control his or her own life is acquired through unpleasant experiences and traumas that are tried unsuccessfully to control by individual bringing on a sense of helplessness which leads to depression.

In 1989, a further revision of this theory was presented known as the hopelessness theory (Abramson et al., 1989). Although many elements of the earlier theory were similar, these investigators proposed that having a pessimistic attribution style in conjunction with one or more negative life events was not sufficient to produce depression unless one first experienced a state of hopelessness. A hopelessness expectancy was defined by the

perception that one had no control over what was going to happen and by absolute certainty that an important bad outcome was going to occur or that a highly desired good outcome was not going to occur. So a hopelessness expectancy was proposed as a sufficient condition for depression, although Abramson and colleagues acknowledged that this may be true for only a subset of depressives-a new subtype that they defined as the hopelessness subtype of depression. Research is currently testing this theory. One supportive study with college students found that students with a pessimistic attributional style who had low self-esteem were likely to develop depressed mood for several days following a poor grade on amid-term exam (Metalsky et al., 1995). In addition, this effect was related to the tendency to become hopeless, as predicted by the theory.

An advantage of the hopelessness theory is that it can deal directly with the co morbidity of depression and anxiety disorders.

(e) Beck's Cognitive Theory

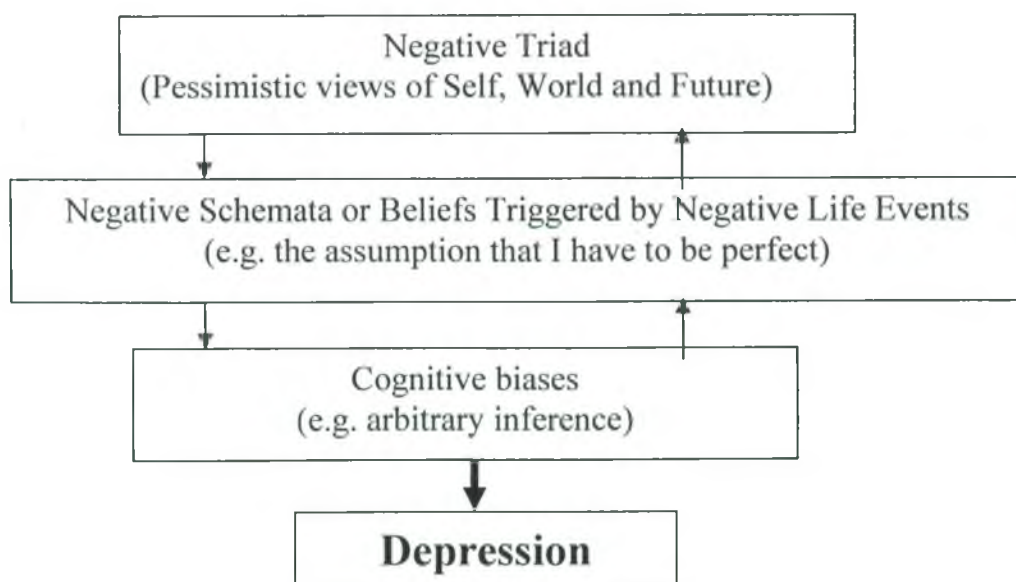
One of the most prominent theories of depression for the past 25 years has been that of Aaron Beck (1967, 1985, 1987)- a psychiatrist who became disenchanted with psychodynamic theories of depression early in his career and developed his own cognitive theory of depression. This theory regards thought processes as causal factors in depression. According to Beck, depressed individual's thinking is biased toward negative interpretations.

According to Beck, in childhood and adolescence, depressed individuals acquired a negative schema, a tendency to see the world negatively through loss of a parent, an unrelenting succession of tragedies, the social rejection

of peers, the criticisms of teachers, or the depressive attitude of a parent. The negative schemata or beliefs acquired by depressed persons are activated whenever they encounter new situations that resemble in some way, perhaps only remotely, the conditions in which the schemata were learned. Moreover, the negative schemata of depressed people fuel and are fueled by certain cognitive biases, which lead these people to misperceive reality. Thus an ineptness schema can make depressed individuals expect to fail most of the time, a self-blame schema burdens them with responsibility for all misfortunes, and a negative self evaluation schema constantly reminds them of their worthlessness.

The negative schemata, together with cognitive biases or distortions, maintain what Beck called the negative triad; negative views of the self, the world and the future. Following figure illustrates the interactions among three levels of cognitive activity believed by Beck to underlie depression.

Figure: The inter relationship among different kinds of cognitions in Beck's theory of depression.



Examples of negative triad are following;

- a) Negative thoughts about the self:- "I am failure", "I am worthless", "I am ugly".
- b) Negative thoughts about one's experiences and the surroundings world:-
"No one loves me" "People treat me badly"
- c) Negative thoughts about one's future:- "It's hopeless because things will always be this way".

Beck also postulates that the negative cognitive triad tends to be maintained by a variety of cognitive biases or distortions. The following list describes some of the principal cognitive biases of the depressive individual.

(i) Arbitrary inference :

A conclusion drawn in the absence of sufficient evidence or any evidence at all. For example, a man concludes that he is worthless because it is raining the day he is hosting an outdoor party.

(ii) Selective abstraction:

A conclusion is drawn on the basis of but one of many elements in a situation. A worker feels worthless when a product fails to function, even though she is only one of many people who contributed to its production.

(iv) Overgeneralization :

An overall sweeping conclusion is drawn on the basis of a single, perhaps trivial, event. A student regards his poor performance in a single class on one particular day as final proof of his worthlessness and stupidity.

(v) Magnification and minimization:

It means exaggerations in evaluating performance. A man, believing that he has completely ruined his car (magnification) when he sees that there is a slight scratch on the rear fender, regards himself as good- for- nothing; or, a woman still believes herself worthless (minimization) in spite of a succession of praiseworthy achievements.

The implications of Beck's theory are very important. By recognizing cognitive errors and the underlying schemas, depressive and other related emotional disorders can be alleviated. Applying this theory, Beck became the father of cognitive therapy,- one of the most important approaches for depressive and other emotional disorders.

(f) Interpersonal Theory

Some depressed people have had lifelong difficulties in their interactions with other people. For example, a 40 year old man named Willy who for most of his life acted in abrasive ways that alienate others. As the year go by, Willy becomes increasingly saddened by the fact that he has no friends and realizes that it is unlikely that he will ever have a close relationship. For depressed people like Willy, whose social skills are so deficient, a cycle is

created as their constant pessimism and self deprecation make other people feel guilty and depressed. As a result, other people respond in unhelpful ways with criticism and rejection, and this further reinforces the depressed person's negative view of the world.

Expanding on these ideas, Columbia University researcher Myrna Weissman, with her late husband Gerald Klerman and their associates developed a model of understanding mood disorders that emphasizes disturbed social functioning (Klerman, Weissman, Rounsaville & Chevron, 1984; Weissman & Markowitz, 1994). This theory incorporates the ideas of behavioral psychologists who focus on the poor social skills of the depressed individual, but it goes one step further in looking at the origins of the depressed person's fundamental problems. Gotlib and Hammen (1992) reviewed a considerable amount of research showing that depressed individuals have smaller and less supportive social networks. They reviewed evidence that depressives have social skills deficits. For example, they seem to speak more slowly and monotonously and to maintain less eye contact; they are also poorer than non depressed people at solving interpersonal problems.

The interpersonal theory of depression is rooted in the interpersonal approaches of Adolph Meyer (1957) and Henry Stock Sullivan (1953 a; 1953 b) and the attachment theory of John Bowlby. Meyer was known for his psychological approach to abnormal behavior, emphasizing how psychological problems might represent an individual's misguided attempts to adapt to the psychosocial environment. He believed that physical symptoms can also develop in association with psychological distress. Sullivan (1953) characterized abnormal behavior as a function of impaired interpersonal relationships, including deficiencies in communication.

Bowlby's theory with its specific focus on disturbed attachment bonds in early childhood as the cause of unhappiness later in life, is particularly relevant to depression .

Interpersonal theory connects the ideas of these theorists with the behavioral and cognitively oriented theories by postulating a set of steps that leads to depression. The first step is the person's failure in childhood to acquire the skills needed to develop satisfying intimate relationships. This failure leads to a sense of despair, isolation, and resulting depression. Once a person's depression is established, it is maintained by poor social skills and impaired communication, which leads to further rejection by others. Reactive depressions in adulthood may arise when the individual experience a stressful life event, such as the end of a relationship or death of a significant other. After the depressive symptoms begin, the individual's maladaptive social skills perpetuate them. For example, a man whose wife dies may become so distraught over an extended period of time that he alienates his friends and family members. In time, a vicious cycle establishes itself, in which his behavior causes people to stay away; because he is so lonely, he becomes even more difficult in his interactions with others. Although the individual circumstances differ in each case, it is this cycle of depression, lack of social interaction, and deterioration of social skills that interpersonal theory regards as the core problem of depression. Some theorists and clinicians have attended to the way in which conflict with close ones, particularly family members is sometimes associated with the onset and course of depression (Moos, Cronkite & Moos, 1998). It makes sense that unhappiness in a person's most intimate relationships has a profound impact on emotional functioning.

Social influences have a powerful effect on psychological and biological functioning. In general the greater the numbers and frequency of a person's social relationships and contacts, the longer he or she is likely to live (for instance, House, Landis & Umberson, 1988). It is not surprising, then that social factors influence whether a person become depressed. Many studies have established the importance of social support in speeding recovery from depressive episode (Keitner, et al 1995; McLeod, Kessler, & Landis, 1992; Sherbourne, Hays, & Wells, 1995)

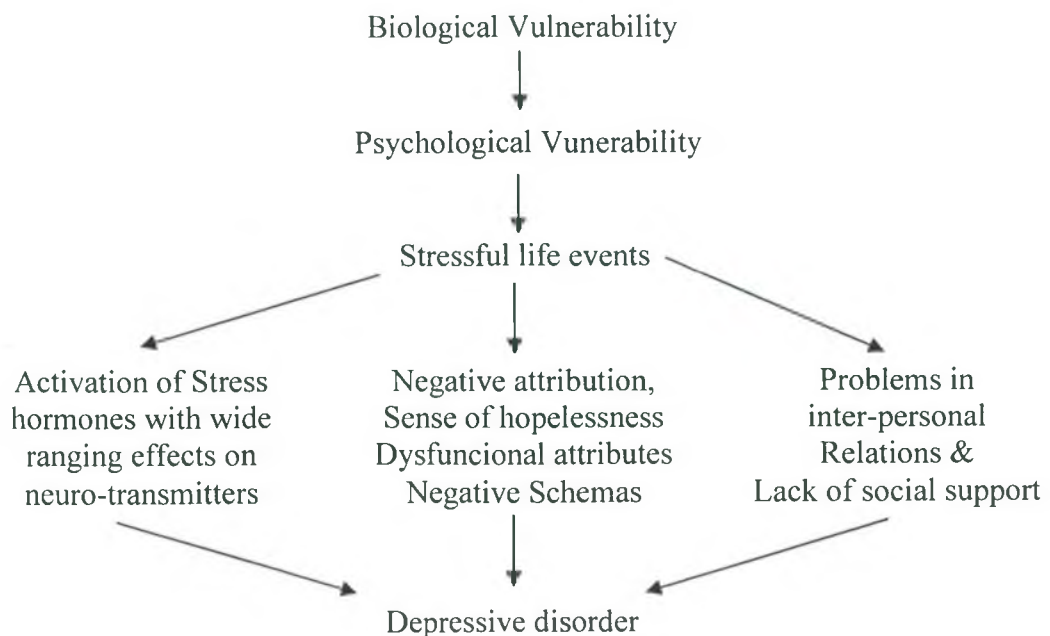
It is most important implications of interpersonal theory that this theory provides interpersonal therapy where the problems of interpersonal relationship are solved and social skill training is given necessarily.

(g) An integrative Theory

Basically, depression and anxiety may often share a common genetically determined biological vulnerability (Barlow, in press; Barlow et al., 1996) that can be described as an overactive neurobiological response to stressful life events. Once again, this vulnerability is simply a general tendency to develop depression or anxiety rather than a specific vulnerability for depression or anxiety itself. There is good evidence that stressful life events precede the onset of depression in most cases. The best current thinking is that stressful life event activates stress hormones which in turn, have wide ranging effects on the neurotransmitter systems, particularly those involving serotonin and norepinephrine. There is also evidence that activation of stress hormones over the long term may actually "turn on" certain genes, producing long-term structural and chemical changes in the brain. For example, processes triggered by long-term stress may lead to atrophy of neurons in the hippocampus that help regulate emotions. Such structural

change might permanently affect the regulation of neurotransmitter activity. The extended effects of stress may also disrupt the circadian symptoms in certain individuals, who then become susceptible to the recurrent cycling that seems so uniquely characteristic of the mood disorder (Post-1992).

People who develop mood disorders also possess a psychological vulnerability experienced as feeling of inadequacy for coping with the difficulties confronting them. When vulnerabilities are triggered the "giving up" process is crucial to the development of depression (Alloy et al, 1990). A variety of evidence indicates that these attitudes and attributions correlate rather strongly with such biochemical markers of stress and depression as by products of nor epinephrine (for example, Samson, Mirin, Houser, Fenton & Schildkraut, 1992), and with hemispheric lateral asymmetry (Davidson et al., in press). Finally, it seems clear that factors such as interpersonal relationships may protect us from the effects of stress and therefore from developing mood disorders. In summary biological, Psychological and social factors all influence the development of depressive disorder, as depicted in the following figure.



2.3 : RATIONALE OF THE STUDY

Bangladesh is one of the worst poverty stricken countries of the world where nearly 40 percent of the population fall below poverty line (UNDP, 2003). Majority of the people in Bangladesh depend mainly on agriculture and manual labor for their livelihood. There is low income and high illiteracy (74%) with over population-this is the true picture of Bangladesh. The rate of illiteracy for women is 75.8% as against 54.44% for men (UNDP, 1994).

The poverty and illiteracy in Bangladesh have great influence on people. Due to poverty, people can not afford sufficient food and minimum level of livelihood. Taking education for most of the people is unthinkable. They cannot enjoy the modern facilities of life. These inadequate facilities in home, society and environment ultimately produce psychological distress which has a detrimental effect on psychological well being in terms of depressive symptoms.

Poverty again is not equally experienced across gender. A particular section of the people of Bangladesh who are worst affected by socio-cultural attitudes and values and have been pushed to an extreme end of poverty are women often designated by the social scientist as the poorest of the poor. In a situation like this, symptoms of depression among the people of Bangladesh might be common.

Research conducted in Bangladesh revealed that 34% of patients attending psychiatric outdoor of Banga Bandhu Sheikh Mujib Medical University (BSMMU) (Former IPGMR) and in General practice are suffering from depressive illness (Chowdhury & Firoz, 1998) In Bangladesh, prevalence of

depression was found to be 28.78 per thousand in a field study near Dhaka (Chowdhury, Alam & Ali, 1981).

Depression is associated with high mortality. Up to 15% of individuals with severe major depressive disorders die by committing suicide (American Psychiatric association, 1994).

Epidemiological evidence also suggests that there is a fourfold increase in death rates in individuals with major depressive disorder who are over the age of 55 years. Individuals with major depressive disorder admitted to nursing homes may have a markedly increased likelihood of death in the first year. Among individuals seen in general medical setting those with major depressive disorder have more pain and physical illness and decreased physical, social and role functioning (American Psychiatric Association, 1994)

Depression is likely the most common psychiatric disorder in the world and is a terminal disease when it results in suicide (Robins, Murphy, Wilkinson, Gassner & Kayes, 1959). In other researches it is found that between 11% and 17% of people who have suffered from a severe depressive disorder at any time will eventually commit suicide (Fremming, 1951) Helgason, 1964; pitts & Winokur, 1964, Black, Winokur & Hasrallah, 1987).

And at the same time, it is a challenge for national health, when Government of Bangladesh is trying to ensure good health for everybody. Depressed people remain sad, they loose their interest or pleasure in activities and they may loose their energy and concentration also (American Psychiatric Association, 1994). These symptoms may disrupt normal family atmosphere. So they may become burden for their family and as well as for

the society. Due to depression, they might lose their job or fail to perform well. As a result, they create loss for family and for country. Some of them might commit suicide which is one of the symptoms of depression and cause enormous essential loss and other social difficulties for family. At the same time, country loses its probable human resources. Bangladesh is a poor developing country but it has a potential manpower. The country's ultimate goal is to utilize human resources, which can contribute to country's development. In order to meet this great challenge, it is essential to use our resources as precisely as possible. Human resource is one of the powerful resources for Bangladesh. In order to utilize this manpower in a most skilled way, it is essential to ensure good health including mental health of the people with other measures.

As depression is a prominent terminal psychiatric disorder, so it should be considered with priority. About 90% of the people who die from suicide have some form of mental disorder at the time of death (Barraclough, Bunch, Nelson & Sainsbury, 1974). The most frequent disorder of these mental disorders is the depressive disorder (Goldacre, Seagoatt & Hawlton, 1993).

So early detection and proper management of this common and dangerous psychiatric disorder (depressive disorder) is essential. In the perspectives of these arguments, the present study has been designed to carry out an empirical investigation of depression in adults among different income groups from Bangladesh context. Findings of the study will provide a clear picture of depression of male and female adults of the three different income groups, such as low, middle and high-income groups.

The present study also attempted to investigate whether depression varies with family type, education, age and marital status of respondents.

It is hoped that this study will help us to contribute to the knowledge of planners, policy makers, and practitioners to chalk out a meaningful action scheme to prevent depression among the people of different income groups in Bangladesh.

2.4 : Purpose of the study

The purpose of the present study was to investigate depression among male and female adults as related to some socio-economic factors.

2.5 : Objective of the study

- (1) To assess the level of depression among male and female respondents.
- (2) To see whether depression varies with different income groups.
- (3) To see whether depression varies with the education level of the respondents.
- (4) To see whether depression varies with the marital status of the respondents.
- (5) To see whether depression varies with the type of family.
- (6) To see whether depression varies with the age of the respondents.

METHOD

Chapter III

METHOD

This chapter describes the sample, study design, questionnaire used and field work procedures of the present study.

3.1 : SAMPLE

A total of 150 adult subjects (75 male and 75 female) ranged between the ages of 18-60 years were selected from Dhaka city. Subjects were divided into three groups according to their income (upper, middle and lower income groups), 50 respondents were selected for each group. There were 25 male respondents and 25 female respondents in each group.

Stratified purposive sampling technique was employed to select sample for the present study.

Table-1: Distribution of sample by gender and different income groups

Gender	Income groups			Total
	Lower	Middle	Upper	
Male	25	25	25	75
Female	25	25	25	75
Total	50	50	50	150

3.2 : STUDY DESIGN

To have representative sample of the population of Dhaka City, care was taken to cover respondents from three income groups (high, middle and lower income groups). Subjects were selected from different areas of Dhaka City to cover 150 respondents of three income groups.

Selection of the respondents:

The criteria used for the selection of the respondents were:

- (i) Respondents willing to participate.
- (ii) Only one respondent from each house was selected.
- (iii) Only 18 years of age and above.
- (iv) Permanent resident of the house to ensure the return of the questionnaire if left with the respondent to be collected later.
- (v) Sick or persons with physical or mental handicap like bed ridden, short of hearing, poor eye sight, mentally retarded etc. were excluded.

Number and percentages of certain demographic factors of sample are presented in table-2 through table-5.

Table 2: Number and percentage of sample in different income groups according to family type

Family type	Income groups			Total
	Upper	Middle	Lower	
Single	15 (30)	26 (52)	34 (68)	75 (50)
joint	35 (70)	24 (48)	16 (32)	75 (50)
Total	50	50	50	150

Table 3: Number and percentage of sample in different income groups according to education

Education	Income Groups			Total
	Upper	Middle	Lower	
Below S.S.C	0	3 (6)	44(88)	47 (31.33)
Above S.S.C	50 (100)	47(94)	6(12)	103 (68.67)
Total	50	50	50	150

Table 4 : Number and percentage of sample in different income groups according to age

Age	Income Groups			Total
	Upper	Middle	Lower	
35 & above	23(46)	24(48)	28(56)	75(50)
Below 35	27(54)	26(52)	22(44)	75(50)
Total	50	50	50	150

Table 5: Number and percentage of sample in different income group according to marital status

Marital status	Income	Groups		Total
	Upper	Middle	lower	
Married	36 (72)	36 (72)	18 (36)	75 (50)
Unmarried	14 (28)	14 (28)	32 (64)	75 (50)
Total	50	50	50	150

Age of the respondents ranged from 18 to 60 years, income ranged for lower income groups from 2 to 8 thousand, for middle income group from 9 to 29 thousand, for upper income group from 30 thousand to above. The range of education was from no education to Masters.

3.3 : Instrument used

The instrument used for the present study were the following:

- i) The Beck Depression Inventory-second edition (BDI-II)
- ii) Bio-data form

i) The Beck Depression Inventory-second edition (BDI-II)

The "Beck Depression Inventory-Second edition (BDI-II)" is a 21-item self report questionnaire for measuring the severity of depression in adults and adolescents aged 13 years and older. BDI-II is the revised and modernized form of the Beck Depression Inventory (BDI-IA; Beck, Rush, Shaw and

Emery; 1979). The BDI-A replaced the original instrument (BDI) that had been developed by Beck, Ward, Mendelson, Mock, and Erbaugh (1961). This version of the inventory (BDI-II) was developed for the assessment of symptoms corresponding to criteria for diagnosing depressive disorders listed in the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders-Forth Edition (DSM-IV, 1994). The BDI-II is one of the most widely accepted instruments for assessing the intensity of depression in psychiatric patients.

There are 21-items consisting of depressive symptoms and attitudes in this instrument. These items were organized according to the severity of the content of the alternative statements and each item was rated on a 4-point scale ranging from 0 to 3 in terms of severity.

The items of BDI-II were (1) Sadness (2) Pessimism (3) Past failure (4) Loss of Pleasure (5) Guilty Feelings (6) Punishment Feelings (7) Self-Dislike (8) Self-Criticalness (9) Suicidal Thoughts or Wishes (10) Crying (11) Agitation (12) Loss of Interest (13) Indecisiveness (14) Worthlessness (15) Loss of Energy (16) Changes in Sleeping Pattern (17) Irritability (18) Changes in Appetite (19) Concentration Difficulty (20) Tiredness on Fatigue (21) Loss of Interest in Sex.

The BDI-II has been translated into Bangla by Rahman, (2001) and it is popular among the growing professional clinical psychologists and psychiatrists in Bangladesh. Reliability studies (Beck et al., 1988) have shown high degree of internal consistency where all item scores correlated highly with total score. Test-retest correlation ranged from 0.48 to 0.9 with intervals varying from a few hours to four months. (Beck et al., 1988). Test-retest reliability of the Bangla version of BDI-II was obtained by

administering it to 30 adults mixed clinical and non-clinical samples thrice within the duration of 7 to 10 days. The Pearson correlation between first week and second week of BDI-II scores was 0.82 and spearman's correlation co-efficient was 0.89 ($P < 0.01$). Independent validation studies have shown a range of usually high correlation of BDI-II Scores with other depression measures (Beck et al., 1988).

Scoring:

The BDI-II is scored by summing the ratings for the 21 items. Each item is rated on a 4 point scale ranging from 0 to 3. If an examinee has made multiple endorsements for an item, the alternative with the highest rating is used. The maximum total score is 63. Special attention must be paid to the correct scoring of the Changes in Sleeping Pattern (Item-16) and Changes in Appetite (Item-18) items. Each of these items contains seven options rated in order as 0, 1a, 1b, 2a, 2b, 3a, 3b, to differentiate between increases and decreases in behavior or motivation. If a higher rated option is chosen by the respondent, the presence of an increase or decrease in either symptom should be clinically noted for diagnostic purpose.

ii) Bio-data Sheet .

A bio-data sheet containing some personal information was attached with the questionnaire and is given in Appendix-A. It included information regarding age, education, marital status, monthly income, family type (single or joint), and gender.

3.4 : PROCEDURE

The data for the present study was collected through questionnaires from the respondents of different areas of Dhaka City. The questionnaire is designed to be self-administered. At the beginning each respondent was briefly explained about the purpose of the present study and was requested to co-operate with the research –work. The respondents were first asked to fill up the bio-data form which contained some personal information regarding age, sex, education, family type (single or joint), marital status (married or unmarried) and monthly income etc. Before completing the questionnaire respondents were asked to read the instructions carefully printed on both of the question range. The respondents at first were bit hesitant to give answers to the questions. But they were assured that all the information would be kept confidential and would be used only for research purpose. Respondents were approached for administration of the questionnaire either at homes or in their offices. For respondents with low educational background, the items were verbally presented in a simple language and their responses were noted down. It should be mentioned that few respondents did not complete the questionnaires in front the researcher. So the researcher had to leave the questionnaire for a day or two and collected those later at their convenience. After that the respondents were thanked by the researcher.

3.5 : SCORING AND CODING OF RESPONSES

Upon completion of the data collection, the researcher scored all the responses and made the necessary coding for data analysis

Data Analysis

Data analysis were done using SPSS. The following statistical analysis were performed.

- (i) Descriptive statistics: Descriptive statistics for each variable was calculated (Mean and Standard Deviation)
- (ii) 2x3 ANOVA: 2x3 ANOVA was computed to see if depression varied as a function of gender and different income groups.
- (iii) One way ANOVA: (a) one way ANOVA was computed to see if depression varied as a function of education, family type, marital status and age.

RESULT

Chapter-IV

RESULT

The purpose of the present study was to investigate symptoms of depression among male and female adults as related to some socio-economic factors.

The objectives of the study were:

- (1) To assess the level of depression among male and female respondents.
- (2) To see whether depression varies with the income level of the respondents.
- (3) To see whether depression varies with the education level of the respondents.
- (4) To see whether depression varies with the marital status of the respondents.
- (5) To see whether depression varies with the type of family.

And

- (6) To see whether depression varies with the age of the respondents.

The data were analyzed computing ANOVA. Results of these analyses are presented in five sections.

Section-I describes the effect of gender and different income groups on depression.

Section-II describes the effect of marital status of the respondents on depression.

Section-III describes the effect of types of family on depression.

Section-IV describes the effect of the age of the respondents on depression.

Section-V describes the effect of the level of education of the respondents on depression.

Section-I

4.1 : DEPRESSION: GENDER AND DIFFERENT INCOME GROUPS

2x3 analysis of variance was computed to see the effect of gender and different income groups on depression. The results are presented in table 6 and 7.

Table 6: Mean and SD of depression score according to gender and different income groups

Income	Sex	Mean	Std. Deviation	N
Lower	Male	16.96	3.08	25
	Female	17.96	3.90	25
	Total	17.46	3.51	50
Middle	Male	4.96	1.59	25
	Female	6.48	2.68	25
	Total	5.62	2.35	50
Upper	Male	.72	.68	25
	Female	1.76	.88	25
	Total	1.24	.94	50
Total	Male	7.48	7.23	75
	Female	8.73	7.38	75
	Total	8.11	7.31	150

In the case of gender, it was found that the mean score of depression of female respondents ($\bar{X}=8.73$) was higher than that of male respondents ($\bar{X}=7.48$). Therefore it can be said that female respondents suffered from depression more than male respondents.

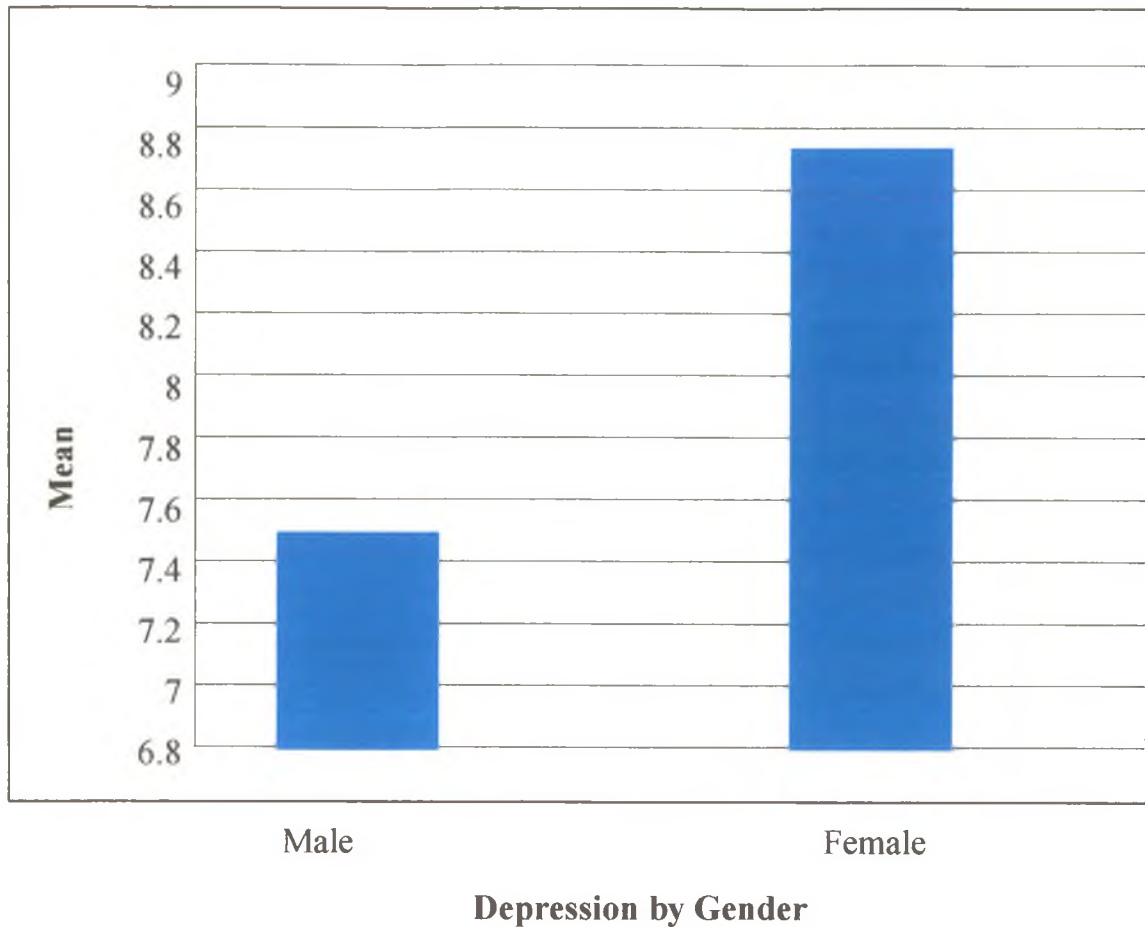
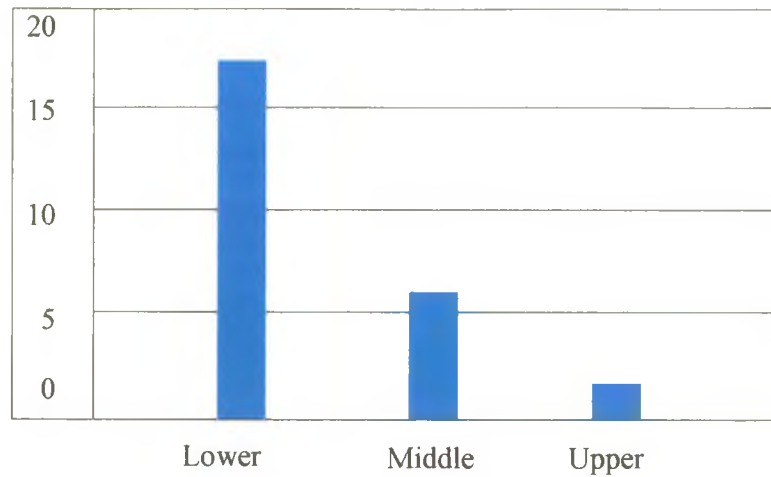


FIGURE 1: Mean of depression score by gender

In the case of income groups, highest mean score for depression was obtained by the respondents of lower income groups ($\bar{X}=17.46$) and the lowest mean score for depression was obtained by the respondents of the higher income group ($\bar{X}=1.24$). It was found that the mean score for depression of the respondents of lower income group ($\bar{X}=17.46$) was higher than that of the respondents of middle income group ($\bar{X}=5.62$) and the mean score for depression of the respondents of middle income group ($\bar{X}=5.62$) was higher than that of the respondents of upper income group ($\bar{X}=1.24$). Therefore, obtained result indicated that the respondents of lower income groups suffered from depression more than those of all other income groups.



Depression by Income

FIGURE 2 : Mean of depression score by income.

Table 7: Depression score by Gender and Income with F-value.

Source	Sum of square	df	Mean square	F
Gender	58.91	1	58.91	9.93
Income	7040.97	2	3520.49	593.40
Gender X Income	4.09	2	2.047	.35
Within cells	854.32	144	5.93	

$P < .01$

Obtained result indicated that gender had significant effect on depression ($F=9.93$; $df=1,144$, $P<.01$) and also a significant difference was found in the depression among the different income groups ($F=593.40$; $df=2,144$; $P<.01$).

Section-II

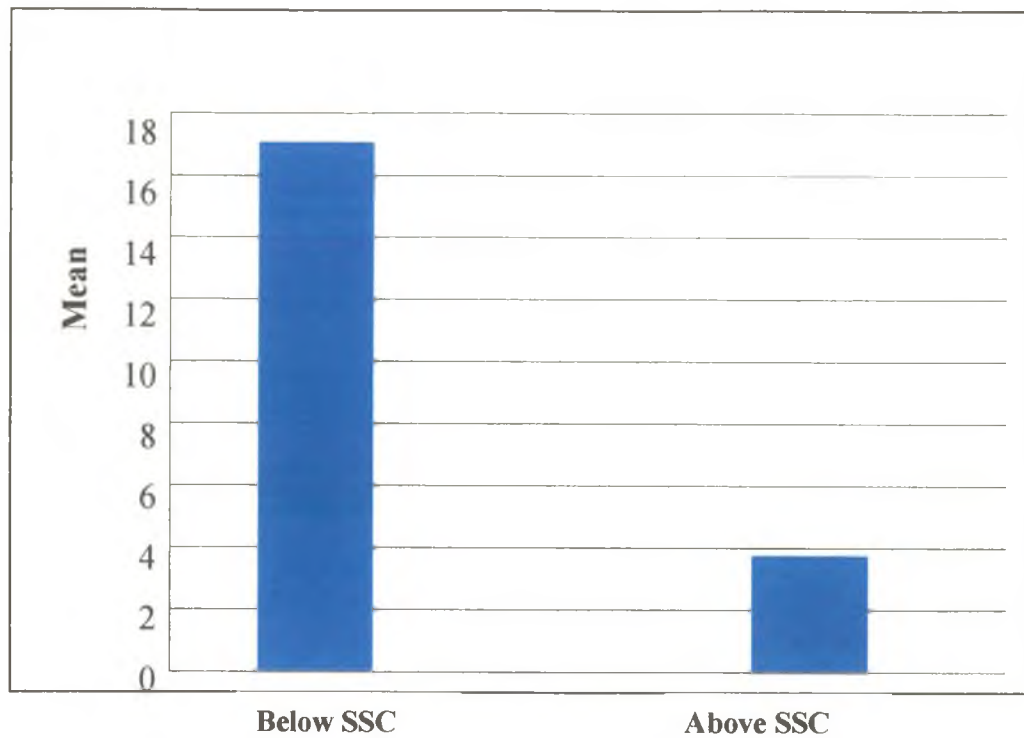
4.2 : DEPRESSION AND EDUCATION

One way analysis of variance was computed to see whether depression varies with the education of the respondents. The result is presented in table 8 and 9.

Table 8: Mean and SD of depression score according to education

Level of education	N	Mean	Std. Deviation
below S.S.C	47	17.04	4.77
above S.S.C	103	3.78	2.62
Total	150	10.41	

Highest mean score was obtained by the respondents of below S.S.C level of education ($\bar{X}=17.04$) and lowest mean score was obtained by the respondents of above S.S.C level of education ($\bar{X}=3.78$).



Depression by Education

FIGURE 3 : Mean of depression score by education

Table 9: Depression score by education with F-value

	Sum of square	Df	mean square	F
Between groups	5971.53	1	5971.53	511.26
Within groups	1728.47	148	11.68	
Total	7958.29	149		

P<.01

Obtained result indicated that education had significant effect on depression. Respondents of lower education level suffered from depression more than those of higher education level. (F=511.26; df= 1,148; P<.01)

Section-III

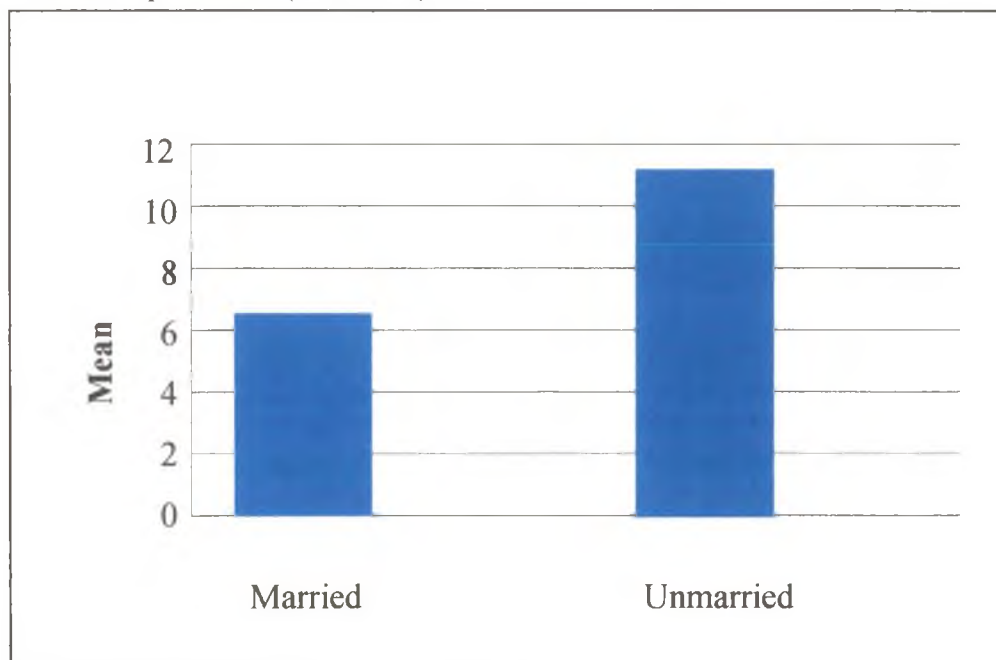
4.3 : DEPRESSION AND MARITAL STATUS

One way analysis of variance was computed to see whether depression varies with the marital status of the respondents. The result is presented in the table of 10 and 11.

Table 10: Mean and SD of depression score according to marital status

Marital status	N	Mean	Std. Division
Married	90	6.07	6.10
Unmarried	60	11.17	7.93
Total	150	8.11	7.31

Unmarried respondents obtained higher depression score ($\bar{X}=11.17$) than married respondents ($\bar{X} = 6.07$)



Depression by Marital Status

FIGURE 4 : Mean of depression score by marital status

Table 11: Depression score by marital status with F-value

Source of variance	Sum of square	Df	Mean square	F
Between group	936.36	1	936.36	19.14
Within groups	7021.93	148	47.45	
Total	7958.29	149		

$r < .01$

Obtained result indicated that marital status had significant effect on depression ($F=19.74$; $df=1,148$; $p < .01$). Unmarried respondents suffered from depression more than married respondents.

Section-IV

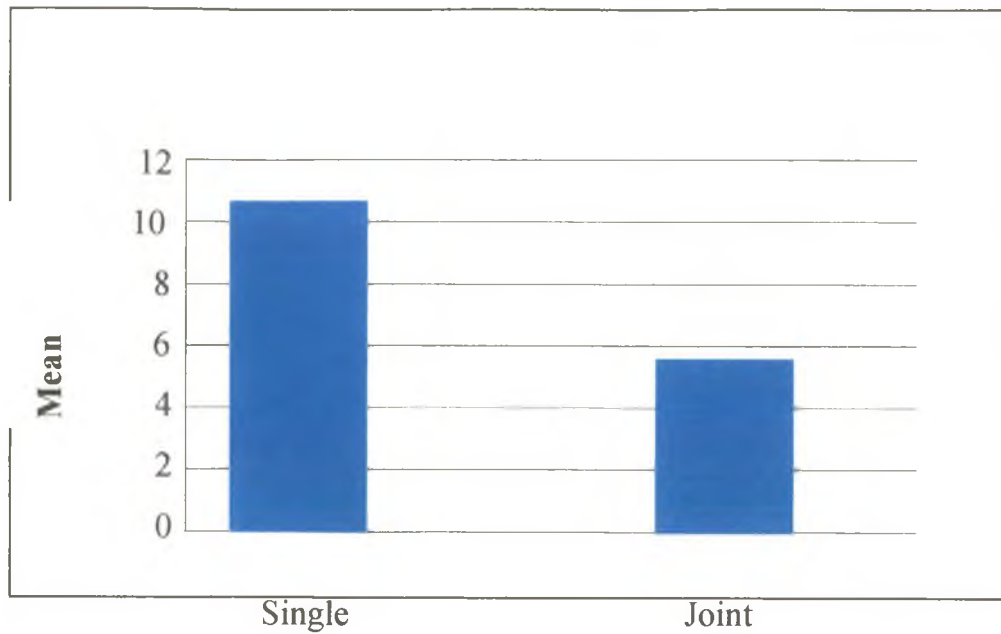
4.4 : DEPRESSION AND FAMILY TYPE

One way analysis of variance was performed to see whether depression varies with family type of the respondents. The results of this analysis are presented in table 12 and 13.

Table 12: Mean and SD of depression score according to family type.

Family type	N	Mean	Std. Deviation
Single	75	10.49	7.32
Joint	75	5.72	6.52
Total	150	8.11	7.31

The respondents of single family obtained higher depression score ($\bar{x}=10.49$) than the respondents of joint family.



Depression by Family Type

FIGURE 5 : Mean of depression score by family type

Table 13: Depression score by family type with F-value

Score of variance	Sum of square	Df	Mean square	F
Between groups	854.73	1	854.43	17.80
within groups	703.84	148	477.99	
Total	7958.29	149		

$p < .01$

Obtained result indicated that family type had significant effect on depression ($F = 17.80$, $df = 1, 148$, $p < .01$).The respondents of single family suffered from depression more than those of joint family.

Section-V

4.5 : DEPRESSION AND AGE

One way analysis of variance was also performed to see whether depression varies with age of the respondents. The results are presented in the table 14 and 15

Table 14: Mean and SD score according to age

Age	N	Mean	Std. Deviation
Below 35	75	8.01	7.90
35 and above	75	8.20	6.72
Total	150	8.11	7.31

The respondents of 35 and above age group obtained a bit higher depression score ($\bar{X} = 8.20$) than those of below 35 age group ($\bar{X} = 8.01$).

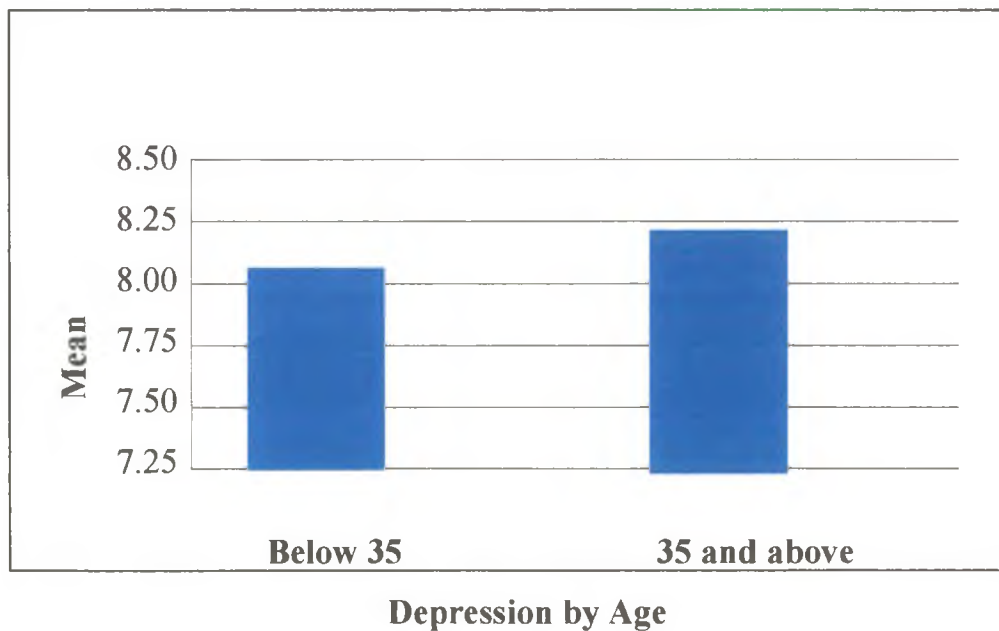


FIGURE 6 : Mean of depression score by age

Table 15 : Depression score by age with F-value

Source of variance	Sum of square	df	Mean square	F
Between group	1.31	1	1.31	.02
Within groups	7956.99	148	53.76	
Total	7958.29	149		

$P < .01$

Obtained result indicated no significant difference in depression between the respondents of two age groups ($F = .02$, $df = 1, 148$, $p < .01$).

DISCUSSION

Chapter –V

DISCUSSION

The main purpose of the present study was to investigate depression among male and female adults as related to some socio-economic factors.

The objectives of the present study were:

- 1) To assess the level of depression among male and female respondents.
- 2) To see whether depression varies with different income groups.
- 3) To see whether depression varies with the education level of the respondents.
- 4) To see whether depression varies with the marital status of the respondents.
- 5) To see whether depression varies with the type of the family of the respondents.

And

- 6) To see whether depression varies with the age of the respondent.

The result of the study is presented in the previous chapter. This chapter discusses on the findings of the study. The discussion of the findings are categorized in the following sections. In these sections,

depression is treated as dependent variable while gender, income, education, marital status, family type and age are treated as independent variables. All information regarding these variables were obtained from respondents during data collection phase.

5.1 : DEPRESSION: GENDER AND INCOME

The result presented in table 6 showed that gender had significant effect on depression of the respondents. It was evident from the result of the study that the depressive symptoms of female respondents were higher than those of male respondents. This finding is supported by Kessler et al., (1994) who found that women are more likely to experience depressive symptoms than men. Spaner, Blanel and Newman (1994) also found the same result in their study. Some possible explanation could be given for the higher score of depression among female respondents.

A particular section of the people of Bangladesh who are the worst affected by socio-cultural attitudes and values and have been pushed to an extreme end of poverty are women often designated by the social scientists as “ the poorest of the poor”. The tradition of the countries has denied them of equal status with men in society. These traditions nourish some built in beliefs, prejudices, discrimination in stereotyped gender roles and above all acceptance of patriarchy in social and cultural spheres and women are at a disadvantage in our society. They experience more discrimination, poverty, sexual harassment and abuse than men do. As a result, the higher incidence of depression in women may be due to the particular stresses that

many women face. These stresses include major responsibilities at home such as, doing most of the household works, caring for children and aging parents. Social expectations play a role here as well. Society expects that women should have a greater share of child care and household responsibilities.

Women's reproductive events that include the menstrual cycle, pregnancy, the post pregnancy period, inheritability, menopauses also bring fluctuations in mood that lead women to depression. Weissman and Klerman (1977) concluded that women had higher rates of depression than men, they received evidence bearing on the possibility that the higher rates of depression among women could be due to genetic factors.

For instance, in today's two income households, the total daily workload is particularly heavy for mothers because they still do most of the household works in addition to their professional works (Frankenhaeuser, 1991). The personality theories of women's depressions suggest that in general women are more prone than men to be unassertive and dependent on others than men and that these lead women to experience more helplessness, self punishment and depression (Chevran, Quinlan & Blatt, 1978; Jack 1991; Radlaff, 1975). Women do score lower than men on some measures of assertiveness or self-confidence (Noten-Hoeksema, 1990). These lower scores seem to be associated with higher levels of depression. When women feel sad or distressed, women are more likely than men to focus on their distress and passively ruminate about it rather than take action to distract them or change their situations (Nolen-Hoeksema, 1990). Laboratory and naturalistic studies have shown

that people with such a passive ruminative style of coping with their periods of depression and distress have longer and more severe periods of depression (Noten-Hoeksema 1995).

From table 6 it appears that income had significant effect on depression of respondents. The result showed that the respondents of lower income groups suffered from depression more than all other income groups. The findings of present study are similar to the finding of the study conducted by Hirschfield and Cross, 1982. They found that the poor have higher rate of depressive symptoms. It was evident from the result of the study conducted by Monroe and Simons (1991) also. They found that poverty might be associated with creation of depressive symptoms. Some possible explanations could be given for the higher scores of depressions among the people of lower class. The persons with low income always struggle to manage their daily minimum foods and lower living. They are always anxious of their poor livelihood. They feel helpless and hopeless. These helplessness and hopelessness cause depression among them. People with low income cannot fulfill their desires and hope for want of money and lack of social support. So they feel distressed and depressed. They suffer from diseases for malnutrition, unhealthy environment and ignorance. They cannot afford money for treatment. These types of many casual factors which root from poverty make them naturally depressed. Low economic status brings with it many stresses including isolation, uncertainty, frequent negative events and poor access to helpful resources. Sadness and low morale are common with low incomes. These lack social support. Therefore it may be the reason that adverse circumstances due to low income make the members of lower income group suffer from depression.

The findings of this study have been supported by previous same kind of researches. Diener (2000), Oishi (2000), Easterlin (1974) also found that wealthier persons were happier than poorer persons. Higher SES is associated with more positive mood and cognition (Barefoot et al., House et al., Ross & Wa, 1995).

5.2 : DEPRESSION & EDUCATION

The Study found significant effect of education on depression of the respondents. The respondent of below SSC suffers from depression more than those of above SSC. This finding has been supported by previous finding. Mahmuda (1998) found that respondents having high education had better mental health than respondents with low education. A person with high education has independent life, vocation and good income and as a result he or she is likely to perceive his wishes fulfilled to a large extent and thus it causes him or her to have a more positive outlook toward everyday life activity (Nagpal and sell, 1985). Haque (2004) also found positive correlation between education and psychological well-being. Education makes a person to be more strong and logical in any sphere of life. It is easier to get a better job for a person with good education. As a result he or she can lead a better life and can try to solve problems and minimize life stress. Consequently depression among high educated persons is less than low educated persons.

5.3 : DEPRESSION AND MARITAL STATUS

The present study found significant effect of marital status on depression of the respondents. The result revealed that unmarried persons suffered from depression more than married persons. The finding of the present study is similar to the finding of the previous study. Sorcar & Rahman (1993) found

higher stress among unmarried women than married women. Monroe, Bromet, Connell & Sleiner (1986) as well as O' Hara (1986) also implicated factors in the marital relationships as predicting the later onset of depression. The range of married persons' social support is wider than the same of the unmarried persons. Married persons can share any problem with his or her life -partner. But unmarried persons are deprived of this advantage. Unmarried persons are anxious of his or her future about getting job, about uncertain future life, breaking romantic relationships. Society and family also have restrictions on their movements. Rozario (2002) reported that parents put restrictions on unmarried person's movement. Naturally they face stress more, they become depressed more. Married persons look after and care each other and they help each other about financial matter and in any other crisis of life. They may get social support much more than the same of unmarried single persons. So it is quite possible for unmarried persons to suffer more from depression than married persons.

5.4 : DEPRESSION AND FAMILY TYPE

The study found significant difference in depression between respondents living single and joint families. Respondents of single family suffered from depression more than those of joint families. Respondents living in joint families had less depression than those living in single families. Several factors might help to explain such findings. Living with parents, uncles, aunts & in laws etc. might sometimes be more enjoying and pleasurable than living alone. All the members share family responsibilities like caring and looking after, sharing financial matters, helping one another in times of crisis and giving social supports. Studies have found an association between social support and depression (G.W Brown & Harris, 1978). Studies of social support give the knowledge that as we are part of mutual network of

caring, so interest about others enables us to reduce our levels of stress and to cope better with the stress we do undergo (Uchino, Uno, Holt-Lunstad, MC Cabe et. al.,2000) The members of single family are deprived of advantage of social support of joint family . So it is quite reasonable to believe that members of single family suffer from depression more than those of joint family.

5.5 : DEPRESSION AND AGE

The study failed to show any signification relationship between age and depression. But from the mean score for depression it was found that the mean score for depression of older age group (35 and above) was higher than that of younger group (below 35). This leads support to Wilson's study (1967). From Wilson's research it was found that younger age group had better mental health than the older group. Young people are mentally stronger, worriless and have the capacity to handle problems more efficiently and realistically than older people. Compel et al., (1926), concluded from their study that the people who were younger than 35 years were the happiest while those above 75 years were the least happy groups.

SUMMARY & CONCLUSION

Chapter – VI

SUMMARY AND CONCLUSION

The present study attempted to assess the level of depression among male and female adults as related to some socio-economic factors. 150 adult subjects (75 male and 75 female) were selected randomly from three different income groups (upper, middle and lower income groups) as the sample of the study. Of the total respondents, 50 respondents were selected from each income group among which 25 were male respondents and 25 were female respondents. The Bangla version of Beck Depression Inventory second edition-(BDI-II) translated by Rahman, (2001) was used for the present study.

Mean, SD, one way ANOVA and 2/3 ANOVA were used for analyzing the data.

2X3 ANOVA was used to see depression varies with different income groups and to assess the level of depression among male and female respondents. One way ANOVA was used to see if depression varies with education, marital status, family type and age. The result showed significant difference in depression as a function of economical status of the respondents and there was also found significant difference among male and female respondents in terms of depression. The respondents of lower income group ($\bar{x}=17.46$) suffered from depression more than those of middle income groups ($\bar{X}=5.62$) and the respondents of middle income group ($\bar{X}=5.62$) suffered from depression more than those of upper income group ($\bar{X}=1.24$). Therefore, it was found that the respondents of lower income group suffered from depression more than those of all other income

groups. The result also showed significant difference among male and female in terms of depression. Women ($\bar{x}=8.73$) suffer from depression more than men ($\bar{X}=7.48$).

One way ANOVA was also used to see if depression varies with education. Significant difference was found among the respondents of different level of education in terms of depression. It is found that the level of education of respondents is higher, the rate of depression is less. The respondents of below S.S.C ($\bar{x}=17.04$) suffered from depression more than those of above S.S.C ($\bar{X}=3.78$).

No significant difference was found between the different two age groups. Yet from mean score it was found that old age group ($\bar{x}=8.20$) suffered from depression more than younger group ($\bar{x}=8.01$).

Results showed significant difference in depression with marital status. Unmarried persons ($\bar{X}=11.17$) suffered from depression more than married persons ($\bar{X}=6.07$).

Results also showed significant difference in depression with family type. The respondents living in single families ($\bar{X}=10.49$) suffered from depression more than those living in joint families ($\bar{X}=5.72$).

LIMITATION OF THE PRESENT STUDY

In addition to above discussion, it is important to point out several potential limitation of the present study.

- i) The sample was not representative of the whole population of Bangladesh. The sample was drawn only from Dhaka City.
- ii) The sample size was relatively small.
- iii) The study didn't take full account of the whole spectrum of variables that might make an individual depressed.

RECOMMENDATION : BANGLADESH CONTEXT

- i) The study points to some important aspects such as economic condition, education, social support etc. which should be given more importance.
- ii) Women issues should particularly be high lighted in order to lessen the stresses faced by them. In various sectors of life, gender discrimination should be discouraged. Women issues should get proper importance such as health, education and job security.
- iii) To prevent depression, socio-economic condition must be improved. Vigorous training programs are necessary to develop skills. That will open more opportunities to earn and help overcome stresses.
- iv) A broad based and well controlled nationwide survey on depression need to be conducted to confirm the findings.

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REFERENCES

REFERENCES

Abramson, L.Y., Seligman, M.E.P., & Teasdale, J.D. (1978). Learned helplessness in humans : Critique and reformulations. *J. Abnorm. Psychol.*, 87, 49-74.

Abramson, L.Y., Metalsky, G.I., & Alloy, L.B. (1989). Hopelessness depression: A theory-based subtype of depression. *Psychol. Rev.*, 96, 358-372.

Akiskal, H.S. , and Cassano, G.B. (EDS). (1997) *Dysthymia and the spectrum of chronic depression*. New York; Guilford Press.

American Psychiatric Association, (1994). *Diagnostic and Statistical Manual of Mental Disorders* (4th ed). Washington D.C.: Author

Alloy, L.B., Kelly, K.A., Mineka, S.A & Clements, C.M. (1990). Comorbidity in anxiety and depressive disorders : A helplessness / hopelessness perspective. In J.D. Maser & C.R. Cloninger (Eds.). *Comorbidity in anxiety and mood disorders* (PP. 499-543). Washington DC: American Psychiatric Press.

Andreasen, N.C., Swayze, V.W., Flaum, M., & Alliger, R. (1990). Ventricular abnormalities in affective disorder; clinical and demographic correlates. *American Journal of psychiatry*, 147, 893-900.

Angst, J., & Preizig, M. 1995. Course of a clinical Cohort of unipolar, bipolar and schizoaffective patients; Results of a Perspective study from 1959-1985. *Schweiz, Archiv, neurol. Psychiatr.* 146.1-16

Arieti, S., & Bemporad, J.R.(1980). The psychological organization of depression. *Americal Journal of Psychiatry*, 137, 1360-1365.

Banich, M.T., Stolar, N. Heller, W. & Goldman, R.B. (1992). A deficit in right-hemisphere performance after induction of a depressed mood. *Neuropsychialtry, Neuropsychology, & Behavioural Neurology*, 5,20-27.

Barchas, J., Akil, H., Elliott, G., Holman, R., & Watson, S. (1978, May 26). Behavioral neurochemistry : Neuroregulators and behavioral states. *Science*, 200, 964-73.

Barlow, D.H., (In Press). *Anxiety & Its disorders: The nature and treatment of anxiety and panic* (2nd ed.). New York: Guilford Press.

Barraclough, B.M., Bunch, J., Nelson, B., Sainsbury, P. (1974). A hundred cases of suicide; clinical aspects. *British Journal of Psyciatry*, 125, 355-73.

Beck A. T. (1967). *Depression : Clinical, experimental and theoritical aspects*. New York : Harper & Row.

Beck, A.T., Rush, A.J., Shaw, B., & Emery, G. (1979). *Cognitive therapy of depression; A treatment manual*, New York; Guilford.

Beck A.T. & Steer, R.A. (1988). *Manual for the Beck Depression Inventory*. San Antonio, TX: The psychological Corporation.

Begum, H. & Mahmuda, A. (1997). Psychological well being as a function of socio economic status sex, and place of residence. *Bangladesh psychological studies*, 7, 15-30.

Bibring, E. (1953). The mechanism of depression. In P. Greenacre (Ed.), *Affective disorders* (PP.13-48). New York; International Universities Press.

Black, D., Woinokur,, G., & Hasrallah, A. (1987). Suicide subtypes of major affective disorders. *Archives of General Psychiatry*, 44, 878-80.

Blatt, S. (1974). Levels of object representation in anaclitic and introjective depression. *The psychoanalytic study of the child*, 24, 107-57.

Blatt, S.J., D.'Afflitti, J. P., & Quinlan D. M. (1976). Experiences of depression in normal young adults. *J. Abnorm. Psychol.*, 85, 383-89.

Blatt, S.J., & Zuroff, D.C. (1992). Interpersonal relatedness and self - definition; Two prototypes for depression. *Clinical psychology. Review*, 12, 527-562.

Blazer,D.G., Kessler,R.C., Mc Gonagle,K.A., and Swartz, M.S.(1994). The prevalence and distribution of major depression in a national community sample: The national co morbidity study , *American journal of psychiatry*, 151, 979-986.

Brown, G.W., & Harris, T.O. (1978). *Social origins of depression*. London: Tavistick.

Brown, J.H.,D' Emidio-Caston, M., & Pollard, J. A. (1997). Students and substances: Social power in drug education. *Education evaluation & Policy analysis*, 19, 65-82.

Brown, T. A. , Chorpita, B. F., & Barlow D.H. (1998). Structural relationships among dimensions of the DSM-IV, Anxiety & Mood Disorder and dimensions of negative affect, Positive affect, & automatic arousal, *Journal of Abnormal Psychology*.

Burke, K.C, Reiger, D.A. & Rae, D.S (1990). Age at onset of selected mental disorders in five community populations. *Archives of General Psychiatry*, 47, 511-518.

Carey G., & DiLalla, D.L. (1994). Personality and psychopathology; Genetic perspectives. *J. Abnorm. Psychol.*, 103, 32-43.

Chowdhury, A.K.M.N, Alam, M.N. & Ali, S. M. K. (1981). “Dasherbandi Project Studies; demography, morbidity and mortality in a rural community of Bangladesh”. *BMRC Bulletin*, Vol-VII, No-1.

Chowdhury, A. K. M. N. and Firoz, A. H. M. (1998), “Depressive Disorders in Bangladesh” – Paper presented in the First International Conference on Psychiatry, Dhaka, Bangladesh, organized by Bangladesh Association of Psychiatrists.

Clark, D.C., & Fawcett, J.(1992) Review of empirical risk factors for evaluation of the suicidal parents. In B. Bonger (Ed.), *Suicide: Guidelines for assessments, management and treatment*. New York: Oxford University Press.

Clark, L. A., Watson, D., & Mineka, S.(1994). Temperament, Personality, and the anxiety disorder, *J. Abnorm. Psychol.*, 103, 103-16.

Clayton, P.J. (1982). Bereavement. In E. S. Paykel(E.D.), Handbook of affective disorders. New York; Guilford.

Coffey, L.E., Wilkinson, W.E., Weiner, R.D. Ritchie, J.C. (1993). The dexamethasone suppression test and quantitative cerebral anatomy in depression. Biological psychiatry, 33, 442-449.

Cross -National collaborative group, (1992). The changing rate of major depression. Journal of the American Medical Association, 268, 3098- 3105.

Di Nardo, P.A., & Barlow, D.H., (1990). Syndrome and Comorbidity in the anxiety disorders. In J.D. Maser & C. R. Cloninger (Eds.). Comorbidity of mood and anxiety disorders.(PP.205-230) Washington D.C.: American Psychiatric Press.

Dohrenwend, B.P. Shrout, P.E., link, B.G., Skodol, A. E. & Martin, J.L. (1986). Overview and initial results from a risk factor study of depression and schizophrenia. In J.E. Barrett (Ed.), Mental disorders in the community: Progress and challenge, New York: Guilford.

Eaton, W.W., Anthony, J.C.,Gallo, J., Cai, G.,Tien, A., Romanoski, A., Lyketsos, C., & Chen, L.S.(1997). Natural history of diagnostic interview schedule /DSM-IV major depression. The Baltimore Epidemiologic Catchment's Area follow – up, Archives of General Psychiatry, 54, 993-999.

Egeland, J.A., Gerhard , D. S., Pauls, D.L., Sussex, J.N., Kidd, K.K., Allen, C.R., Hostetter, A.,M., & Housmam, D.E.(1987). Bipolar affective disorders linked to DNA markers on chromosome II . Nature, 325, 783-787.

Fava, M. & Rosenbaum, J.F. (1995). Pharmacotherapy and somatic therapies. In E.E. Beckham & W.R. Leber (Eds.), *Handbook of depression* (2nd ed., PP. 280-301). New York : Guilford.

Fremming, K.H., (1951), The expectations of mental infirmity in a sample of the Danish Popular Occasional Papers on Eugenics, No.7. Cassell, London.

Freud, S. (1917). Mourning and melancholia. *Collected works*. London; Hogarth Press.

Glassman, A. (1969). Indoleamines and affective disorders. *Psychosomatic Medicine*, 31, 107-114.

Goldacre, M., Seagroatt, V., & Hawton, K., (1993). Suicide after discharge from psychiatric inpatient care. *Lancet* 342, 283-6.

Goodwin, F., & Jamison, K. (1990). *Manic-depressive illness*. New York: Oxford University Press.

Gotlib I.H., & Abramson, L.Y. (in press). Attributional theories of emotion. In T. Dalgleish & M. Power (Eds.), *Handbook of cognition and emotion*.

Gotlib, I.H., & Hammen, C.L. (1992), *Psychological aspects of depression : Toward a cognitive-interpersonal integration*. Chichester, UK: Wiley.

Helgason, T. (1964). Epidemiology of mental disorders in Iceland. A psychiatric and demographic investigation of 5395 Icelanders. *Acta Psychiatrica Scandinavica*, Suppl. 173.

Hiroto, D.S., & Seligman, M.E.P., (1975), Generality of learned helplessness in man. *J. Pers. SOC. Psychol*, 31 (2), 311-27.

Hirschfeld, R.M.A., & Cross, C.K. (1982). Epidemiology of affective categories. *Arch. Gen. Psychiat.*, 39, 35-46.

Hirschfeld, R.M.A., Klerman, G.L., Clayton, P.J., Keller, M.B., Mc Donald-Scott, P., & Larkin, B.H. (1983), Assessing personality : Effects of the depressive state on trait measurement. *Amer. J. Psychiat.*, 140, 695-99.

Hoberman, H.M., Lewinson, P.M, Teri, L., & Hauzinger, M. (1985). An integrative theory of depression. In S. Reiss & R. Bootzin (Eds.), *Theoretical issues in behaviour therapy* (PP.331-59). San Diego; Academic Press.

Holsboer, F. (1992). The hypothalamic-pituitary-adrenocortical system. In E.S paykel (Ed.), *Handbook of affective disorders* (PP. 267-287). New York: Guilford press.

House, J.S., Landis, K.R., & Umberson, D. (1988). Social relationships and health, *Science*, 241, 540-545.

Huque, P. (2004), *Life Stress, Coping Strategies and Psychological well being of men and women in urban and rural setting*. Unpublished Ph D Thesis, University Of Dhaka, Bangladesh.

Jahan, N. (1996). *Psychological well being of elderly women living in their own home with son's family & with daughter's family*. An unpublished research, Eden girls college, Dhaka.

Judd, L.L., Akiskal, H.S., Maser, J.D., Zeller, P.J., Endicott, J., Coryell, W., Paulus, M.P., Kunovac, J.L., Leon, A.C., Mueller, T., Rie, J. A., & Keller, M.B., (in press). A prospective 12 years study of subsyndromal and syndromal depressive symptomatology in 451 patients with unipolar major depressive disorder. *Archives of General psychiatry*.

Katz, R., & McGuffin, P. (1993). The genetics of affective disorders. In L.J. Chapman, J.P. Chapman, & D.C. Fowles (Eds.), *Progress in experimental personality and Psychopathology research* (Vol. 16), New York, Springer.

Keller, M.B., Baker, L.A. & Russell, C.W. (1993). Classification & treatment of Dysthymia. In D.L. Dunner (Ed.). *Current Psychiatric Therapy*, Philadelphia: W.B. Saunders.

Kessler, R. C. , McGonagle, K. A. , Zhao, S., Nelson, C.B., Hughes, M., Eshleman, S., Wittchen, H.U., & Kendler, K.S. (1993). Lifetime & 12 months Prevalence of DSM-III-R Psychiatric Disorders in the United States: Result from the National comorbidity survey, *Arch, Gen. Psychiat.*, 518-19.

Khaleque, A. & Sorcer, N. R. (1992). Food intake health & quality of life of garment workers, *Bangladesh journal of psychology*, 13, 67-75.

Klerman, G.L., (1982.) Practical issues in the treatment of depression and mania. In E.S. Paykel (Ed.). *Handbook of affective disorders*. New York: Guilford.

Klerman, G.L., Weissman, M.M., Rounsaville, B.J., & Chevron, E.S. (1984), *Interpersonal Psychotherapy of depression*. New York : Basic Books.

Lewinsohn, P.M., & Gotlib, I.H.(1995). Behavioural therapy and treatment of depression. In E.E. Beckham & W.R. Leber (Eds.). Handbook of depression (2nd ed., PP. 352-375). New York; Guilford.

Lewinsohn, P. M., Hops, H., Roberts, R. E., Seeley, J. R., & Andrews, J.A. (1993). Adolescent Psychopathology : I. Prevalence & Incidents of depression & other DSM- III-R disorders in High School Students. *J. Abnorm Psychol.*, 102, 133-44.

Loosen, P.T. (1986). Hormones of the hypothalamic-pituitary-thyroid axis: A Psychoneuro endocrine perspective, *Pharmacopsychiatry*, 19, 401-15.

Maier, S.F., Seligman, M. & Solomon, R. (1969). Pavlovian fear conditioning and learned helplessness. In B.A Campbell & R.M. Church (Eds.), *Punishment and aversive behavior*. New York : Appleton-Century-Crofts.

Malone, K. & Mann J.J. (1993). Serotonin and major depression. In J.J. Mann & D.J. Kupfer (Eds.), *Biology of depressive disorders : Part A- A Systems perspective* (PP. 29-49). New York : Plenum.

Manson, S., Beals, J., O' Nell, T., Piasecki, J., Bechtold, D., Kean, E., & Zones, M. (1996). Wounded spirits, Ailing hearts; PTSD & related disorders among American Indians. In A. J. Marcseella, M. J. Friedman, E.T. Gerrily & R. M. Scurfield (Eds.). *Ethnocultural aspects of posttraumatic stress disorder*.(PP. 255-283). Washington D.C: American Psychiatric Press

Meehl, P.E. (1962). Schizotomia, Schizotypy, Schizophrenia. *American Psychologist*, 17, 827-838.

Metalsky, G.I., Abrason, L.Y., Seligman, M.E.P., Semmel, A., & Peterson, C.R. (1982). Attributional Styles and life events in the class room : Vulnerability and invulnerability to depressive mood reactions. *J. Pers, Soc. Psychol.*, 43, 612-617.

Monroe, S.M., & Simons, A.D. (1991). Diathesis-stress theories in the context of life stress research; Implications for the depressive disorders. *Psychological Bulletin*, 110, 406-425.

Nolen-Hoeksema, S.(1990).Sex differences in depression .Stanford, CA; Stanford University Press.

Nolen-Hoeksema, S., & Girgus, J.S. (1994). The emergence of gender differences in depression during adolescence, *psychological bulletin*, 115, 424-443.

Otto, M.W., Yeo, R.A., & Dougher, M.J. (1987). Right hemesphere involvement in depression : Toward a neuropsychological theory of negative affective experiences. *Biological psychiatry*, 22, 1201-1215.

Overmier, J. B., & Seligman, M.E.P. (1967). Effects of inescapable shock upon subsequent escape and avoidance learning. *Journal of comparative and physiological psychology*,63, 23-33.

Perris, C. (1992). Bipolar-Unipolar distinction. In E.S. Paykel (Ed.), *Handbook of affective disorder* (2nd ed.), New York : Guilford.

Pitts, F.N., & Winokur, G. (1964). Affective disorders III; diagnostic correlates and incidence of suicide. *Journal of nervous and mental disease*, 139, 176-81.

Post, R.M. (1992). Anticonvulsants and novel drug. In E.S. Paykel (Ed.), *Handbook of affective disorders* (2nd ed.). New York : Guilford.

Rahman, U. (2001). Impact of rape on mental health of victims and assessing the need for psychological services. Unpublished M.Phil. Thesis, University of Dhaka, Bangladesh.

Rifkin, L., & Gurling, H. (1991), Genetic aspects of affective disorders. In R. Horton & C. Katona (Eds.), *Biological aspects of affective disorders*. San Diego : Academic Press.

Robins, E., Murphy, G. E., Wilkinson, Jr., R.H., Gassner, S., & Kays, J. (1959). Some clinical consideration in the prevention of suicide based on a study of 134 successful suicide, *Amer. J. Public Hlth.* 49, 888-889.

Rosenthal, D. (Ed.). (1963). *The Genian quadruplets. A case study and theoretical analysis of heredity and environment in Schizophrenia*. New York: Basic Books.

Rush, J. A. (1993). Mood disorders in DSM-IV. In D. L. Dunner (Ed). *Current Psychiatric Therapy* (PP.189-195). Philadelphia: W. B. Saunders.

Samson, J.A., Mirin, S.M., Hauser, S.T., Fenton, B.T., & Schildkraut, J.J. (1992). Learned helplessness and urinary MHPG levels in unipolar depression. *American Journal of Psychiatry*, 149(6), 806-809.

Schildkraut, J.J. (1965). The Catecholamine hypothesis of affective disorder : A review of supporting evidence. *American Journal of Psychiatry*, 122, 509-522.

Shelton, R.C. Hollon, S.D., Purdon, S, E. and Loosen, P. T. 1991). Biological and psychological aspects of depression. *Behav. Ther.*, 22,201-28.

Shrout, P.E., Link, B.G.J Dohremwend, B.P., Skodol, A.E., Stueve, A., Mirotzink, J. (1989). Characterizing life events as risk factors for depression: The role of fateful loss events. *J. Abnorm. Psychol*, 89, 460-67.

Stroebe, M. S., & Stroebe, W.(1983). Who suffers more? Sex difference in health risk of the widowed. *Psychol. Bull.*, 93 (2), 279-301.

Sullivan, H.S. (1953). In H.S. Perry & M.L. Gawel (Eds.) *The interpersonal theory of psychiatry*, New York : Norton.

Thase, M.E., & Howland, R.H. (1995). Biological process in depression; An updated review and integration. In E.E. Beckhaum & W.R. Leber(Eds.). *Handbook of depression* (2nd ed., PP. 213-279). New York; Guilford.

Tollefson, G. D. (1993), Major depression : In D.L. Dunner (Ed.), *Current Psychiatric therapy*. Philadelphia; W.B. Saunders.

UNDP (United Nations Development Programme, 2003). *Human Development Report*; New York; Oxford University Press.

UNDP (United Nations Development Programme, 1994). Report on Human Development in Bangladesh; Empowerment of Women, Dhaka, Bangladesh.

Weiss, J.M. (1991). Stress induced depression : Critical neurochemical and electrophysiological changes. In J.I. Madden (Ed.), *Neurobiology of learning, emotion and affect* (PP. 123-154). New York : Raven Press.

Weissman, M.M., Buce, M. L., Leaf, P.J., Florio, L.P., & Holzer, C. (1991). Affective disorders. In L. N. Robins & D. A. Regier (Eds.), *Psychiatric disorders of America : The epidemiologic catchment area study*. (PP, 53-80). New York: Free Press.

Zinbarg, R. E., & Barlow, D.H. (1996). Structure of anxiety and the anxiety of disorders.: A hierarchical model. *Journal of abnormal psychology*, 105, 181-193.

Zinbarg, R.E., Barlow D. H., Liebowitz, M.Strret, L., Broadhead, E., Kayton, W., Roy-Byrne, P., Lepine, Z. P., Teherani, M.,Richards, J., Brantley, P.J., & Kraemer, H.(1994). The DSM-IV filed trial for mixed anxiety depression. *American journal of psychiatry*, 151, 1153-1162.

APPENDICES

APPENDIX-A

Bio-data

ব্যক্তিগত তথ্য

১. বয়স : বছর
২. শিক্ষাগত যোগ্যতা : (শেষ ধাপ উল্লেখ করুন)
৩. বর্তমান মাসিক আয় : টাকা
৪. বৈবাহিক অবস্থা : (যথাস্থানে টিক চিহ্ন দিন)
☐ বিবাহিত
☐ অবিবাহিত
৫. লিঙ্গ : (যথাস্থানে টিক চিহ্ন দিন)
☐ পুরুষ
☐ মহিলা
৬. পরিবারের ধরন : (যথাস্থানে টিক চিহ্ন দিন)
☐ একক
☐ যৌথ

APPENDIX-B

Bangla version of Beck Depression Inventory-2nd Edition (BDI-II)

Beck এর বিষন্নতা পরিমাপক প্রশ্নমালা

নির্দেশনাঃ

এই প্রশ্নে ২১ গুচ্ছ উক্তি রয়েছে। অনুগ্রহ করে প্রতিটি গুচ্ছের উক্তিগুলো মনোযোগ দিয়ে পড়ুন।

প্রতিটি গুচ্ছ থেকে যে উক্তিটি গত দুই সপ্তাহ যাবত (আজকের দিনটি সহ) আপনার মানসিক অবস্থা সবচেয়ে সঠিক ভাবে বর্ণনা করে, সেই উক্তি সংশ্লিষ্ট নম্বরটি (০ বা ১ বা ২ বা ৩) গোল দাগ দিয়ে চিহ্নিত করুন। যদি একটি গুচ্ছের অনেকগুলি উক্তি সমভাবে আপনার মানসিক অবস্থার সঠিক বিবরণ দেয়, তবে ঐ গুচ্ছের সর্বোচ্চ সংখ্যায় গোল দাগ দিন। প্রতিটি গুচ্ছ থেকে একটি বিবৃতি আপনাকে বেছে নিতে হবে। কোন গুচ্ছের একের বেশি বিবৃতি বেছে নেবেন না। ১৬ (ঘুমের ধরণে পরিবর্তন) এবং ১৮ নম্বর (ক্ষুধার ধরণে পরিবর্তন) গুচ্ছের ক্ষেত্রেও একটি মাত্র বিবৃতি বেছে নেবেন।

১. বিষন্নতা

- ০ আমি বিষন্ন বোধ করি না।
- ১ আমি বেশির ভাগ সময় বিষন্ন বোধ করি।
- ২ আমি সব সময় বিষন্ন থাকি।
- ৩ আমি এত বিষন্ন বা অসুখী যে, আমি তা সহ্য করতে পারি না।

২. নিরাশাবাদ

- ০ আমি আমার ভবিষ্যৎ সম্পর্কে নিরুৎসাহিত নই।
- ১ আমি আমার ভবিষ্যৎ সম্পর্কে আগের চেয়ে বেশি নিরুৎসাহিত বোধ করি।
- ২ আমার বিভিন্ন সমস্যা সমাধান হয়ে যাবে এমনটা প্রত্যাশা করিনা।
- ৩ আমি মনে করি যে আমার ভবিষ্যৎ অন্ধকার এবং শুধু খারাপ দিকেই যাবে।

৩. অতীত ব্যর্থতা

- ০ আমি নিজেকে ব্যর্থ মনে করিনা।
- ১ যতটা হওয়া উচিত ছিল আমি তার চেয়ে বেশি ব্যর্থ হয়েছি।
- ২ আমার অতীত জীবনের দিকে তাকালে প্রচুর ব্যর্থতা দেখতে পাই।
- ৩ আমি মনে করি একজন ব্যক্তি হিসাবে আমি সম্পূর্ণ ব্যর্থ।

৪. আনন্দ হারিয়ে ফেলা

- ০ বিভিন্ন জিনিস আগে উপভোগ করে যতটুকু আনন্দ পেতাম, এখনো ততটুকু আনন্দ পাচ্ছি।
- ১ যে ভাবে বিভিন্ন জিনিস আগে উপভোগ করতাম সে পরিমাণে এখন উপভোগ করি না।
- ২ যে সব জিনিস আগে উপভোগ করতাম তার থেকে এখন সামান্যই আনন্দ পাই।
- ৩ যে সব জিনিস আগে উপভোগ করতাম তা থেকে এখন কোন আনন্দই পাই না।

৫. অপরাধবোধ

- ০ আমি বিশেষ কোন অপরাধবোধ অনুভব করিনা।
- ১ বহু জিনিস যা আমি করেছি বা করতে পারতাম সেগুলো নিয়ে অপরাধবোধ করি।
- ২ আমার অধিকাংশ সময়ই খুব অপরাধবোধ হয়।
- ৩ আমি সব সময় অপরাধবোধ করি।

৬. শান্তির অনুভূতি

- ০ আমি মনে করিনা যে আমাকে শান্তি দেয়া হচ্ছে।
- ১ আমার মনে হয় আমি হয়তো শান্তি পাব।
- ২ আমি শান্তির আশংকা করছি।
- ৩ আমি মনে করি যে আমি শান্তি পাচ্ছি।

৭. নিজেকে অপছন্দ করা

- ০ নিজের সম্বন্ধে আমার বরাবরের মত একই অনুভূতি আছে।
- ১ আমি নিজের উপর বিশ্বাস হারিয়েছি।
- ২ আমি নিজেকে নিয়ে নিরাশ হয়েছি।
- ৩ আমি নিজেকে অপছন্দ করি।

৮. আত্ম-সমালোচনা

- ০ আমি আগের চেয়ে নিজের বেশি সমালোচনা বা দোষ ধরিনা।
- ১ আগের তুলনায় আমি বেশি আত্ম-সমালোচনা করি।
- ২ আমি আমার সব ভুলের জন্য নিজের সমালোচনা করি।
- ৩ আমি মন্দ যা কিছু ঘটে তার জন্য নিজেকে দোষারোপ করি।

৯. আত্মহত্যার চিন্তা বা ইচ্ছে

- ০ নিজেকে মেরে ফেলার কোন চিন্তাই আমার নেই।
- ১ নিজেকে মেরে ফেলার চিন্তা আমার আছে কিন্তু আমি তা করবো না।
- ২ আমি নিজেকে মেরে ফেলতে চাই।
- ৩ সুযোগ পেলে আমি নিজেকে মেরে ফেলবো।

১০. কান্না

- ০ আমি যতটা অভ্যস্ত তার চেয়ে বেশি কাঁদিনা।
- ১ আমি যতটা অভ্যস্ত তার চেয়ে বেশি কাঁদি।
- ২ আমি প্রতিটি জিনিস নিয়েই কাঁদি।
- ৩ আমার কান্না পায় কিন্তু কাঁদতে পারি না।

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১১. বিস্ময়

- ০ আমি স্বাভাবিক অবস্থার তুলনায় বেশি অস্থির এবং মর্মাহত নই।
- ১ আমি স্বাভাবিক অবস্থার তুলনায় বেশি অস্থিরতা অনুভব করি।
- ২ আমি এত বেশি অস্থির বা উত্তেজিত যে আমার পক্ষে স্থির ভাবে বসাই কঠিন।
- ৩ আমি এত বেশি অস্থির বা উত্তেজিত যে আমাকে চলাফেরার মধ্যে থাকতে হয় বা কিছু না কিছু করতেই হয়।



১২. আগ্রহ হারিয়ে ফেলা

- ০ আমি অন্যদের সম্পর্কে/বা কাজে কর্মে আগ্রহ হারাইনি।
- ১ আমি আগের চাইতে অন্যদের ব্যাপারে বা অন্যান্য বিষয়ে এখন কম আগ্রহী।
- ২ আমি অন্যদের সম্পর্কে বা অন্যান্য বিষয়ে প্রায় সমস্ত আগ্রহ হারিয়েছি।
- ৩ কোন বিষয়ে আগ্রহী হওয়াই আমার পক্ষে কঠিন।

১৩. সিদ্ধান্তহীনতা

- ০ আমি সব সময়ের মত এখনও ভালো ভাবে সিদ্ধান্ত গ্রহণ করি।
- ১ সিদ্ধান্ত গ্রহণ করতে এখন আমার আগের চাইতে কষ্ট হয়।
- ২ আমি সিদ্ধান্ত গ্রহণ করতে আগের চাইতে অনেক বেশী সমস্যা বোধ করি।
- ৩ যে কোন সিদ্ধান্ত নিতে আমার খুব অসুবিধা হয়।

১৪. মূল্যহীনতা

- ০ আমি নিজেকে মূল্যহীন মনে করি না।
- ১ আমি নিজেকে পূর্বের মতো আর মূল্যবান বা কাজের বলে মনে করি না।
- ২ অন্য লোকদের তুলনায় আমি নিজেকে বেশী মূল্যহীন বলে মনে করি।
- ৩ আমি নিজেকে সম্পূর্ণ মূল্যহীন মনে করি।

১৫. শক্তি হারানো

- ০ আমার শক্তি আগের মতই আছে।
- ১ স্বাভাবিক ভাবে যা ছিল তার তুলনায় আমার শক্তি কমে গেছে।
- ২ খুব বেশী কিছু করার মতো যথেষ্ট শক্তি আমার নেই।
- ৩ কোন কিছু করার মতো যথেষ্ট শক্তি আমার নেই।

১৬. ঘুমের ধরনে পরিবর্তন

- ০ আমার ঘুমের ধরনের কোন পরিবর্তন হয়নি।
- ১ ক. স্বাভাবিকের চেয়ে আমি কিছুটা বেশী ঘুমাই
- ১ খ. স্বাভাবিকের চেয়ে আমি কিছুটা কম ঘুমাই
- ২ ক. স্বাভাবিকের চেয়ে আমি অনেক বেশী ঘুমাই।
- ২ খ. স্বাভাবিকের চেয়ে আমি অনেক কম ঘুমাই।
- ৩ ক. দিনের বেশির ভাগ সময়ে আমি ঘুমাই।
- ৩ খ. ২-৩ ঘন্টা আগেই আমি জেগে উঠি এবং আর ঘুমাতে পারিনা।

১৭. ক্রোধ

- ০ স্বাভাবিক ভাবে যা ছিলাম তার চেয়ে আমি ক্রুদ্ধ নই।
- ১ স্বাভাবিক ভাবে যা ছিলাম তার চেয়ে এখন আমি বেশী ক্রুদ্ধ থাকি।
- ২ স্বাভাবিক ভাবে যা ছিলাম তার চেয়ে এখন আমি অনেক বেশী ক্রুদ্ধ থাকি।
- ৩ আমি সব সময়ই ক্রুদ্ধ থাকি।

১৮. ক্ষুধায় পরিবর্তন

- ০ আমার ক্ষুধায় কোন পরিবর্তন হয়নি।
- ১ ক. আমার ক্ষুধা স্বাভাবিকের তুলনায় কিছুটা কমেছে।
- ১ খ. আমার ক্ষুধা স্বাভাবিকের তুলনায় কিছুটা বেড়েছে।
- ২ ক. পূর্বের তুলনায় আমার ক্ষুধা অনেক কম।
- ২ খ. পূর্বের তুলনায় আমার ক্ষুধা অনেক বেশি।
- ৩ ক. আমার কোন ক্ষুধা নেই।
- ৩ খ. আমার সবসময়ই প্রচণ্ড ক্ষুধা পায়।

১৯. মনোযোগের সমস্যা

- ০ বরাবরের মতোই আমি মনোযোগ দিতে পারি।
- ১ বরাবরের মত আমি মনোযোগ দিতে পারি না।
- ২ দীর্ঘ সময় ধরে কোন কিছুতে মনোযোগ দেয়া আমার পক্ষে কষ্টকর।
- ৩ আমি দেখছি যে, কোন কিছুতেই আমি মনোযোগ দিতে পারি না।

২০. ক্লান্তি বা অবসাদ

- ০ স্বাভাবিক অবস্থার তুলনায় আমি বেশি ক্লান্ত বা অবসাদগ্রস্ত নই।
- ১ স্বাভাবিক অবস্থার তুলনায় আমি সহজেই বেশি ক্লান্ত বা অবসাদগ্রস্ত হয়ে পড়ি।
- ২ আমি এতই ক্লান্ত বা অবসন্ন যে সচরাচর যে সব কাজ করতাম তার অনেক কাজ করতে পারি না।
- ৩ আমি এতই ক্লান্ত বা অবসন্ন যে সচরাচর যে সব কাজ করতাম তার বেশির ভাগ কাজই করতে পারি না।

২১. যৌন বিষয়ে আগ্রহ হারিয়ে ফেলা

- ০ আমি সম্প্রতি যৌন বিষয়ের প্রতি আগ্রহে কোন পরিবর্তন লক্ষ্য করিনি।
- ১ আমি যৌন বিষয়ের প্রতি আগের চেয়ে কম আগ্রহ বোধ করি।
- ২ আমি এখন যৌন বিষয়ের প্রতি অনেক কম আগ্রহী।
- ৩ আমি যৌন বিষয়ের প্রতি সম্পূর্ণ আগ্রহ হারিয়ে ফেলেছি।