

**PSYCHOSOCIAL PROBLEMS AND COPING
STRATEGIES OF PRISONERS: A STUDY IN
WEST GOJJAM ZONE**

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OF PRISONERS: A STUDY IN WEST GOJJAM ZONE**

By
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COUNSELING**



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Acronyms and Abbreviations

ANOVA	Analysis of Variance
APA	American Psychologists Association
BDI	Beck Depression Inventory
BDI-SF	Beck Depression Inventory Short Form
DASS	Depression Anxiety Stress Scale
DSM	Diagnostic Statistical Manual of Mental Disorder
GAD	Generalized Anxiety Disorder
IIP	Inventory of Interpersonal Problems
PA	Panic Anxiety
PEP	Psychosocial and Environmental Problems
PSS	Perceived Stress Scale
UN	United Nations

Abstract

This study was aimed to examine the nature of psychosocial problems and coping strategies of prisoners. Data pertaining to these variables were obtained from 200 (148 male, 52 Female, mean age = 25.85 years) prisoners of West Gojjam Zone Prison in Bahir Dar. The males were chosen randomly but almost all the available females were included as samples. The indices of psychosocial variables and coping were gathered using scales. Specifically, the instruments used in this study were Perceived Stress Scale, Beck Depression Scale Short Form, DASS-Anxiety Version, Rosenberg Self-Esteem Scale, Interpersonal Problem Inventory, Loneliness Scale, and Brief COPE Inventory. Consequently, the results of severity rating indexes and one sample t-tests suggest that prisoners are vulnerable to very serious levels of stress, depression, and anxiety but moderate level of self-esteem, interpersonal problem, and loneliness as a group. The co-occurrence of those problems was found very significant. The coping mechanisms used by the prisoners are highly correlated with the problems they are facing. Furthermore, the predominantly used coping strategy was religious cope. Of course, the group difference results show that almost all psychosocial variables and coping strategies were not sex dependent with some exceptions. Indeed, length of sentence was influential factor to aggravate the level of stress, depression, anxiety, loneliness, and to diminish self-esteem, but not interpersonal problem. On the other hand, most of the coping strategies were significantly depend on the length of incarcerated time as well as on rate of family visit. Accordingly, appropriate biopsychosocial intervention and preventions, trainings or professional care and supports have been recommended.

CHAPTER ONE

INTRODUCTION

1.1. Background of The Study

About 9 million people are imprisoned worldwide and several of those prisoners have serious mental health or psychosocial problems that should be understood critically (Fazel and Danesh, 2002). As a matter of fact, the modern mankind is always striving to find the best ways of life for all people in the world: respecting human dignity; and positive attention, care and support for any disadvantaged and marginalized people like prisoners. For instance, concerning prisoners, there is a United Nation Convention against torture and other cruel, inhuman, or degrading treatment or punishment that is intended to prevent torture and other similar activities and also created the UN Committee against torture, which focuses on the duties of national leaders in a preventive role concerning the use of torture and similar actions (Hoorn and Okorodudu, 2006). As a result, prisoners are getting appropriate health, psychosocial, and educational services.

There is paradigm shift to believe that human being is a biopsychosocial entity. Hence, a problem of an individual can have also biopsychosocial dimensions. To mention it further, according to the biopsychosocial model, a problem is the product of a combination of factors including biological characteristics (e.g., genetic predisposition), behavioral factors (e.g., lifestyle, stress, health beliefs), and social conditions (e.g., cultural influences, family relationships, social support), as it is pointed out by Marks et al. (2003). To this end, there are great improvements concerning prisoners' biopsychosocial conditions in several developed nations in this time. For instance, hospitalization of male prisoners, school for juveniles, and care and supports services for pregnant women prisoners have been given in Japan (Johnson, 1997).

Similarly, Dale and Woods (2001) reported that prisoners of England with physical and mental health problems have got appropriate care and support services. The developed nations are carrying out great number of tasks in both prevention and intervention of problems that could be aroused in relation to criminals and offenders (Matthews and Pitts, 2001). However, it does not mean that prisoners of all modern nations are treated well and have no any problems. For example, there are reports on the maltreatments of prisoners and they have been exposed to serious mental illnesses in Guantanamo prison in USA even against the UN convention.

More seriously, the identification and prevention of psychosocial issues as well as the rights of prisoners and detainees in African countries are not still proper and sufficient. It is obvious that prisoners have the right for medication, care and support, education, to be visited and to communicate with friends; and even the constitution of FDRE (Federal Democratic Republic of Ethiopia) includes these rights in Article 21 (Heyns, 1996, 121). To support this idea, Ololade (2004) said that the rights of prisoners in Ghana and Nigeria have been violated and ignored. He added also that there had been prisoner with mental disorder and disability in those countries, who were not treated with special consideration even though they have the right to dignity. This condition could make the problems worst. So, there are more tasks to be done in prison areas in African countries.

Theories have seen psychosocial problems as maladjustments, impairments, or dysfunctions on the life span changes of individuals' psychological (emotional-personal) and social aspects (Boeree, 2006; Santrock, 2006; Steinberg, 1993). Specifically, psychosocial problems refers to mental health problems with affective and psychiatric symptoms (like depression, anxiety,) or any sort of psychological distress, stress and inability to cope, negative self evaluation and

1.2. Statements of the Problem

Growing bodies of evidences substantiate the claim that prisoners have been highly exposed to psychological deprivations, social deviations and related mental health problems (Miller, 1980; Johnson, 1978; Goldstein & Weiner, 2003; and Allerton et al., 2003). Scholars have reported also that the problems can be multidimensional and diversified in their nature in some circumstances in marginalized people. A problem may have its own co-morbidity and it can have biopsychosocial nature. Bio-psycho-social perspective (Marks et al., 2003) assumes that biological, socio-cultural, and psychological factors combine and interact to produce psychological disorders: biological (evolution, individual genes, brain structures and chemistry), psychological (stress, trauma, learned helplessness, mood-related perceptions and memories) and socio-cultural (roles, expectations, definition of normality and disorder).

Prisoners are from the marginalized people who can face serious and number of mental, psychological and social disorders. As Dale and Woods (2001) reported, prisoners have more than average rates of mental illness including neurosis, psychosis, substance misuse and personality problems, which are the results of both the psychological and social factors. Therefore, the possibilities of experiencing psychosocial illness could be very serious in the case of Ethiopian situations. Needless to say, the prevalence, and the comorbidity of the psychological and social related problems on prisoners of this nation were not clearly understood.

On the other version against problems, unless a person has good coping skills, s/he is easily vulnerable to distresses of any kind. Prisoners/detainees can have problems on how to use coping skills while they are in problem situation. Although theorists have proposed several specific coping strategies such as active coping, denial, use of instrumental support, behavioral

disengagement, venting, positive reframing, planning, humor, acceptance, religion and the like; the coping strategies used by detainees/prisoners were not clearly known and then they should be critically studied.

For this reason, this risky area attracted the researcher's attention and he has intended to believe that the psychosocial and related incidents of detainees should be studied. In addition, the little research emphasis given to the prison life, in this country, pushed the researcher more to make his thesis work on prisoners' psychological and social troubles as well as the coping skills they used to minimize the stressful situations in the prison life.

In this regard the following research questions are entertained in this study.

1. What are the general severity level of psychosocial problems namely depression, stress, anxiety, self esteem, loneliness, and interpersonal problem of prisoners?
2. Are different psychosocial problems interrelated significantly among prisoners?
3. Which type of coping strategies are used predominantly by prisoners in response to the specified psychosocial problems?
4. Are psychosocial problems and coping strategies correlated with each other?
5. Do the psychosocial problems are differed by sex and length of sentence and do coping strategies vary with sex, incarcerated time passed in prison and family visit rates significantly?

1.3. Objectives of the Study

The general objective of the study is to investigate the nature of psychosocial problems and coping strategies of detainees/prisoners in the prison settings. Specifically, the objectives of the study are to:

- determine the general severity levels of psychosocial problems of prisoners,
- examine the interrelationship of psychosocial problems among prisoners,
- discover the predominant coping strategies that are used by prisoners,
- determine the association of psychosocial problems with coping strategies among respondents, and
- reveal if there are significant differences on the level of psychosocial problems depending on sex and length of sentence; and of coping strategies depending on sex, length of incarcerated time in prison and rate of family visit of prisoners.

1.4. Significance of the Study

Today's burning issue in social science in general and psychology in particular is to achieve good mental health and to minimize psychosocial problems through proper intervention that is comprehensively supported by skeptical investigation of the phenomena. Mainly the marginalized and disadvantaged groups of the society like children and youth at risk, women, prisoners, old age and individuals with special concern are the focus of empirical investigation for appropriate empowerment, rehabilitation, and social reintegration.

Exploring the nature and association of mental and psychosocial problems can be very essential in order to modify and treat them through clearly defined techniques. For example, prisoners and detainees are from the marginalized part of the society, who need great concern in relation to the psychological and social adjustments and associated health issues.

The psychosocial conditions of detainees and/or prisoners are issues that need urgent and careful attention in order to build good mental health of prisoners in particular and society at large. In short, addressing these issues in this study will have the following advantages:

1. This study may provide information to policy makers for making decisions to develop structural and programmatic changes if needed in the correctional institution,
2. It can give reasonable information to clinical, social and psychosocial service providers for planning and implementing appropriate psychosocial care and support services,
3. It may also help professionals and prison officers to be aware of about the current situations of prisoners or to equip themselves by up to date information so that they can have clear directions and approaches to meet their obligations, and
4. This study is also expected to give direction for further research in the prison areas and related contexts.

1.5. Definition of Terms

Psychosocial problems: refer to the affective or mental health problems result from background, psychological, and social factors; and include experiences of depression (e.g. sadness, hopelessness, suicidal ideation, pessimism etc); anxiety (scare, fear, irritation, nervousness etc); stress (inability to cope, tension); low self-esteem; interpersonal problems, and loneliness that

have occurred due to social, psychological, and environmental factors in prison settings (Boeree, 2006; Santrock, 2006; Antoni, 2005; Kelleher et al., 2000; and Steinberg, 1993).

Coping strategies are referring to personal, contextual and social strategies that consist of constantly changing cognitive, social and behavioral skills in managing situations that are ambiguous, unpredictable, or perceived as causing stress and psychosocial distress (Moos and Billings, 1982; Mohino et al., 2004; Fugate et al., 2008; Manne, 2003).

Problem-focused coping is a type of coping that aimed at altering the problematic situation (e.g., active cope, planning, religion, and support seeking behavior).

Emotion-focused coping is the other type of coping that aimed at managing emotional responses to stressors (e.g., behavioral disengagement, venting, and acceptance).

Appraisal focused is a coping strategy through cognitive mechanisms like logical analysis, cognitive redefinition and cognitive avoidance or denying.

Active coping is a strategy of taking action or exerting efforts to remove the stressor.

Planning refers to the thinking about how to confront the stressor, planning one's attention to other active coping efforts.

Instrumental support is to mean seeking assistance, information or advice about what to do.

Behavioral disengagement is referring to giving up, or withdrawing effort from, the attempt to attain the goal with which the stressor is interfering.

Acceptance is coping by accepting the fact the stressful event has occurred and is real.

Venting is a coping strategy that refers to an increased awareness of one's emotional distress, and a concomitant tendency to ventilate or discharge those feelings.

Denial is an attempt to reject the reality of the stressful event has occurred and is real.

Positive reframing is positive reinterpretation of, or making the best of the situation by viewing it in a more favorable light.

Religion cope is a strategy of coping by increased engagement in religious activities.

The definitions of the specific coping strategies have been revised from the work of Taylor et al. (1999).

Prisoner: The term “Prisoner” generally refers to a person deprived of liberty and kept under involuntary restraint, confinement, or custody (Merriam, 2008).

Detainee: The term detainee refers to a person who has been officially ordered to stay in a prison or similar place, especially person held in custody prior to trial or hearing (2008 Merriam, 1996, 2008).

1.6. Delimitation of the Study

This study was done in only one selected prison of West Gojjam in Bahir Dar that is located at 560km from Addis Ababa and is found in Amahara Region of Ethiopia. This prison was chosen since it is one of the most populated prisons and is found in the capital city of the region. The other thing that makes this prison special is that the prisoners here could come from other several areas and prisons of the specified region if their crime is very serious (like genocide, high political crime, and crimes with death sentence) and due to related reasons. In addition, the number of female prisoners is relatively high in this area. There is also wide chance to get prisoners with several cases and length of sentences range from few months (short-term sentence) to several years (long-term sentence). So the researcher believed strongly that the subjects could be reasonable representatives of the prisoners of the Region. More than others, the willingness of

the officials and their intimate behavior to facilitate conditions had been greatly considered as the very special reason to make the study in this place.

In addition to that, since all the psychosocial issues cannot be covered, psychosocial variables are delimited to include only stress, depression, anxiety, self-esteem, loneliness, and interrelationship problems. In addition, only 9 specific coping strategies have been included to see the general coping strategies that have been utilized by individuals to cope to problems in the prison even though there are several coping strategies.

1.7. Limitation of the Study

The current study contains several limitations. First of all, the study sampled only one prison. So, the result of this study may have limited scope of generalizability to other prisoners across the country. Furthermore, the number of female prisoners is very small proportionally when it is compared to the number of male prisoners. Thirdly, the data gathering process was really very difficult and challenging since some prisoners were very dangerous and irresponsible. Finally, all of the instruments were self-reports which may bias some of the responses given.

CHAPTER TWO

LITERATURE REVIEW

2.1 The Nature of Psychosocial Problems: Conceptual and Theoretical Backgrounds

2.1.1 The definition and Causes of Psychosocial Problems

Definition: Psychosocial problems are psychological and social maladaptive experiences; or affective or mental health problems that specifically consist of disturbances like stress, depression, anxiety, low self-esteem, loneliness, and interpersonal and related problems that are the results of personal, environmental or social factors. To support this idea, Steinberg (1993) says psychosocial problems are referring to development, it is the way an individual goes through various stages of development that are both psychological and social in nature, where conflict structures each stage. Similarly, Santrock (2006, p. 17), who represents psychosocial processes as socio-emotional processes, defines them as changes in individual's relationship with other people, emotions, and personality. In this respect, psychosocial problems include emotional disturbances, personality problems, and problems in social interaction.

Major Causes: it is very clear that psychosocial problems can be also the results of stressful situations in one's life experience. Stressors, if they are beyond the control of the agent, can lead the person to socio-emotional and related behavioral disturbances. For instance, these problems can be resulted due to the bad experience of a person in the social environment: like being imprisoned, being exposed to HIV related issues, and other hazard situations. In this respect, the imprisonment, the isolation and restriction from normal life, lack of security, maltreatment in the prison, and the like can be the stressful situations that lead prisoners to experience psychosocial disturbances (Ming, 2002; Hawells, 2000; and Wills and Langner, 1981).

2.1.2 Theories/Models on Psychosocial Issues

2.1.2.1 Psychosocial Theory of Erickson

The psychosocial theory of Erickson is one of the theories that emphasizes the life span changes of psychosocial issues. According to this theory, psychosocial development functions by epigenetic principle. This principle reveals that we develop through a predetermined unfolding of our psychological functions in eight stages each of them involves certain developmental tasks that are psychosocial in nature (Boeree, 2006). If a stage is managed well we carry away a certain virtue or psychosocial strength which helps the person in the rest stages of lives. In the reverse, if the person does not do well, she/he may develop maladaptations and malignancies, as well as endanger all the future development (Santrock, 2006; Boeree, 2006). These scholars suggest also that psychosocial malignancies and maladaptations that are occurred in some life time and can be reflected and cause other psychosocial dysfunctions in the later socioemotional processes. For example, if some one develops mistrust in the first stage, the probability of developing shame and doubt could be high in the next stage.

2.1.2.2 Psychosocial Problems and Mental Health Perspectives

Axis IV, which is intended to include mental problems in relation to psychosocial issues, is titled as “Psychosocial and Environmental Problems” in DSM-IV and as “Severity of Psychosocial Stressors” in DSM-III. This section in DSM-III contained eleven categories, each of which was assessed on a scale 0 to 6 based on the severity of the stressor. In DSM-IV and in the revised one, the categories were reduced to nine. Here, psychosocial and environmental problems (PEP) can represent a range of events: negative life events or experiences; environmental difficulty, deficiency, or impediment; a further dysfunction or distress; an interpersonal conflict or stress;

absence of social support; lack of resources, or any other problems that exists with in the context of the person's mental disorder (Munson, 2008).

There are several researchers who have explained psychosocial problems in relation with mental health or psychiatric cases. Accordingly, psychosocial problems can refer to any mental disorder, psychological symptoms, social situations warranting intervention (Kelleher et al., 2000). Similarly, Antoni (2005, p. 341) discusses psychosocial issues as clusters of domains including affective and psychiatric disorders as well as personal and external resources of an individual. Antoni (p. 347) clearly explained that psychosocial characteristics include psychiatric conditions such as anxiety and depressive disorders, personality/coping styles, stress moderators related to intrapsychic (cognitive appraisals) and interpersonal/external resources (social and spiritual support), and treatment prognosticate related to adjustment to the treatment conditions.

2.1.2.3 Biopsychosocial Model

Currently, scientific evidences are coming to investigate even a single experience in its multidimensional approach. For instance, biopsychosocial model has been developed to see one problem from three major dimensions (biological, psychological and social) in an integrated manner. Marks et al. (2003, P. 9) have said that in biopsychosocial model health and illness are the product of a combination of factors including biological characteristics (e.g., genetic predisposition), behavioral factors (e.g., lifestyle, stress, health beliefs), and social conditions (e.g., cultural influences, family relationships, social support). The authors also added that bio-psycho-social perspective assumes that biological, socio-cultural, and psychological factors combine and interact to produce psychological disorders: biological (evolution, individual genes, brain structures and chemistry), psychological (stress, trauma, learned helplessness, mood-

related perceptions and memories) and socio-cultural (roles, expectations, definition of normality and disorder).

Even criminal behavior has been explained by taking biogenic theory, psychogenic theory, and sociogenic theory in to account (Johnson, 1978). That means criminal behavior as well as factors and consequences of it are integrated with the biological, psychological, and social elements. Accordingly, it can be said that the problems of individuals in prison can have biopsychosocial nature. Thus, this model clearly shows that the psychosocial problems of prisoners have combined roots and integrative nature. Here, we can say that at least physical, psychological and social symptoms should be considered while we are identifying problems. In addition, factors of those problems should include the biological, psychological and the social issues of a person for effective intervention even though this is beyond the scope of this research.

2.1. 3 Psychosocial Problems

2.1.3.1 Stress

Stress is a response to threatening and challenging situations when the individual and environment are interacting. The stress responses are both physiological and psychological reactions to any demands of the situations. Of course, the earlier theorists have explained stress differently by emphasizing some portions of the responses or some aspects of the interaction between the person and his environment. For instance, Hans Selye (1981: 127) defines stress as the non specific response of the body to any demand. This author emphasizes the physiological responses. On the other hand, Coyne and Lazarus (1981) clearly demonstrating the cognitive-mediational accounts of human stress and they view that psychological stress as cognitive phenomenological, emphasizing how the person appraises what is being experienced and uses this

information in coping to shape the course of events. These authors say that psychological stress is not environmental stimuli, the characteristics of the person, or a response but the balance between the demands and the power to deal with them without unreasonable or destructive costs. Accordingly, stress is the transaction between the individual and the environment.

By combining the above issues, Cardena et al (2005: 229) define stress as reaction to threatening or unpleasant factors or as the product of circumstance that threatens the homeostasis or develop a new cognitive and emotional organization to accommodate the challenging experience or irretrievable loss. These authors also appreciate the cognitive perspectives of stress as a growing model. In addition to this, Compas (1995: 249) clearly reflects the combined nature of stress as follows: "A comprehensive perspective on ... stress includes both the objective nature of the environmental events and conditions as well as the individuals' cognitive appraisals of the environment. That is, neither objective nor subjective elements are sufficient along the individual differences in the nature of what is stressful and who is vulnerable to what type of stressful situations."

The concept of stress, at know, is broadening. It has been play very key roles in physiological, psychological and social perspectives. Currently within medical perspectives, "there is a very growing recognition than an exclusion of psychosocial considerations distorts perspectives and interferes with patient care" (Coyne and Lazarus, 1981: 145). Therefore, in order to consider stress and other psychosocial interferences, to medical models are forced to expand their scope to biospsychosocial models. So, it is very wise to consider stress as one key element as long as psychosocial problems of an organism are concerned.

Stress is our daily experience and cannot be avoided. However, its level can vary in different circumstances. As a result, stress can be categorized in two types: as (1) eustress, positive type that is pleasant and curative and (2) distress, negative type, unpleasant or disease producing stress (Cardena, 2005: 229; Selye, 1981: 128).

Rutter (1996: 357) comprehensively reflects that stressful events in young people have been extremely associated with psychopathology, or psychosocial risks even though there are individual difference on experiencing stress and there are differences on the degree of influences of negative life events (stressful events). Similarly, Compass (P. 250) explicitly argues that several studies have found an association between stress and emotional/behavioral problems. He added also that several studies established that stressful events of both major and magnitude are predictive of subsequent internalizing and externalizing problems.

Wills and Langner (1981: 159) have viewed stress as a cause of psychological disorders like lack of control, learned helplessness, incompetence, frustration, deprivation, anxiety, fatigue, low self-esteem and demoralization; and is reinforced by lack of social supports and low socio economic status. Prison life is often stressful, and it is easy for pressures to build up (Maunder and Cameron, 2007). So, stress can cause and can be depend on other psychosocial problems in the correctional settings.

2.1.3.2 Depression

Depression is the common psychological disorder/mental illness/ characterized by a profound and persistent feeling of sadness or despair and/or a loss of interest in things that once were pleasurable. Persons who are depressed have feelings of sadness, loneliness, irritability, worthlessness, hopelessness, agitation, and guilt that may be accompanied by an array of

physical symptoms (Sharp and Lipsky, 2002). Disturbance in sleep, appetite, and mental processes are a common accompaniment. The term depression has been used to describe a wide range emotions, symptoms, syndromes, and disorders that vary in their variety, duration, and scope. Scholars explain that depressive phenomenon has three levels: depressed mood, depressive syndromes, and depressive disorders (Compas and Hammen, 1996, p 227). A depressive disorder is a syndrome (group of symptoms) that reflects a sad mood exceeding normal sadness or grief.

Several researchers realize that depression is one of the major mental health problems of prisoners. Fazel and Danesh (2002) reported that several prisoners have serious mental disorder like major depression, psychosis, and antisocial disorders. Meeks et al (2008) reported also that as the number of prisoners "aging in place" rises, there is a critical need for research on mental health interventions in prison nursing homes where inmates may be at high risk for depression and suicide. Fortunately, all the participants in their project had diagnoses of major depressive episodes.

2.1.3.3 Anxiety

Anxiety is the feeling we get when our body responds to a frightening or threatening experience. It has been called the fight or flight response and is simply your body preparing for action, either to fight danger or run away from it as fast as possible (Maunder and Cameron ,2007). It can also be seen as stressing event characterized by intense fear, excessive worry for long period of time (for months) (Edwards, 1999). Anxiety becomes a problem when the symptoms are: severe and unpleasant; going on too long; happening too often; causing us to worry that there is something seriously wrong; stopping us doing what we want to do.

The feeling of anxiety involves being anxious, nervous, worried, frightened feeling something dreadful is going to happen, tense, stressed, uptight, on edge, unsettled, unreal, strange, woozy, detached and panicky(Maunder and Cameron ,2007). These scholars also added that the thinking aspect anxiety may be constant worrying, can't concentrate, thoughts racing, mind jumping from one thing to another, and imagining the worst and dwelling on it. The physical symptoms of anxiety includes jumpy or restless, tense muscles, sweating, breathing changes and the like.

Anxiety is positively associated with other psychosocial problems like with stress and depression (Compas and Hammen, 1996; and Maunder and Cameron, 2007). Mash and Wolfe (2003) illustrate comprehensively that especially generalized anxiety disorder (GAD) and panic anxiety (PA) co-occur with specific phobias and major depression, impaired social adjustment, low self-esteem, and an increased risk for suicide behavior and the like on young individuals.

2.1.3.4 Negative Self Evaluation/Low Self Esteem

Self-esteem is one's self evaluation and is the basic psychological elements of a person. Branden (1981: 109-110) says the following about self-esteem that there is no value-judgment more important to man—no factor more decisive in his psychological development and motivation—than the estimate he passes on himself. He added also that the nature of man's self-evaluation has profound effects on a man's thinking processes, emotions, desires, values and goals. Thus, to understand a man psychologically, one must understand the nature and degree of his self-esteem, and the standards by which he judges himself. As Branden pointed out Self-esteem has two interrelated aspects: it entails a sense of personal efficacy and a sense of personal worth. In other words he explained it as the integrated sum of self-confidence and self-respect or it is the conviction that one is competent to live and worthy of living.

Branden (p. 110) explains about maladjusted self evaluation that if a man intensely does feel the need of a positive view of himself that he may evade, repress, distort his judgment, disintegrate his mind—in order to avoid coming face to face with facts that would affect his self-appraisal adversely. On the reverse, this author pointed out that if and to the extent that men lack self-esteem, they feel driven to fake it, to create the illusion of self-esteem-condemning themselves to chronic psychological fraud moved by the desperate sense that to face the universe without self-esteem is to stand naked, disarmed, delivered to destruction.

From the above evidence we can understand that negative self-evaluation or low self esteem is both the result and the cause of psychosocial disturbance. In other words, if a person is stressful situation, in depressed and anxious mood, other bad conditions, she/he can experience distorted feeling to wards one self. On the other hand, if a person lacks self confidence and self worthiness, s/he has a possibility to suffer psychological abnormalities. Because man can not be health without self esteem. On this respect, prisoners are highly exposed to evaluate themselves negatively, or to develop low self esteem.

2.1.3.5 Interpersonal Problems

It is obvious that while a person is in conflict, frustration, or stressful situations and is suffering from mental disorders, his/her relationship to others can be affected adversely. This is very high on individuals with criminal cases since criminal behavior is the good indicator of bad interpersonal relationship with others. Prisoners, especially recidivists, reported more problems and stress, more negative emotionality, a less structured lifestyle, less social support resources and a lack of forethought and anticipatory capacity for the negative consequences of their behavior and thus they need re-education and interpersonal skill training (Ming, 2002).

Interpersonal difficulties include hard to be assertive, hard to be supportive, too aggressive, hard to be sociable, hard to be involved, too open, too caring, and too dependent (Kellett et al., 2004).

Haney (2001) says prisoners who labor at both an emotional and behavioral level to develop a "prison mask" that is unrevealing and impenetrable risk alienation from themselves and others, may develop emotional flatness that becomes chronic and debilitating in social interaction and relationships, and find that they have created a permanent and unbridgeable distance between themselves and other people.

2.1. 3.6 Problem of Loneliness/Isolation

Inmate isolation is common in prisons due to the fact that they can be isolated by the authorities in prison as a punishment or they may isolate themselves while they face social disturbances. Lovell & Johnson (2004) support this idea by saying that the use of super-maximum confinement is against the rights of prisoners and studies of inmates in isolation indicate that even those who start out healthy can become withdrawn, incapable of initiating or governing behavior, suicidal, or paranoid. As Haney (2001) reports, some prisoners learn to find safety in social invisibility by becoming as inconspicuous and unobtrusively disconnected from others as possible. He adds also that the self-imposed social withdrawal and isolation may mean that they retreat deeply into themselves, trust virtually no one, and adjust to prison stress by leading isolated lives of quiet desperation. This author also explains the extreme cases, especially when combined with prisoner apathy and loss of the capacity to initiate behavior on one's own, the pattern closely resembles that of clinical depression. Long-term prisoners are particularly vulnerable to this form of psychological adaptation (Haney, 2001).

A study in a South Australian remand facility was used to examine the relationship between loneliness and known predictors of self-harm, such as depression and hopelessness. The results suggested that prisoners who scored higher on a measure of loneliness reported higher levels of depression, hopelessness and indicators of suicidal behavior (Brown, 2008). This researcher concluded that whilst specialist mental health services are needed to treat problems such as depression, loneliness is something that may be managed by correctional staff with no professional experience or training.

2.2 The Concept of Coping

Coping is usually defined as cognitive, personal, contextual and social skills and efforts to manage situations that are perceived as causing stress and psychosocial distress. Coping can also be seen as constantly changing cognitive and behavioral effort to manage specific external or internal demands that are appraised as taxing the resource of a person (Mohino et al., 2004; Fugate et al., 2008,).

Coping can be viewed as individual's purposeful set of personal, cognitive, social, and behavioral responses to deal with situations that perceived to result stress or psychological distress. To enlighten this concept, Forman (1993, p. 15) defines coping skills as "sets of learned, purposeful, individual responses to stressors to that increase positive outcomes in stressful situations, and reduce or eliminate negative stressful states". Further more, Mohino and associates (2004) have seen coping as "a voluntary and conscious effort that refer to those personal, contextual, and/or social strategies which people use in dealing with situations that are perceived as causing stress or psychological distress". They add also that the subjective perception of the degree of stress is crucial so that situations that are neutral for some individuals

may be regarded as threatening by others. From this evidence, it can be deduced that individual difference in coping to stress is a grain of truth.

As Manne (2003: 52) revises the two main traditional dimensions of coping: problem-focused and emotion-focused coping. He defines problem-focused coping is aimed at altering the problematic situation but emotion-focused coping is aimed at managing emotional responses to stressors. However, Moos and Billings (1982: 218 -219) divide coping in to three:

i. **Appraisal focused coping:** (1) logical analysis; (2) cognitive redefinition: - accept the reality of the situation but restructure it to find something favorable, concentrating on some thing good, altering values and priorities in line with changing reality; and (3) cognitive avoidance: - e.g. deny fear or anxiety under stress, trying to forget the whole situation, refusing to believe the problem really exist, and engaging in wishful fantasies instead of thinking really about the problem.

ii. **Problem focused coping:** (1) seek information or advice asking for help, guidance, (2) problem solving actions, planning, taking actions, learning new skills, compromising to resolve problems, and (3) develop alternative reward: strategies like build relationship, independence, studying philosophy and involving in religious activities.

iii. **Emotion focused coping:** (1) affective regulation, (2) resigned acceptance or accepting, submitting the situation, and (3) emotional discharge like crying, smoking, overreacting.

Research evidences are realizing that prisoners have problems of coping with in prisons due to mental illness, physical damage, or other factors; due to the fact that needed treatment is not provided and that vulnerable inmates are further damaged by sensory deprivation and other disorientating features of the environment (Lovell & Johnson, 2004).

Concerning the relationship of coping and psychosocial problems, Sherman et al. (2000, cited in Manne, 2003) found that denial, behavioral disengagement, and emotional ventilation were associated with higher distress as assessed by the Profile of Mood States.

Manne (2003) has reported that coping through social support, positive appraisal, and self-controlling coping were all associated with more positive affect whereas distancing, using cognitive and behavioral escape avoidance was associated with more emotional distress.. He revised the findings of Epping-Jordan et al (1999) that evaluated the association between coping (assessed with the COPE) and anxiety and depressive symptoms among a sample of 80 women with health problems and then coping was evaluated as a mediator of the relation between optimism and distress. Optimism was predicted to predict less emotion-focused disengagement, which, in turn, predicted fewer symptoms of anxiety and depression. So, emotion focused and disengagement are directly related to anxiety, depression and related problems. Similarly, Kausar & Powell (1999) reported that respondents who were more dependent on emotion-focused coping styles reported greater distress as compared to those who depended more on problem-focused strategies.

Tuncay and associates (2008) made a research on the relationship between anxiety and coping strategies and the results of correlation analysis showed that coping strategies such as acceptance, religion, positive reframing, and emotional support were negatively related to anxiety. They said also that evidence was consistent with the idea that higher levels of anxiety are associated with lower problem-focused coping strategies. Of course, in their finding, anxiety was also found to be negatively correlated with venting as emotion-focused coping strategies, denial was one of the passive coping strategies, while acceptance, instrumental support and emotional support are active coping strategies. These scholars revised others contributions and say that an increase in the functioning of spiritual or religious coping in the patients with diabetes decreases anxiety, depression, and hopelessness, and stimulates psychological functions, adaptation to the illness process, life satisfaction, and quality of life.

2.3. Prison and Its Contributing Factors for Psychosocial Vulnerability

- 1. The Setting:** Prison is one of the institutions like hospitals, schools, etc for the purpose of correction or modification of human behavior for the sake of serving the needs of the society. To support this idea, Feldman (1993) has described prisons as institutions that are self contained and largely or totally isolated from the rest of the society. He adds also that all activities of the inmates are carried out to an imposed schedule, under an imposed set of rules, in a single place and under a single authority as part of an overall plan designed to fulfill the aims of the institution.

Prison is the place where criminal behavior is intended to be rehabilitated, and corrected. However, the reverse may happen in some cases. Since, there could be different criminals in a prison living together, prisoners may learn new criminal skills and attitudes from each other, and they may strengthen the existing crime. Feldman (1993) used two terms to explain the learning processes in prison: (1) *prisonalization* that is the process of learning the rules set by the staff and (2) *criminalization* that is the process as that refers to the impact of prisoners on each other of skills and attitude of deviant behavior.

- 2. Crowding:** Prison population is substantially increasing may be due to a “get tough” of sentencing policies, unemployment, and other social inadequacies (Johnson, 1978). Smith (1982; cited in Feldman, 1993) has found that prisoner density levels beyond the recommended are positively correlated with increase in: disciplinary infractions; mortality rates of prisoners aged over 45 years; rates of psychiatric commitments and suicides of all age; complaints of physical illness; and recidivism.

3. Violence in Prison and the Pains of Imprisonment: Haney (2001) illustrate comprehensively negative psychological consequences of long-term solitary-like confinement include: an impaired sense of identity; hypersensitivity to stimuli; cognitive dysfunction (confusion, memory loss, ruminations); irritability, anger, aggression, and/or rage; other-directed violence, such as stabbings, attacks on staff, property destruction, and collective violence; lethargy, helplessness and hopelessness; chronic depression; self-mutilation and/or suicidal ideation, impulses, and behavior; anxiety and panic attacks; emotional breakdowns; and/or loss of control; hallucinations, psychosis and/or paranoia; overall deterioration of mental and physical health.

One of the major factors for experiencing psychosocial disturbance in the prison that commonly raised by authors is violence. Individual violent incidents are endemic in prisons, i.e., they are part of everyday life (Feldman, 1993). As this author realizes, there are fights between inmates and with guards, assaults by inmates on prison officers, assaults on prisoners by their inmates.

Imprisonment can be very harsh in some circumstances. There are also “cruel and unusual” punishments that are both physically harmful including assault, homosexual rape, and even occasional homicide; and the occurrence of serious consequences for mental health including deprivations, abuse by officers, and death anxiety and the like.

2.4 Researches on the Problems of Prisoners

Haney (2001) argues that due to of several negative trends in American corrections, the personal challenges posed and psychological harms inflicted in the course of incarceration have grown over the last several decades in the United State. He also adds that the ordinary adaptive process

of institutionalization or "prisonization" has become extraordinarily prolonged and intense and then among other things, these recent changes in prison life mean that prisoners in general (and some prisoners in particular) face more difficult and problematic transitions as they return to the free world. Finally, he recommends that ranges of social and psychological programs, structures, and resources that are required to address these issues must be made available in the immediate, short, and long-term.

Dale and Woods (2001) reported that Prisoners have higher than average rates of mental illness with psychosis, substance misuse, and paranoid and borderline personality disorders being the most common type of disorder. They also supported this idea by taking information from Office for National Statistics' study on 'psychiatric morbidity among prisoners in England and Wales' (Singleton et al., 1998) that identified a range from 39 percent of male sentenced prisoners to 75 percent of female remand prisoners with significant neurotic symptoms (anxiety, depression, and phobias). The psychological pain of prisoners could be more serious in solitary confinement (Grassian, 1993).

Sailas et al. (2005) made research on young prisoners and reported that prisoners are more likely to have serious mental disorders than the general population, and efforts have been made to reduce the number of young prisoners. This study also added that more mentally ill young people end up in prison as the prison population diminishes.

The interaction between rehabilitation program effectiveness and the psychosocial environment of prisons is quite remarkably under-investigated, given a) the long history of anecdotal and ethnographic observation as to the nature of prison culture and its possible deleterious effects b)

the massive increase in the number of outcome studies relating to the effectiveness of rehabilitation programs (Howells, 2000).

Desai et al. (2006) provide substantiate evidences on mental health care of juvenile by saying that juvenile detention facilities have come under increasing legal pressure to provide mental health services to detainees, and mental health clinicians may be asked to design and implement programs in detention facilities. They have also reported that the rates of being exposed to psychiatric disorders and other mental health problems are substantially higher than estimates from community populations. The study by Teplin and colleagues indicates that the majority of juveniles in detention can be expected to suffer from a psychiatric and/or substance-abuse disorder there are high rate of comorbidity across psychiatric diagnoses (Desai et al., 2006).

Researches are realizing that psychosocial risk behaviors are more prevalent among prisoners. Drug and alcohol abuse have been associated with and reported more by individuals with mental illness in jail (David Canales-Portalatin, 1995). Suicide attempt and suicidal ideation in prison are also from the most researched areas in these respects. To support this idea, Brown (2008) reported that suicide in prisons has been seen as a public health concern reaching crisis proportions around the world.

Forrest et al. (2000) reported that compared with school counterparts, incarcerated male youths had significantly worse health status as demonstrated by poorer health and functioning scores in perceived well being, self-esteem, physical discomfort, acute, chronic, and psychosocial disorders, family involvement, physical activity, interpersonal problem-solving, risk behaviors, and academic performance.

2.5 Correctional Responses to Problems of Prisoners

Lambert et al. (2007) proposed that cognitive interventions are effective for the rehabilitation of the offender community corrections, juvenile facilities, adult prisons, and substance abuse programs. These scholars are arguing that cognitive programming is essential to teach individuals how to adopt more pro-social attitudes, beliefs, cooperation, flexibility; and an understanding of the consequences of their behavior. Specially, this is true in the case of minimizing the effect of violence and misconduct behaviors, or it has been quite effective at reducing recidivism rates of program participants. To illustrate more, cognitive therapy programs are becoming the preferred treatment strategy in juvenile and adult correctional facilities for the following four reasons: 1) they deal with observable behavior, 2) they do not require the hiring of professional staff such as psychologists, 3) they require confrontation of inappropriate behavior, which can occur in a controlled setting, and 4) they have been shown to be highly effective (Lambert et al., 2007).

There are also researchers, who advocate, psychodrama as vital technique of treatment, reeducation, and/or a source of creativity in correctional settings. For instance, Gregory (1995) reported the importance of psychodrama as a therapeutic technique involving reenactment of situations that have great emotional significance to the women in correctional settings. Gregory said also that through the use of drama, participants obtain a deeper sense of understanding of who they are, where they have been, their internal drives and their patterns of behavior.

Toch (1995) discusses the incidents involving mental health services in prison facilities that illustrate Catch-22 situations, in many of which inmates perceive clinicians as people who “come

to watch you drown instead of throwing you a rope". This author proposes a supplementation of what he calls "administrative clinical" thinking with non-bureaucratic, collaborative efforts to assist inmates.

Summary

Psychosocial problems are psychological and social maladaptive experiences; or affective or mental health problems that specifically consist of disturbances like stress, depression, anxiety, low self-esteem, loneliness, and interpersonal and related problems that are the results of personal, environmental or social factors. It has developmental and multidimensional nature as different theories proposed. It can represent a range of events: negative life events or experiences; environmental difficulty, deficiency, or impediment; a farther dysfunction or distress; an interpersonal conflict or stress; absence of social support; lack of resources, or any other problems that exists with in the context of the person's mental disorder. The specific psychosocial variables do have comorbidity with each other and the biological, psychological and social nature of a person.

Coping is usually defined as cognitive, personal, contextual and social skills and efforts to manage situations that are perceived as causing stress and psychosocial distress. It can be divided in to two main traditional dimensions of coping: problem-focused and emotion-focused coping. Problem-focused coping is aimed at altering the problematic situation but emotion-focused coping is aimed at managing emotional responses to stressors. In addition,

In the prison area the crowding, setting (prisonization, criminalization), violence, and pain of imprisonment can be the contributing factors to escalate mental and psychosocial problems of prisoners.

As correctional responses to psychosocial problems of prisoners, cognitive rehabilitation and therapeutic techniques and psychodrama are advocated predominantly by scholars.

CHAPTER THREE

METHODOLOGY

3.1. Research Design

Quantitative research design was used in this research since it was find convenient to answer the basic questions of the study. Because, the data obtained from the structured scales were very convenient for quantitative methods. Consequently, it was possible to examine the nature and association of psychosocial variables and coping strategies; and their dependence on some demographic variables (like sex, time length of sentence, time passed in prison and rate of family visit) through both descriptive and inferential statistics precisely.

3.2 The Sampling

The Target Population and Samples: The existing population of prisoners/detainees of Bahir Dar prison in West Gojjam Zone was 1682 including 1626 male and 56 female individuals (as obtained from 2001 E.C. annual and monthly statistics of the prison). Totally, about 250 questionnaires were distributed but 46 questionnaires were not returned and from the returned 206 questionnaires 6 of them were excluded since they were incomplete. Hence, only 200 (11.96% of the population) samples were included in the study.

The Sampling Techniques: Of course, most of the existing female detainees and prisoners were included intentionally. Because they were small in number and available sampling was appropriate to this end. However, male respondents were chosen by using simple random sampling to give equal chance for them. The method was done by drawing names of prisoners out of a hat until the required number was reached after taking those names from the complete list of the prisoners' name that was documented well in the archive of the prison.

The Participants: From the 200 samples 148(74%) of them were males and 52(26%) of them female participants with average age of 25.85 yrs, SD = 9.54 and age range of 16 – 60 years (see Appendix D). From these participants 35.5% of them were married, 57.5% of them were unmarried and 7% of them were divorced; 65% of them had no children but the other 35% of them reported that they had at least one child; on their residence 46% (92) were from town but 54% of them were from rural areas; and concerning their educational levels 17% uneducated, 21% primary grade level, 27.5% from 5-8 grade level, 20% grade 9 & 10, 14.5 % from 10+1 to degree levels were accounted. Concerning their family visit 41% of the respondents reported that they were not visited at all, 44.5% of the reported some times, and 14.5% of the reported frequently visited. Moreover, the length of sentence reported by participants range from 3 months to 30 years. Lastly, the types of crimes, participants were accused of and reported, were genocide, murder, theft, assault, rape, hiding weapons, abduction and the like.

3.3 Instruments

The collected data included prisoners'/detainees' demographic data, psychosocial problems, and coping mechanisms. To this end, appropriate questionnaires and scales were utilized to achieve the purpose. All the scale including their psychometric properties and scoring are explained titles and sub titles to make them clear and convenient.

3.3.1 Psychosocial Scales

3.3.1.1 Instruments of Emotional-Personal (Psychological) Problems: Perceived Stress Scale, Beck Depression Inventory, DASS- Anxiety Version, and Rosenberg Self-Esteem Scale

Perceived Stress Scale (PSS-10): PSS is developed by Sheldon Cohen and it has PSS-4, PSS-10, and PSS-14 versions. The Perceived Stress Scale-10 is five points (0-4) self report questionnaire that measures person's evaluation of stressfulness of the situation (refer to appendix A2). PSS has good internal consistency of .83 (Gonzalez and Landero, 2007), reliability ($r = 0.85$) in both the 10- and 14-items (FRIENDS National Resource Center, 2006). Authors reported the contribution of other scholars also that PSS-10 has also good internal reliability of .78 coefficient alpha, appropriate construct-, predictive-, and discriminate validity. PSS-10 scores are obtained by reversing the scores on the four positive items e.g., 0=4, 1=3, 2=2, etc. and then summing across all 10 items. Items 4, 5, 7, and 8 are the positively stated items. Scores can range from 0 to 40, with higher scores indicating greater stress. The cutoff scoring to determine the low and high stress is 20 i.e., the mid point of the scores.

Beck Depression Inventory Short Form (BDI – SF): The BDI-SF is a 13-item (refer to appendix A3), abbreviated version of the 21-item, self-report BDI screening test for depression. The BDI-SF is scored as an index of severity of depressed mood. Each of the 13 items is scored from 0 to 3. The BDI-SF has been found to correlate highly with the standard 21-item BDI ($r=0.96$, $P<0.001$) and relates the clinical depth-of-depression ($r=0.61$) (Kunkel et al., 2000). BDI is the mostly used instrument of depression that has been proved psychometrically reliable and valid in several settings. Beck Depression Inventory short form is a 13 item self-report inventory that assesses affective, cognitive, motivational, and vegetative symptoms of depression. Items use a 4-point scale that ranges from 0 to 3. A total score is calculated by

summing the item responses. A score of 8 is the cutoff indicating moderate depression (Crocker, 1994). Cleiren (1991) reports the categorization of scores as follows: 0-4 not or hardly depressed, 5-7 mildly depressed, 8-15 moderately depressed and 16+ severely and these ranges are used in this study to determine the severity level of depression.

DASS-Anxiety Version: This scale is used to measure symptoms of anxiety (refer to appendix A4). DASS is the depression, anxiety, and stress scale with 42 items. From these items 14 of them are used to assess anxiety. So, these items have been used to see the anxiety level of respondents. Concerning the psychometric property, reliability of the DASS Anxiety is considered adequate and test-retest reliability is likewise considered adequate with .79 (Deville, 2005). The author reported also that the DASS anxiety scale correlates .81 with the Beck Anxiety Inventory (BAI).

Rosenberg Self Esteem Scale: Rosenberg Self-esteem Scale (RSE) is the 10-items scale that has been presented with four response choices, ranging from a strongly agree to strongly disagree (refer to appendix A5). The scoring of the scale ranges from 1-40. Scores between 25 and 35 are within normal range; scores below 25 suggest low self-esteem. Several researches report that this scale is the most reliable and valid instrument of global self esteem. The scale has good reliability of Cronbach Alpha of .86 (Vermillion and Dodder, 2007).

3.3.1.2 Instruments of Social Connected Problems: Inventory of Interpersonal Problems and Loneliness Scale

Inventory of Interpersonal Problems: The inventory of interpersonal problem (IIP) has 8 subscales 4 items each (refer to appendix A6). In this research the three subscale including (a) hard

to be sociable, (b) hard to be supportive and (c) too aggressive scale that have the reliability measures range from .75 -.81, .66 -.73, and .55 - .78 for each subscales respectively (Kellest et al., 2005), were taken as appropriate to measure the interpersonal problems of prisoners. This inventory includes 12 items (or three sub scales 4 items for each) that have been used to measure the interpersonal problems of prisoners. Scoring is made by taking 18 as cutoff the scores to determine the low and high levels.

Loneliness Scale: The Loneliness Scale was developed by De Jong Gierveld and colleagues. It consists of 11 items; six are formulated negatively and five are formulated positively. It has also a short form scale or the 6-item version for overall, to measure emotional and social loneliness (refer to appendix A7). Concerning its psychometric properties, typically, scale reliability in the 0.80 to 0.90 range is observed (Cronbach's alpha). The homogeneity of the scale varies across studies, with Loevingers' *H* typically in the 0.30 to 0.50 range (higher when mail questionnaires were applied than in face-to-face interviewing), which is sufficient, but not very strong (Gierveld & Tilburg, 2008). The 6-items loneliness scale is used here. It is a three point scale (1-3) and then the sum score range from 6-18. The cutoff scoring to determine the low and high loneliness is 12 i.e., the mid point of the scores.

3.3.2 Instrument for Coping Strategies

Brief COPE Inventory: In order to measure the coping strategies of prisoners, the 18 items of Brief COPE Inventory were used. These 18-items self report scale consists of 9 sub scales represented by 2 items each (refer to appendix A8). This inventory has been provided to measure the coping strategy of respondents when they face stressful situation in the prison setting.

Cronbach's Alpha of the Brief COPE Inventory was found to be .82. With regard to the internal consistency of the sub-scales for assessing coping strategies, the following Cronbach's alphas were found: acceptance .82, religion .77, planning .75, positive reframing .87, using instrumental support .76, active coping .83, venting .84, behavioral disengagement .81, and denial .96 and the scales are only two items each, their reliabilities all meet or exceeded the value of .50 regarded as minimally acceptable (Tuncay et al., 2008).

These coping sub scales that are used in this study do have two items consisting of Active Cope (question 1 & 4), Denial (question 2&5), Behavioral Disengagement (question 3&10), Venting (question 6& 13), Instrumental Support (question 7&15), Positive Reframing (question 8& 11), Planning (question 9& 17), Acceptance (question 12 &16), and Religious Coping (question 14& 18). Concerning the scoring of the low and high levels of coping for all specific strategies, 5 is taken as a cutoff since it is the mid point of the scores.

3.3.3 Pilot Testing

Pilot studies are small-scale try-outs of various aspects of the intended protocol. Initial pilots were done with colleagues and friends to get the administrative procedures roughly right and to reveal any gross errors in measurement or design. Subsequently a pilot test was done with 22 prisoners of Debre Markos that were closer to the target population that had been intended to be studied. Accordingly, the reliability statistics of the pilot testing revealed that the scale are reliable with high Cronbach's Alpha reliability of perceived stress scale (0.846), BDI-13 (0.816) DASS Anxiety Version(0.922), Self-esteem Scale (0.901), inventory of interpersonal problems (0.769), loneliness (0.903), and the Brief Cope Inventory (0.645).

3.4 Procedures of Data Collecting and Data Analysis

The data collection task was made first by distributing to almost all the female prisoners. They were told the purpose of the study and how they could answer the questionnaires clearly. For the prisoners who can not read and write the practitioner read to them and complete the scales based on their responses. 55 questionnaires were distributed to females and 52 of the questionnaires were considered for the study since three questionnaires were no returned.

The randomly selected participants from male prisoners were picked by the help of administrative coordinator from their compound to the office. Those male respondents, who can not read and write, were helped by the researcher and the coordinator in completing the scales. But those respondents, who can read and write, tended to report by themselves and return the questionnaires after completing. Totally, 195 questionnaires were distributed to male respondents but 148 questionnaires were considered in the study since 41 of them were not returned and 6 of them were not responded completely. So, totally 200 participants were considered in this study as the source data.

Next to that, the data entry was made to SPSS data base and some missed responses were corrected by taking the response that is nearer to the mean of the scale. Then, results have been computed and retrieved. Subsequently, the retrieved results were provided in table forms so that they could be easily interpreted.

3.5 Data Analysis

The results of the present study were analyzed through percent analysis, correlation coefficient, One-way ANOVA, and one-sample t-test, two-sample t-test and Friedman test (chi-square). First, statistics like percent analysis and one sample t-test were used to describe levels of the problems among respondents. In order to examine the relationships among variables Pearson correlation analysis was used. Next to that, Friedman test and percentile were used to compare the predominance of coping strategies among prisoners. Two-sample t-test was employed to investigate the variation of coping style based on sex or gender variation. One-way ANOVA was applied to examine dependence of psychosocial variables on sex and the time length of sentence as well as coping strategies on length time passed in the prison and on rate of family visit. Finally, bonferroni post hoc test was also employed to compare the mean differences of the significantly varied copings due to different rates of family visit on the one-way ANOVA.

3.6 Ethical Considerations

To get permission to carry out the investigation, a formal and written approach had been followed to the organization concerned. The department wrote a letter to the target prison, which assures the data collection task, would be done by respecting the rules and regulations of your organization. The practitioner also mentioned honestly about the carried out research that would be utilized for academic purpose and about the usefulness of the information to propose appropriate solutions to concerned bodies. Respondents were also told that the data they gave might be seen by some individuals who participated in this research, there was no need of write their name, and to cooperate based on their choice.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Results and Interpretation

4.1.1 General Severity Levels of Psychosocial Problems on Prisoners

To examine the general levels of the psychosocial problems on the participants, one sample t-tests were computed in Table 1 and frequency and percentile of each severity level were analyzed in Table 2 (page 41).

Table 1 Means, Standard Deviations and One Sample T-test of Psychosocial Problems

Psychosocial Variables	N	Mid point	Sample Mean	Std. Deviation	t-test	Sig. (2-tailed)
Stress	200	2	2.32	.93	4.866	.000
depression	200	1.5	1.75	.76	4.728	.000
Anxiety	200	1.5	1.57	.95	1.025	.306
Self esteem	200	2.5	2.64	.85	2.306	.022
Interpersonal Problem	200	1.5	1.4	.79	-1.887	.061
Loneliness	200	2	2.08	.59	1.872	.063

NB: The mid points are taken as the population mean (μ)

As it is clearly observed above in Table 1, participants tended to perceive high level of stress that is supported by one t-test result, $t = 4.866$, $p = .000$ that is indicating significantly higher level of value than the mid point of the scale. Similarly, the percentile results (Table 2, page 41) indicate that majority of the participants (68.5%) scored high level of stress and only 31.5 % of them scored low on their perception of stress. So, we can confidently deduce that these prisoners as a group were experiencing serious stressful situations while they were living in the prison.

On top of that, the significantly high level of depression is obtained on participants that is supported by $t = 4.728$, $p = .000$, the group mean value of depression of 1.75 (SD=.76) is greater

than 1.5 that is the mid point of the scale (Table 1, p. 39). More over, the severity level assessed based on the scorings of the BDI (see Table 2, p. 41) surprisingly connotes that depression was extremely sever in most of the prisoners that is supported by 74.5% severely depressed and 18.5% moderately depressed participants. As a result, it is very convincing that depression is the very common psychological disturbance as far as the prison life is concerned.

Table 1 (page 39) also shows that there was a little bit higher group mean score than the mid point of the scale but not significantly higher as the t-test result shows, $t = 1.025$, $p = .306$. However, that does not mean there is normal anxiety level as the mean score is similar to the mid point of the scale. Because, as shown in Table 2, the scoring of the scale (Anxiety - DASS) to determine the severity rating index shows that majority of the respondents were scored extremely severe (55.5% of them) and severe (10% of them) anxiety level. So, the results confirmed that anxiety had been affecting majority of the respondents seriously. Even the sum of normal (16%), mildly anxious (2%) and moderately anxious (15%) individuals was less than the number of extremely sever anxious individuals (55.5%) alone even with out including the sever ones. This is a very substantial evidence to argue that most of the prisoners were vulnerable to anxiety disorder.

Table 2 Severity Rating Indexes of Psychosocial Variables and Frequency Distribution of Respondents

Variables	Severity level	Score range(cut off)	Frequencies	Percent
Stress	Low	≤ 20	63	31.5%
	High	> 20	137	68.5%
Depression	Not depressed	0-4	8	4%
	Mildly depressed	5-7	6	3%
	Moderate	8-15	37	18.5%
	Severely depressed.	16+	149	74.5%
Anxiety	Normal	0 - 7	33	16.5%
	Mild	8 - 9	4	2%
	Moderate	10 - 14	30	15%
	Sever	15 - 19	20	10%
	Extremely Sever	20+	111	55.5%
Self- Esteem	Low	10-25 (< 25)	76	38%
	Medium	25-35	93	46.5%
	High	> 35	31	15.5%
Interpersonal Problem	Low	≤ 18	115	57.5%
	High	> 18	85	42.5%
Loneliness	Low	≤ 12	104	52%
	High	< 12	96	48%

The t-test result ($t = 2.306$, $p = .022$) of self-esteem indicates that there is significantly high level of self-esteem on the participants as a group or they seem to have low level of negative self evaluation. However, the rating index implies that majority of the respondents concentrated on the moderate (46.5%) level of self esteem followed by low self esteem (38%) but only 15% of them were categorized as high self-esteem individuals. Indeed, considerable numbers of participants were tended to score low in their self-esteem who disposed to evaluate themselves negatively even though most of them had healthy or high self-esteem.

Regarding the problems of loneliness, the group mean is not significantly different from the mid point at alpha (α) 0.05 significant level, $t = 1.872$, $p = .063$. In addition, 52% of the respondents

scored below the mid point and 48% of them scored above the mid point. Both the one sample t-test (Table 1, page 39) and percentile results (in Table 2, page 41) show that participants inclined to report moderate level of loneliness since in both cases results are nearer to half share of high and low level of loneliness problem. Consequently, the results convince us to say that participants experienced more or less moderate level of isolation. However, the existence of higher level of isolation problem on half of the participants is not insignificant number and does not mean there is normal level loneliness, rather it means nearly half of the participants had been affected by the problem and needed proper attention of care and support.

The findings realize that prisoners had low problem of interpersonal relationship since majority (57%) of them (in Table 2, p. 41) reported low level of score and even the mean score ($M=1.4$, $SD=.79$ but the midpoint is 1.5) is lower than the mid point even though it is not statistically significant since the one sample t-test result (in Table 1, p. 39) reveal that the mean score is not significantly different from the mid point ($t = -1.887$, $p = .061$ i.e., greater than $\alpha = 0.05$). Here, the negative value t-test indicates that the mean is less than the mid point.

4.1.2 Interrelationship of Psychosocial Variables

To determine the degree of relationship between the six psychosocial variables, bivariate Pearson correlation technique was employed. The correlation results confirmed that there are significant (with $p<0.01$ significant level) correlations among all the six variables (see Table 3, page 23). Self esteem of the participants is negatively correlated with the other psychosocial variables even though these five are interrelated positively with each other.

Table 3 Correlation Matrix on Interrelationship of Psychosocial Variables

Variables	1	2	3	4	5	6
1. Stress	-					
2. depression	.753**	-				
3. Anxiety	.541**	.755**	-			
4. Self-esteem	-.632**	-.746**	-.658**	-		
5. Interpersonal Problem	.593**	.629**	.571**	-.616**	-	
6. Loneliness	.524**	.577**	.565**	-.578**	.532**	-

** Correlation is significant at the 0.01 level (2-tailed).

Specifically, as it is put in Table 3 above, the level of stress is significantly and positively correlated with depression ($r = 0.753$), anxiety ($r = 0.54$), loneliness ($r = 0.52$), interpersonal problem ($r = 0.59$), and negatively with self esteem ($r = -0.63$) significantly (all at $p < 0.01$, $N = 200$). Similarly, there are significant correlations between depression and anxiety with $r = 0.755$, depression and self-esteem with $r = -0.746$, depression and loneliness with $r = 0.577$, depression and interpersonal problem with $r = 0.629$, anxiety and self-esteem with $r = -0.658$, anxiety and loneliness with $r = 0.565$, anxiety and interpersonal problem with $r = 0.57$, self-esteem and loneliness with $r = -0.578$, self-esteem and interpersonal problems with $r = -0.616$, loneliness and interpersonal problems with $r = 0.532$.

4.1.3 Predominance of Coping Strategies Used by Prisoners

This was planned to illustrate which coping mechanisms were manifested in response to the problems faced by prisoners. Percent analysis and chi-square test were utilized in order to assess the likelihood of using those coping strategies and to examine whether of these coping strategies were used differently or homogeneously.

Table 4 Ranks and Friedman Chi-square Test of Specific Coping Strategies

Coping Strategies	Mean Rank
Active Cope	4.10
Denial	4.81
Behavioral Disengagement	4.13
Venting	5.77
Instrumental Support	4.88
Positive Reframing	5.05
Planning	5.18
Acceptance	5.18
Religious Cope	5.90
N	200
Chi-square	95.988
df	8
Asymp. sig.	.000

The mean ranks and chi-square test results in Table 4, which were employed to compare and to signify the variations among the specific coping strategies, assure that all the nine coping strategies significantly vary while compare to each other. The absolute measure of discrepancy (chi-square: $X^2 = 95.988$, $df=8$, $N=200$, $p = 0.000$) between those specific strategies implied that they were used differently in significant level. In their rank order (in Table 4), religious coping was tended to be used most by the participants followed by venting, planning, acceptance, positive reframing, and instrumental support coping styles respectively. On the other hand, the other three styles including denial, behavioral disengagement and active coping were the least utilized strategies in the rank order in comparison with the above five strategies (Table 4).

Table 5 Frequencies & Percentiles of Respondents on the High and Low Levels of Specific Coping Strategies

Specific Coping Strategies	Category	Score Range	N	Percent (%)
Active Cope	Low	<= 5	130	65
	High	> 5	70	35
Denial	Low	<= 5	118	59
	High	> 5	82	41
Behavior disengagement	Low	<= 5	122	61
	High	> 5	78	39
Venting	Low	<= 5	83	41.5
	High	> 5	117	58.5
Instrumental Support	Low	<= 5	91	45.5
	High	> 5	109	54.5
Positive Reframing	Low	<= 5	99	49.5
	High	> 5	101	50.5
Planning	Low	<= 5	88	44
	High	> 5	112	56
Acceptance	Low	<= 5	100	50
	High	> 5	100	50
Religious cope	Low	<= 5	73	36.5
	High	> 5	127	63.5

The findings (in Table 5) again assert that active coping, denial, and behavioral disengagement were intended to be carried out below the expected level. This is confirmed by that only 35% of the participants on active coping, only 41% of them on denial, and only 39% of the participants on behavior disengagement reported above the mid point. So, majority of the respondents reported that they did not use these three strategies that much. On the other hand, we get that venting (58.5%), instrumental support (54.5%), planning (56%), positive reframing (50.5%) and religious cope (63.5%) were actually reported by the participants to be performed highly by majority of them. In the case of acceptance 50% of the respondents inclined to report high and the other 50% of them tended to report low.

Table 6 Frequencies & Percentiles of Respondents on the High and Low Levels of General Coping Strategies

General Coping Strategies	Category	Score Range	Frequency	Percent (%)
Emotion Focused (<i>Behavioral disengagement, Venting and acceptance</i>)	Low	<=12	40	20
	High	>12	160	80
	Total		200	100
Problem Focused (<i>active cope, planning, instrumental support, and religious cope</i>)	Low	<=16	52	26
	High	> 16	148	74
	Total		200	100
Appraisal Focused (<i>denial, and positive reframing</i>)	Low	<= 8	68	34
	High	> 8	132	66
	Total		200	100

Table 6 indicates that 80% of the respondents reported above and only 20% of them reported below and equal to the mid point on emotion focused strategy. Secondly, 74% of them above and 26% of them below and equal to the mid score on problem focused strategy. Finally, 66% of them scored above and 34% of them scored below and equal to the mid point on the appraisal focused strategies. As far as the percentile results show, all the three general coping strategies were used by majority of the respondents above the mid score of respective strategies. Relatively, emotion focused strategy seems to be used more followed by problem focused but appraisal focused is the least used as the percentage figure shows in the above table

4.1.4 Relationship of Psychosocial Variables with Coping Strategies

To determine the association between the psychosocial variables and coping strategies correlation matrix was computed using Pearson correlation analysis. Consequently, almost all are significantly associated.

Table 7 Correlations between Coping Strategies (Both Specific and General) and Psychosocial Variables on Prisoners

Coping Strategies	Psychosocial Variables					
	Stress	Depression	Anxiety	Self-esteem	Inter-personal problem	Loneliness
Active Cope	-.583(**)	-.525(**)	-.417(**)	.526(**)	-.434(**)	-.497(**)
Denial	.206(**)	.207(**)	.136	-.241(**)	.145(*)	.009
Behavioral - disengagement	.597(**)	.714(**)	.619(**)	-.658(**)	.516(**)	.601(**)
Venting	.410(**)	.369(**)	.315(**)	-.362(**)	.249(**)	.211(**)
Instrumental Support	-.490(**)	-.443(**)	-.364(**)	.495(**)	-.376(**)	-.479(**)
Positive Reframing	-.441(**)	-.420(**)	-.368(**)	.467(**)	-.448(**)	-.440(**)
Planning	-.556(**)	-.508(**)	-.422(**)	.521(**)	-.518(**)	-.462(**)
Acceptance	.259(**)	.263(**)	.248(**)	-.330(**)	.198(**)	.234(**)
Religious Cope	-.245(**)	-.221(**)	-.147(*)	.334(**)	-.281(**)	-.307(**)
Emotion Focused	.580(**)	.623(**)	.547(**)	-.622(**)	.447(**)	.490(**)
Appraisal Focused	-.185(**)	-.170(*)	-.177(*)	.182(**)	-.229(**)	-.310(**)
Problem Focused	-.567(**)	-.513(**)	-.409(**)	.568(**)	-.489(**)	-.528(**)

** Correlation is significant at the 0.01 level (2-tailed). Pearson Correlation,

* Correlation is significant at the 0.05 level (2-tailed).

Accordingly, the correlation results (in Table 7) display that stress is directly and significantly correlated with denial ($r=.206$), behavioral disengagement ($r = .597$), venting ($r = .410$), and acceptance ($r = .259$) from specific and with emotion focused ($r = .580$) from the general categories of coping (at $p< 0.01$). In contrast, stress is negatively and significantly correlated with active coping ($r = -.583$), instrumental support ($r = -.490$), planning ($-.556$), positive reframing ($r = -.441$), and religious coping ($r = -.245$) from specific as well as problem focused ($r = -.567$) and appraisal focused ($r = -.185$) from the general categories significantly at $p<0.01$ in all pairs.

Table 7 shows also that depression is directly and significantly correlated with denial ($r =.207$), behavioral disengagement ($r = .714$), venting ($r = .369$), and acceptance ($r = .263$) from specific and with emotion focused ($r = .623$) from the general categories of coping (at $p< 0.01$). In

contrast, depression is negatively and significantly correlated with active coping ($r = -.525$), instrumental support ($r = -.443$), planning ($r = -.508$), positive reframing ($r = -.420$), and religious coping ($r = -.221$) from specific as well as problem focused ($r = -.513$) and appraisal focused ($r = -.170$) from the general categories at $p < 0.01$ with all pairs except with appraisal focused (i.e., at $p < 0.05$).

In the same Table, the anxiety is significantly and positively correlated with behavioral disengagement ($r = .619$), venting ($r = .315$), acceptance ($r = .248$), and emotion focused ($r = .547$) but not with denial. However, it is negatively correlated with active coping ($r = -.417$), instrumental support ($r = -.364$), planning ($r = -.422$), positive reframing ($r = -.368$), religious coping ($r = -.147$), and problem focused ($r = -.409$) significantly at $p < 0.01$ and with appraisal focused ($r = -.177$) significantly at $p < 0.05$.

Regarding self-esteem, it is positively and significantly (at $p < 0.01$ for all pairs) correlated with active coping ($r = .526$), instrumental support ($r = .495$), planning ($r = .521$), positive reframing ($r = .467$), religious coping ($r = .334$), problem focused ($r = .568$) and appraisal focused ($r = .182$). In contrast, self-esteem is negatively and significantly correlated with behavioral disengagement ($r = -.658$), venting ($r = -.362$), acceptance ($r = -.330$), denial ($r = -.241$) and emotion focused copings ($r = -.622$) (see Table 7).

Concerning loneliness and interpersonal problems, both of them are significantly and positively (at $p < 0.01$) correlated with behavioral disengagement, venting, acceptance, and emotion focused; but negatively with active coping, instrumental support, planning, positive reframing, religious coping, problem focused and appraisal focused. However, they differ on their association with

denial that interpersonal problem has significant and direct correlation with it at $p < 0.05$ but loneliness has no significant correlation with denial (see Table 7).

4.1.5 Differences on Psychosocial Variables and Coping Strategies Due to the Effect of Some Demographic Variables

4.1.5.1 The Psychosocial Variables and Demographic Variables

The psychosocial experiences of prisoners were examined whether they were gender dependent. To examine the variation on the level of problems depend on gender One-way ANOVA was utilized.

Table 8 ANOVA Summary on the Differences of Psychosocial Variables among Males and Females

Variables	df	F	Sig.
Stress	1,198	1.227	.269
Depression	1,198	1.223	.270
Anxiety	1,198	1.669	.198
Self-Esteem	1,198	.605	.438
Interpersonal Problem	1,198	3.875	.050
Loneliness	1,198	.114	.736

The ANOVA summary (in Table 8) proves that gender variation has no effect on the experience of stress, depression, anxiety, loneliness, and on the level of self esteem. Nevertheless, the result of ANOVA confirm that there was statistically significant difference, $F(1,198) = 3.875$, $p = .05$, between males and females on the level of interpersonal problems.

4.1.5.2 Psychosocial Variables and Length of Sentence (in Years)

To find out whether the levels psychosocial experiences of prisoners were differed by the variation of time length of sentence, one-way ANOVA had been calculated (see Table 9, next

page). This finding authenticated that variation of length of sentence made the psychosocial problems significantly vary including stress $F(34,165) = 2.83, p < .001$, depression $F(34,165) = 2.938, p = .000$, anxiety $F(34,165) = 1.527, p < .05$, self esteem $F(34,165) = 2.297, p = .000$, loneliness $F(34,165) = 1.964, p = .003$, but not interpersonal problem $F(34,165) = 1.218, p = 0.209$ i.e. > 0.05 . With the exception of interpersonal problems length of sentence did have significant effect to vary the levels of psychosocial experiences of prisoners. Although, there was significant difference on the level of interpersonal problem on gender, length of sentence did not have effect on it.

Table 9 One-way ANOVA Summary of the Dependence of Psychosocial Variables on the Length of Sentence and Their Correlations.

Psychosocial Variables	ANOVA Result			Correlation Result (r)
	df	F	Sig.	With Length of sentence
Stress	34, 165	2.083	.001	.419(**)
depression	34, 165	2.938	.000	.491(**)
Anxiety	34, 165	1.527	.043	.361(**)
Self Esteem	34, 165	2.297	.000	-.448(**)
Interpersonal Problem	34, 165	1.218	.209	.247(**)
Loneliness	34, 165	1.964	.003	.285(**)

The results above In Table 9 serve us to argue that the higher the time length of sentence of a prisoner disposed to wait in jail, the more she or he was going to experience disturbances of anxiety, depression, stress, loneliness, and low self esteem. The correlation of length of sentence is confirming the degree and direction of association of length of sentence with psychosocial variables. Stress, depression, anxiety, interpersonal problems, and loneliness are related significantly and positively but self-esteem significantly and negatively with length of sentence. If both the ANOVA and correlation results (in Table 9) are considered together, length

of sentence aggravates the psychosocial problems including stress, depression, anxiety, and loneliness but diminishes self esteem of prisoners.

4.1.5.3 Differences of Coping Strategies Based on Sex, Length of Time Passed in the Prison, and Rate of Family Visit.

In order to prove the effects of gender and length of time waiting on the three general categories of coping, independent sample t-test and one way analysis of variance were conducted respectively.

Table 10 Summary Data of t-Test for Difference between Males (X1) and Females (X2) on Their Manners of Using Coping Strategies

Specific Coping Strategies	t	df	Sig. (2-tailed)	Mean Difference)
Active cope	1.388	198	.167	.42360
Denial	.332	198	.740	.09356
Behavior Disengagement	-.771	198	.442	-.28898
Venting	.211	198	.833	.06497
Instrumental Support	-.536	198	.593	-.18347
Positive Reframing	1.085	198	.279	.34511
Planning	2.239	198	.026	.79470
Acceptance	2.520	198	.013	.80665
Religious Cope	-.016	198	.988	-.00520
Emotion Focused	.779	198	.437	.58264
Appraisal Focused	.988	198	.325	.43867
Problem Focused	.931	198	.353	1.02963

As we can see from Table 10 above, sex had no significant power to bring differences on the manner of using general categories of coping on prisoners. The t-test results indicate emotion focused ($t = 0.779$), problem focused ($t=0.931$), and appraisal focused ($t= 0.988$) coping mechanisms were not significantly differed by gender. In other words, there was no statistically significant difference between male and female on emotion focused, problem focused, and appraisal focused coping strategies.

Table 10 also indicates that from the specific coping strategies, only acceptance ($t = 2.520$, $p = .013$) was significantly varied among males and females. Nevertheless, active cope, denial, behavior disengagement, venting, instrumental support, religious cope, positive reframing and planning were not differed by the effect of gender variation.

Table 11 One Way ANOVA Summary Data on the Influence of Length of Incarcerated Time in the Prison on the Level of Using Coping Strategies

Coping Strategies	<i>df</i>	<i>F</i>	Sig.
Active cope	38, 161	.931	.588
Denial	38, 161	1.176	.243
Behavior Disengagement	38, 161	1.115	.314
Venting	38, 161	1.617	.022
Instrumental Support	38, 161	1.063	.385
Positive Reframing	38, 161	1.268	.158
Planning	38, 161	1.206	.212
Acceptance	38, 161	1.517	.040
Religious Cope	38, 161	1.158	.263
Emotion Focused	38, 161	1.481	.050
Appraisal Focused	38, 161	1.104	.329
Problem Focused	38, 161	1.177	.241

As shown in Table 11, from the specific coping strategies, venting with $F(38,161) = 1.617$, $p < 0.05$ and acceptance with $F(38,161) = 1.517$, $p < 0.05$ were significantly differed due to the difference of length of time passed in the prison. Where as, the rest including active cope, denial, behavior disengagement, instrumental support, positive reframing, planning, and religious cope were the same across different incarcerated time.

Of course, from the general categories of coping the length of time prisoners lived in the prison did have significant influence to differ the emotion coping strategy, $F(38, 161) = 1.481$, $p = .05$ (see Table 11). But this factor did not have effect on the values of problem focused coping with $F(38, 161) = 0.241$ and appraisal focused coping with $F(38, 161) = 0.329$. There fore, from the

results, we can deduce that prisoners tended to vary their emotion focused coping mechanisms based on the length of time they lived with in the prison.

Table 12 ANOVA Summary Data for the Effect of Family Contact Rate on the Level of Coping Strategies

Coping Strategies	<i>df</i>	<i>F</i>	Sig.
Active cope	2, 197	4.300	.015
Denial	2, 197	.612	.543
Behavior Disengagement	2, 197	9.858	.000
Venting	2, 197	.023	.977
Instrumental Support	2, 197	5.561	.004
Positive Reframing	2, 197	5.282	.006
Planning	2, 197	6.842	.001
Acceptance	2, 197	.879	.417
Religious Cope	2, 197	5.386	.005
Emotion Focused	2, 197	2.137	.121
Appraisal Focuses	2, 197	1.435	.241
Problem Focused	2, 197	7.934	.000

Table 12 shows that the mode of using of coping strategies mostly depends on family contact rate since majority of the coping strategies vary due to reported rates of family contact. The statistical result in this table confirmed that the active coping $F(2,197)=4.300$, $p<0.05$, behavioral disengagement $F(2,197)= 9.858$, $p< 0.000$, instrumental support $F(2,197)= 5.561$, $p< 0 .005$, positive reframing $F(2,197)= 5.282$, $p<.01$, planning $F(2,197)= 6.842$, $p <0.001$, religious cope $F(2,197) = 5.386$, $p<=0.005$, and problem focused $F(2,197)=7.934$, $p<0.000$ are significantly vary depend on the rates of family contact the individual had while he/she was in prison. Table 12 also reveals that denial, venting, and acceptance from the specific; emotion focused, and appraisal focused coping from the general categories did not depend on the rate of family contact of prisoners.

Table 13 Bonferroni Post Hoc Test That Compares the Mean Differences of the Significantly Varied Copings among The Rates of Family Contact

Dependent Variable	(I) Family Contact	(J) Family Contact	Mean Difference (I-J)	Sig.
Active Cope	1.00 (not at all)	2.00	-.72787(*)	.035
		3.00	-.92431	.069
	2.00 (some times)	1.00	.72787(*)	.035
		3.00	-.19644	1.000
	3.00 (frequently)	1.00	.92431	.069
		2.00	.19644	1.000
Behavior Disengagement	1.00	2.00	.83776(*)	.045
		3.00	2.08999(*)	.000
	2.00	1.00	-.83776(*)	.045
		3.00	1.25223(*)	.028
	3.00	1.00	-2.08999(*)	.000
		2.00	-1.25223(*)	.028
Instrumental Support	1.00	2.00	-.57139	.220
		3.00	-1.46678(*)	.004
	2.00	1.00	.57139	.220
		3.00	-.89539	.134
	3.00	1.00	1.46678(*)	.004
		2.00	.89539	.134
Positive Reframing	1.00	2.00	-.69307	.060
		3.00	-1.23549(*)	.010
	2.00	1.00	.69307	.060
		3.00	-.54243	.573
	3.00	1.00	1.23549(*)	.010
		2.00	.54243	.573
Planning	1.00	2.00	-1.07632(*)	.004
		3.00	-1.32506(*)	.015
	2.00	1.00	1.07632(*)	.004
		3.00	-.24874	1.000
	3.00	1.00	1.32506(*)	.015
		2.00	.24874	1.000
Religious Cope	1.00	2.00	-.84859(*)	.019
		3.00	-1.16358(*)	.024
	2.00	1.00	.84859(*)	.019
		3.00	-.31499	1.000
	3.00	1.00	1.16358(*)	.024
		2.00	.31499	1.000
Problem Focused	1.00	2.00	-3.22417(*)	.005
		3.00	-4.87973(*)	.002
	2.00	1.00	3.22417(*)	.005
		3.00	-1.65556	.733
	3.00	1.00	4.87973(*)	.002
		2.00	1.65556	.733

* The mean difference is significant at the .05 level.

As shown in Table 13 (page 54), there is significant negative mean difference only between individuals who respond 'no' and some times family contact on their usage of active coping with $p < .05$ significant level. The significant variation result found in Table 12 (page 53) come due to only the grater value of active coping of individual with little family contact than individuals with no family contact.

Table 13 also indicates that the mean differences on behavioral disengagement are significantly varied with all the three pairs of the rates with $p < .05$ alpha. But when the family contact increases, the manner of using this coping style decreases and this is contrasted to the rest coping styles in the same table. Concerning the variation of instrumental support and positive reframing, the Bonferroni Post Hoc Test result proved that the significantly ($p < .05$) vary due to only the mean variation between the responses of 'no' and frequent family contact. The last three coping strategies namely: planning, religious cope, and problem-focused significantly ($p < .05$) differed in their mean between no and some time contact rates and between no and frequent contact rates (see Table 13). Surprisingly, except behavioral disengagement coping all these coping strategies are problem focused coping categories and they are more likely and positively affected by family contact rate.

4.2 Discussion

The discussion centers on exploring the relative severity of psychosocial problems, relationships among them and to coping strategies, relative levels of coping strategies, group variations on the problems and copings.

4.2.1 General Severity Levels of Psychosocial Problems

Psychosocial conditions of prisoners had been found in critical condition as far as the result of this study proved concerning the severity levels of each problem. These result agreed to the findings of Fazel and Danesh (2002) and Dale and Woods (2001) which say that several prisoners have serious mental and psychosocial problems that should be understood critically.

In specific terms, the present study discovered that stress, depression, and anxiety were the predominant and very serious psychological disturbances in the prison life. As expected, these psychological distress, and stressful situations were at escalate position so that they continued to consume these targeted part of the society. In addition, the findings of this study suggested that loneliness and developing of negative self judgment or low self esteem were also reflecting reasonable problems that were rated by slightly more than half of the participants. In sum, from the results we can deduce that incarcerated individuals had significantly chronic level psychosocial disorders and/or worse psychological health status as demonstrated by acute or chronic stress, sever depression, extremely sever anxiety, moderate to poorer scores of self-esteem, and higher but not significant level of loneliness scores. This result is partially agree with the findings of many researchers (Fazel and Danesh, 2002; Forrest et al, 2000; Haney, 2001). So, it is not surprising.

However, interpersonal problem was definitely the least serious trouble, even if it cannot be ignored totally. This is due to the fact that, majorities of the participants reported that they do not have that much interpersonal problems while they were living in the prison. Hence, these persons tended to support, communicate, and understand with each other; solve interpersonal conflicts, decrease aggressive behaviors towards inmates and authorities and the like as the result of the

present study shows. This result was contrasted to the findings of some researchers (Forrest and associates, 2000) who reported that there was poorer level of interpersonal problem-solving amongst the imprisoned persons. The result of this study reflects that prisoners may not be always problem creators rather there are possibilities of helping each other, solving interpersonal problems even though literatures do not support. Of course, this result was obtained may be due to biased responses of prisoners to socially approved behavior. Any way, further research is needed to this point.

4.2.2 Interrelationship of Psychosocial Variables (Namely Stress, Depression, Self Esteem, Anxiety, Loneliness, and Interpersonal Problem)

Results on the correlation analysis authenticate that stress depression, anxiety, loneliness, and interpersonal problem are interrelated significantly and positively with each other. These are supported by other researchers (Compas and Hammen, 1996; and Maunder and Cameron, 2007; Brown, 2008; Kellett et al., 2004). In addition, the results suggested by Brown (2008) that say prisoners who scored higher on a measure of loneliness reported higher levels of depression, hopelessness and indicators of suicidal behavior are strengthened by the results of this study.

Regarding self-esteem, it is significantly but negatively related with these five problems. Thus, individuals with low self-esteem inclined to have high depression, stress, anxiety and the like or sever social and psychological distresses. Branden (1981) argues the same by saying that persons without self esteem feel driven to fake it, to create the illusion of self-esteem-condemning themselves to chronic psychological fraud moved by the desperate sense that to face the universe without self-esteem is to stand naked, disarmed, delivered to destruction. On the other hand,

individuals with high self-esteem are likely to have low level of stress, depression, loneliness, and interpersonal problem.

From the first research question, we have got high severity levels of those problems and in the present result strongest correlation had been found among psychosocial problems. As a result, these two results proved the co-occurrence (comorbidity) of these problems so that a prisoner might have two and more than two sever problems at the same time. This result was supported by different researches (Compas and Hammen, 1996; Maunder and Cameron, 2007; Mash and Wolfe, 2003).

To illustrate further, as it can be observed on the findings, psychosocial variables were found to be associated highly and directly except with the level of self-esteem and the rest that is associated indirectly with them since high self esteem does not indicate the existence of problems. Consequently, it can be deduced that the occurrence and change of one variable can predict the phenomena of the other problems too on the prisoners' psychological and social disturbances. These are also evidences for existence of two and more emotional-personal or social problems on one prisoner/detainee while s/he is living in the prison. In other words, if a person is stressed, she or he could experience depression, anxiety, loneliness, problems of relationship with others and negative self-judgment and the same is true with the other variables.

4.2.3 Predominance of Coping Strategies

Evidently, the chi-square and percentile analysis on coping reveal the significant variation on participants' manner of using the specific coping strategies. The foremost coping strategy of the prisoners in the study area is religious coping followed by venting, planning, acceptance, positive reframing and instrumental support. Active coping, denial and behavioral disengagement are

from the least hierarchy of the ranks and used less as compared to the others. Concerning the general coping strategies, we have got sub categories in both the most and the least used strategies. For problem focused, we have active cope from the least and religious cope from the top, for appraisal focused we have denial from the least and positive reframing from the highest, for emotion focused we have behavioral disengagement from the least and venting from the highest. Cumulatively, emotion focused seemed the most highly used followed by problem focused and the least used was appraisal focused even if all of these three types of coping mechanisms were used by majority of the respondents. Manne (2003) has supported these findings in advance

4.2.4 Relationship of Psychosocial Variables and Coping Strategies

With regard to the association of psychosocial experiences with coping skills, we have got both direct and indirect links among different pairs. Specifically, level of stress was directly correlated with denial, behavioral disengagement, venting, and acceptance from specific and with emotion focused from the general categories of coping. In contrast, it was negatively correlated with active coping, instrumental support, planning, positive reframing, and religious coping from specific as well as with problem focused and appraisal focused from the general categories significantly. Similarly, Sherman et al. (2000, cited in Manne, 2003) found that denial, behavioral disengagement, and emotional ventilation were associated with higher distress as assessed by the Profile of Mood States.

Like wise, depression had positive and significant link with denial, behavioral disengagement, venting, and acceptance copings, but it was negatively and significantly linked with active coping, instrumental support, planning, positive reframing, and religious copings. From the three

traditional categories of coping, depression was related directly and significantly with emotion focused but indirectly and significantly with problem focused and appraisal focused copings. The results in both stress and depression are in some way agree with explanation of Manne (2003), which states that coping through social support, positive appraisal, and self-controlling coping were all associated with more positive affect whereas distancing ,using cognitive and behavioral escape avoidance was associated with more emotional distress. Not far from this, Epping-Jordan et al (1999, Cited by Manne, 2003) that evaluated the association between emotion-focused disengagement with anxiety and depressive symptoms and found direct relationships. So, the present results strengthen the findings of those scholars.

In similar fashion, anxiety was significantly and positively correlated with behavioral disengagement, venting, acceptance, and emotion focused but not with denial. However, it was negatively correlated with active coping, instrumental support, planning, positive reframing, religious coping, problem focused, and appraisal focused significantly. Except denial, the rest coping styles had strong connection with the level of anxiety. Normally, all copings may not turn off disturbances. Some of them may facilitate in reverse to decrease the growth of problems. So, those coping strategies that had direct relationship are indicators or facilitators, but those had indirect relationship to the problem could serve as remedial techniques from those disturbances. The findings of Tuncay and associates (2008) have agreed with these findings except with the case of acceptance. Acceptance here is positively correlated with psychological and social problems.

However, self-esteem was significantly and positively correlated with active coping, instrumental support, planning, positive reframing, religious coping, problem focused coping and

appraisal focused coping; negatively correlated with behavioral disengagement, venting, acceptance, denial and emotion focused copings. Indeed, individuals with high self esteem are relatively health individual's interims of evaluating one self. So, they are expected to cope and take actions in order to cure one self from any kind of distress rather than playing with feelings. The direction of the correlations were not similar to the levels of stress, depression or the rest since the higher score here was not indicating the existence of the problems.

Concerning loneliness and interpersonal problems, both of them were significantly and positively correlated with behavioral disengagement, venting, acceptance, and emotion focused; but negatively and significantly correlated with active coping, instrumental support, planning, positive reframing, religious coping, problem focused and appraisal focused copings. However, they differ on the association with denial that interpersonal problem had significant direct correlation and loneliness had no significant correlation with denial.

Regarding the association of the general coping strategies to psychosocial problems, the results have shown that higher level of psychosocial disturbances are followed by higher level of emotion-focused coping and lower level of problem focused coping strategies. Respondents who reported more emotion-focused coping styles reported greater distress as compared to those who depended more on problem-focused strategies (Kausar and Powell, 1999).

4.2.5 Group Differences on Psychosocial Problems and Coping Strategies

4.2.5.1 The dependence of Psychosocial Problems on Sex and Length of Sentence

Sex and length of sentence were used to compare the mean difference of psychosocial variables. Where as, in the case of coping the general categories of coping were examined in relation to

sex, length of time lived in the prison, and rate of family contact and specific categories only based on rate family contact.

The level of interpersonal problem was found dependent on gender. There was significant difference between males and females. Females were more exposed to interpersonal problem than males. However, levels of stress, anxiety, self-esteem, anxiety and loneliness were the same for both sexes.

Length of sentence, on the other hand, had substantial effect on the levels of all the five psychosocial variables, but not on interpersonal problem. Surprisingly, variables which did not vary on gender differed on the length of sentence and the reverse was true. The present results of the analysis of variance confirmed that participants with very long sentence became highly stressed, depressed, anxious, lonely, and low on self esteem and the reverse is true. This result agrees some how with the findings of Haney (2001). So, it is not surprising.

4.2.5.2 The Dependence of Manner to Cope on Sex, Length of Incarcerated Time, Family Visit Rate

According to this study, the general categories of coping strategies seem to have no connection with gender. In all the three main categories of coping male and females do not show differences on using them. The result of the study also indicates that from the specific coping strategies, only acceptance is significantly varied between males and females. Nevertheless, active cope, denial, behavior disengagement, venting, instrumental support, religious cope, positive reframing and planning are not significantly different by the effect of sex variation.

Turning to the other group difference, from the specific coping strategies, venting and acceptance significantly differed due to the difference of length of time passed in the prison. Where as, the rest including active cope, denial, behavior disengagement, instrumental support, positive reframing, planning, and religious cope are the same across different length of incarcerated time.

Evidently, using of problem focused and appraisal focused strategies do not vary through time even though the emotion focused coping significantly vary when the time passed in prison has been taken as independent factor. This finding is agree with the idea of Lovell & Johnson (2004) as reported by saying that prisoners have problems of coping due to unsolved problems and factors in the prison.

According to the present result demonstrates that active coping, behavioral disengagement, instrumental support, positive reframing, planning, religious cope, and problem focused were significantly varied depending on the rates of family contact of the individuals while they were in prison. Further, except behavioral disengagement, the above significantly varied copings were positively affected by the rate of family visit. The dependence of problem focused and related coping on family contact can be the good evidence for the consistency of result to the idea given by Moos and Billings (1982) about problem focused coping. As these scholars say, asking for help, building relationship, seeking guidance, information and the like are the characteristics of problem focused coping. Thus, repeatedly asked individuals could have the probability to get these things and coping resources from their family. So, it is not surprising that the absence and presence of those family contacts and resources altered the manners to cope of prisoners.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1. Summary of the Findings

The purpose of this research was to investigate the nature of psychosocial problems and coping strategies of prisoners. To achieve the objective of the study, 200 samples (148 males and 52 females) were participated on the study. The appropriate scales were administered to collect data. Then, one sample t-test, independent sample t-test, correlation techniques, one way ANOVA were used to analyze the obtained data. Based on the obtained results of the study, the findings are summarized as follow.

1. The one sample t-test results assure that there were significantly high level of stress with $t = 4.866$, $p = .000$; significantly high level of depression with $t = 4.728$, $p = .000$; higher but not statistically significant level of anxiety ($t = 1.025$, $p = .306$); significantly high level of self-esteem with $t = 2.306$, $p = .022$; high but not statistically significant level of loneliness ($t = 1.872$, $p = .063$ i.e., greater than $\alpha = 0.05$); and lower but not statistically significant level of interpersonal problem ($t = -1.887$, $p = .061$ i.e., greater than $\alpha = 0.05$).
2. The severity index results in this study illustrate that majority of the participants (68.5%) scored high level of stress and only 31.5 % of them scored low level of stress, 74.5% of them were severely depressed and 18.5% of them were moderately depressed participants; majority of the respondents were scored extremely severe (55.5% of them) and severe (10% of them) anxiety level; majority of the respondents concentrated on the moderate (46.5%) level of self esteem followed by low self esteem (38%) but only 15% of them scored high on self-esteem; 52% of the respondents scored below the mid point and 48% of them scored

above the mid point on loneliness; and majority (57%) of them reported low level of interpersonal problem but only 43% of them tended to obtain more than the mid score.

3. As the Pearson correlation results confirm, all the six psychosocial variables are significantly correlated at $p < 0.01$. Specifically, stress, depression, anxiety, interpersonal problem and loneliness are positively and significantly correlated with each other but self-esteem is negatively and significantly correlated with the other five variables.
4. According to result on predominance of the specific coping styles, the mean ranks from the mostly used to the least include religious coping, venting, planning, acceptance, positive reframing, instrumental support, denial, behavioral disengagement and active coping respectively. This rank variation is supported by Friedman test chi-square: $X^2 = 95.988$, $df=8$, $N=200$, $p = 0.000$ that aggregates the significant variation on using those nine specific coping sub categories.
5. The percentile results on specific coping strategies illumine that venting (58.5%), instrumental support (54.5%), planning (56%), positive reframing (50.5%) and religious cope (63.5%) were actually reported by the majority of the participants. In the case of acceptance, 50% of the respondents inclined to report high and the other 50% of them tended to report low. But the rest three accounts for only 41% of them on denial, only 39% of the participants on behavior disengagement, and only 35% of the participants on active coping reported above the mid point. So these three are the least used specific coping strategies as long as the percentile figure indicates.
6. According to this research, the three major types of coping were used by more than half of the respondents. This is supported by 80% of the respondents reported above mid point on

emotion focused strategy, 74% of them scored above the mid score on problem focused strategy and 66% of them scored above the mid point on the appraisal focused strategies.

7. Among the variables computed using correlation matrix, both stress and depression are directly and significantly correlated with denial, behavioral disengagement, venting, and acceptance from specific and with emotion focused from the general categories of coping ($p < 0.01$); and negatively and significantly correlated with active coping, instrumental support, planning, positive reframing, and religious coping from specific as well as problem focused and appraisal focused from the general categories significantly at $p < 0.01$ in all pairs except depression and appraisal focused (significant at $P < 0.05$). Similarly, the anxiety is significantly and positively correlated with behavioral disengagement, venting, acceptance, and emotion focused but not with denial. However, it is negatively correlated with active coping, instrumental support, planning, positive reframing, religious coping, and problem focused significantly at $p < 0.01$ and with appraisal focused significantly at $p < 0.05$. Regarding self-esteem, it is positively and significantly correlated with active coping, instrumental support, planning, positive reframing, religious coping, problem focused and appraisal focused; and negatively and significantly with behavioral disengagement, venting, acceptance, denial and emotion focused copings at $p < 0.01$ for all pairs. Finally, both loneliness and interpersonal problems are positively and significantly correlated with behavioral disengagement, venting, acceptance, and emotion focused; but negatively and significantly correlated with active coping, instrumental support, planning, positive reframing, religious coping, problem focused and appraisal focused (at $p < 0.01$). However, they differ on the association with denial that interpersonal problem has significant direct correlation at $p < 0.05$ and loneliness has no significant correlation with denial.

8. Among the psychosocial variables analyzed if they vary with the effect of gender, only interpersonal problem was significantly differ depending on sex, $F(1,198) = 3.875$, $p=.50$ but the rest were not depend on gender.
9. On the other hand, the One-way ANOVA summary discloses that all the psychosocial variables except interpersonal problem significantly differed by the variation of time length of sentence for imprison, which is supported by stress $F(34,165) = 2.83$, $p<.001$, depression $F(34,165) = 2.938$, $p=.000$, anxiety $F(34,165) = 1.527$, $p<.05$, self esteem $F(34,165) = 2.297$, $p=.000$, loneliness $F(34,165) = 1.964$, $p =.003$, but not interpersonal problem $F(34,165) = 1.218$, $p= 0.209$ i.e. $p>0.05$ alpha.
10. The findings on sex variation on coping strategies prove that males and females were significantly different only on acceptance ($t =.2.520$, $p=.013$). However, the rest specific and general coping strategies are not differed by the effect of sex variation.
11. Most of the coping strategies are not depend on the variation of incarcerated time passed in the prison except venting with $F(38,161) = 1.617$, $p<0.05$ and acceptance with $F(38,161) = 1.517$, $p<0.05$ from the specific strategies and emotion focused coping with $F(38, 161) = 1.481$, $p = .05$ from the general coping categories. These three coping mechanisms are significantly differed by the variation of length of time passed with in the prison.
12. Concerning the effect of family contact rate on coping, the present study makes certain that active coping $F(2,197)=4.300$, $p<0.05$, behavioral disengagement $F(2,197)= 9.858$, $p< 0.000$, instrumental support $F(2,197)= 5.561$, $p< 0.005$, positive reframing $F(2,197)= 5.282$, $p<.01$, planning $F(2,197)= 6.842$, $P <0.001$, religious cope $F(2,197) = 5.386$, $p<=0.005$, and

problem focused $F(2,197)=7.934$, $p<0.000$ are significantly vary depend on the rates of family contact of the prisoners while they were in jail.

5.2 Conclusions

- ❖ The findings have shown that prisoners have suffered by far psychosocially as the level of severity results confirm, which implies that prison life has inclined to have high considerable level of emotional (stress, depression, and anxiety), personal and social problems.
- ❖ The finding lends support to the idea that there is high comorbidity among psychosocial variables since they are correlated significantly and then it implies that they can occur on one person at the same time.
- ❖ The predominant specific coping strategy used by prisoners in the study area was religious coping followed by venting, planning, acceptance, positive reframing and instrumental support. Concerning the general coping strategies, emotion focused seems relatively to be the most highly used coping mechanism in response to problems in the prison.
- ❖ According to the present study most of the psychosocial problems are significantly associated with all the nine specific coping strategies and three major types of coping.
- ❖ The findings of the comparative results signify that the level of interpersonal problem is significantly different among males and females; levels of stress, depression, anxiety, loneliness, and self-esteem are differed by the variation of year length of sentence. With regard to the influence of gender on coping, the result indicates that from the specific

coping strategies, only planning and acceptance are gender dependant. In addition, venting and acceptance from the specific and emotion focused from the general coping strategies are significantly differed due to the difference of length of time passed in the prison. The present result demonstrates also that active coping, behavioral disengagement, instrumental support, positive reframing, planning, religious cope, and problem focused copings vary significantly depend on the rates of family contact of the prisoner.

5.3 Recommendations

Based on the results found on the study the following recommendations are suggested.

- The psychosocial conditions of prisoners need critical concerns from the responsible bodies because the present and previous studies reveal that there are large numbers of prisoners exposed to psychological and social related problems, especially depression, anxiety and stress are very sever. So, our correction centers should do more and be more concerned to alleviate those problems in short and long run.
- Prisoners need eventually appropriate mental health, medical, social, and counseling treatments in order to tackle the bio-psycho-social dimensions of problems that are faced due to the misery prison life. The evidence found here assure the existence of very sever as well as combined psychological as well as social related disturbances with considerable amount. It is clarified comprehensively that a problem by it self could have physiological, psychological and social symptoms, effects and defects on a person. As a result, prisoners should be treated medically or clinically, socially and by the help of psycho-education.

- To provide effective psycho-educational care and support (like cognitive therapy, psycho drama, and behavioral therapeutic techniques), highly trained psychotherapists and/or counselors should be recruited to bring substantial mental health on the prison setting.
- A facility with a multidisciplinary care and supervision team is needed to accommodate these prisoners into appropriate community placements, if possible. The team may include social workers, medical professionals, psychologists, educators, career planners and trainers, and fund raisers and administrative officers and then they should work together to this end.
- Immediate as well as ultimate intervention plans and assessments should be made for appropriate implementations of correction.
- Trainings should be given to develop best coping mechanisms among prisoners. For example, problem solving skills, planning skills, emotion regulation mechanisms, relaxation techniques, appraisal techniques or cognitive means of controlling stressful conditions, communication skills for asking help and the like can be given to them in the form of training to adjust themselves to the situation.
- Further research should be done on the whole situation of the prisoners or detainees to have clear directions for the intervention and prevention activities.

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Appendices

Appendix A

Instruments (English Version)

**ADDIS ABABA UNIVERSITY
COLLEGE OF EDUCATION
DEPARTMENT OF PSYCHOLOGY
GRADUATE STUDIES**

Questionnaires to be Filled by Prisoners

Dear Participants:

These questionnaires are prepared in order to measure nature of the psychological and social related problems of prisoners well as the coping strategies that are used in response to the problems within the prison. The data which is going to be found from these instruments will be very vital to investigate the psychosocial problems of prisoners and their skills to cope stresses and distresses in prison so that it is possible to recommend different solutions to responsible bodies. The primary objective of collecting your personal data is only for study purpose to the partial fulfillment of My MA graduate program in counseling and thus I need to assure you that your personal data are going to be kept secrete and will be used ethically to this purpose only.

There are seven scales with alternative responses. So, after reading each items give your responses how much the item agree to your feeling and thinking based on the alternatives given by circling the number or by giving tick (✓) on the box in front of each item. I hope you will seriously consider assisting a fellow student by completing the questionnaire and I would greatly appreciate your participation.

Thank you!

Appendix A1

DEMOGRAPHIC ITEMS

1. Sex _____
2. Age _____
3. Educational level _____
4. Marital Status A. Single _____ B. Married _____ C. Divorced _____
5. Do you have children? Yes ____ No ____ If yes how many _____
6. What is the crime you committed that makes you imprisoned?

7. How much year of sentence you have been disposed to be in jail? _____
8. Length of time you have waited in jail _____ and after what time you will be released from prison? _____
9. How do you rate your economical level or financial power?
A. Lower _____ B. Medium _____ C. Higher _____
10. Your residence A. Urban B. Rural
11. How much your family visited you?
A. Frequently – 3 B, Some times – 2 C. Not at all - 1

Appendix A2

I. Perceived Stress Scale (PSS)

Instructions: The questions in this scale ask you about your feelings and thoughts during the last month. In each case, please indicate with a check how often you felt or thought a certain way.

Rating Scores:

0=never ___1=almost never ___2=sometimes ___3=fairly often ___4=very often

Items	never	Almost never	Some-times	fairly often	very often
1. In the last month, how often have you been upset because of something that happened unexpectedly?	0	1	2	3	4
2. In the last month, how often have you felt that you were unable to control the important things in your life?	0	1	2	3	4
3. In the last month, how often have you felt nervous and "stressed"?	0	1	2	3	4
4. In the last month, how often have you felt confident about your ability to handle your personal problems?	0	1	2	3	4
5. In the last month, how often have you felt that things were going your way?	0	1	2	3	4
6. In the last month, how often have you found that you could not cope with all the things that you had to do?	0	1	2	3	4
7. In the last month, how often have you been able to control irritations in your life?	0	1	2	3	4
8. In the last month, how often have you felt that you were on top of things?	0	1	2	3	4
9. In the last month, how often have you been angered because of things that were outside of your control?	0	1	2	3	4
10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?	0	1	2	3	4

Appendix A3

II. Beck Depression Inventory – II – Short Version

<p>Instructions: This questionnaire consists of 13 statements. Please read each statements carefully, and then rate the degree of your feeling in the past two weeks based on the numbers: 0, 1, 2, and 3;</p> <p>0 = Not At All,</p> <p>1 = Mildly but it didn't bother me much.</p> <p>2 = Moderately - it wasn't pleasant at times.</p> <p>3 = Severely – it bothered me a lot</p>				
Items	Responses			
1. I am sad all the time	0	1	2	3
2. I feel my future is hopeless and will only get worse	0	1	2	3
3. As I look back, I see a lot of failures	0	1	2	3
4. I can't get any pleasure from the things I used to enjoy	0	1	2	3
5. I feel quite guilty most of the time	0	1	2	3
6. I feel I am being punished	0	1	2	3
7. I am disappointed in myself	0	1	2	3
8. It's hard to get interested in anything	0	1	2	3
9. I have much greater difficulty in making decisions than I used to	0	1	2	3
10. I don't consider myself as worthwhile as useful as I used to	0	1	2	3
11. I don't have enough energy to do very much	0	1	2	3
12. My appetite is much less than the usual	0	1	2	3
13. I am too tired or fatigued to do a lot of the things I use to do	0	1	2	3

Appendix A4

III. Measurement of Anxiety

Anxiety Version of the DASS				
<p>Please read each statement and circle a number 0, 1, 2 or 3 that indicates how much the statement applied to you <i>over the past week</i>. There are no right or wrong answers. Do not spend too much time on any statement.</p> <p><i>The rating scale is as follows:</i></p> <p>0 Did not apply to me at all 1 Applied to me to some degree, or some of the time 2 Applied to me to a considerable degree, or a good part of time 3 Applied to me very much, or most of the time</p>				
Items	Responses			
1 I was aware of dryness of my mouth	0	1	2	3
2 I experienced breathing difficulty (eg, excessively rapid breathing, breathlessness in the absence of physical exertion)	0	1	2	3
3 I had a feeling of shakiness (eg, legs going to give way)	0	1	2	3
4 I found myself in situations that made me so anxious I was most relieved when they ended	0	1	2	3
5 I had a feeling of faintness	0	1	2	3
6 I perspired noticeably (eg, hands sweaty) in the absence of high temperatures or physical exertion	0	1	2	3
7 I felt scared without any good reason	0	1	2	3
8 I had difficulty in swallowing	0	1	2	3
9 I was aware of the action of my heart in the absence of physical exertion (eg, sense of heart rate increase, heart missing a beat).	0	1	2	3
10 I felt I was close to panic	0	1	2	3
11 I feared that I would be "thrown" by some trivial but unfamiliar task	0	1	2	3
12 I felt terrified	0	1	2	3
13 I experienced trembling (eg, in the hands)	0	1	2	3
14 I was worried about situations in which I might panic and make a fool of myself	0	1	2	3

Appendix A5

IV. ROSENBERG SELF-ESTEEM SCALE

Instructions: Please place a tick in the appropriate box to say whether you strongly agree, agree, disagree, or strongly disagree with the statements below.

Items	Strongly Agree	Agree	Disagree	Strongly Disagree
1. On the whole I am satisfied with myself				
2. At times I think I am no good at all				
3. I feel I have a number of good qualities				
4. I am able to do things as well as most other people				
5. I feel I do not have much to be proud of				
6. I certainly feel useless at times				
7. I feel that I am a person of worth at least on an equal plane with others				
8. I wish I could have more respect for myself				
9. All in all I am inclined to feel that I am a failure				
10. I take a positive attitude towards myself				