University of Alberta

Self-Esteem in Psychiatric Patients

By

Mahnaz Salsali ©

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirements for the degree of Master of Science

in

Medical Sciences - Obstetrics & Gynaecology

Edmonton, Alberta

ISBN 0-612-18319-X

University of Alberta

Library Release Form

Name of Author: Mahnaz Salsali

Title of Thesis: Self-Esteem in Psychiatric Patients

Degree: Master of Science

Year this degree Granted: 1996

Salsali

502, 11147-82 Ave.
Edmonton, Alberta
Canada T6G-0T5

UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled SELF-ESTEEM IN PSYCHIATRIC PATIENTS by MAHNAZ SALSALI in partial fulfilment of the requirements for the degree of MASTER OF SCIENCE in Medical Sciences -Obstetrics and Gynaecology .

A.J. Greenshaw (Chair)

P.H. Silverstone (Supervisor)

B.F. Mitchell (Cosupervisor)

G.B. Baker

DATED: September 30, 1996

ABSTRACT

The purpose of this study was to evaluate the prevalence of low self-esteem in different psychiatric disorders, and to determine factors affecting self-esteem of psychiatric patients. The research was a retrospective analytical study of 1190 cases referred to the Walk-In clinic at the University of Alberta Hospitals during the first 6 month of 1991. Self-esteem was measured using the Rosenberg self-esteem measurement and the Janis and Field self-esteem inventory. Demographic information and history of alcohol and drug abuse were also analyzed. Compared to normals, low self-esteem was common in most psychiatric disorders. However, patients with different psychiatric conditions had considerably different levels of self-esteem. This suggests that there are factors in the illness itself which are responsible for the effect on self-esteem. Also, we have observed that a range of psychosocial factors are related to levels of self-esteem in psychiatric patients.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABBREVIATIONS

ANOVA	Analysis of variance
ANCOVA	Analysis of covariance
F	The ratio of the variability between treatments to the variability within treatments.
M	Mean
N	Number of cases
P value	It indicates the probability that a result at least as extreme as that observed would occur by chance.
r	The Pearson product-moment correlation coefficient
SPSS	Statistical package for social sciences
SD	Standard deviation
Scale I	The Janis and Field Feelings of Social Adequacy Scale
Scale II	The Rosenberg Self-Esteem Scale
t-test	A statistical test used to draw inferences about the mean differences between two populations or between two treatment conditions.
V-codes	Individuals with conditions not attributable to a mental disorder.

CHAPTER 1

RATIONALE, OBJECTIVES AND HYPOTHESES

1.1 Rationale for the Study

It is well known that in certain psychiatric conditions low self-esteem occurs frequently. The two conditions in which this is most widely recognized are depressive disorders and eating disorders. There have also been suggestions that low self-esteem is prevalent in several other psychiatric conditions, such as alcohol and drug dependence. However, there has been little previous work on the relationship between low self-esteem and other psychiatric disorders. Also, little has been written about the factors that may influence se' teem in psychiatric patients.

1.2 Objectives

The purpose of this study is to evaluate the prevalence of low self-esteem in different psychiatric disorders, and to determine the factors affecting the self-esteem of psychiatric patients.

1.3 Research Hypotheses

1. Since increased self-esteem is an index f psychological health, we hypothesized that low self-esteem is common in psychiatric patients.

2. Whilst low self-esteem occurs in many psychiatric conditions, the level of self-esteem varies between different psychiatric disorders.

3. There is a relationship between self-esteem and a number of factors such as age, sex, income, marital status, level of education and history of alcohol and drug abuse.

1.4 Relevance and Clinical Significance

We believe self-esteem is an important component of psychological health. The cumulative evidence to date indicates that low self-esteem

frequently accompanies psychological disorders such as depression and anxiety, and it has been suggested as an etiological factor in many psychiatric conditions. Also, low self-esteem is associated with a large number of undesirable or maladaptive traits, symptoms or behaviours. In addition, low self-esteem is common among suicidal individuals. It is noteworthy to mention that suicide is the third leading cause of death in 15 to 24 year olds in the United States. On the other hand, higher self-esteem is associated with better adaptive functioning, greater personal contentment and less susceptibility to developing psychiatric disorders in the face of life events.

Thus, further understanding of the relationship between self-esteem and psychiatric disorders and the factors affecting self-esteem is important. We hope to have a better understanding of the relationship between self-esteem and psychiatric condition and factors affecting self-esteem. Since, this will eventually lead to improved care for psychiatric patients.

CHAPTER 2

REVIEW OF THE LITERATURE

Self-esteem is an important component of psychological health. The cumulative weight of evidence indicates that low self-esteem frequently accompanies psychological disorders such as depression and anxiety, and may be a causative or maintaining factor. Low self-esteem is also associated with a large number of undesirable or maladaptive traits, symptoms or behavior. In addition, low self-esteem is common among suicidal individuals. On the other hand, higher self-esteem is associated with better adaptive functioning, greater personal contentment and less susceptibility to developing psychiatric disorders in the face of life events. It has been suggested, however, that an intermediate level of self-esteem is best for mental health, and that self-esteem and psychosocial adjustment have a curvilinear relationship (Block &Thomas, 1955).

2.1 Problems with Lack of a Clear Definition of Self-Esteem

Self-esteem is an abstract term and everybody seems to have an intuitive understanding of the meaning and significance of this concept. However, this concept has been attracted a number of different definitions, each reflecting the different point of view of their writers. The fact that many different writers have used the term self-esteem gives the misleading impression that different writers are referring to the same thing, while this is not always the case. Also, this assumption hides the fact that individual theorists hold different views as to what comprises a healthy component of personality. Measures based on different definitions sometimes have poor correlations. This makes literature comparisons difficult.

2.2 Definition of Self-Esteem

Despite the huge literature that has accumulated, there is no clear consensus regarding the meaning of self-esteem. Rosenberg, who conducted the first major empirical study on the subject, defined it as the sense of personal worth, appearance, and social competence (1965). Coopersmith (1967) has drawn attention to the need for a feeling of competence and power, while Abramson et al. (1978), in their reformulation of the learned helplessness hypothesis, have pointed out how attributional style may affect self-esteem. Some researchers regarded self-esteem as a trait that plays a central determining role in an individual's social behavior, while others have shown that self-esteem is susceptible to a number of experimental manipulations (Anderson & Williams, 1985; Jones et al., 1981).

Self-esteem as an idea signifies different things to different people. In discussing abstract ideas, certain assumptions are required that are essentially untestable. Among these is the assumption that self-esteem is a composite rather than a single entity. Utilizing this assumption, probably the most appropriate definition of self-esteem is "the sense of contentment and self-acceptance that stems from a person's appraisal of his own worth, significance, attractiveness, competence, and ability to satisfy his aspirations" (Robson, 1988).

2.3 Acquisition of Self-Esteem

Self-esteem, which starts to form from childhood, seems to be affected by a variety of factors. The importance of other people's reactions in shaping self-esteem is stressed by many researchers (e.g., Mead, 1934; Beck, 1967).

White (1959 & 1960) speculated that self-esteem develops in two closely related ways; firstly, through evaluation of others that makes individuals tend to form a positive impression of themselves, and secondly through an intrinsic need to be competent when dealing with their environment.

Relationship between parents and children is the most important factor affecting the mental health and self-esteem of many children. Coopersmith (1967) discovered that the greatest antecedents of high self-esteem in childhood are: unconditional acceptance of children by their parents; clearly defined and enforced limits to behaviour; respect and latitude for individual action and interpretation within the defined limits, and high self-esteem in the parents. He also postulated that success in different areas of living is crucial for the development of high self-esteem. Success in being accepted and approved by others, success in coping effectively with one's life, and in controlling one's destiny and that of others are all important in establishing and maintaining self confidence (Coopersmith, 1967). Another factor that affects self-esteem formation is a person's outlook on their own future (Melges et al., 1971). Once a concept begins to emerge, events are interpreted in such a way as to consolidate the concept, eventually giving rise to a permanent cognitive structure.

2.4 Self-esteem Measurements

In an attempt to accurately measure self-esteem many instruments have been devised, but most are in some ways unsatisfactory. Very few instruments have been subjected to stringent testing, including discriminant validity. Even if such sophisticated analysis is undertaken, the fundamental

problem of a circular relationship between validation of measures and definition of the concept, which each requires the other, remains (Wells & Marwell, 1976). In addition, different scales can measure different aspects of self-esteem and this has led to poor correlation between scales in some studies (Bridle, 1984; Lloyd et al., 1979).

The difficulty in interpreting various studies stems largely from the quality of the measuring instruments. Some methodological artifacts that can cause response variance include: the ceiling effect in scoring (Bingham, 1983); response style variance; social differences leading to for example semantic confusion; inconsistency or carelessness in younger subjects (O'Malley & Bachman, 1983), and social-desirability effects. Furthermore, overlap of some items between self-esteem and depression scales sometimes accounts for positive correlations between self-esteem and depression (MacLachlan, 1985).

The format of scales might also introduce some biases into the study of self-esteem. The majority of measures are based on verbal self-reports. In these kinds of scales honest response to questionnaires may not occur. Summation of response biases may impair the internal consistency. In response to questions affirming a positive statements, two major response biases, social desirability and acquiescence, might act synergistically, whereas for negative items they act in opposite directions. Also, scales which require a judgement of whether each statement is "like me" or "unlike me" may be misleading, because a subject might disapprove a likeness that is ascribed a positive value by the researcher (Juhasz, 1985). Measures in which the 'real' self is contrasted with the 'ideal' self to obtain a real/ideal discrepancy score

remain controversial, some workers arguing that inherent interpretative difficulties reduce reliability to an unacceptable degree (Hoge & McCarthy, 1983).

Some investigators believe that self as experienced may differ significantly from the self as presented, as a result of lack of awareness, insight, emotional state, or because of response biases (Savin-Williams & Jaquish, 1981). Consequently, a number of non-phenomenological or abstract measures have been devised such as "Rorschach interpretation" (Spitzer, 1969). Potential advantages are that they are nonverbal, do not mould responses, avoid assumption of equivalent personal values, and are not culture bound. After reviewing available measures, however, Wylie (1974) concluded that none of the current instruments could be considered adequate.

Given the inherent difficulties of defining and measuring self-esteem, it seems reasonable to suppose that failure to find positive association is sometimes attributable to lack of instrument power (Richards, 1983), so that its role as an independent moderating variable or trait may have been underestimated.

Despite these problems, the Rosenberg rating scale has been used in a large number of studies. This is because it is reproducible, reasonably reliable, and easy to administer (Bachman & O'Malley, 1977; Hagborg, 1993; Fleming & Courtney, 1984).

2.5 Self-Esteem and Age

Theoretically it is not clear whether age changes in self-esteem should be expected. Those theorists who see self-esteem as a relatively enduring

characteristic would not expect age changes in this phenomenon. Researchers who view self-esteem as a situationally reactive phenomenon would probably expect age changes due to significant external events or other processes correlated with age.

In terms of self-esteem, the main question is whether people's self evaluations change in predictive ways with age or as a result of age correlated events and processes. Some researchers believe that the differences in the structure of self-concept and self-esteem are probably due to age-related events rather than to the aging process per se (Breytspraak, 1979).

Many different self-esteem and self-concept instruments have been used in gerontological research. The conceptualization of self-esteem underlying these instruments varies widely, as do the actual methods used. Since research instruments are often not included in published research report, or adequate information is not available on scoring procedures for a research, comparison and replication of findings is difficult. Validation data on self-esteem measures used in gerontological research are weak. Also, reliability information based on either internal consistency, split-half or test / retest analyses, is frequently missing. Sometimes reliability estimates are reported for younger age groups, and it is assumed that they are generalizable to older age groups (Breytspraak, 1979).

Some of the variables investigated as correlates or predictors of self-esteem in the elderly are type of institutionalization (Anderson, 1971), socioeconomic factors (Ward 1977), sex (Lowenthal et al., 1975; Monge, 1975),

and life stage or age (e.g. Back & Guptill, 1966; Lowenthal et al., 1975; Ward, 1977). Bloom (1961) found that the relationship between age and self-acceptance is curvilinear, with self-acceptance reaching a peak in the 40-49 age range. He, however, did not report the content of his 95 word adjective checklist, nor did he present any evidence of the instrument's validity. The results of a study on three groups, depressed in-patients, non-depressed psychiatric in-patients, and a general hospital control group, showed a significant negative correlation between age and negative 'actual self' for all subjects. The correlations for each group did not reach significance. Of these three groups the control group showed the strongest relationship between younger age and tendency to evaluate 'actual self' negatively (Axford & Jerrom, 1986). Another study, using the Folds scale, showed increasing self-confidence by increasing years. This was a marginal finding (Ingham et al., 1986).

2.6 Self-Esteem and Gender

When comparing males and females, males usually showed higher self-esteem than females (e.g. Berger, 1968; Fein et al., 1975; Feather, 1985). Bardwick (1971) theorized the sex differences do not reach significance until the onset of adolescence. This theory was confirmed by Fein et al. (1975). The sex differences obtained indicate that females' self-evaluation might stem from different sources than males' self-evaluation. Until puberty, the self-esteem of girls, as well as that of boys, derives largely from the mastery of age appropriate skills. Thereafter, girls' self-esteem does not drop but remains

competence proportionate to natural physical and cognitive development, that produces the sex differences. Girls, who reach the puberty period before boys, do not experience the increase of self-esteem, perhaps because of increasing emphasis on heterosexual affiliation. It seems self-perceived heterosexual popularity or physical attractiveness would correlate positively with girls' self-esteem (Fein et al., 1975). Interestingly, girls report a significantly more negative body image than do boys (Ostrov et al., 1989). On the other hand, boys describe themselves as having higher levels of physical attractiveness, athletic competence, and romantic appeal than do girls (King et al., 1993). This is consistent with the research of Lerner et al. (1991) documenting the stability of these gender differences in a short-term longitudinal study across the sixth grade period. Due to different perspective of self-evaluation, the self-esteem scores may be heavily influenced by the items chosen for the scale. If the scale is weighted more heavily with specific items such as competence items or items regarding body image, the sex differences might be larger.

2.7 Self-Esteem and Marital Status

Marital status as well as marital communication is important factors in self-evaluation. Marital communication style is an important factor affecting mental health of both spouses and their children. Self-esteem, as one aspect of mental health, can be affected by this factor. Parents of low self-esteem adolescents reported their perceived marital communication as less facilitative and rated their marriage as less satisfying, than did parents of adolescents with high self-esteem (Matteson, 1974).

Marital dissolution is a major stressful event. According to 'Social

Readjustment Rating Scales', divorce and separation were ranked as second and third in a hierarchy of 43 stressful life events respectively (Holmes et al., 1967). Literature reviews show that the self-esteem of separated or divorced women is lower than that of their married counterparts (Tcheng-Laroche & Prince, 1983). Divorced women also drink more than married and never married women (Johnson, 1982).

2.8 Self-Esteem and Education

Some researchers have found a relationship between self-esteem and performance, even on a simple counting task such that subjects with low self-esteem in actuality did worse on the task (League & Jackson, 1964). Low self-esteem in adolescence is tied to failure outcomes such as poor academic experiences (Weiss & Hechtman, 1986; Slomkowski et al., 1995). Moreover, it appears that the low self-esteem in adolescence is associated with lower levels of psychosocial adjustment, both in adolescence and adulthood. In contrast, Buchman and O'Malley (1977), based on their findings of a longitudinal study, concluded that self-esteem and educational attainment are correlated because both are heavily influenced by prior causal factors such as scholastic performance, academic ability, and to some extent family socioeconomic level. Furthermore, they found that higher educational attainment does not contribute directly to higher self-esteem. However, higher level of educational attainment lead to higher status jobs. Since occupational status has a direct positive impact on self-esteem, there is an indirect causal connection between educational attainment and self-esteem.

2.9 Current Employment Status, Income and Self-Esteem

Although there are many confounding variables, such as age, previous occupational status, and degree of social support, generally a significant correlation has been found between low self-esteem and unemployment (Feather, 1982). Likewise, women in higher grade employment are more likely to have higher self-esteem (Brown & Bifulco, 1990). The association between work status and women's psychological well-being is likely to be mediated by factors such as the quality of the employment and the quality of the environment (Warr & Parry, 1982: Brown & Bifulco, 1990). It is also possible that the work status index, in part, reflects some other related factors such as the woman's financial situation (Keith & Schafer, 1980). It seems that differences in self-esteem between employed and unemployed young people are due to a larger increase in self-esteem of those obtaining jobs. Nevertheless, unemployment seems to give rise to an increase in negative self-appraisal rather than a decrease in positive self-appraisal (Warr & Jackson, 1983).

2.10 Self-Esteem and Alcohol Abuse

The influence of self-concept and one aspect of it, self-esteem, on behaviour is a central focus in the models of many theorists in the field of human personality and behaviour (Coopersmith, 1969; Kiesler,1971). A person with low self-esteem can be expected to behave in ways consistent with such a self-concept, and consequently exhibit ineffective or negative behaviour. Observation of their own ineffectiveness (real or imagined) will in turn serve to maintain an individual's low self-esteem. Kaplan's self-enhancement theory (1975, 1980) postulated that reliance on alcohol is a strategy used to manage

negative feelings about the self.

Supporting this suggestion is clinical observations indicating that alcoholics have lower self-esteem compared with the non-alcoholic population (Chafetz et al., 1970; Clinebell, 1968; Sands et al., 1967). For instance, Charalampus et al. (1976) reported that alcoholics scored lower on a test of self-esteem than did non-alcoholics. Likewise, male alcoholics appear to have lower self-esteem than non-alcoholics (Allen, 1969). According to Beckman (1978) alcoholic women showed much lower self-esteem than did a normal control group. Comparison of the self-esteem of male and female alcoholics showed no significant differences between the two groups (Clarke, 1974). However Beckman (1978) reported lower self-esteem in female alcoholics compared to male alcoholics. Also, studies on this subject indicate that alcohol consumption patterns are related to self-esteem. For example, Mitic (1980) found that regular drinkers had significantly higher self-esteem than heavy drinkers, occasional drinkers, and abstainers. Self-esteem seems to decrease as the duration of the drinking problem increases. This pattern would be expected and probably be explained by the hypothesis that the longer the problem, the more time the alcoholic has to feel the social and physical stresses of his illness, and this is reflected in his lower self-opinion (Nocks & Bradley, 1969). Also, alcoholics with lower self-esteem were found to be more willing to seek treatment than those with higher self-esteem (Charalampous et al., 1976).

Rosenberg claimed that a low self-esteem is associated with various neurotic symptoms (Rosenberg, 1963). Since depressive alcoholics scored

significantly lower on the self-esteem scale than non-depressive alcoholics, lower levels of self-esteem in alcoholics might be a function of secondary depression (Vrasti et al., 1988).

The literature on the effects of treatment on alcoholics' self-esteem is inconsistent. For example, although the majority of studies confirm the widely held expectation that self-esteem will improve with alcoholism treatment (Carmichael et al., 1977; Cooper, 1983; Felde, 1973; Gross, 1971; O'Leary et al.,1978; Rollnick & Heather, 1980; Rooney et al., 1984), some studies have found a decrease in alcoholics' self-esteem after entering treatment (White & Gaier, 1965; White & Porter, 1966). This inconsistency might be related to the types of applied treatments. In treatments that involve positive feelings being improved as well as addressing the alcoholism, improvement of self-esteem is expected. However, when alcoholism treatment was not carried out with additional work to improve self-esteem, alcoholics may lose the only strategy they know as to how to manage negative feelings about themselves.

2.11 Self-Esteem and Drug Abuse

The literature indicates at least some aspects of self-esteem are related to drug use (Allendorf et al., 1985; Botvin et al., 1986). Perez (1980) found that certain self-concept factors were significant predictors for the use of marijuana, inhalants and phencyclidine among Spanish-American adolescents. Also, Young et al.(1989) concluded that specific aspects of self-esteem were highly associated with several types of substance use. The data from Fisher et al. study (1991) corroborate the growing belief that health risk behaviours, such as drug abuse, tend to cluster together in certain vulnerable adolescents,

especially those with low self-esteem. Several investigators observed that low self-esteem is linked to initiation of cigarette smoking (Dielman et al., 1984; Tucker, 1985). In contrast, another study among alcoholics showed that cigarette smokers had higher self-esteem than non-smokers (Nocks & Bradley, 1969). Guglielmo et al. (1985) argued that low self-esteem and familial environment are causally linked to substance use and abuse. When self-esteem is low, it becomes a "background of pain" in a person's life, with substance abuse becoming a frequently observed maladaptive means of coping.

2.12 Self-esteem and Delinquency

Previous research reports demonstrate that adolescents who are delinquent feel inadequate in their roles and have low self-esteem compared to adolescents who fit into legitimate roles (Gold, 1970; Berman, 1976). Some investigators believe there is agreement on the nature of an individual's destructive behaviour and the beliefs and attitudes he has about himself and others. Yelsma and Yelsma (1977) observed that the types of crimes committed are an indication of the enduring beliefs the prisoners have of themselves and others. Those prisoners who were directly destructive to others or to themselves had lower self-esteem. Also, prisoners who were on work release or in psychology classes tended to have higher self-esteem. A group of researchers observed that the maximum security prisoners had the lowest self-esteem compared with other prisoners and nonprisoners. Furthermore, newly arrived prisoners had greater self-esteem than those in maximum security. The critical variable differentiating prisoners' level of self-esteem was

time spent in prison. These authors concluded that imprisonment can reduce prisoners' self-esteem score (Fichtler et al., 1973).

2.13 Self-Esteem and Psychosocial Stressors

Psychosocial and environmental factors have a great impact on self-esteem. Most researchers agree on the fact that the link between self-esteem and social factors is important, although complex, and involves reciprocal effects. Self-esteem has been related to various social factors, including social resources (Hobfoll & Leiberman, 1987), life stress (Miller et al., 1989), life events (Brown et al., 1985), and social support (Brown et al., 1986-1990a-d). Low self-esteem is also related to adverse social circumstances such as unemployment (Feather, 1982). On the other hand, positive life changes lead to more positive evaluations of self (Brown et al., 1988). Kaplan (1976) believes that adolescents' perceived devaluation of self by others in their social network predicts a worsening of negative self-evaluation. Different studies reported that negative interaction with family members, lack of close confiding relationship, and early loss of mother or early inadequate parenting were associated with negative self-evaluation (Brown et al., 1990b; Brown & Harris, 1978; Ingham et al., 1986). Although most researchers reported a correlation between life events and self-esteem, Pardoen et al. (1993) did not observe a significant correlation between severe life events and self-esteem scores in three different groups of bipolar, unipolar and control subjects.

2.14 Self-Esteem and Mood Disorders

The link between negative self appraisal and mood disorders is well known and documented (Battle, 1978; Harter, 1989; Ryan et al., 1987).

Clinicians generally agree that depression tends to be associated with low self-esteem. However, what is not clear is whether these negative self perceptions are etiological, facilitative, maintaining factors, and/or outcomes of depression.

Some researchers believe that low self-esteem arises as a consequence of depression, and neither precedes nor follows it (Lewinsohn et al., 1981). In other words, change in affect is in some sense primary, while altered self-concept is a secondary change. Depressed individuals are more likely to recall more negative self-referent adjectives, which leads to describing themselves mostly in negative terms (Beck et al., 1979; Brewin, 1988; Kuiper et al., 1983; Power, 1987). They tend to have automatic thoughts that often reflect inaccurate and negative appraisals of events they experienced (Beck, 1979). Ingham et al. (1987) found a major decrease in self-esteem with the onset of depressive illness, especially major depressive illness. It appeared that the magnitude of the drop is closely related to the intensity of the depressive or anxious mood changes. Recurrent episodes of illness leave their mark as a progressive impairment of self-confidence. When a group of depressed patients was asked to describe themselves currently and generally, they described themselves currently in largely negative items (Brewin et al., 1992). Nonetheless, in view of the methodological problems with self-measurement of self-esteem discussed previously, these data should be treated cautiously.

Some investigators see low self-esteem as one component of a depression-prone personality (Altman & Wittenborn, 1980). Cross-sectional studies have found that recovered depressives have lower self-esteem than normal controls (Altman & Wittenborn, 1980; Cofer & Wittenborn, 1980).

However, longitudinal studies which followed individuals from depression to recovery showed self-esteem returning to normal levels with remission of the depressive episode (e.g., Hamilton & Abramson, 1983). Ingham (1987) suggested that persistence of low self-esteem after recovery might be due to the continuation of the adverse social stresses which triggered the illness itself.

Butler et al. (1994) speculate that inconsistent findings reflect a problem in the conceptualization of self-esteem as a vulnerability factor. Research investigating self-esteem in depression has used a trait conceptualization almost exclusively. Subjects are typically measured on their self-esteem level and day to day fluctuations in feelings of self-worth are dismissed as measurement error. An alternative conceptualization of self-esteem, suggested by Barnet & Gotlib (1988), is self-esteem "lability". This refers to the excessive reactivity of self-esteem to daily threat and boosts. Butler et al. (1994) found that both currently depressed and previously depressed subjects showed significantly higher self-esteem lability than never-depressed controls. Self-esteem lability was found to be a better index of depression proneness than low self-esteem as a trait. Highly labile subjects may have especially high recall for negative life events because of the impact of those events on self-esteem, whereas subjects with low lability may experience the same events but be less inclined to recall or report them. Self-esteem lability was found to increase risk for depression following life stress.

An alternative view is that the altered self-concept may be primary. Brown et al. (1986) reported a clear predictive role for self-esteem, but it is unlikely that self-disparagement per se induces depression (Ingham et al.,

1987). A number of theories of depression suggest that a negative attitude towards oneself confer vulnerability (e.g., Beck, 1967; Brown & Harris, 1978). The presence of negative self-evaluation rather than the absence of positive self-evaluation is linked with vulnerability to depression. Individuals liable to depressive illness are distinguished by chronic self-disparagement which is not explained by their anxious or depressive mood. Low self-esteem was shown to act as a vulnerability factor in the sense of being associated with a doubling of the risk of depression during a one year follow-up period once a provoking crisis had occurred (Brown et al., 1990a). The onset of major depression was best predicted by an interaction between total stress experienced and low self-esteem. There was evidence that such onset involves a pre-existing low level of self-esteem on which life stress impinges, rather than life stress generating low self-esteem and then onset (Miller et al., 1988).

However, arguing against these conclusions are findings from a prospective study using a global five item measure that failed to show that self-esteem of non-depressed individuals who became clinically depressed differed from the self-esteem of those who had not become depressed (Lewinsohn et al., 1981). Nevertheless, differences in self-esteem did emerge after the depression occurred. Andrews & Brown (1993) suggested that cognitive vulnerability to depression may be studied more effectively by semi-structured interviews with investigator based rating rather than the most commonly used, namely self-rating questionnaires. This is because these semi-structured interviews tap specific areas of self-dissatisfaction in real life situations, and they are less vulnerable to mood-state effects than more global

questionnaire measures.

Some investigators see low self-esteem as intervening between social adversity and depression (Brown & Harris, 1978). Any link between self-esteem and social environment is bound to involve reciprocal effects. Also, life events play a major etiological role in depression (Finlay-Jones, 1981). The chronological relationship between social support, stressors, self-esteem and psychiatric disorders is of crucial importance for establishing causal links. Most events provoking depression occur a few weeks before onset. Furthermore, the critical importance of the mobilization of supportive resources at the time of a crisis becomes increasingly clear (Eckenrode, 1983; Eckenrode & Gore, 1981; Gore, 1985). Low self-esteem and lack of a supportive confidant have been shown to be associated with a greatly increased risk of subsequent depression once a stressor occurs (Brown et al., 1986). The combined presences of negative environmental factors, such as inadequate parenting, negative interaction with spouse, and lack of support, are all associated with an increased risk of negative self-evaluation (Brown et al., 1990b). Such early and current adversities are also related to the subsequent risk of depression (Andrews & Brown, 1988; Brown et al., 1986, Brown et al., 1990c). However, the results of another study did not support the notion that these putative vulnerability factors reduce the threshold to depressive illness by reducing self-esteem (Ingham et al., 1987). This is because the factors that were most associated with low self-esteem were not the ones that best predicted new onsets, and conversely two of those that did predict new onsets continued to do so after adjustment for self-esteem.

It was observed that characteristically depressed individuals experienced elation as a result of taking on attitudes of positive self-esteem. Likewise, characteristically elated individuals experienced depression as a result of taking on attitudes of negative self-evaluations. This highlights the role played by negative self-evaluations in the induction and experience of depression (Coleman, 1975). Also, Brown et al. (1990d) found that both positive evaluation of self and absence of negative evaluation of self measured during a chronic depressive episode were related to subsequent recovery or improvement. A causal effect is suggested since the positive self-evaluation effects were above those of environmental factors previously established to relate to recovery such as reduction of an ongoing difficulty or fresh-start event.

Brown et al. (1990c) speculated that the onset of depression is determined by the combined presence of psychological and negative environmental factors. Positive environmental factors, particularly support from a close tie, and psychological inputs from positive self-evaluation may buffer the negative factors and serve some kind of protective role. They recognised that since the onset of depression cannot always be explained by these factors, other etiological factors, including biological factors, must have a role in the onset of illness.

From the above review, it is clear that there is evidence supporting the suggestion that low self-esteem precedes depression, but then it gets much worse when patients get depressed, improving again as they get better. Nevertheless, it remains unclear to what extent low self-esteem is a trait or

state symptom in depression.

It seems that low self-esteem may be a feature in both phases of bipolar affective disorder, although in the manic phase it may not be directly expressed. Manic patients score similarly to normal people on self-esteem scales, but they have much higher social desirability and self-deception ratings. The tendency of bipolar patients to social conformity and their drive for success may partly explain their higher self-esteem compared to unipolar patients. Furthermore, bipolar patients' inferences about the causes of failure resemble those of the depressive patients. In other words, they infer that positive events are due to external factors and negative events to internal ones, suggesting the presence of a low self-worth schema. It seems bipolar patients have negative feelings of self which is not revealed on usual self-report inventories, and could be said to represent an example of defensively high self-esteem. However, it is not clear whether the process of 'recognizing feelings of low self-esteem and self reporting normal self-esteem' occurs at a conscious or unconscious level (Winters & Neale, 1985; Pardoen et al., 1993).

2.15 Self-Esteem and Anxiety Disorders

A number of previous studies have shown a significant negative correlation between anxiety and level of self-esteem, i.e., with increasing anxiety self-esteem decreases (e.g., Parsons et al., 1968; Cowan et al., 1978; Felix Gentil & Lader, 1979; Taylor & Pilar, 1992). Some researchers (Lundgren & Schwab, 1977) view anxiety as a function of individuals' self-appraisal and the evaluations of themselves that they attribute to significant others. These

and linked to the individuals' assessments of these relationships. They also speculated that discrepancies in evaluations by the individual and others may be a particularly important precipitant of anxiety. Thus, when an individual's perception of the evaluation of himself held by significant others, or "subjective public-esteem", is more negative than that individual's view of himself, then the individual is faced with pressures towards decreased self-esteem. On the other hand, when subjective public-esteem is more positive than an individual's self-esteem, the individual is likely to feel incapable of living up to others' expectations. Supporting these ideas was the results of their study showing that the level of self-esteem and absolute discrepancies between subjective public-esteem and self-esteem are important and relatively independent factors in anxiety (Lundgren & Schwab, 1977). However, another study showed that patients with anxiety disorders had the highest self-esteem compared to patients with other psychiatric disorders, including depressive disorders, psychotic disorders, personality disorders and alcohol dependence (Silverstone, 1991).

Beck et al. (1992) studied self-concept dimensions of clinically depressed and anxious outpatients. They found that outpatients with mood disorders considered their physical appearance, work efficacy, and virtues /vices to be less acceptable than those with anxiety disorders. This finding might imply that these dimensions are more highly relevant to depressed patients than they are to anxious patients. Consequently, life experiences that threaten the self-concept in these content areas may have the potential to elicit future

and their early life circumstances, are associated with the persistence of certain symptoms such as thought impairment after a psychotic episode. The result of this study suggested that the persistence of symptoms may be a part of a long-standing process that might be discerned in youth or childhood (Wittenborne et al., 1977). Another study refers to low self-esteem as one of the predisposing and precipitating factors in the aetiology of depression in schizophrenic patients (Roy, Thompson & Kennedy, 1983). Mulaik (1992) viewed low self-esteem as one of the predisposing factors for noncompliance with medication regimens in schizophrenic patients, and as one of the challenges in the care of severely and persistently mentally ill patients. She believed that the way the patients feel about themselves could influence their decision to take medications and those patients with positive self-image would be more likely to accept their illness and to comply with treatment.

CHAPTER 3

PATIENTS AND METHODS

3.1 Study Design

Different designs are used to study the various health-related issues, and each is susceptible to various forms of bias. The current study was a retrospective analytical design (cross-sectional survey). The advantages and disadvantages of this type of study are as following:

Advantages: It tests hypotheses about risk factors or prognostic factors, and the results are applicable to other individuals. Cross-sectional surveys are relatively cheap, and subjects are neither deliberately exposed to possibly harmful agents nor do they have treatments withheld from, or imposed on, them.

Disadvantages: It might be susceptible to sampling bias, selection bias, confounding bias, and measurement bias.

The goal of research is to draw valid conclusions. The validity of a study may be enhanced by using procedures which avoid bias. Systematic error can be reduced by proper sampling, study design , and data collection tools. In the current study, in order to decrease sampling bias, we selected a period of time and studied every consecutive person who came to the Walk-In clinic during this period. Thus, the study subjects are not so different from the general population of psychiatric patients or at least psychiatric patients who are referred to the Walk-In clinic. Therefore, we believe the results of this study can be generalized.

High validity and reliability of the two scales of self-esteem measurement imply a low possibility of measurement bias due to instrument error. This in turn, decreases the probability of type II errors (a type II error is

the acceptance of a null hypothesis when it is false). However, the threats of measurement bias due to the subject errors, including response style variation, semantic confusion, carelessness, and social desirability effects such as defensiveness, and need for approval, exist. To decrease the possibility of confounding bias, we were cautious about controlling the effects of confounding variables, when studying the relationship between self-esteem and various factors. In general, cross-sectional design is a weaker method of establishing causal relationship than a prospective survey or a case-control study. In other words, it may not be possible to state what is cause and what is effect. However, for the proposed objectives, the current study design (cross-sectional) is appropriate

3.2 Sample

The study sample consisted of 1190 consecutive cases referred to the Walk-In clinic of the University of Alberta Hospitals during the first six months of 1991. The sample consisted of 957 psychiatric patients, 182 cases with conditions not attributable to a mental disorder, and 51 normal people who accompanied patients and did not receive a psychiatric diagnosis.

3.2.1 Walk-In Clinic

The Walk-In clinic refers to a clinic at the University of Alberta Hospitals where patients can refer themselves or be referred through a family doctor. Each patient is seen by a therapist, who can be a psychologist, a social worker or a specialist nurse. The diagnosis is then confirmed during a subsequent interview with a psychiatrist. Based on the diagnosis, the patient might be referred to a psychiatrist or be advised to participate in individual

therapy, group therapy, family therapy, or couple therapy.

3.3 Data Collection

From each patient's file the following information was collected (Appendix 1).

1. Demographic information including age, sex, origin, marital status, religion, number of children, personal income, family income, level of education, current employment, and usual and current occupation.

2. Chief complaint

3. Patient's medical background

4. Past or present medication

5. Medical background of patient's family including medication

6. Legal problem

7. History of alcohol or drug abuse in patient or his/her family

8. In women, information regarding their menstrual cycle problems, number of pregnancies, miscarriages, and abortions.

9. The scores of two scales of self-esteem; "Janis and Field social inadequacy scale" and "Rosenberg self-esteem measurement" (Appendices 2 and 3).

10. Multiaxial evaluation report consisting of five axes;

Axis 1. Clinical syndromes or v-codes

Axis 2. Personality disorders or developmental disorders

Axis 3. Physical disorders and conditions

Axis 4. Severity of psychosocial stressors

Axis 5. Global assessment of functioning

3.4 Instruments

Two scales were used to measure self-esteem. These were the "Janis and Field Social Adequacy Scale" or "Scale I" which measures primarily feelings of social inadequacy and the "Rosenberg Self-Esteem Measurement" or "Scale II" which measures global self-esteem. The correlation coefficient between these two scales in the current study was - 0.72.

3.4.1 Janis and Field Feelings of Social Adequacy Scale (Scale I)

The questions of this scale are part of the Janis and Field personality questionnaire. The measure consists of 23 items which ask the subjects to give self-rating on three factors :

Factor 1: Anxiety in social situations

Factor 2. Self-consciousness

Factor 3. Feelings of personal worthlessness

All questions beginning with the phrases "How often do you ... ?" and "Do you ever ... ?" had the following check list of five answer categories: Very often, Fairly often, Sometimes, Once in a great while, Practically never. Most of the other questions deal with the various sources of worry and other disturbing feelings and are worded in terms of "How .. do you usually feel ... ?". For such questions, the check list was always given in the following standard form: Very, Fairly, Slightly, Not very, Not at all.

The Janis and Field Inventory split-half reliability estimate and reliability estimate based on Spearman-Brown formula respectively are 0.83 and 0.91 (Appendix 2).

3.4.2 Rosenberg Self-Esteem Scale (Scale II)

The Rosenberg Self-Esteem Scale is simple and easy to administer. It includes 10 general statements assessing the degree to which respondents are satisfied with their lives and feel good about themselves. This scale provides an established measure of global self-worth. Statements are rated on a four-point scale, ranging from "strongly disagree" to "strongly agree" which is subsequently collapsed to a dichotomy when scoring. According to its author, a high score "means that the individual lacks respect for himself, considers himself unworthy, inadequate or otherwise seriously deficient as a person". A low score indicates that individual feels himself to be "a person of worth", but not necessarily superior to others. In the original report, Rosenberg quoted a reproducibility of 0.9 and a scaleability of 0.7. The Rosenberg Self-Esteem Scale has obtained adequate evidence of internal consistency and temporal stability among young males (Bachman and O'Malley, 1977). Also, this scale has shown evidence of construct validity as a measure of global self-esteem in adolescents (Hagborg, 1993) and young adults (Fleming & Courtney, 1984). It is the most widely used scale to measure self-esteem in research studies. In previous studies the correlation with other self-esteem scales ranged from r=0.56 to r=0.83. This scale has high reliability and validity (Appendix 3).

3.5 Statistical Program Used

Initial data entry and statistical analyses were done with the Statistical Package for Social Sciences, (SPSS). Graphs and charts were plotted using Lotus Freelance Graphics.

3.6 Statistical Methods and Grouping

The two measures of self-esteem were considered as dependent variables, and all other variables, such as age, sex, income, and history of alcohol abuse were considered independent variables or factors. For each independent variable under study, according to the nature of the variable, the sample was divided into two or more groups. These groups are described in the next chapter. It was attempted to make the number of cases in different groups equal, where possible. The equality of sample sizes in different groups is an important factor in most analytical procedures. For instance, analysis of variance (ANOVA) is most accurate when used to examine experimental data with equal sample sizes. However, ANOVA is a valid test even when sample sizes are not equal, especially when the samples are relatively large and when the discrepancy between sizes is not extreme (Gravetter & Wallnau, 1988). Also, when using t-tests, for practical purposes, one need not even test the assumption of homogeneity of variance when sample sizes are equal (Glass & Hopkins, 1984).

Parametric tests were used for data analysis, because nonparametric tests are well suited for data that are measured on nominal or ordinal scales and also do not have as much statistical power as parametric tests (Gravetter & Wallnau, 1988). Since the majority of research questions involved a comparison of several groups on a particular measure, we mostly used one way analysis of variance (ANOVA) to test the null hypothesis of equality of the means of different groups. ANOVA is a powerful, robust test that allows us to test for relationships between categorical independent variables and a

continuous dependent variable. ANOVA has been shown to be fairly "robust". This means that even if the assumptions are not rigidly adhered to, the results may still be valid. The assumptions for ANOVA are the same as those for the t-test, that is, the dependent variable should be measured at the interval or ratio level, the groups should be mutually exclusive (independent of each other), the dependent variable should be normally distributed, and the groups should have equal variances (homogeneity of variance requirement) (Munro & Page, 1993). Analysis of variance procedures are reasonably robust to departures from normality. If the result of one way ANOVA showed statistically significant difference between means of groups, the Student-Newman-Keuls test for multiple comparisons was applied. Since the number of cases were not equal in the different groups, for sample size estimates, the harmonic average of pairs was used. Thus, in the presentation of results, gaps between asterisks may occur in tables whenever the number of cases in the related groups was small. The Levene test is a homogeneity of variance test that is less dependent on the assumption of normality than most tests and thus is particularly useful with ANOVA (Norusis, 1994). The Levene test was used to examine the homogeneity of variances, a main assumption in ANOVA.

Multifactorial ANOVA, analysis of covariance (ANCOVA), and Pearson correlation coefficients, were also applied in some cases. Two way ANOVA was applied to control the variances related to the second factors and to measure interaction between two factors. An interaction exists when the effect of one factor depends on the levels of the other factor (Gravetter & Wallnau, 1988). ANCOVA is an extension of ANOVA that allows us to remove additional

sources of variation from the error term, thus enhancing the power of our analysis. This test is also used to control for the effects of a third variable (covariate). ANCOVA has two more assumptions compared to ANOVA; firstly, the covariate should be measured at interval or ratio level and secondly, the covariate and dependent variable must show a linear relationship, otherwise this procedure will have little benefit. Pearson correlation coefficient is a procedure for quantifying the relationship between two or more variables. It measures the strength and indicates the direction of the relationship (Munro & Page, 1993).

3.7 Ethics Approval

Ethics approval for this project was obtained from the Ethics Review Committee at the University of Alberta Hospitals.

CHAPTER 4

RESULTS

Results

In this chapter, the results of different types of data analysis are explained. All reported probabilities are 2-tailed, unless otherwise stated. Whenever the results of one way ANOVA was statistically significant, the Student-Newman-Keuls procedure was used as post hoc test to probe which groups are significantly different.

4.1 Relationship Between Self-Esteem and Age

4.1.1 Self-Esteem and Age in Psychiatric Patients

Pearson correlation coefficients, r, were computed as an assessment of the association between age and self-esteem in psychiatric patients. It shows a significant correlation between these two variables, using either Scale I ($r=.13$, $p<.001$; $n=889$) or Scale II ($r=-.18$, $p<.001$; $n=825$). However, the absolute value of "r" is low.

The sample was grouped into seven age categories as shown in Table 4.1. Using one way ANOVA, the results show statistically significant differences between these groups, both for Scale I ($F_{6,889}=4.65$, $P=.0001$), and Scale II ($F_{6,825}=5.00$, $P<.0001$). The Student-Newman-Keuls test was used as post-hoc test to determine which groups accounted for the most statistically significant differences.

For "Social Adequacy Scale", those aged more than 60 showed statistically significantly higher self-esteem than all other groups, except those

increase in self-esteem with age was observed in patients above 18 (Table 4.1, and Figure 4.1). With Scale I an increased score reflects increased self-esteem.

When the Rosenberg self-esteem measurement was used (Scale II), those under 24 years had the lowest scores and those above 40 had the highest scores. Like Scale I, patients aged 60 and above had a statistically significant increase in self-esteem compared to all groups except those aged 51 to 59 (Table 4.1, and Figure 4.2). With Scale II a decreased score reflects increased self-esteem.

Table 4.1 Effects of Age on Self-Esteem of Psychiatric Patients

	Group	1	2	3	4	5	6	7
	Age	< 18	19-24	25-30	31-40	41-50	51-59	> 60
Scale I (n=889)	Mean	63.48	58.88	60.07	62.49	64.28	70.39	75.13
	Standard Deviation	20.45	18.59	17.38	17.44	19.78	18.39	24.05
	Number of cases	79	163	211	258	123	31	24
Scale II (n=825)	Mean	5.75	5.44	5.17	4.61	4.79	4.00	2.91
	Standard Deviation	3.21	2.90	2.76	2.79	2.83	2.69	2.78
	Number of	71	156	199	238	109	29	23

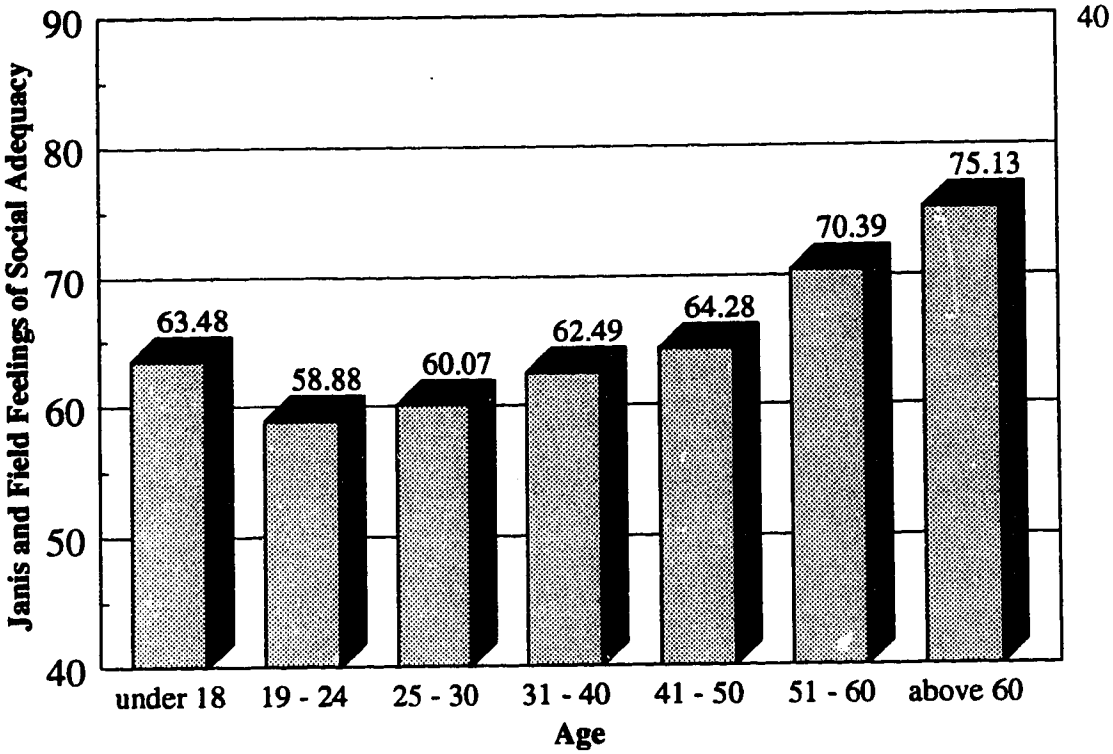
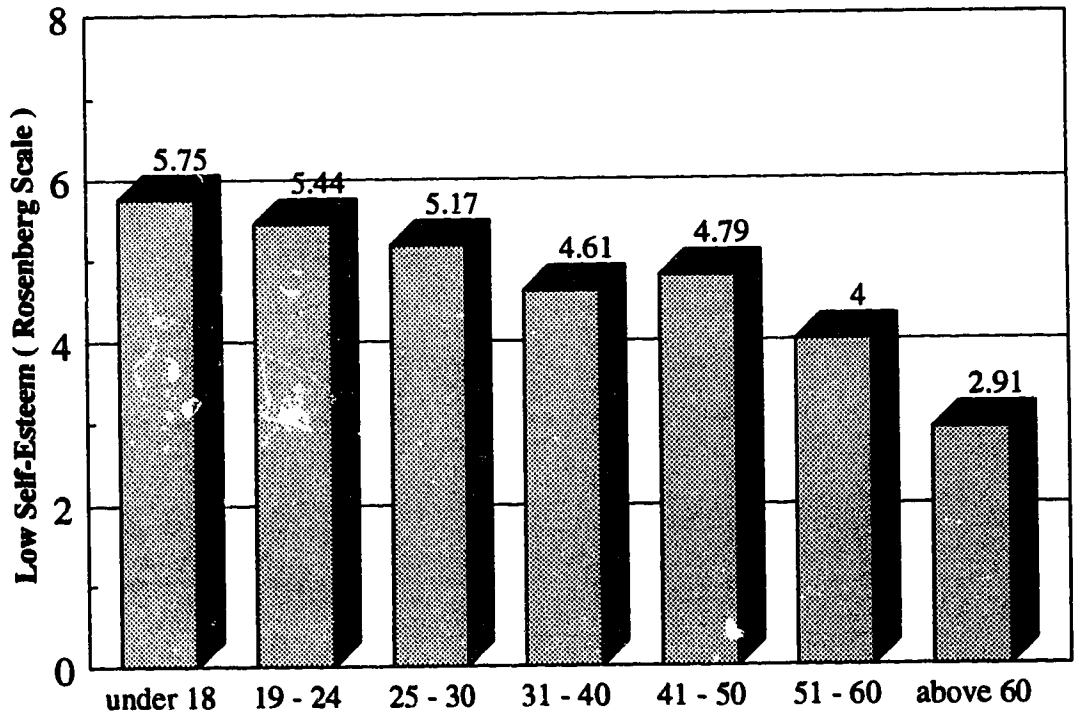


Figure 4.1 Age and Feelings of Social Adequacy in Psychiatric Patients



4.1.2 Self-Esteem and Age in Depressed Patients

Since a large number of patients were depressed patients, the sample was divided into two groups; depressed patients and non-depressed patients. The patterns of alterations of self-esteem with age were studied in these two groups separately.

Table 4.2 Effect of Age on Self-Esteem of Patients with Major Depressive Disorder

	Group	1	2	3	4	5	6	7
	Age	< 18	19-24	25-30	31-40	41-50	51-59	> 60
Scale I (n=434)	Mean	57.36	55.18	57.70	58.12	60.44	71.44	68.31
	Standard Deviation	17.95	18.31	17.48	16.87	17.64	21.01	21.31
	Number of cases	25	71	114	130	62	16	16
Scale II (n=401)	Mean	7.32	6.04	5.42	5.33	5.11	4.38	3.31
	Standard Deviation	2.61	2.78	2.72	2.71	2.87	3.12	2.47
	Number of cases	22	67	110	116	54	16	16

In depressed group, those aged between 51 to 59 had the highest feelings of

social adequacy, which were significantly different from patients aged 19 to 40 ($F_{6,434}$ =2.82; P=.01). In the depressed patients, Rosenberg self-esteem measurement scores (Scale II) showed an increase of self-esteem with the increase in age ($F_{6,401}$ =4.40; P=.0003). Patients aged more than 60 showed significantly higher self-esteem than patients aged less than 40. Furthermore, patients aged under 19 demonstrated significantly lower self-esteem than patients aged more than 25 (Table 4.2). Thus, using Scale II, but not Scale I, there was a significant relationship between age and self-esteem in the depressed patients.

4.1.3 Self-Esteem and Age in Non-Depressed Patients

In the non-depressed group, those aged more than 59 had significantly greater feelings of social adequacy than the younger patients ($F_{6,455}$=3.55; P=.002). The Rosenberg self-esteem measurement (Scale II) again showed the general pattern of an increase in self-esteem with age. Patients aged 19 to 24 had significantly lower self-esteem than patients aged 31 to 40 ($F_{6,424}$ =2.92; P=.009). That this did not reach statistical significance in older age groups may be because of the small number of cases in groups 6 and 7. Thus, a clear relationship between age and self-esteem could be seen. It is also of interest to note that non-depressed patients had higher self-esteem than depressed patients (Table 4.3).

Table 4.3 Effect of Age on Self-Esteem of Non-Depressed Patients

	Group	1	2	3	4	5	6	7
	Age	< 18	19-24	25-30	31-40	41-50	51-59	> 60
Scale I (n=455)	Mean	66.31	61.73	62.86	66.92	68.20	69.27	88.75
	Standard Deviation	21.06	18.40	16.92	16.95	21.17	15.77	24.68
	Number of cases	54	92	97	128	61	15	8
Scale II (n=424)	Mean	5.04	4.98	4.85	3.93	4.47	3.54	2.00
	Standard Deviation	3.23	2.92	2.79	2.69	2.78	2.07	3.42
	Number of cases	49	89	89	122	55	13	7

4.1.4 Self-Esteem and Age in Individuals with Conditions not Attributable to a Mental Disorder

The relationship between self-esteem and age was also studied in those cases who were referred to the Walk-In clinic because of specific problems, such as marital problems or parent-child problems. The similar relationship as patients group was observed (Table 4.4, and Figures 4.3 and 4.4). The correlation between age and self-esteem of individuals with conditions not attributable to a mental disorder was small but statistically significant ($r=0.19$, $p=0.01$). The correlation between age of this group and measure of feelings of social adequacy was also statistically significant ($r=0.26$, $p<0.001$).

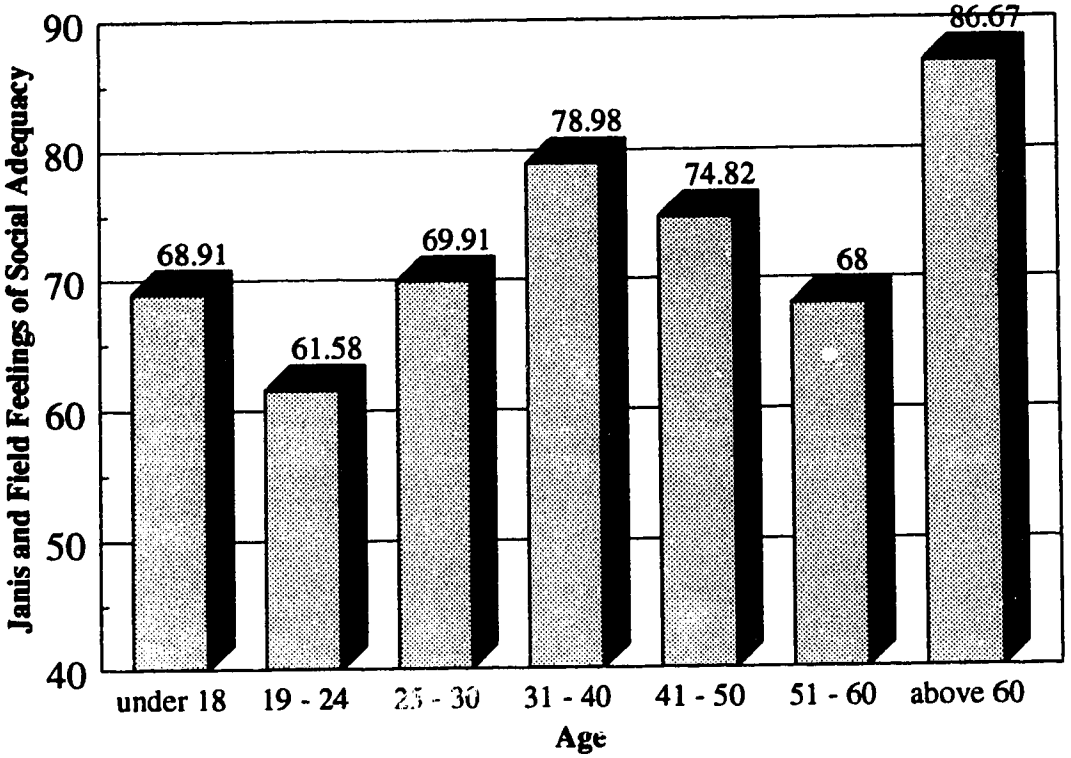


Figure 4.3 Age and Feelings of Social Adequacy in Individuals with Conditions not Attributable to a Mental Disorder

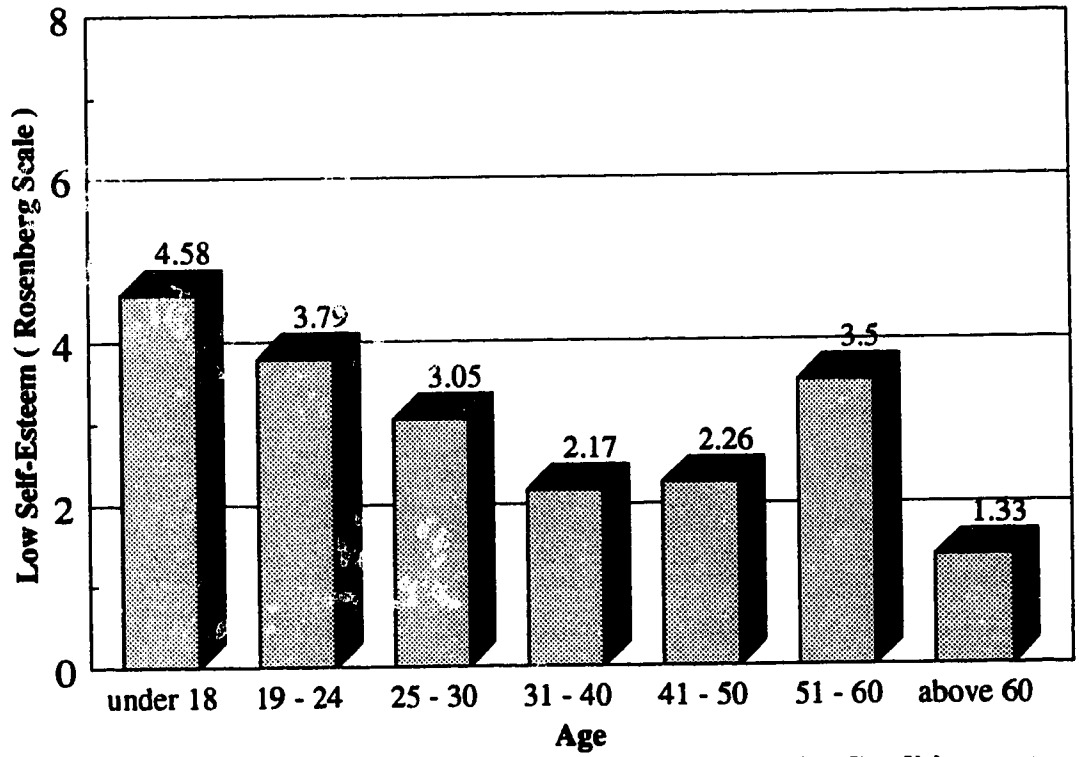


Figure 4.4 Age and Global Self-Esteem in Individuals with Conditions not Attributable to a Mental Disorder

Table 4.4 Effect of Age on Self-Esteem of Individuals with Conditions not Attributable to a Mental Disorder

	Group	1	2	3	4	5	6	7
	Age	< 18	19-24	25-30	31-40	41-50	51-59	> 60
Scale I (n=167) P=.004	Mean	68.91	61.58	69.91	78.98	74.82	68.00	86.67
	Standard Deviation	20.08	18.45	16.05	16.83	14.89	13.59	8.74
	Number of cases	33	19	23	49	33	7	3
Scale II (n=161) P=.002	Mean	4.58	3.79	3.05	2.17	2.26	3.50	1.33
	Standard Deviation	3.09	3.29	2.52	2.19	2.57	2.81	1.53
	Number of cases	33	19	21	48	31	6	3

4.2 Self-Esteem and Gender

4.2.1 Self-Esteem and Gender in Psychiatric Patients

The results examining the relationship between self-esteem and gender show that female patients had significantly lower feelings of social adequacy ($F_{1,847}$=24.91, P<.0001) and lower self-esteem ($F_{1, 785}$=6.17, P=.01) than males (Table 4.5, and Figures 4.5 and 4.6).

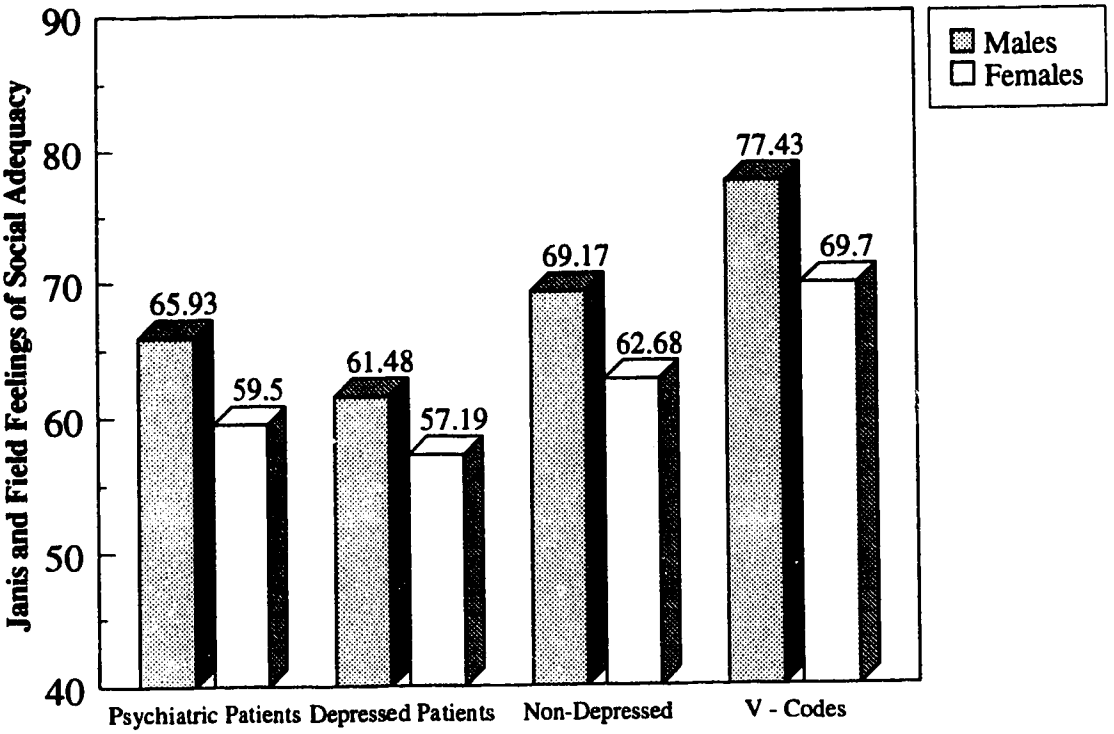


Figure 4.5 Gender and Feelings of Social Adequacy

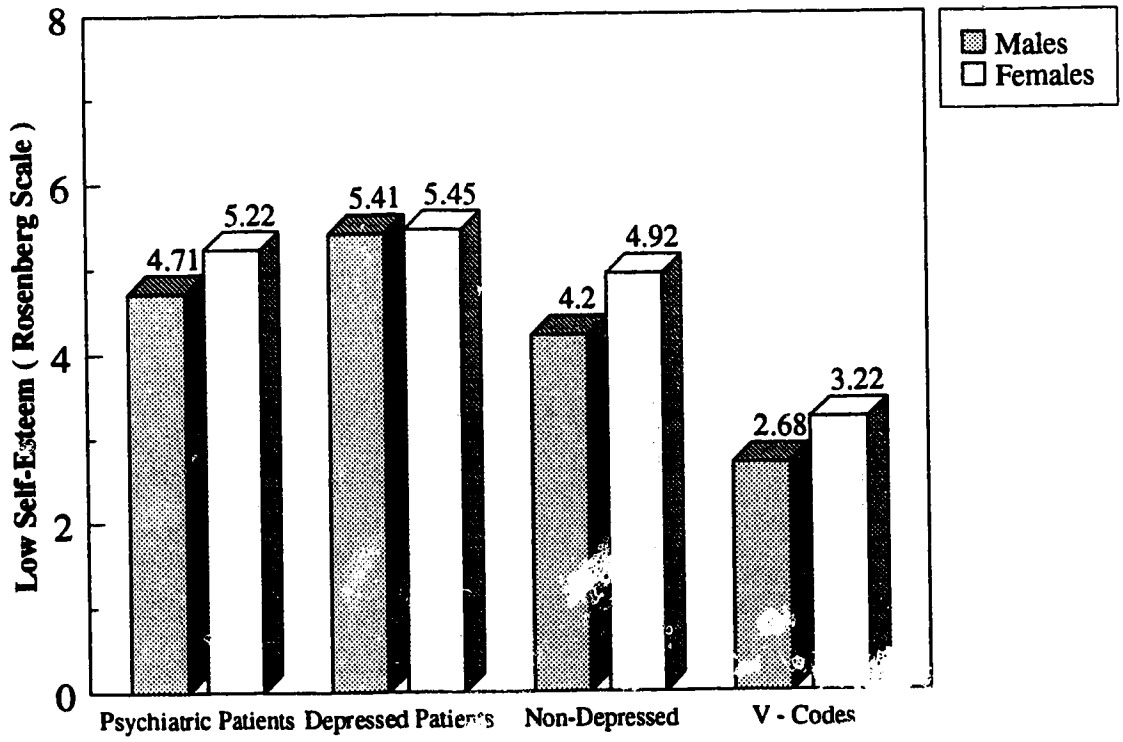


Figure 4.6 Gender and Global Self-Esteem

Table 4.5 Effect of Gender on Self Esteem of Psychiatric Patients

	Gender	Mean	Standard deviation	F- ratio	P value
Scale I (n=847)	Male (n=358)	65.93	18.23	24.91	P < 0.0001
	Female (n=283)	59.50	18.72		
Scale II (n=758)	Male (n=324)	4.71	2.81	6.17	P = 0.01
	Female (n=461)	5.22	2.91		

4.2.2 Self-Esteem and Gender in Depressed Patients

We also subgrouped patients into two groups; depressed patients and non-depressed patients. Table 4.6 give the results of data analysis for the depressed patients. The overall findings were mixed. Females showed significantly lower feelings of social adequacy than males ($F_{1,434}$=5.68, P=.018). However, the self-esteem of females was not significantly different from that of males ($F_{1,401}$=.013, P=.91).

Table 4.6 Effect of Gender on Self-Esteem of Depressed Patients

	Gender	Mean	Standard deviation	F- ratio	P value
Scale I (n=434)	Male (n=151)	61.48	17.96	5.67	.018
	Female (n=283)	57.19	17.87		
Scale II (n=401)	Male (n=136)	5.41	2.66	.013	.91
	Female (n=256)	5.45	2.90		

4.2.3 Self-Esteem and Gender in Non-Depressed Patients

Females of non-depressed group showed lower feelings of social adequacy ($F_{1,413}$ =12.55, P=.0004) and lower global self-esteem ($F_{1,384}$=6.22, P=.01) than males (Table 4.7, and Figures 4.5 and 4.6).

Table 4.7 Effect of Gender on Self-Esteem of Non-Depressed Patients

	Gender	Mean	Standard deviation	F- ratio	P value
Scale I (n=413)	Male (n=207)	69.17	17.77	12.55	.0004
	Female (n=206)	62.68	19.43		
Scale II (n=384)	Male (n=188	4.20	2.82	6.22	.013
	Female (n=196)	4.92	2.89		

The non-depressed group was subgrouped based on different psychiatric diagnosis when the sample size was large enough. Table 4.8 summarize the results of data analysis from these subgroups, including patients with psychotic disorders, dysthymia, bipolar disorder, alcohol dependence, anxiety disorders, and adjustment disorder.

The results for patients with psychotic disorders were rather surprising. Unlike patients in other groups, females tended to have higher self-esteem than males, but this difference was not statistically significant ($F_{1,19}$=.12, P=.73). Furthermore, females showed significantly higher feelings of social adequacy than males and this difference was statistically significant ($F_{1,23}$=6.03, P=.023).

In patients with dysthymia, bipolar disorder, and alcohol dependence, there were no statistically significant differences between the self-esteem or feelings of social adequacy of males and females.

On the other hand, females in the anxiety disorders group demonstrated significantly lower self-esteem ($F_{1,46}$=8.37, P=.006) and lower feelings of social adequacy ($F_{1,44}$=15.85, P=.0003) than males in this group.

In patients with adjustment disorders, females tended to have lower self-esteem which was not statistically significant ($F_{1,103}$=3.17, P=.078). Also, females showed significantly lower feelings of social adequacy than males ($F_{1,103}$=4.67, P=.033).

Table 4.8 Effect of Gender on Self-Esteem of Patients with Different Psychiatric Disorders

	Scales (Number)	Male Mean (Standard deviation)	Female Mean (Standard deviation)	F ratio	P value
Psychotic disorder	Scale I (n=12, 11)	58.91 (13.16)	78.18 (23.49)	6.03	.023 *
	Scale II (n=11, 8)	4.27 (2.33)	3.75 (4.13)	.124	.729
Dysthymia	Scale I (n=26, 39)	58.23 (15.30)	56.87 (17.83)	.101	.751
	Scale II (n=25, 31)	6.32 (2.36)	6.00 (2.37)	.254	.616
Bipolar disorder	Scale I (n=7, 8)	69.14 (19.52)	69.63 (26.22)	.001	.969
	Scale II (n=7, 8)	4.00 (2.94)	2.50 (2.98)	.958	.346
Alcohol dependence	Scale I (n=38, 18)	65.34 (17.10)	63.89 (19.68)	.080	.778
	Scale II (n=32, 18)	5.16 (2.63)	5.22 (2.88)	.007	.935
Anxiety disorder	Scale I (n=18, 26)	75.67 (16.17)	58.00 (13.19)	15.85	.0003 *
	Scale II (n=18, 28)	2.22 (2.31)	4.57 (2.90)	8.37	.006 *
Adjustment disorder	Scale I (n=46, 57)	74.96 (17.45)	67.05 (19.20)	4.68	.033 *
	Scale II (n=45, 58)	3.49 (2.80)	4.48 (2.82)	3.17	.078

* indicate significant difference

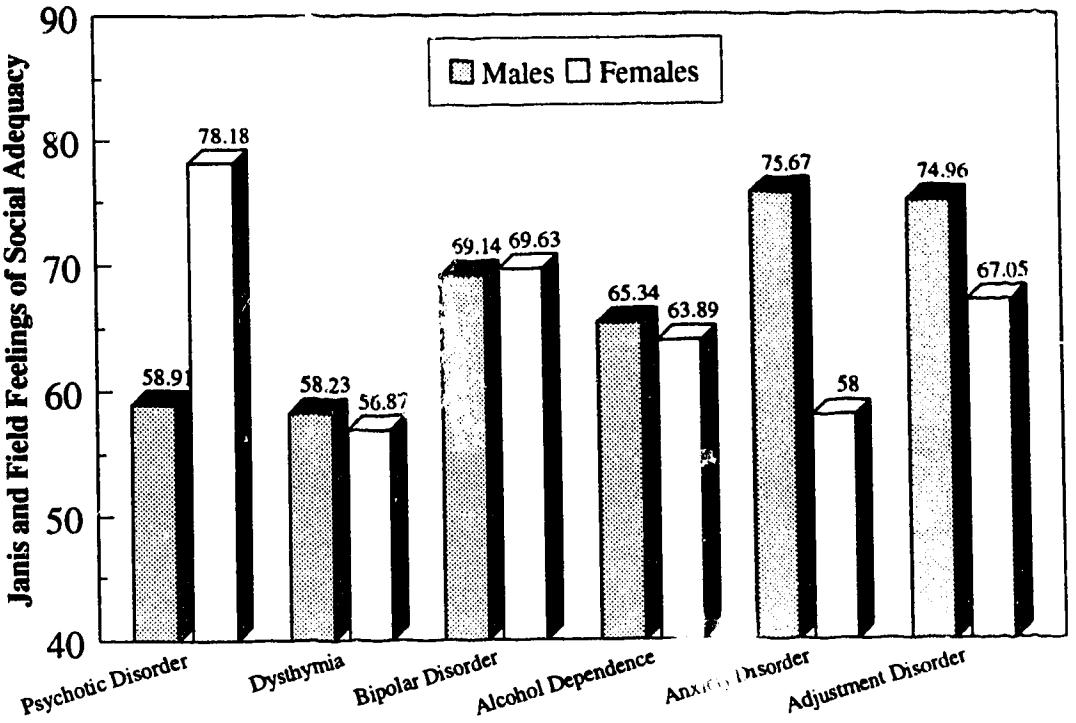


Figure 4.7 Gender and Feelings of Social Adequacy in Psychiatric Disorders

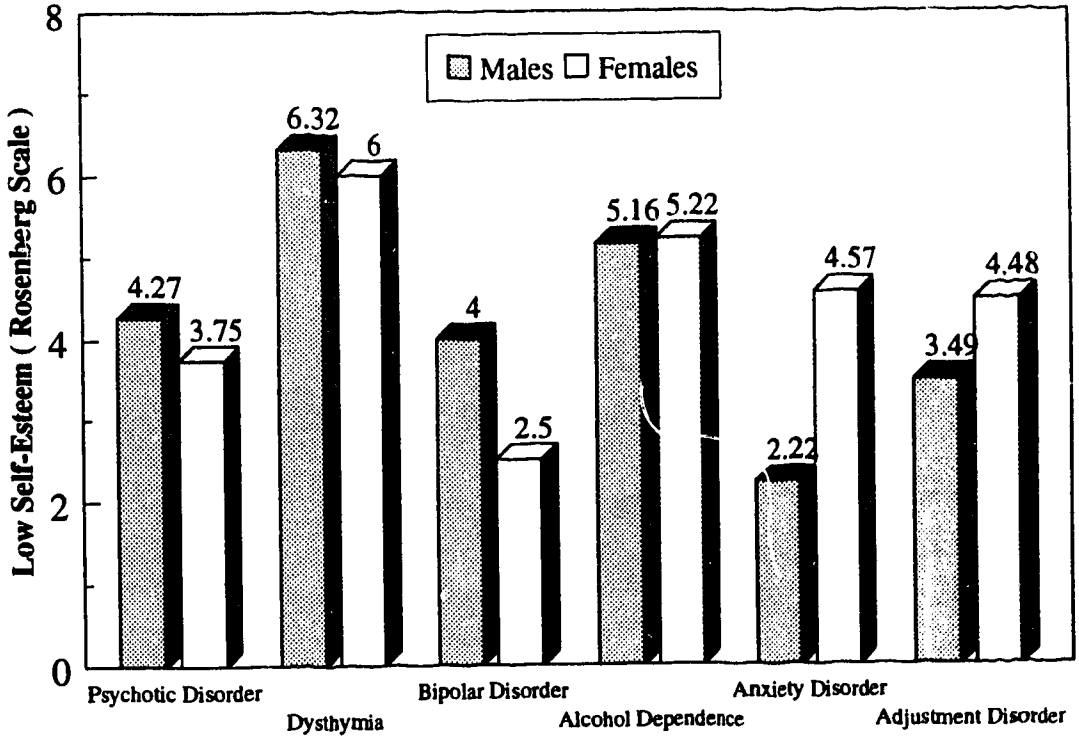


Figure 4.8 Gender and Global Self-Esteem in Psychiatric Disorders

4.2.4 Self-Esteem and Gender in Individuals with Conditions not Attributable to a Mental Disorder

Table 4.9 present the results of the effect of gender on self-evaluation of individuals with conditions not attributable to a mental disorder such as marital problem. In this group, females had significantly lower feelings of social adequacy ($F_{1,167}$=7.71, P=.006), while, their self-esteem was not significantly different from males ($F_{1,161}$=1 39, P=.241).

Table 4.9 Effect of Gender on Self-Esteem of Individuals with Conditions not Attributable to a Mental Disorder

	Gender	Mean	Standard deviation	F- ratio	P-value
Scale I (n=167)	Male (n=63)	77.43	16.30	7.71	.006
	Female (n=104)	69.70	18.08		
Scale II (n=161)	Male (n=59)	2.68	2.63	1.39	.241
	Female (n=102)	3.22	2.88		

4.3 Self-Esteem and Marital Status

4.3.1 Self-esteem and Marital Status in Psychiatric Patients

The patients' marital status was assigned to one of seven groups. Table

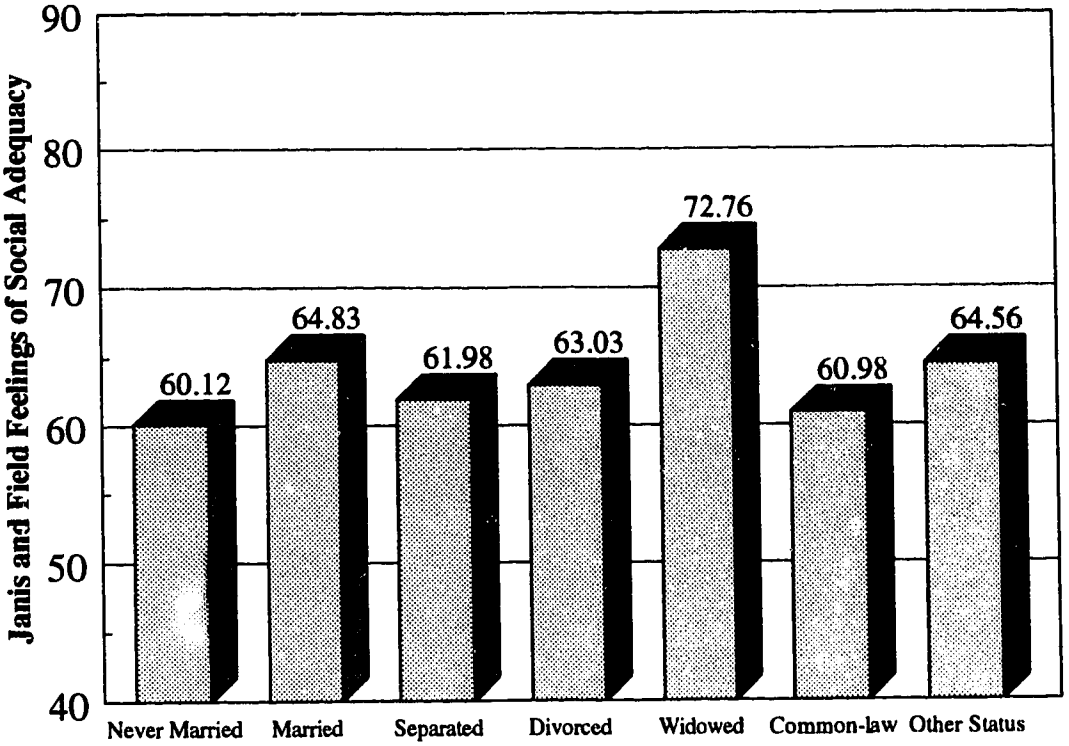
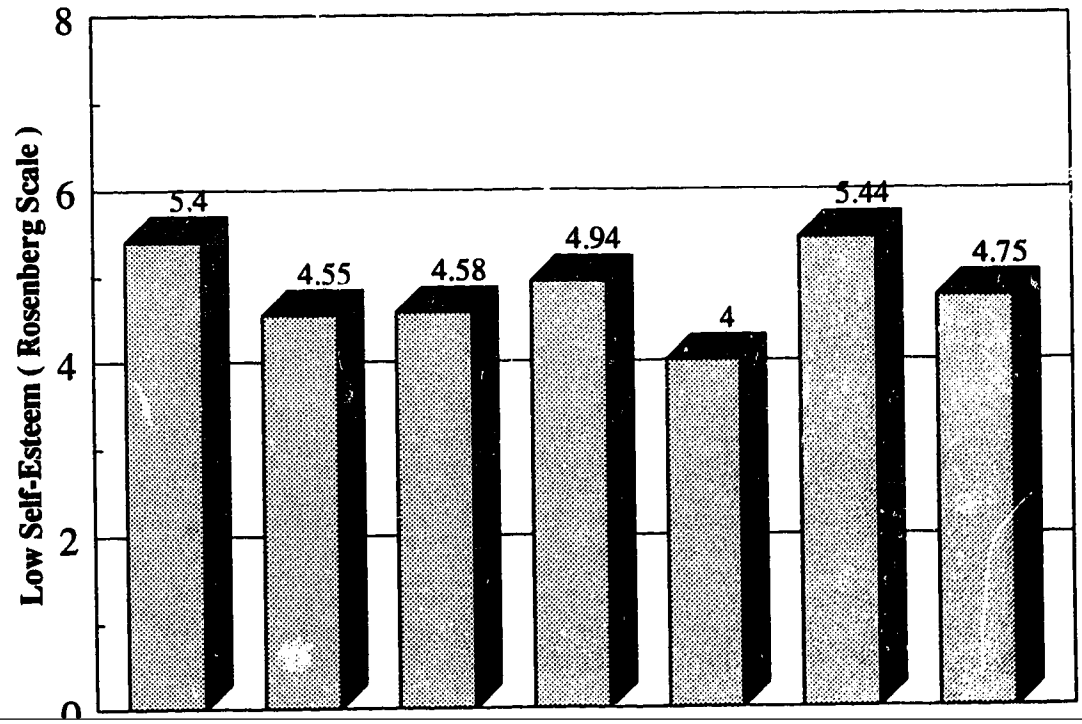


Figure 4.9 Marital Status and Feelings of Social Adequacy in Psychiatric Patients



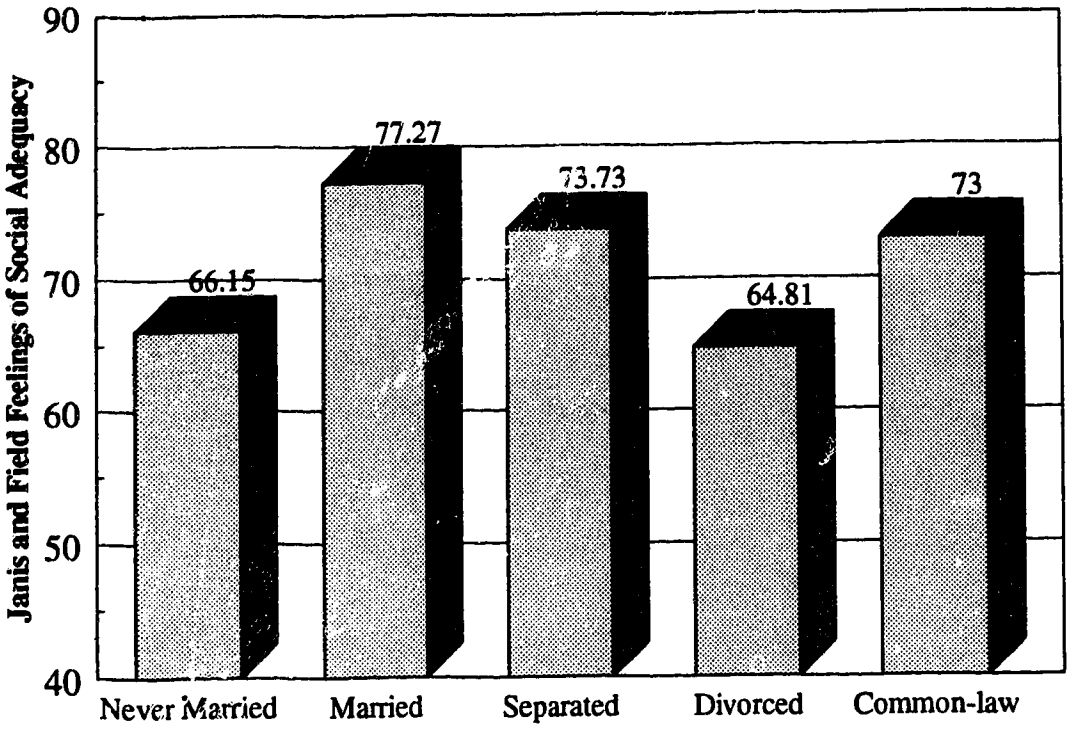


Figure 4.11 Marital Status and Feelings of Social Adequacy in Individuals with Conditions not Attributable to a Mental Disorder

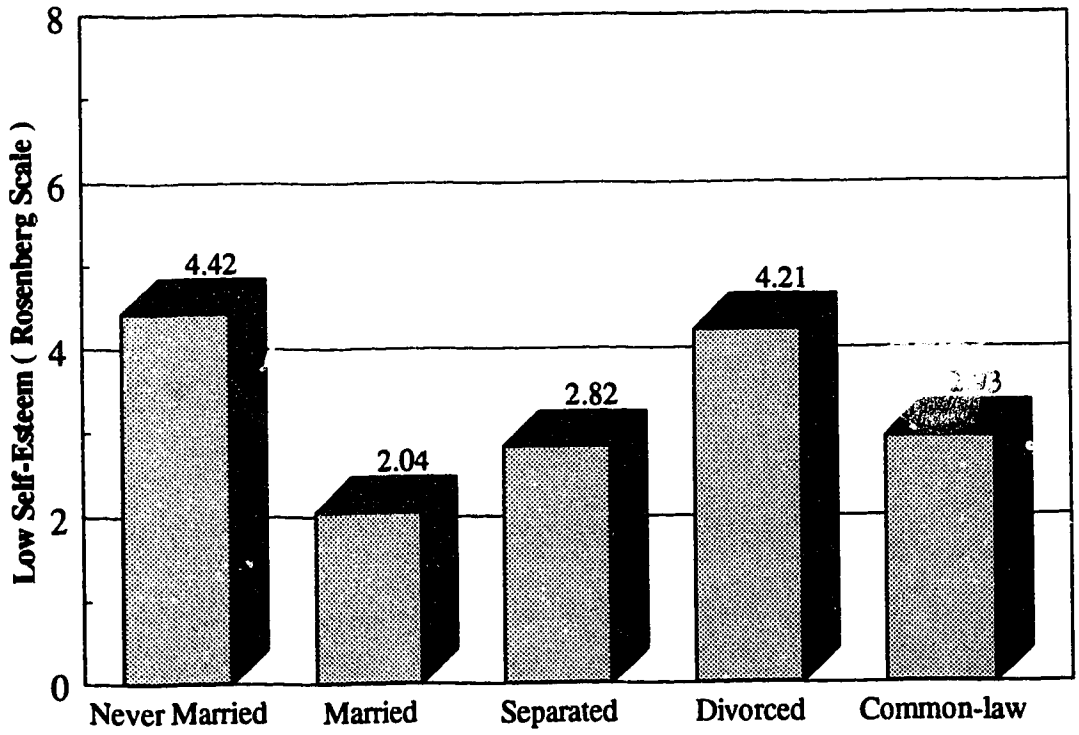


Table 4.10 Self-Esteem and Marital Status in Psychiatric Patients

	Definition	Scale I ($F_{6,838}$=2.41, P=.03)			Scale II ($F_{6,776}$=2.71, P=.01)		
		N	M	S.D	N	M	S.D
1	Never married	333	60.12	18.27	299	5.40	2.85
2	Married	203	64.83	19.44	203	4.55	2.90
3	Separated	82	61.98	19.58	77	4.58	3.13
4	Divorced	125	63.03	18.36	111	4.94	2.80
5	Widowed	17	72.76	18.57	18	4.00	2.22
6	Common-law	62	60.98	16.96	52	5.44	2.44
7	Other status	16	64.56	18.86	16	4.75	3.19

The scores for social adequacy were significantly different among groups ($F_{6,838}$=2.41, P=.03). However, further probing with the use of Student-Newman-Keuls test showed that no two groups were significantly different at the 0.05 level of significance. When using the Rosenberg self-esteem scale, the married patients showed significantly higher self-esteem than never married patients ($F_{6,776}$=2.71, P=.01). However, this difference did not remain significant, after adjusting for age with the use of ANCOVA ($F_{6,775}$=.77, P=.59).

4.3.2 Self-Esteem and Marital Status in Individuals with Conditions not Attributable to a Mental Disorder

In individuals with conditions not attributable to a mental disorder, married individuals had significantly higher feelings of social adequacy ($F_{6,165}$=.3.26, P=.0047) and global self-esteem ($F_{6,159}$=4.79, P=.0002) than never married and divorced individuals. This difference remained significant

after adjusting for age ($P_{scale\ I}$=.04, $P_{scaleII}$=.01) (Table 4.11).

Table 4.11 Marital Status and Self-Esteem in Individuals with Conditions not Attributable to a Mental Disorder

	Definition	Scale I ($F_{6,165}$ =3.26, P=.005)			Scale II ($F_{6,159}$=4.79, P=.0002)		
		N	M	S.D	N	M	S.D
1	Never married	46	66.15	19.11	45	4.42	2.30
2	Married	75	77.27	16.24	73	2.04	2.20
3	Separated	11	73.73	15.09	11	2.82	3.12
4	Divorced	16	64.81	16.98	14	4.21	2.81
5	Widowed	1	82.00		1	.00	
6	Common-law	16	73.00	16.19	15	2.93	2.46
7	Other status	1	106.0		1	.00	

4.4 Educational Status and Self-Esteem

4.4.1 Educational Status and Self-Esteem in Psychiatric Patients

The patients were divided into five groups according to their educational achievement. Table 4.12 define these groups, and describes the result of the data analysis.

The results showed statistically significant differences between those with a University degree and those who did not graduate from high school. Also those who passed college or technical school had significantly higher self-

esteem than patients who did not graduate from high school. Thus, the patients with higher education had significantly higher self-esteem than patients whose educational level was between grade ten and high school ($F_{4,763}$=5.51, P=.0002). The difference between groups on Scale II remained statistically significant even after adjusting for age with the use of ANCOVA test (P=.001). Although the same pattern was observed when using Scale I, none of the two groups was significantly different at the 0.05 level of significance ($F_{4,823}$=2.11, P=.08)

Table 4.12 Association of Educational Status and Self-Esteem in Psychiatric Patients

		Group 1 Grade <10	Group 2 Grade10-11	Group 3 High school graduate	Group 4 Technical school or community college	Group 5 University degree
Scale I $F_{4,763}$=2.11 P=.08	N	96	164	183	171	209
	M	61.34	60.65	60.75	61.99	65.39
	SD	21.53	18.15	18.12	18.51	65.39
Scale II $F_{4,763}$=5.51 P=.0002	N	81	148	175	159	200
	M	5.26	5.65	5.34	4.62	4.41
	SD	3.25	2.70	2.81	2.72	2.94

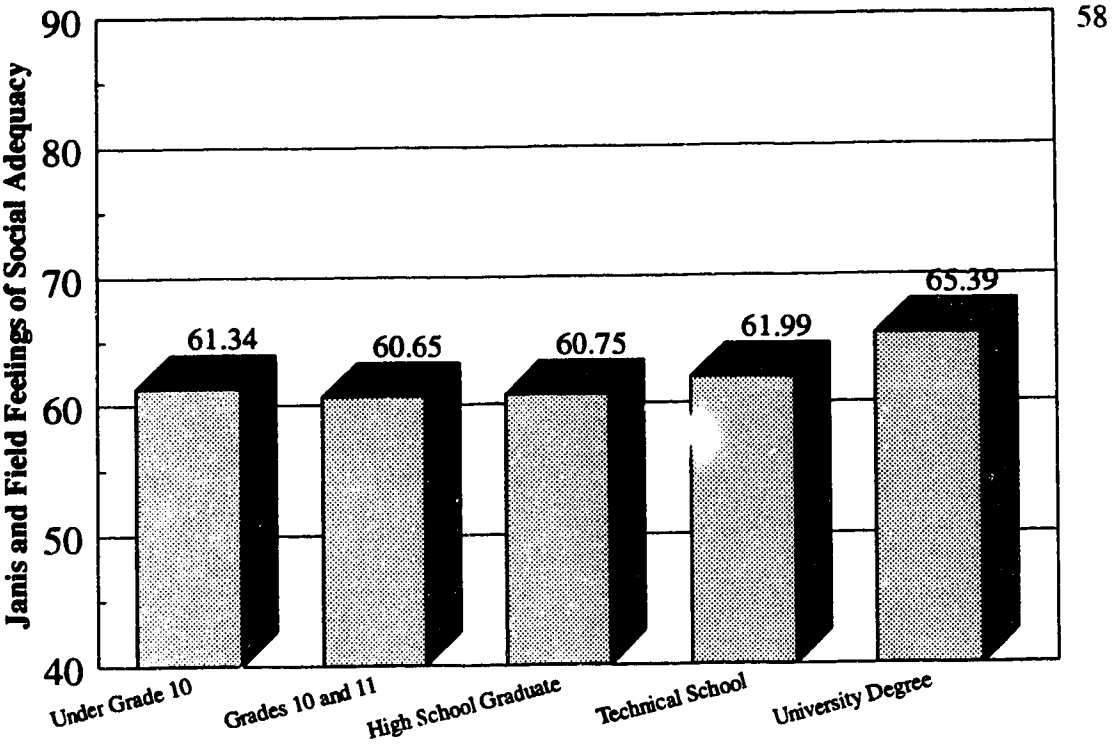


Figure 4.13 Educational Status and Feelings of Social Adequacy in Psychiatric Patients

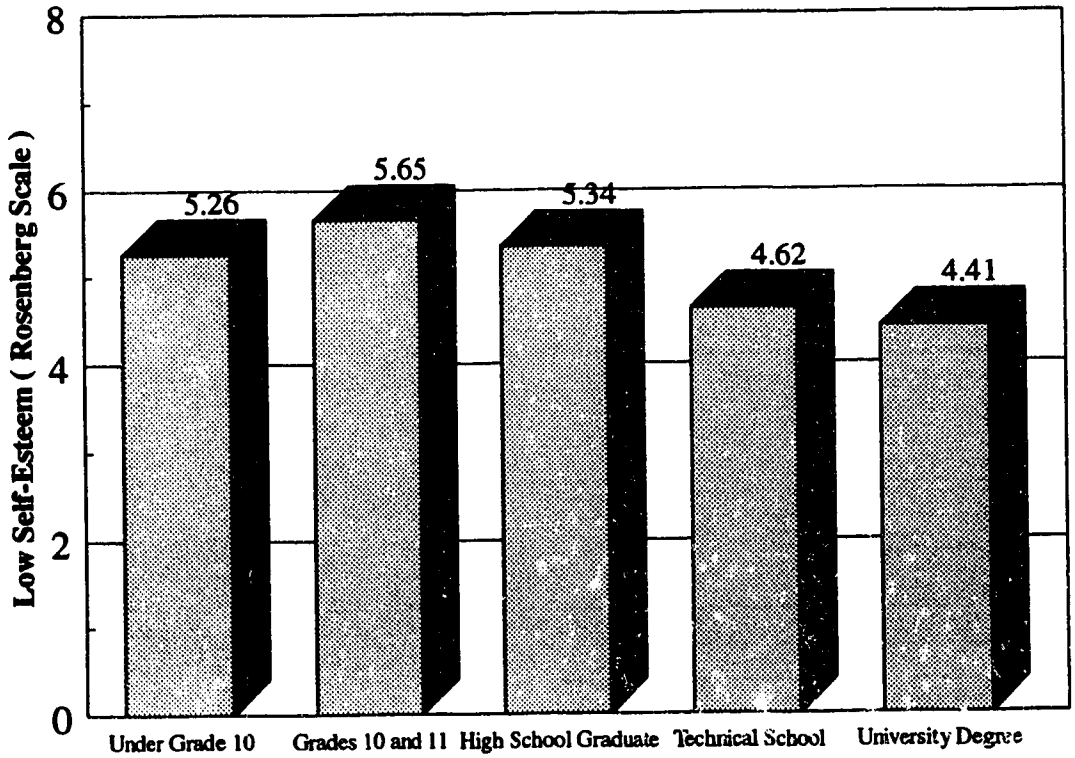


Figure 4.14 Educational Status and Global Self-Esteem in Psychiatric Patients

4.4.2 Educational Status and Self-Esteem in Depressed Patients

Similar analyses were repeated for the subgroup of patients with depression (Table 4.13). The findings indicated that depressed patients with university degrees had greater feelings of social adequacy than the other groups ($F_{4,418}$=3.58, P=.007). This difference remained significant after adjusting for age (P=.01). The global self-esteem of the depressed patients, grouped according to their educational status seems to be significantly different ($F_{4,385}$=2.76, P=.03). However, further probing by the use of Newman-Keuls test showed that no two groups were statistically significantly different at 0.05 level of significance.

Table 4.13 Educational Status and Self-Esteem in Depressed Patients

		Group 1 Grade <10	Group 2 Grade10-11	Group 3 High school graduate	Group 4 Technical school or community college	Group 5 University degree
	N	49	85	98	81	105
Scale I $F_{4,418}$=3.58 P=0.007	M	54.57	56.20	57.09	58.72	63.96
	SD	17.60	16.92	117.20	18.04	18.84
	N	41	76	96	72	100
Scale II $F_{4,384}$=2.76 P=.0278	M	6.09	5.89	5.66	4.83	4.96
	SD	3.23	2.62	2.66	2.55	3.08

4.4.3 Educational Status and Self-Esteem in Non-Depressed Patients

In subgroup of non-depressed patients, patients with university degrees had higher self-esteem than other groups and statistically significantly higher self-esteem than patients who did not graduate from high school ($F_{4,378}$=3.45, P=.009). However, no two groups were significantly different on measure of feelings of social adequacy ($F_{4,406}$=0.39, P=0.82) (Table 4.14).

Table 4.14 Educational Status and Self-Esteem in Non-Depressed Patients

		Group 1 Grade <10	Group 2 Grade10-11	Group 3 High school graduate	Group 4 Technical school or community college	Group 5 University degree
Scale I $F_{4,406}$=0.39 P=0.82	N	47	79	85	90	104
	M	68.40	65.44	64.98	64.93	66.84
	SD	23.11	18.32	18.34	18.53	18.57
Scale II $F_{4,378}$=3.45 P=.0088	N	40	72	79	87	100
	M	4.40	5.38	4.95	4.44	3.87
	SD	3.09	2.78	2.95	2.86	2.68

4.4.4 Educational Status and Self-Esteem in Individuals with Conditions not Attributable to a Mental Disorder

No two groups were significantly different on measures of global self-esteem ($F_{4,158}$=2.09, P=0.084) and feelings of social adequacy scale ($F_{4,164}$=1.77, P=0.137) (Table 4.15, and Figure 15 and 4.16).

Table 4.15 Educational Status and Self-Esteem in Individuals with Conditions not Attributable to a Mental Disorder

		Group 1 Grade <10	Group 2 Grade10-11	Group 3 High school graduate	Group 4 Technical school or community college	Group 5 University degree
	N	26	33	45	27	33
Scale I $F_{4,164}$=1.77 P=.137	M	73.12	65.94	74.00	72.52	76.97
	SD	18.95	15.72	16.24	21.10	16.79
	N	25	33	42	25	33
Scale II $F_{4,158}$=2.09 P=.084	M	2.96	4.15	2.50	2.88	2.48
	SD	2.47	3.06	2.71	2.93	2.51

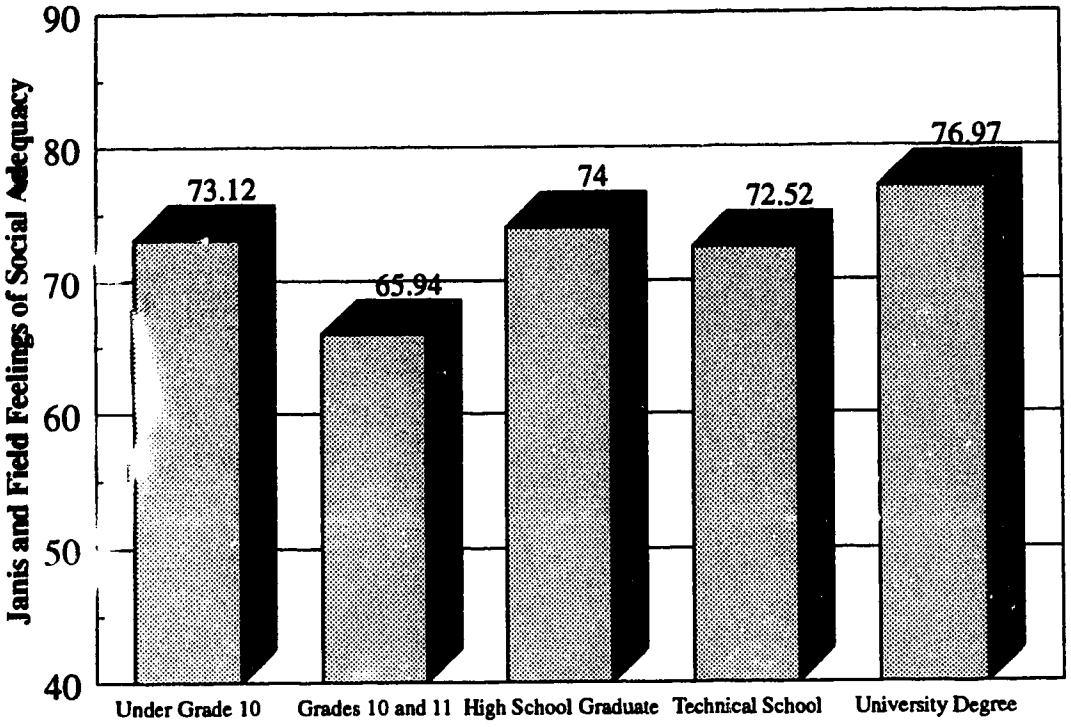


Figure 4.15 Educational Status and Feelings of Social Adequacy in Individuals with Conditions not Attributable to a Mental Disorder

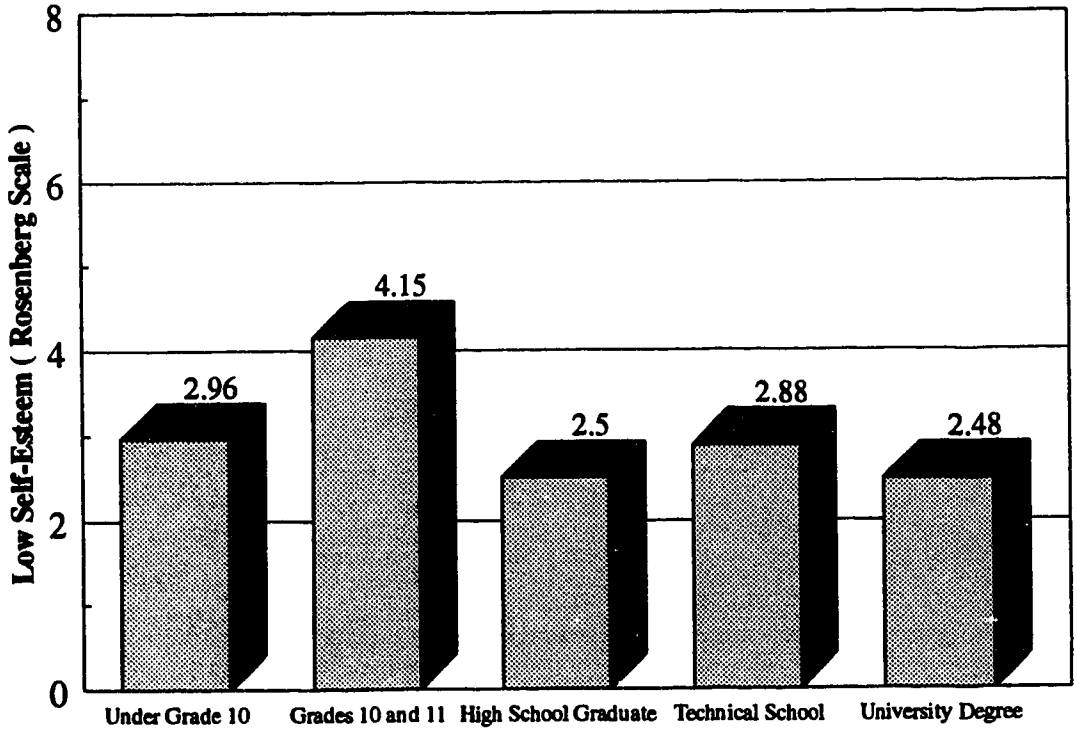


Figure 4.16 Educational Status and Global Self-Esteem in Individuals with Conditions not Attributable to a Mental Disorder

4.5 Association of Current Employment Status and Self-Esteem

4.5.1 Current Employment Status and Self-Esteem in Psychiatric Patients

The patients were divided into six groups according to employment status. Table 4.16 define these groups and describes the result of data analysis. Retired patients showed significantly higher scores of feelings of social adequacy than the other groups ($F_{5,832}$=2.48, P=.03). However, the difference did not remain significant, after adjusting for age (P=.194). This implies that the higher feeling of social adequacy in retireds is related to their age being higher and not to their employment status.

Table 4.16 Association of Current Employment Status and Self-Esteem in Psychiatric Patients

	Definition	Scale I $F_{5,831}$=2.48, P=.03			Scale II $F_{5,772}$=3.97, P=.002		
		N	M	SD	N	M	SD
1	Employed full time	328	63.28	17.99	316	4.69	2.76
2	Employed part time	100	62.94	17.94	100	4.55	2.59
3	Housewife or househusband	63	59.27	19.39	59	5.03	2.94
4	Unemployed	249	60.51	19.17	207	5.49	2.94
5	Student	77	60.97	19.40	77	5.75	3.10
6	Retired	15	75.13	20.26	13	3.92	2.50

When global self-esteem was measured, employed patients showed

significantly higher self-esteem than unemployed patients and patients who were students ($F_{5,772}$=3.97, P=.002). This difference remained statistically significant after adjusting for age (P=.04) and adjusting for sex (P=0.036), using ANCOVA and two way ANOVA respectively.

4.6 Association of Income with Self-Esteem

4.6.1 Personal Income and Self-Esteem

Patients were divided into eight groups according to their level of income. Table 4.17 provides a summary of data analysis and the definition of these groups. One-way ANOVA showed a significant difference between groups on Scale I ($F_{7,738}$=2.47, P=.016). However, further probing with the Student-Newman-Keuls test indicated that no two groups were significantly different at the 0.05 level of significance (Figure 4.17). On the other hand, data analysis on the Rosenberg self-esteem Scale indicated that patients whose income was between 40,000 to 49,000 dollars per year showed significantly higher self-esteem than patients whose incomes were less than 20,000 dollars per year ($F_{7,689}$=3.91, P=.001) (Figure 4.18). The correlation coefficients between income and either self-esteem or social inadequacy was low but statistically significant (r_1=-.16, P<.001; r_2=.11, P=.002 respectively).

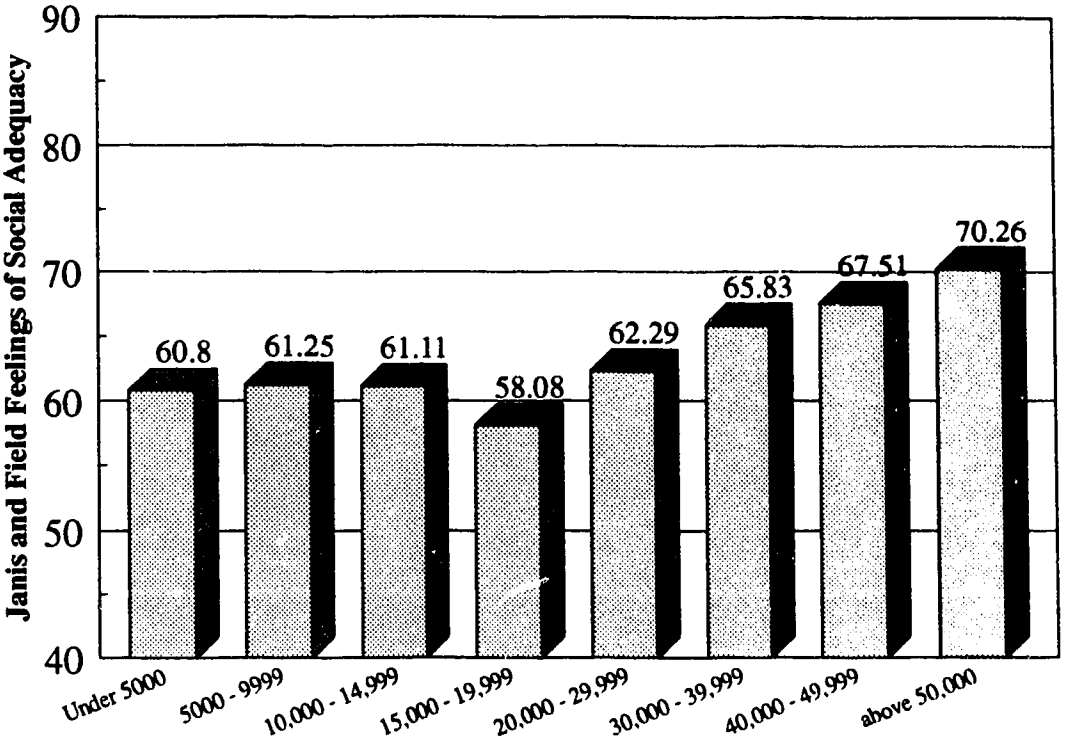


Figure 4.17 Personal Income and Feelings of Social Adequacy in Psychiatric Patients

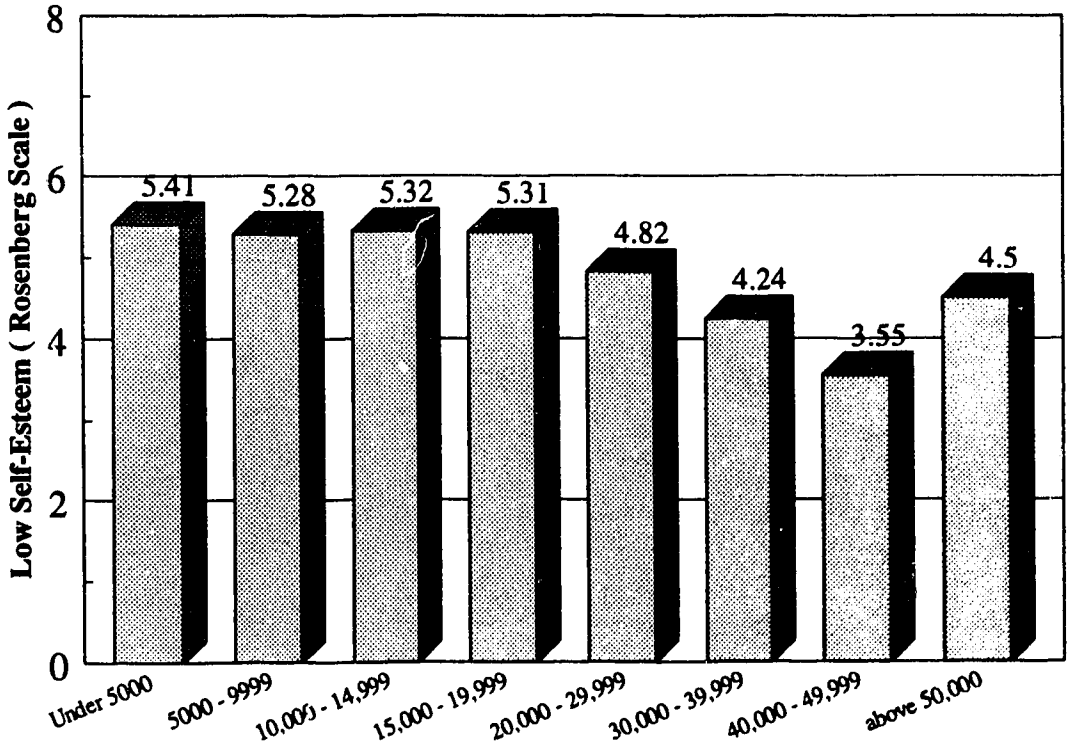


Figure 4.18 Personal Income and Global Self-Esteem in Psychiatric Patients

Table 4.17 Association of Personal Income and Self-Esteem

	Definition	Scale I ($F_{7,738}$=2.47, P=.016)			Scale II ($F_{7,689}$=3.39, P=.001)		
		N	M	SD	N	M	SD
1	$0-$4999	212	60.80	19.12	197	5.41	2.99
2	$5000-$9999	102	61.25	17.16	94	5.28	2.87
3	$10,000-$14,999	85	61.11	18.68	77	5.32	2.84
4	$15,000-$19,999	61	58.08	18.13	58	5.31	2.66
5	$20,000-$29,999	130	62.29	16.29	121	4.82	2.86
6	$30,000-$39,999	78	65.83	16.56	76	4.24	2.63
7	$40,000-$49,999	39	67.51	18.84	38	3.55	2.40
8	$50,000 or more	31	70.26	19.15	28	4.50	2.57

4.6.2 Family Income and Self-Esteem

A summary of data analysis on relationships between self-esteem and family income is presented in Table 4.18. As with personal income, feelings of social inadequacy scores in different family income levels were not significantly different ($F_{7,703}$=2.00, P=.05). When the Rosenberg self-esteem scale was applied, patients whose family income was between 40,000 to 50,000 dollars per year showed significantly higher self-esteem than very low income patients, less than 5000 dollars per year ($F_{7,660}$=2.37, P=.02). The correlation coefficients between family income and either self-esteem or social adequacy was low, but statistically significant (r_1=- .15, P<.001; r_2= .11, P=.005 respectively) (Figures 4.19 and 4.20).

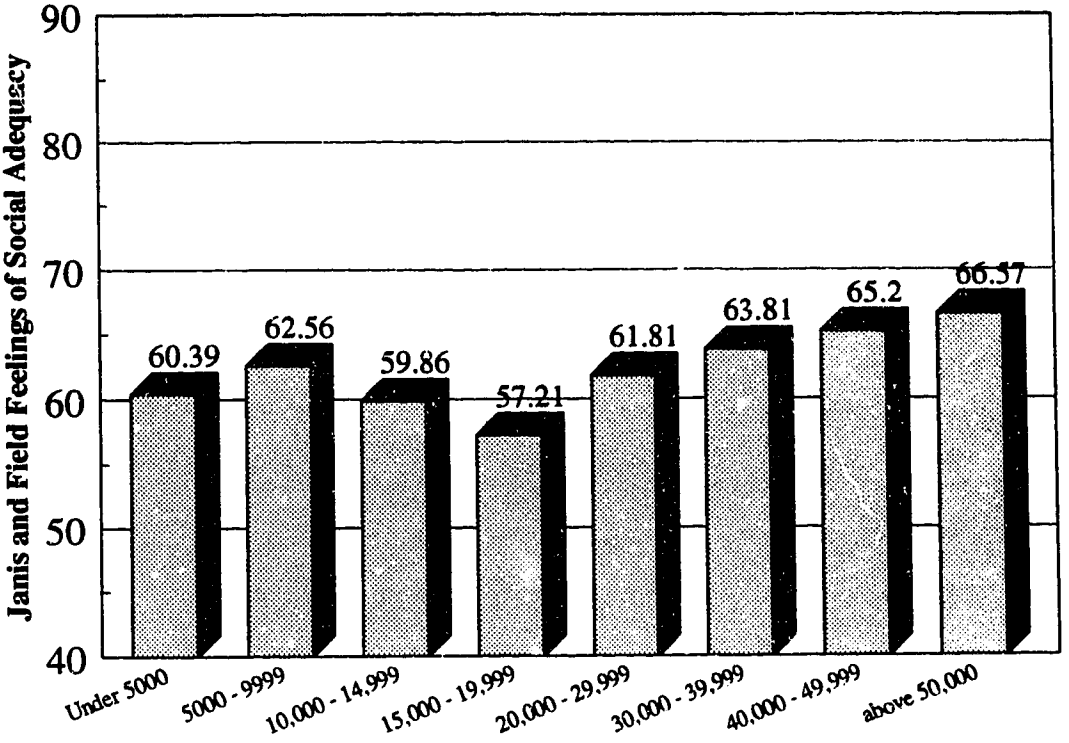


Figure 4.19 Family Income and Feelings of Social Adequacy in Psychiatric Patients

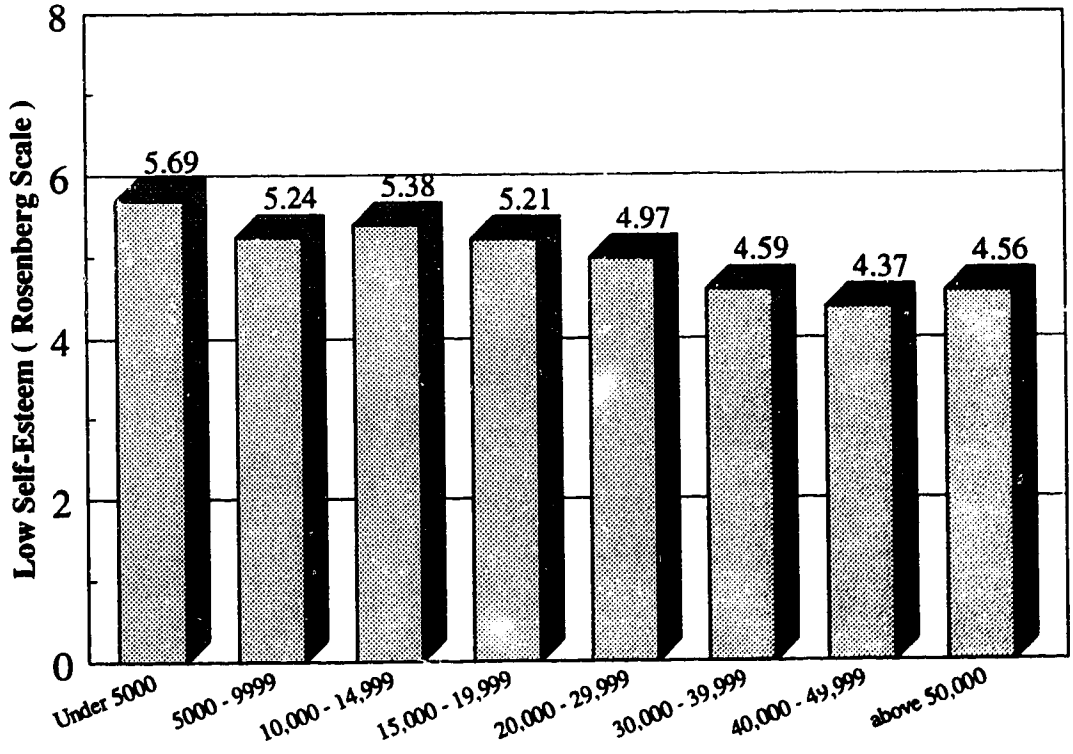


Figure 4.20 Family Income and Global Self-Esteem in Psychiatric Patients

Table 4.18 Association of Family Income and Self-Esteem

	Definition	Scale I $F_{7,703}$=2.00, P=.051			Scale II $F_{7,660}$=2.37, P=.02		
		N	M	SD	N	M	SD
1	$0-$4999	123	60.39	18.96	115	5.69	2.98
2	$5000-$9999	87	62.56	16.30	78	5.24	2.89
3	$10,000-$14,999	58	59.86	19.37	53	5.38	2.69
4	$15,000-$19,999	48	57.21	17.21	42	5.21	2.87
5	$20,000-$29,999	122	61.81	16.56	115	4.97	2.90
6	$30,000-$39,999	84	63.81	21.09	80	4.59	2.71
7	$40,000-$49,999	85	65.20	19.62	83	4.37	2.77
8	$50,000 or more	96	66.57	17.28	94	4.56	2.68

4.7 Self-esteem in Patients with Legal Problems

Patients involved in crimes such as theft, shoplifting and possession of illegal drugs, at least once in their life time, are referred to as patients with legal problems. Table 4.19 shows the results of the data analysis on the self-esteem of patients with or without legal problems. The results showed no relationship between self-esteem and having legal problems (P_{scaleI}=.84, $P_{scaleII}$=.51).

Table 4.19 Association of Having Legal Problems and Self-Esteem

	Legal Problem	Count	Mean	Standard deviation	F-ratio	P value
Scale I (n=788)	No	671	62.50	19.05	.04	.841
	Yes	117	62.13	16.14		
Scale II (n=731)	No	629	4.90	2.93	.44	.507
	Yes	102	5.11	2.52		

4.8 Association of Self-Esteem and Alcohol Abuse

4.8.1 Self-Esteem and Alcohol Abuse in Psychiatric Patients

Based on having a period of heavy alcohol use, in the present or in the past, patients were divided into two groups. The results of comparing the alcohol abusers and non-alcoholics are presented in Table 4.20, which show that alcoholic patients had significantly lower self-esteem ($F_{1,746}$=11.00, P=.001) and significantly lower feelings of social adequacy ($F_{1,805}$=4.30, P=.04) than non-alcoholics (Figures 4.21 and 4.22).

Table 4.20 Association of Alcoholism and Self-Esteem in Psychiatric Patients

	Alcohol Abuse	Count	Mean	Standard deviation	F-ratio	P value
Scale I (n=805)	No	540	63.01	18.92	4.30	.04
	Yes	265	60.12	17.79		
Scale II (n=746)	No	512	4.79	2.87	11.01	.001
	Yes	234	5.53	2.74		

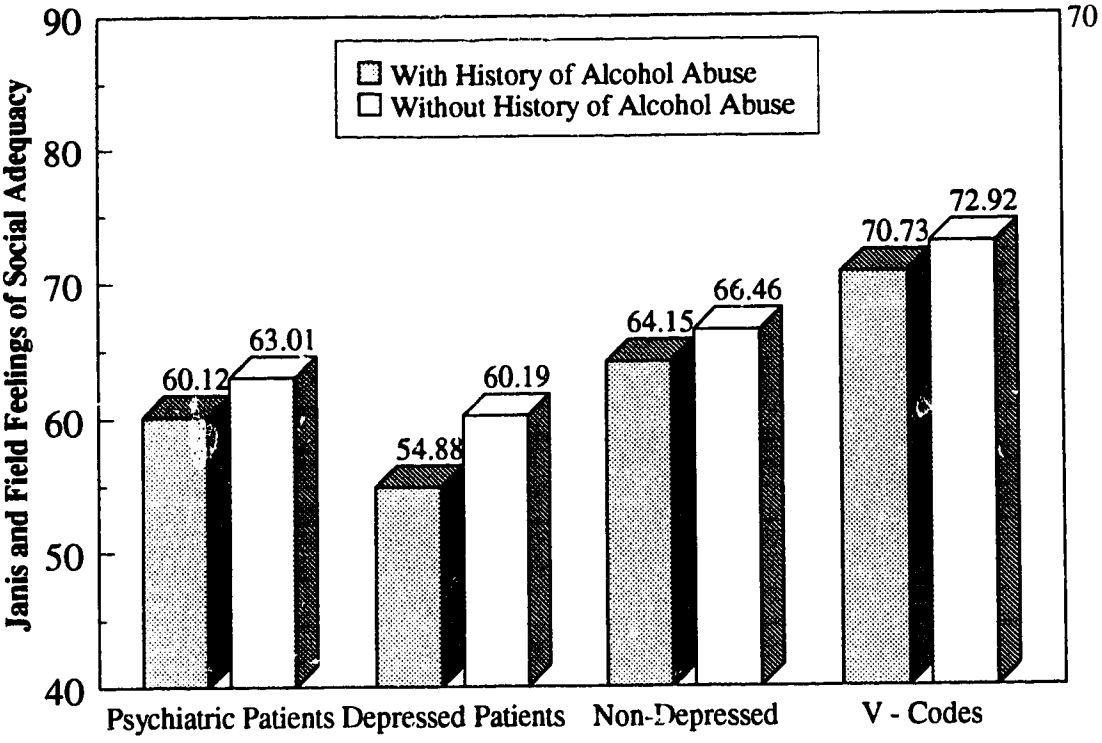


Figure 4.21 Alcohol Abuse and Feelings of Social Adequacy

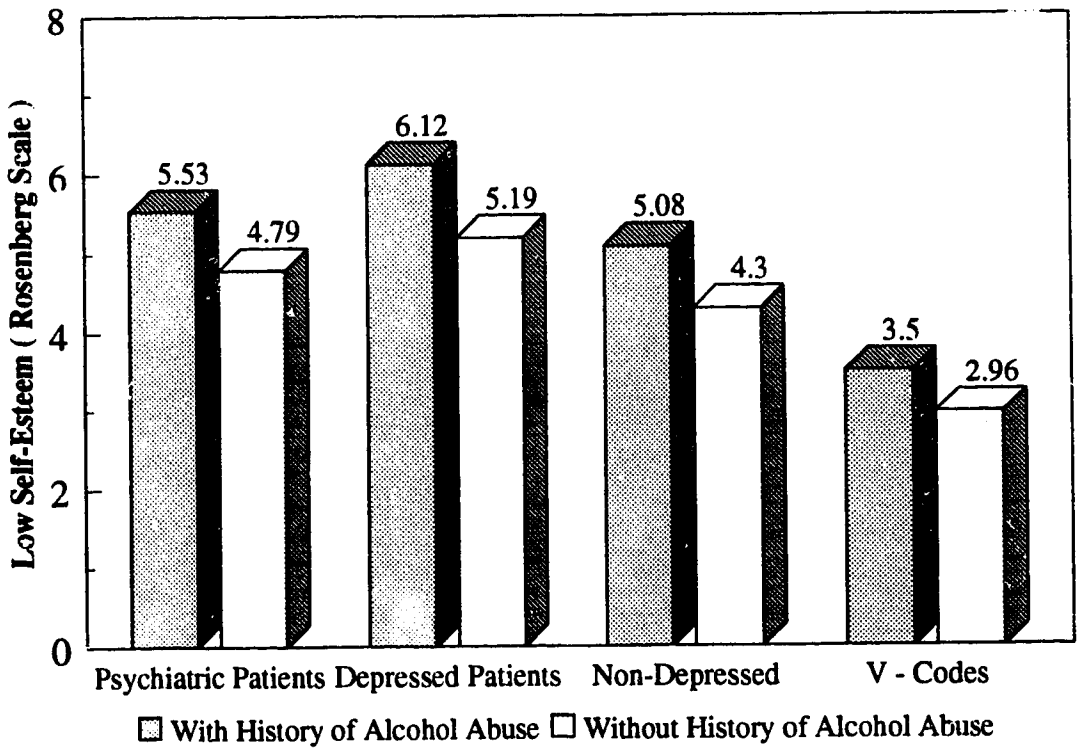


Figure 4.22 Alcohol Abuse and Global Self-Esteem

4.8.2 Self-Esteem and Alcohol Abuse in Depressed Patients

A similar analysis was performed on the subgroups of depressed patients and non-depressed patients (Tables 4.21 and 4.22). In depressed patients, the same pattern as that seen in all patients was observed, but it was even more statistically significant (P_{scaleI}=.007, $P_{scale\ II}$=.004) (Figures 4.21 and 4.22). The difference between the groups remained significant, even after controlling for effects of age ($P_{scale\ I}$=.005, $P_{scale\ II}$=.006), and sex (P_{scaleI}=.001, $P_{scale\ II}$=.018).

Table 4.21 Association of Alcoholism and Self-esteem in Depressed Patients

	Alcohol Abuse	Count	Mean	Standard deviation	F-ratio	P value
Scale I (n=412)	No	297	60.19	18.04	7.49	.007
	Yes	115	54.88	16.62		
Scale II (n=381)	No	279	5.19	2.78	8.47	.004
	Yes	102	6.12	2.63		

4.8.3 Self-Esteem and Alcohol Abuse in Non-Depressed Patients

In non-depressed patients, social adequacy scores (Scale I) were not significantly different between groups ($F_{1,393}$=1.41, P=.24) (Table 4.22, and Figure 4.21). The difference between groups on the Rosenberg self-esteem Scale was still significant ($F_{1,365}$=6.18, P=.01), but not as highly significant as that for whole patients. Two-way ANOVA was conducted to probe the interaction of sex and background of alcohol abuse on self-esteem. The result

did not show significant difference (P=.789). The difference between self-esteem of alcoholic and non-alcoholic patients remained significant, after adjusting for age with the use of ANCOVA (P=.009).

Table 4.22 Association of Alcoholism and Self-Esteem in Non-Depressed Patients

	Alcohol Abuse	Count	Mean	Standard deviation	F-ratio	P value
Scale I (n=393)	No	243	66.46	19.44	1.41	.24
	Yes	150	64.15	17.66		
Scale II (n=365)	No	233	4.30	2.90	6.18	.01
	Yes	132	5.08	2.74		

4.8.4 Self-Esteem and Alcohol Abuse in Different Psychiatric Disorders

The non-depressed group was divided into several subgroups based on different psychiatric disorders. The subgroup data analysis was done only when the sample size of these subgroups was large enough. Table 4.23 summarize the results of this data analysis. The findings indicated that social adequacy scores of the alcoholic group were not significantly different from the non-alcoholic group for all subgroups. Also, the self-esteem of the alcoholic patients was not significantly different from the non-alcoholic patients, excluding patients with adjustment disorders (borderline P value) and patients with conduct disorder (Figures 4.23 and 4.24).

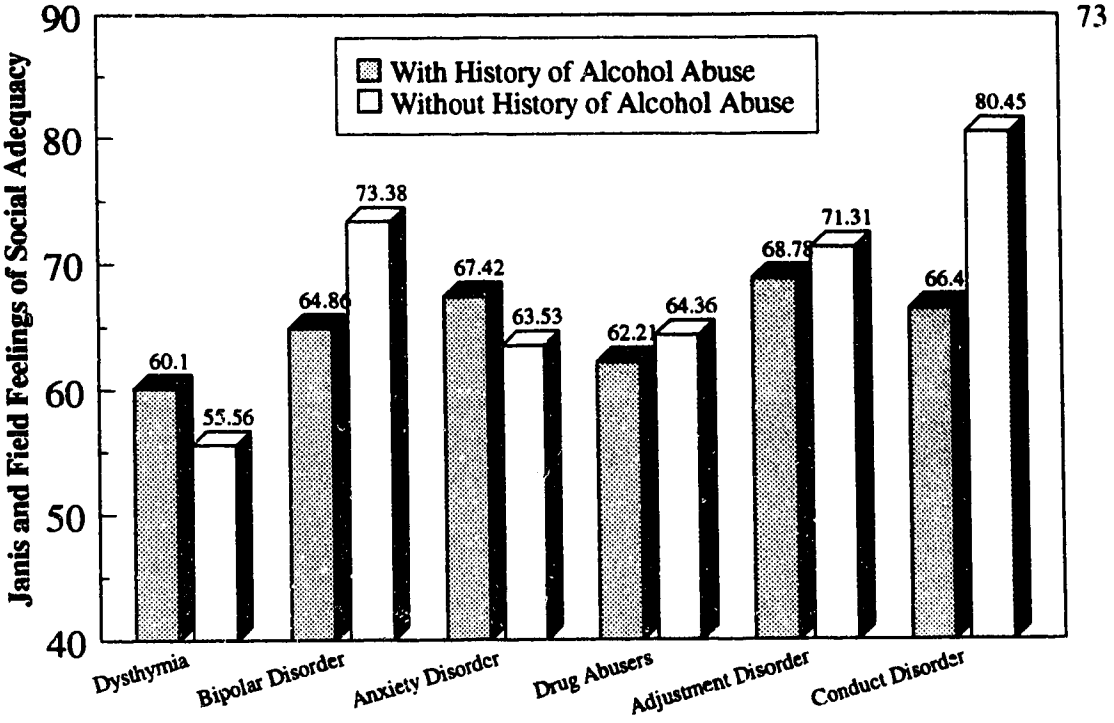


Figure 4.23 Alcohol Abuse and Feelings of Social Adequacy in Psychiatric Disorders

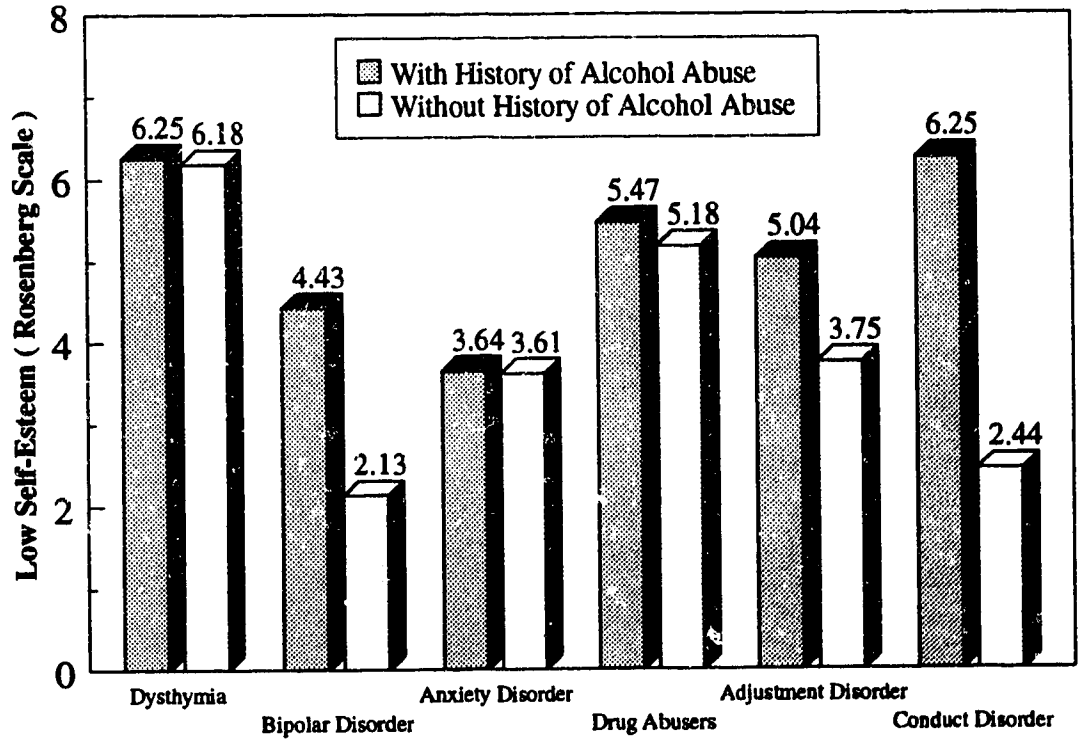


Figure 4.24 Alcohol Abuse and Global Self-Esteem in Psychiatric Disorders

Table 4.23 Association of Alcoholism and Self-Esteem in Different Psychiatric Disorders

Groups	Alcohol Abuse	Scale I N	Scale I M	Scale I SD	P-value	Scale II N	Scale II M	Scale II SD	P-value
Dysthymia	No	43	55.56	16.1	.32	38	6.18	2.3	.92
	Yes	20	60.10	17.8		16	6.25	2.4	
Bipolar disorder	No	8	73.38	25.7	.49	8	2.13	2.9	.14
	Yes	7	64.86	19.1		7	4.43	2.6	
Anxiety disorders	No	30	63.53	18.2	.50	33	3.61	2.9	.98
	Yes	12	67.42	12.5		11	3.64	2.8	
Drug abusers	No	11	64.36	16.4	.74	11	5.18	3.5	.81
	Yes	19	62.21	17.1		15	5.47	2.5	
Adjustment disorder	No	71	71.31	18.8	.56	73	3.75	2.8	.056
	Yes	23	68.78	17.1		23	5.04	2.7	
Conduct disorder	No	11	80.45	22.4	.27	9	2.44	1.9	.045
	Yes	5	66.40	23.7		5	6.25	4.3	

4.8.5 Self-Esteem and Alcohol Abuse in Individuals with Conditions not Attributable to a Mental Disorder

In individuals whose problem was not related to a mental disorders, one-way ANOVA showed no significant difference between alcoholic and non-alcoholic patients (Table 4.24, and Figures 4.21 and 4.22).

Table 4.24 Association of Alcoholism and Self-Esteem in Individuals with Conditions not Attributable to a Mental Disorder

	Alcohol Abuse	Count	Mean	Standard deviation	F-ratio	P value
Scale I (n=154)	No	128	72.92	17.85	.33	.57
	Yes	26	70.73	17.29		
Scale II (n=149)	No	125	2.96	2.82	.74	.39
	Yes	24	3.50	2.80		

4.9 Association of Self-esteem and Drug Abuse

4.9.1 Self-Esteem and Drug Abuse in Psychiatric Patients

The data were divided into two groups, patients who had a period of heavy drug use, present or past, and patients who did not.

Table 4.25 Association of Drug Abuse and Self-Esteem in Psychiatric Patients

	Drug abuse	Count	Mean	Standard deviation	F-ratio	P value
Scale I (n=811)	No	667	62.41	18.06	1.69	.19
	Yes	144	60.19	18.13		
Scale II (n=750)	No	625	4.91	2.84	6.56	.010
	Yes	125	5.62	2.83		

The results of one-way ANOVA showed no significant difference between these two groups on measures of social adequacy ($F_{1,811}$=1.69, P=.19). However, these two groups were significantly different on the Rosenberg self-esteem scale ($F_{1,750}$=6.56, P=.01). In other words, drug abusers showed significantly lower self-esteem than abstainers (Table 4.25, and Figures 4.25 and 4.26).

4.9.2 Self-Esteem and Drug Abuse in Patients with Major Depression

The same analyses were repeated for the patients with major depression. On measures of both global self-esteem and feelings of social adequacy, the results demonstrated significantly lower self-esteem in patients who had a period of drug abuse than in patients who did not (Table 4.26, and Figures 4.25 and 4.26)

Table 4.26 Association of Drug Abuse and Self-Esteem in Patients with Major Depression

	Drug abuse	Count	Mean	Standard deviation	F-ratio	P value
Scale I (n=415)	No	360	59.68	17.61	9.35	.002
	Yes	55	51.89	17.37		
Scale II (n=383)	No	335	5.34	2.75	4.16	.042
	Yes	48	6.21	2.71		

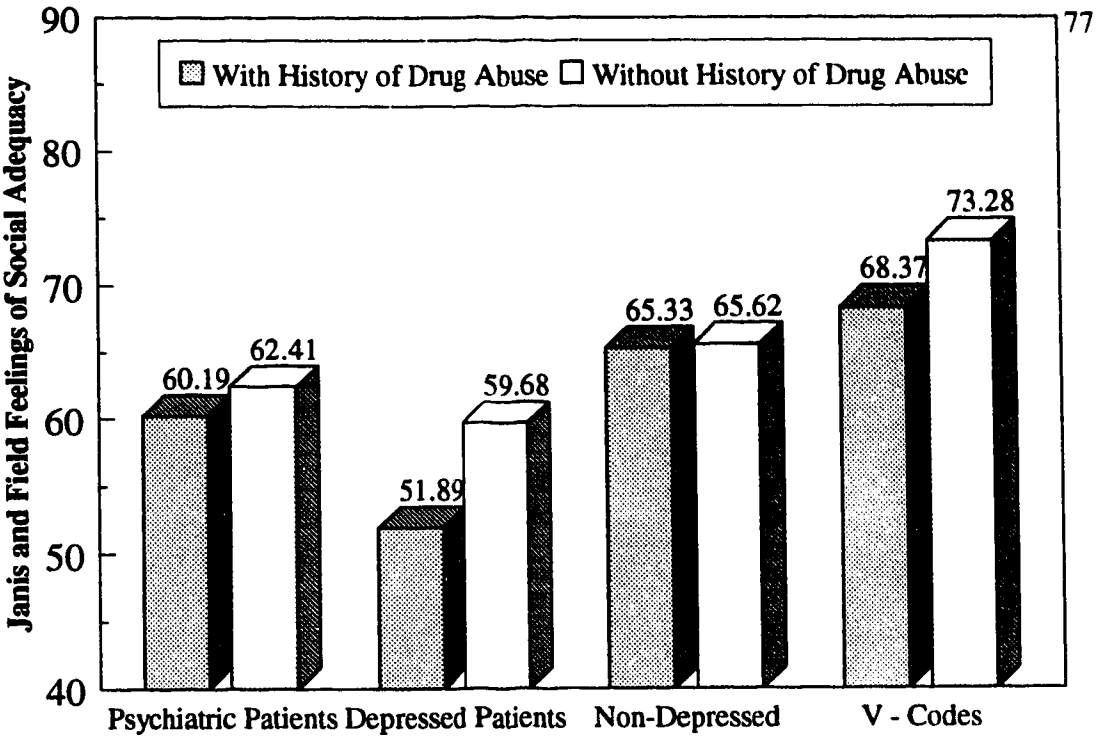


Figure 4.25 Drug Abuse and Feelings of Social Adequacy

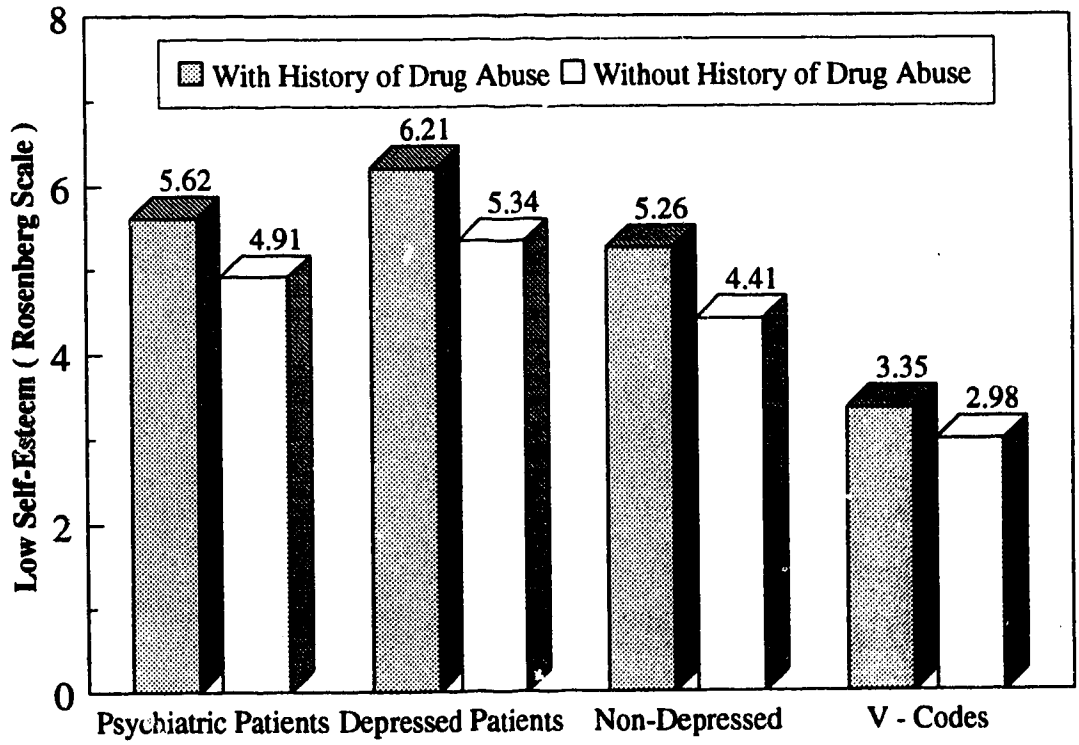


Figure 4.26 Drug Abuse and Global Self-Esteem

4.9.3 Self-Esteem and Drug Abuse in Non-Depressed Patients

In non-depressed patients, the results showed no significant difference between the two groups on the measure of feelings of social inadequacy (P=.898). However, the results of global self-esteem showed significantly lower self-esteem in patients who had a period of drug abuse, either in the present or in the past (P=.02). The results are shown in Table 4.27, and Figures 4.25 and 4.26.

Table 4.27 Association of Drug Abuse and Self-Esteem in Non-Depressed Patients

	Drug abuse	Count	Mean	Standard deviation	F-ratio	P value
Scale I (n=396)	No	307	65.62	19.36	.016	.898
	Yes	89	65.33	16.70		
Scale II (n=367)	No	290	4.41	2.86	5.32	.021
	Yes	77	5.26	2.86		

4.9.4 Self-Esteem and Drug Abuse in Different Psychiatric Disorders

The non-depressed group was divided into several subgroups based on different psychiatric disorders. Table 4.28 summarize the results from data analysis. The findings indicate that both feelings of social adequacy and global self-esteem of drug abusers were not significantly different from patients who had not abused drugs (Figures 4.27 and 4.28).

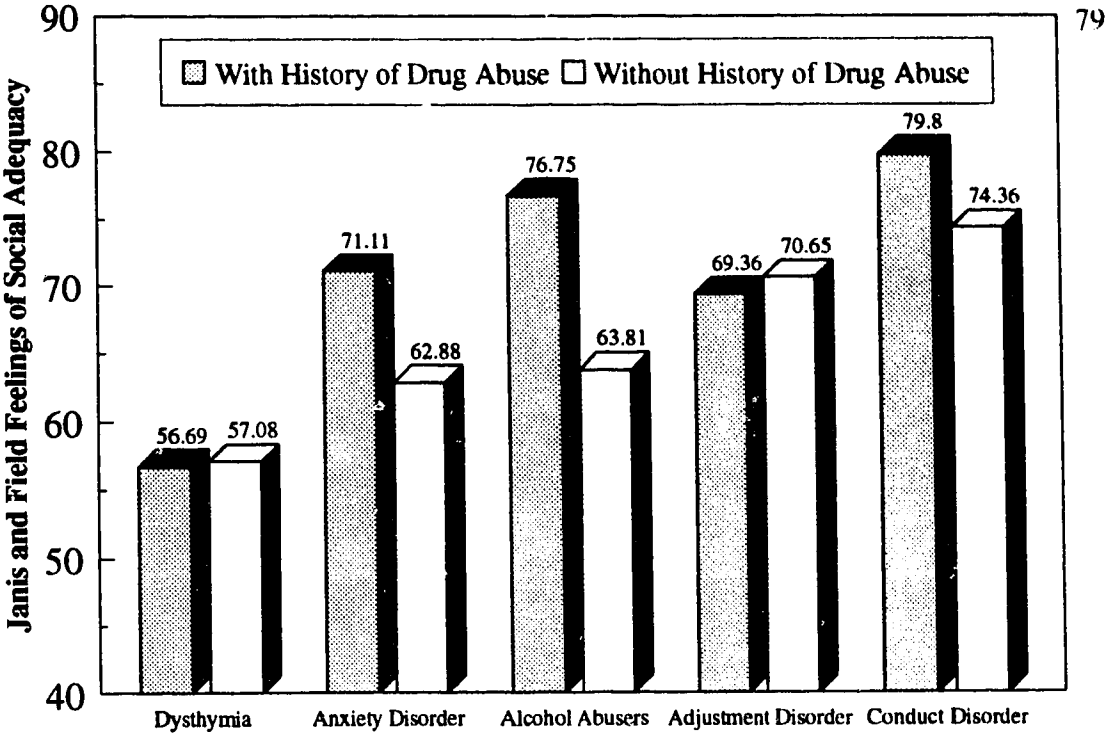


Figure 4.27 Drug Abuse and Feelings of Social Adequacy in Psychiatric Disorders

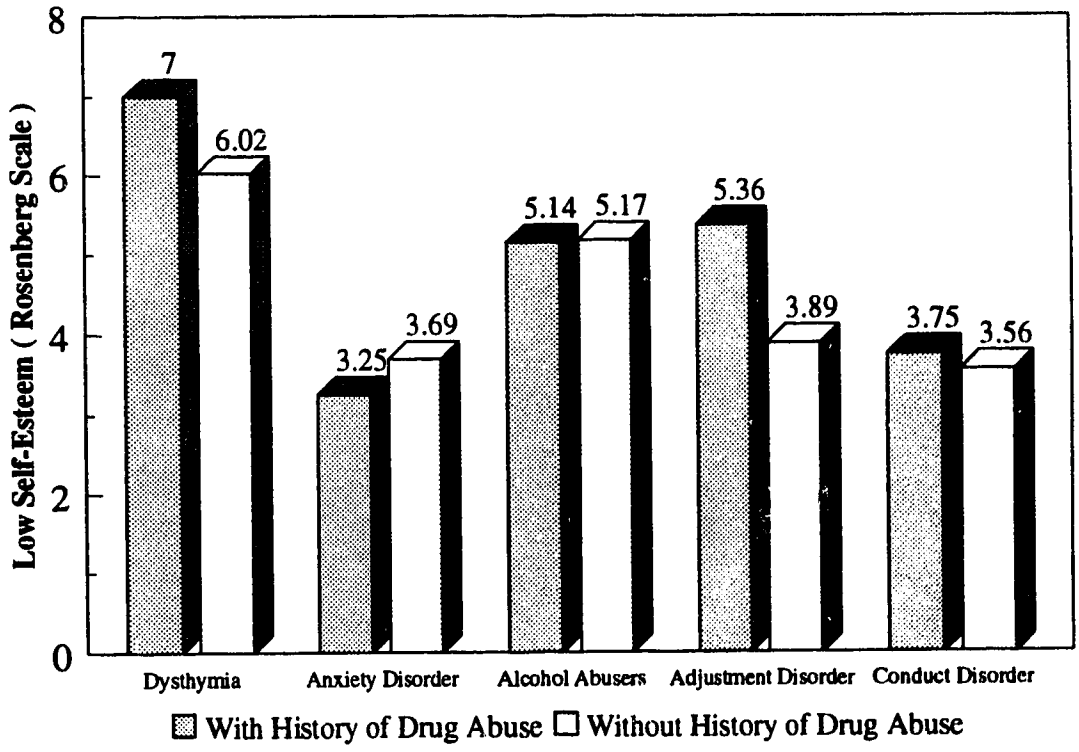


Figure 4.28 Drug Abuse and Global Self-Esteem in Psychiatric Disorders

Table 4.28 Association of Drug Abuse and Self-Esteem in Patients with Different Psychiatric Disorders

Groups	Drug abuse	Scale I N	Scale I M	Scale I SD	P-value	Scale II N	Scale II M	Scale II SD	P-value
Dysthy	No	50	57.08	17.4	.94	44	6.02	2.4	.22
	Yes	13	56.69	13.9		10	7.00	1.4	
Anxiety disorders	No	33	62.88	16.9	.19	36	3.69	2.9	.70
	Yes	09	71.11	15.2		08	3.25	2.8	
Alcohol abusers	No	32	63.81	19.3	.078	30	5.17	2.8	.98
	Yes	8	76.75	10.9		7	5.14	2.2	
Adjustment disorder	No	84	70.65	18.7	.83	85	3.89	2.8	.11
	Yes	11	69.36	15.6		11	5.36	3.0	
Conduct disorder	No	11	74.36	22.8	.68	9	3.56	3.2	.93
	Yes	5	79.80	23.5		4	3.75	3.9	

4.9.5 Self-Esteem and Drug Abuse in Individuals with Conditions not Attributable to a Mental Disorder (V-Codes)

In individuals with conditions not attributable to a mental disorder, one-way ANOVA demonstrated no significant difference between the self-esteem of these two groups of patients with and without a period of drug abuse (Table 4.29, and Figures 4.25 and 4.26).

Table 4.29 Association of Drug Abuse and Self-Esteem in Individuals with Conditions not Attributable to a Mental Disorder

	Drug abuse	Count	Mean	Standard deviation	F-ratio	P value
Scale I (n=153)	No	134	73.28	17.65	1.28	.26
	Yes	19	68.37	18.02		
Scale II (n=148)	No	131	2.98	2.82	.257	.61
	Yes	17	3.35	2.83		

4.10 Effects of Psychosocial Stressors on Self-esteem of Psychiatric Patients

4.10.1 Acute Psychosocial Stressors and Self-Esteem

Based on the severity of acute psychosocial stressors, the patients were divided into five groups of none, mild, moderate, severe, and extreme.

Table 4.30 Effects of Acute Psychosocial Stressors on Self-Esteem in Psychiatric Patients

Severity of Psychosocial stressors	Scale I ($F_{4,821}$=1.50, P=.20)			Scale II ($F_{4,768}$=1.60, P=.16)		
	N	M	SD	N	M	SD
None	81	61.74	19.32	71	5.49	2.90
Mild	214	60.95	17.22	208	4.95	2.78
Moderate	374	62.89	19.06	347	4.93	2.86
Severe	126	61.63	18.58	116	5.31	3.01
Extreme	26	68.62	21.86	26	4.62	3.02

The results of one way ANOVA showed no significant difference between these groups, no matter which scale was used (Table 4.30).

4.10.2 Enduring Psychosocial Stressors and Self-Esteem

Patients were also divided into five groups based on the severity of enduring psychosocial stressors. Table 4.31 define these groups and refers to the results of data analysis. The results of one-way ANOVA indicated no significant difference between groups on measure of social inadequacy ($F_{4,831}$=1.64, P=.15). However, when the Rosenberg self-esteem scale was used, patients who experienced severe enduring stressors had significantly lower self-esteem than patients who experienced none, mild, or moderate stressors. Also patients who suffered from extreme psychosocial stressors had significantly lower self-esteem than patients who did not suffer from any kind of stressor (Figures 4.29 and 4.30).

Table 4.31 Effects of Enduring Psychosocial Stressors on Self-Esteem in Psychiatric Patients

Severity of Psychosocial stressors	Scale I ($F_{4,831}$=1.64, P=.15)			Scale II ($F_{4,774}$=3.44, P=.004)		
	N	M	SD	N	M	SD
None	69	66.70	18.70	71	4.35	3.00
Mild	207	61.58	18.35	190	5.01	2.82
Moderate	371	63.01	18.90	356	4.81	2.88
Severe	136	59.37	18.48	113	5.75	2.79
Extreme	48	61.17	19.72	44	5.86	2.72

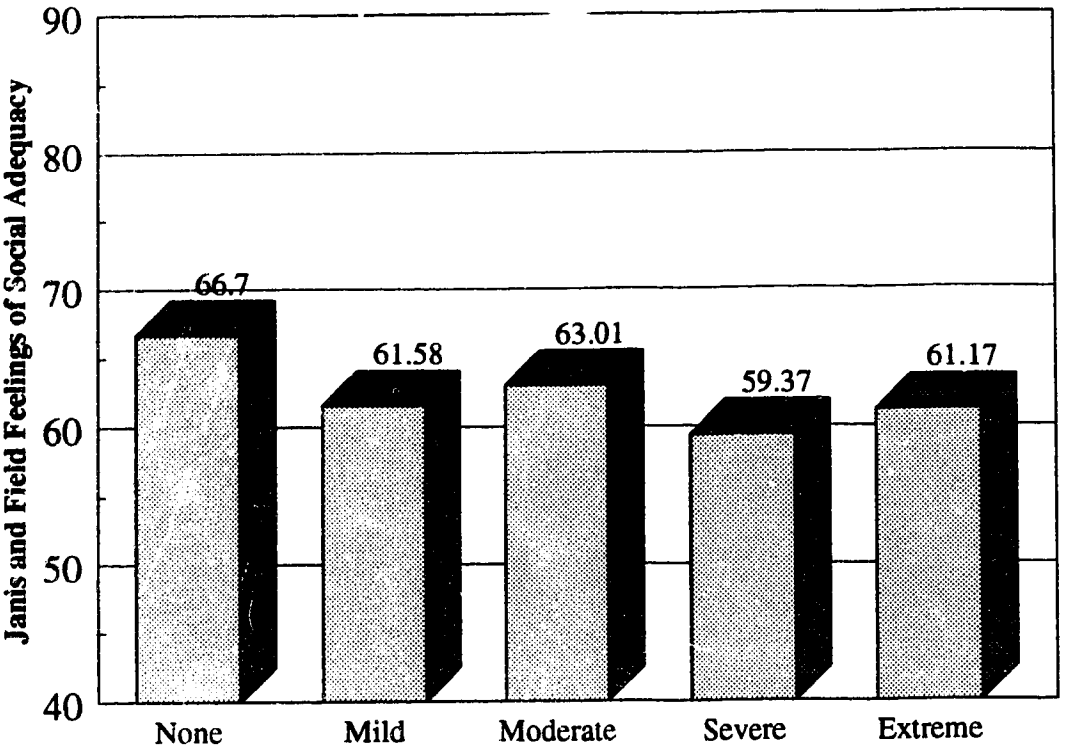


Figure 4.29 Enduring Psychosocial Stressors and Feelings of Social Adequacy in Psychiatric Patients

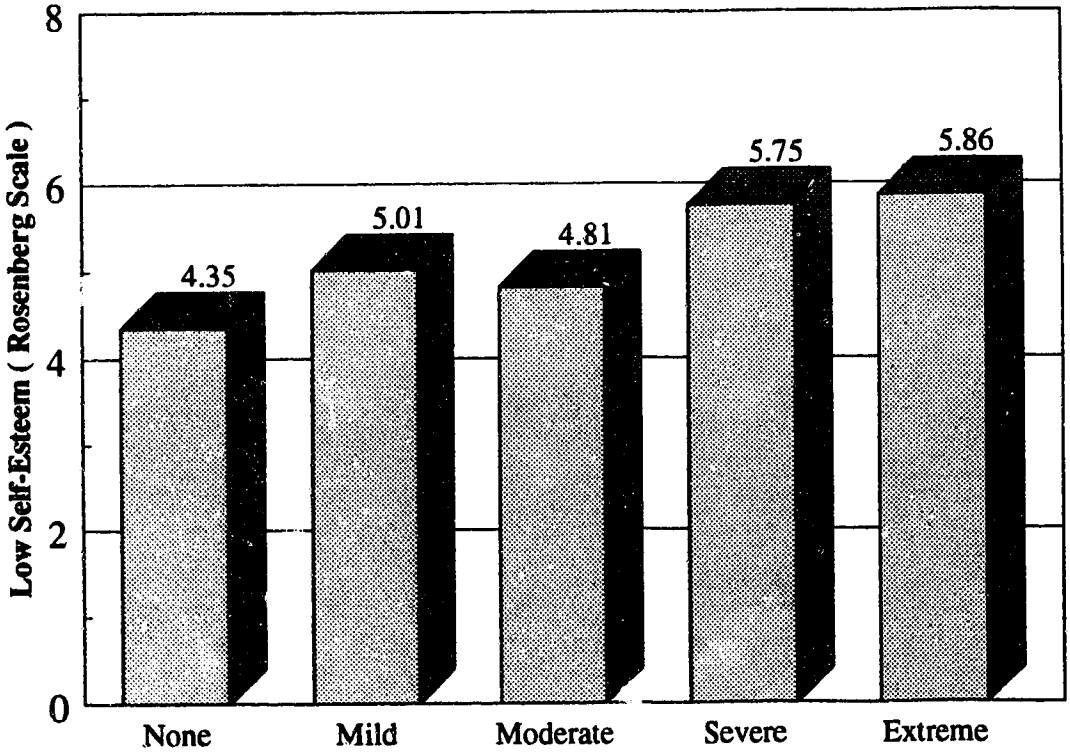


Figure 4.30 Enduring psychosocial Stressors and Global Self-Esteem in Psychiatric Patients

4.11 Association of Self-esteem and Psychiatric Disorders

10.1. All individuals were categorized as being in one of 19 independent groups. Group one consisted of normal people who accompanied patients and completed the self-esteem measurement forms. The second group consisted of individuals with conditions not attributable to a mental disorder, such as marital problems. This group is called the V-codes. The rest were psychiatric patients who were grouped into 17 independent diagnostic groups, according to the patients' first and second clinical diagnoses. Table 4.32 define these groups and describes the results of data analyses.

4.11.1 Feelings of Social Adequacy and Psychiatric Disorders

The result of one way ANOVA indicated that there were significant differences in social adequacy between these groups ($F_{18,1064}=10.63$, $P<.0001$). Further probing with the use of the Newman-Keuls test for multiple comparisons demonstrated the following results (Tables 4.32 and 4.33, and Figure 4.31):

1) Most psychiatric patients had lower feelings of social adequacy than normals, with the exception of patients with conduct disorder or impulse control disorders.

2) Patients with eating disorders had significantly lower feelings of social adequacy than other groups, except those patients with dysthymia; major depression; major depression and dysthymia; major depression and drug abuse; major depression and anxiety disorder; major depression and alcohol abuse.

3) Patients with dual diagnoses of major depression and dysthymia had significantly lower feelings of social adequacy than most patients, except those patients with eating disorders; dysthymia; major depression and drug abuse; major depression and anxiety disorder; or major depression and alcohol abuse. They also demonstrated significantly lower feelings of social adequacy than patients with major depression alone.

4) Patients with conduct disorder, impulse control disorder, or adjustment disorder, and individuals with conditions not attributable to a mental disorder had higher feelings of social adequacy than patients with eating disorders, dysthymia, major depression and patients who in addition to major depression suffered from dysthymia, alcohol abuse, drug abuse, or anxiety disorder.

5) Patients who in addition to major depression suffered from dysthymia, drug abuse, anxiety disorder or alcohol dependence showed lower feelings of social adequacy than patients with diagnosis of major depression alone. Nevertheless, this finding was statistically significant only in the case of patients with dual diagnoses of dysthymia and major depression.

4.11.2 Global Self-Esteem and Psychiatric Disorders

The result of one way ANOVA when using the Rosenberg self-esteem Scale also indicated significant differences between self-esteem of different groups ($F_{18,997}$=10.61, P<.0001). Further probing, using the Student-Newman-Keuls test, demonstrated the following findings (Tables 4.32 and 4.34, and

Figure 4.32):

1) The normals had significantly higher self-esteem than all other groups.

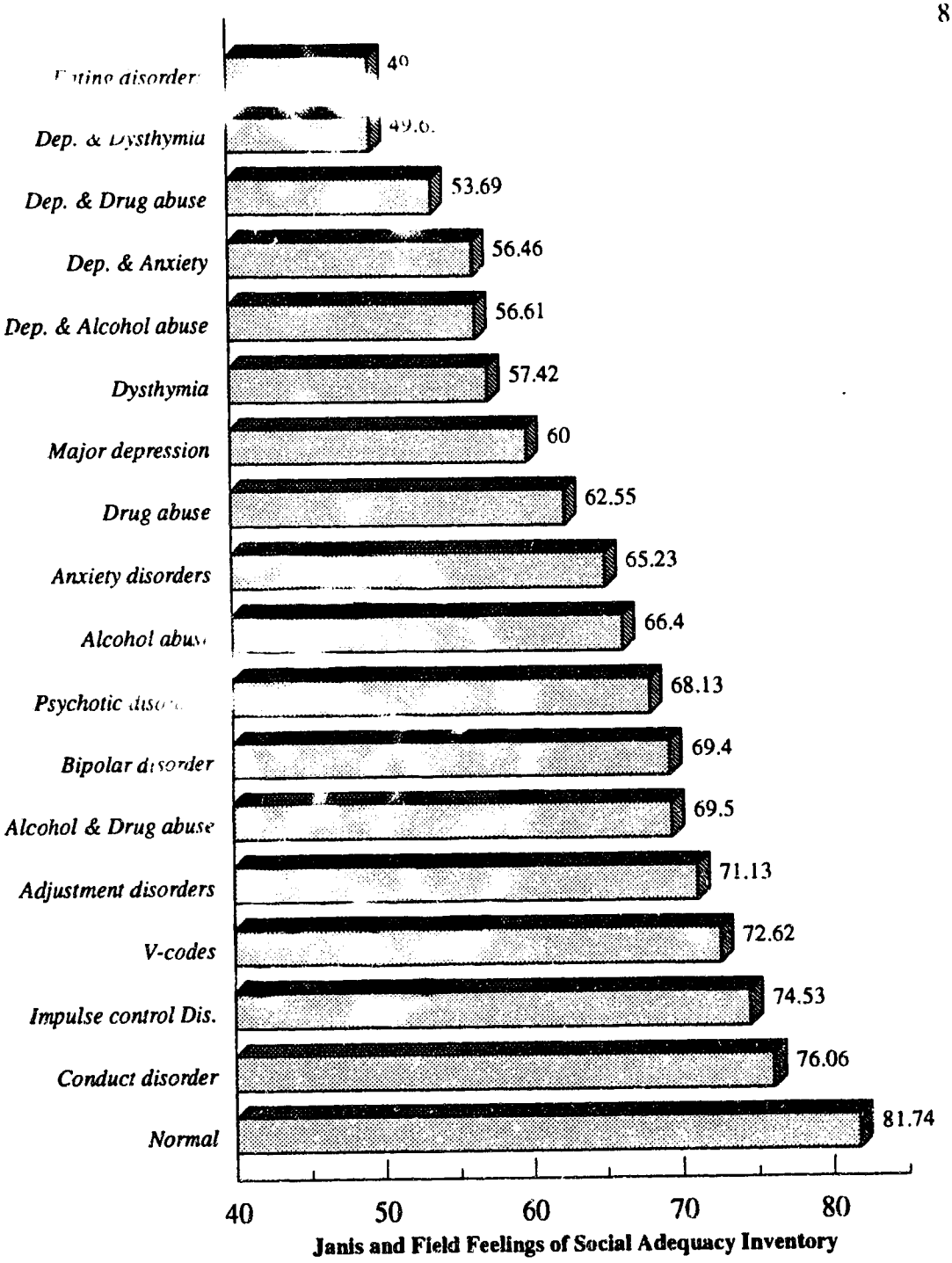
2) Individuals with conditions not attributable to a mental disorder had a higher self-esteem than patients (excluding bipolar disorder, conduct disorder, anxiety disorders and impulse control disorder).

3) Patients with major depression and dysthymic patients had significantly lower self-esteem than patients with anxiety disorders and adjustment disorder. Dysthymic patients also had significantly lower self-esteem than bipolar disorder patients.

4) Patients with dual diagnoses of major depression and dysthymia showed significantly lower self-esteem than patients with anxiety disorders.

Table 4.3 Level of Self-Esteem in Normals, V-Codes and Different Psychiatric Patients

	Group definit	Scale I $F_{18,.064}=10.63$, P<.0001 N	M	SD	Scale II $F_{18,997}=10.61$, P<.0001 N	M	SD
1	Normal accompany	50	81.74	14.5	51	1.71	1.99
2	V-Code	167	72.62	17.8	161	3.02	2.79
3	Psychotic disorders	23	68.13	20.8	19	4.05	3.12
4	Major depression	333	60.00	17.5	322	5.42	2.81
5	Dysthymia	65	57.42	16.8	56	6.14	2.35
6	Bipolar disorder	15	69.40	22.5	15	3.20	2.96
7	Anxiety disorders	44	65.23	16.8	46	3.65	2.90
8	Alcohol abuse	40	66.40	18.6	37	5.16	2.69
9	Drug abuse	31	62.55	16.5	27	5.52	2.95
10	Eating disorders	18	49.56	13.9	16	5.81	2.29
11	Adjustment disorder	101	71.13	18.5	102	4.03	2.83
12	Conduct disorder	16	76.06	23.1	13	3.62	3.25
13	Impulse control disorder	15	74.53	16.3	13	3.77	3.03
14	Major depression & Anxiety disorder	28	56.46	22.1	25	5.24	3.03
15	Major depression & Dysthymia	27	49.63	19.0	17	6.41	2.85
16	Major depression & Alcohol abuse	33	56.61	15.4	27	4.96	2.75
17	Major depression & Drug abuse	13	53.69	21.2	10	6.10	2.88
18	Alcohol & Drug abuse	8	69.50	14.3	7	4.29	3.04
19	Others	37	66.49	18.2	33	4.45	2.48



Note : Dep. stands for major depression

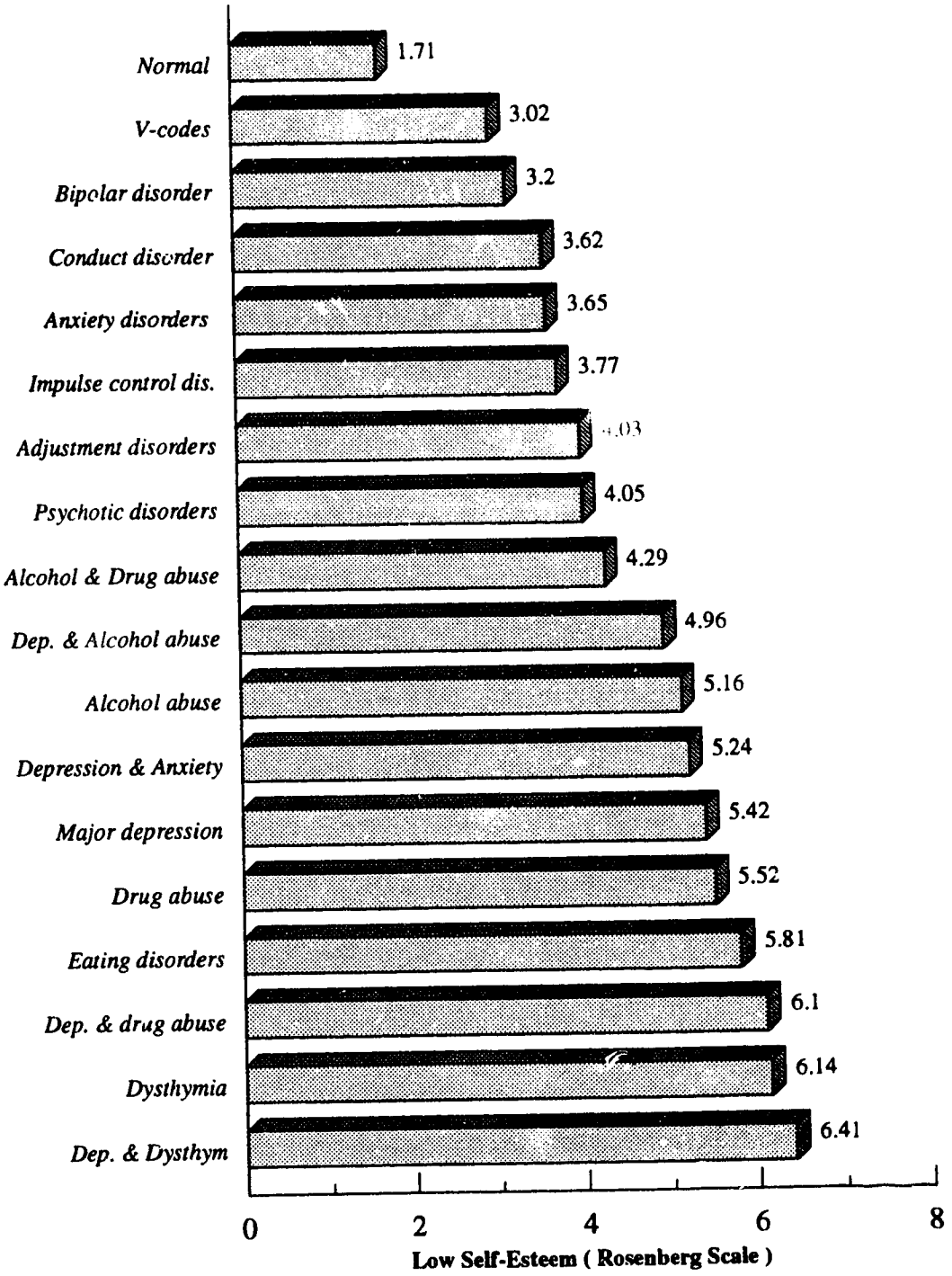
Figure 4.31 Level of Feelings of Social Adequacy in Normals, V-codes, and Psychiatric Patients

Student-Newman-Keuls test with significance level of 0.05

Groups		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
Normal	A				*	*			*	*	*	*	*	*	*	*	*	*	*
Conduct disorder	B												*	*	*	*	*	*	*
Impulse control disorder	C													*				*	*
V-codes	D												*	*	*	*	*	*	*
Adjustment disorders	E												*	*	*	*	*	*	*
Alcohol abuse & Drug abuse	F																		
Bipolar disorder	G																	*	
Psychotic disorders	H																	*	*
Alcohol abuse	I																	*	*
Anxiety disorders	J																	*	*
Drug abuse	K																		
Major depression	L																	*	
Dysthymia	M																		
Depression & Alcohol abuse	N																		
Depression & Anxiety	O																		
Depression & drug abuse	P																		
Depression & Dysthymia	Q																		
Eating disorders	R																		

* Indicates significant differences which are shown in the upper triangle

Table 4.33 Feelings of Social Adequacy Differences that Reach Statistical Significance



Note : Dep. stands for major depression

Figure 4.32 Level of Global Self-Esteem in Normals, V-codes, and Psychiatric Patients

Student-Newman-Keuls test with significance level of 0.05

Groups		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
Normal	A																		
V-codes	B	*																	
Bipolar disorder	C																		
Conduct disorder	D																		
Anxiety disorders	E	*																	
Impulse control disorder	F																		
Adjustment disorders	G	*	*																
Psychotic disorders	H	*																	
Alcohol abuse & Drug abuse	I																		
Depression & Alcohol abuse	J	*	*																
Alcohol abuse	K	*	*																
Depression & Anxiety	L	*	*																
Major depression	M	*	*			*		*											
Drug abuse	N	*	*																
Eating disorders	O	*	*																
Depression & drug abuse	P	*	*																
Dysthymia	Q	*	*	*		*		*											
Depression & Dysthymia	R	*	*			*		*											

* Indicates significant differences which are shown in the lower triangle

Table 4.34 Self-Esteem Differences that Reach Statistical Significance

4.12 Importance of Different Factors Affecting Self-Esteem

To compare the amounts of variances due to each important factor, multifactorial analysis of variances was performed for the five factors; Presence of illness, age, sex, history of alcohol abuse, and educational status, for which the differences between groups were significant (at 0.05 level of significance). Tables 4.33 and 4.34 shows the results for two scales of self-esteem.

Table 4.35 The Importance of Different Factors on Feelings of Social Adequacy

Scale I	Sums of squares	Degree of freedom	Significance of F	Grouping
Presence of psychiatric illness	23902	2	< 0.001	Normals, Patients & V-Codes
Age	8915	6	< 0.001	As in Table 4.1
Sex	8322	1	< 0.001	Male & Female
History of alcohol abuse	3012	1	= 0.002	Abuser & Non-abuser
Educational status	4155	4	= 0.011	As in Table 4.12

* 1190 cases were processed

* 211 cases were missing

Table 4.36 The Importance of Different Factors on Global Self-Esteem

Scale II	Sums of squares	Degree of freedom	Significance of F	Grouping
Presence of psychiatric illness	811.3	2	< 0.001	Normals, Patients & V-Codes
Age	243.1	6	< 0.001	As in Table 4.1
History of alcohol abuse	109.3	1	< 0.001	Abuser & Non-abuser
Educational status	120.1	4	= 0.003	As in Table 4.12
Sex	53.0	1	= 0.007	Male & Female

* 1190 cases were processed

* 272 cases were missing

CHAPTER 5

DISCUSSION

5.1 Preface to Discussion

Self-esteem, being an abstract concept, signifies different things to different people. Being a broad and vague term, attempts have been made to reduce and refine it to more specific and tightly defined concepts, which might have greater analytical or predictive usefulness. However, because of these problems, self-esteem scales may measure different aspects of self-esteem (Bridle, 1984) or different elements of the same construct (Lloyed et al., 1979).

Self-esteem can be referred to as an index of mental health. Low self-esteem has been associated in the literature with a large number of maladaptive traits, symptoms, and behaviours. Low self-esteem frequently accompanies psychological disorders such as depressive disorders, anxiety and eating disorders. In addition, high self-esteem is associated with better adaptive functioning and greater personal contentment.

Our intention has been to examine the factors that might affect self-esteem in psychiatric patients. Therefore, we examined a number of factors, including demographic factors, history of drug or alcohol abuse, and psychosocial stressors. We also evaluated the level of self-esteem in patients with different psychiatric disorders and also normals to determine the prevalence of low self-esteem in different psychiatric disorders.

The current study was designed so as to explore these objectives. Like other designs, this cross-sectional design has some advantages and some drawbacks. The cross-sectional design is a weaker method of establishing causal relationships than prospective survey or case-control study. However, it is relatively inexpensive and subjects are neither deliberately exposed to

possible harmful agents nor are they deprived of possible treatment. In the current study, for example, subjects have not used alcohol or drugs to determine the relationship between alcohol or drug abuse and self-esteem.

Two measures of self-esteem with high validity and reliability were applied to capture overlapping aspects of self-esteem: The Rosenberg Self-Esteem Scale measures global self-esteem and personal worthlessness and the Janis and Field Social Adequacy Scale which measures anxiety in social situations, self-consciousness and feelings of personal worthlessness. The correlation between these two measure is high, suggesting that they are measuring similar concepts. Notwithstanding, the interpretation of self-esteem scores sometimes seems complicated by artifacts resulting from the nature of the study design and subject error. Measurement bias due to subject error includes: response style variation; social differences leading to some problems such as semantic confusion; inconsistency or carelessness in younger subjects (O'Malley & Bachman, 1983); and social desirability effects such as need for approval and defensiveness. Also, not all patients fully completed both of the self-esteem scales.

The high prevalence of some psychiatric conditions, such as major depression, and the low prevalence of other psychiatric conditions, such as psychotic disorders, led to different sample sizes between groups. This could introduce bias to the study and in turn, some limitations in interpretation of the results. The accuracy of clinical diagnosis by therapists is another issue which might affect the results. However, since, patients were visited randomly by different therapists, the error due to this issue is likely to be small. Although

we tried to avoid introducing any biases to the study, there might be slight chance of unpredictable biases such as confounding bias due to unpredictable or unmeasured confounding variables. For example, degree of social support has some effects on self-esteem.

Keeping these drawbacks in mind, we will discuss the effects of different factors on self-esteem and the prevalence of low self-esteem in different psychiatric conditions, in turn.

5.2 Effect of Age on Self-Esteem

Like some investigators, we found a general pattern of increase in self-esteem with increase in age (Ingham et al., 1986). We speculate that as time passes, individuals acquire more experience in confronting new situations and life events, as well as in providing their needs in a variety of situations. Increase in their experience decreases their anxiety and their fear of new social situations when confronting and solving their problems. Finding a mate, having healthy children, and being loved are achievements that happen during life and enhance the self-esteem of individuals. However, confirmation of this speculation needs new research in this area, since there has been no previous research to evaluate the effects of aging on different psychiatric conditions such as anxiety in new situations.

Teenagers had the lowest self-esteem compared to the other age-groups. However, somewhat surprisingly they had relatively good social adequacy scores. About 42% of patients under 18 were diagnosed as having conduct disorder, adjustment disorder, or impulse control disorder. In the current study, patients with these disorders had higher feelings of social adequacy compared

to other psychiatric patients. However, their high scores on the Social Adequacy Scale were not related to the type of their psychiatric illness; even in subgroups of depressed patients and in individuals with conditions not attributable to mental disorder, teenagers showed relatively high feelings of social adequacy, but a low global self-esteem.

Among adolescents, higher level of self-esteem in normals, compared to psychiatric patients, has been reported by several researchers (e.g., Overholser et al., 1995; King et al., 1993). King et al. (1993), in their study of normal and depressed adolescents, concluded that perceptions of global self-worth are related to depression severity. Nonetheless, adolescents were also able to evaluate certain dimensions of their skills and abilities independent of depression severity. In the present study, the difference between the results from the two scales of self-esteem might be related to similar differences in the young adolescents. However, we did not observe any similar difference between two scales of self-esteem in the group of older adolescents. Hence, we were uncertain if the relatively high level of feelings of social adequacy in teenagers is a reflection of age or maturational process. Further research needs to be done to clarify this matter.

In the elderly, the preservation of self-determination in institutional settings and work-roles is important (Brisset, 1972). The loss of self-esteem caused by retirement from competitive activities, and awareness of society's largely unsympathetic attitude to old people, may predispose them to the depression (Butler & Lewis, 1973).

Lack of resilience in recovering from emotional stress and physical

distress, psychological sequelae of various clinical conditions such as poor memory, loss of speed and sensory acuity (Klopfer, 1965), retirement, and widowhood are threats to the self-esteem of the elderly population. However, in spite of all of the presumed threats to self-esteem of the elderly population, the elderly patients in this study had the highest self-esteem and the greatest feelings of social adequacy. This finding may imply successful aging processes in the society studied. We speculate that high self-esteem in seniors in this society is related to good health care programmes, financial security and respect and sympathy from society. This in turn leads them to have a good perspective on the future and to feel that their labours and social contributions have been acknowledged. We also observed that seniors generally l an active living style. They were usually engaged in part-time employment, volunteer work or with active hobbies such as jogging, gardening, and travelling. Others have shown that negative self-concept is related to perceived social isolation and poor health (Thomae, 1969). Therefore, active living can be an important factor in determining self-esteem. In addition, inherent in self-esteem is the desire for prestige or respect from others, dominance, recognition, attention, importance and appreciation (Maslow, 1954). The enhancement of self-esteem in aged patients may be related to some extent to society's attitude that makes aged people feel useful and necessary in the world, satisfying their desire for respect, attention, recognition and appreciation.

5.3 Self-Esteem and Gender

A substantial self-concept literature indicates that males often describe more positive self-concept than do females (Wylie, 1974). Consistent with

previous studies (e.g., Berger, 1968; Feather, 1985), our findings indicate that male patients had higher self-esteem and particularly greater feelings of social adequacy than females. For instance, in subgroups of patients with major depression, adjustment disorder, and in individuals with conditions not attributable to a mental disorder, only the differences between feelings of social adequacy of males and females were significantly different.

Fein et al. (1975) reported that sex-related differences in self-esteem did not reach significance until the onset of adolescence and that the sex difference between ages 7.5 and 13 were produced by the rise in boys' self-esteem not by a drop in girls' self-esteem. No other study has specifically examined these developmental shifts in males' versus females' self-esteem around the time of prepuberty. These investigators also reported that the children's scores were influenced by the items chosen for the scale. If the test were weighted more heavily with competence items, the sex difference might have been larger. Two individual self-esteem items in particular differed meaningfully between the sexes. These items related directly to the stereotyped "feminine" traits of passivity and emotional lability. In both cases, boys gave more positive answers.

In the current study, also, the difference between self-esteem of males and females was more meaningful on measures of Feelings of Social Adequacy than global self-esteem. This finding supports the idea that the difference between self-esteem scores of males and females is influenced by the items chosen for the scale. According to Janis and Field, their self-esteem scale measures three factors of anxiety in social situations, self-consciousness, and

feelings of personal worthlessness. On the other hand, the Rosenberg Self-Esteem Scale measures primarily personal worthlessness. We speculate that larger differences between self-esteem of males and females on the Janis and Field Scale scores are related to the items measuring the two factors of anxiety in social situations and self-consciousness. This means that males answered more positively (high esteem) than females to questions which evaluate these two factors.

Carlson (1970) hypothesized that differential correlates of social self-esteem exist for males and females. Feelings of adequacy and their confirmation in social acceptance and popularity seem to be crucial to feminine self-esteem and may have their roots in parental relationships. For females, social power may be a result of social acceptance, while the social power of males is almost entirely dependent on their competence and accomplishments (Hollender, 1973). Affiliative needs of women have been found to be greater than those of men (Douvan & Adelson, 1966). This might be partly explained by the fact that western culture, at the time, defined the successful woman as the woman who affiliates and the successful man as the man who achieves (Bradwick, 1971). Fein et al. (1975) speculated that self-perceived heterosexual popularity or physical attractiveness would correlate positively with girls' self-esteem. The hypothesis that physical attractiveness would correlate positively with happiness and self-esteem and negatively with neuroticism was supported for women but not for men (Mathes & Kahn, 1975).

It is not obvious if difference in self-esteem between sexes is a trait, or is related to the role of the society, or is a combination of several factors. We

speculate that the evaluation of self by males and females is under the influence of different correlates to self-esteem. These different correlates to self-esteem of males and females are related to the combination of several factors such as the different nature of males and females, the way parents and teachers train and nurture children (Hechtman et al., 1980), the way parents communicate with each other (Matteson, 1974), and the expectations of society regarding the definition of what makes a successful man or woman (Bradwick, 1971). It has been suggested that the differences between the self-esteem of males and females are likely to diminish as views about women and men's roles continue to change (Bachman & O'Malley, 1977). However, there are no longitudinal studies examining whether the self-esteem of women has changed during the last few decades.

In the present study, we also looked at the differences between the self-esteem of males and females in different psychiatric conditions. These differences were more prominent in patients with anxiety disorders. Interestingly, the sex differences in this group were produced by a rise in men's self-esteem and not by a drop in women's self-esteem. Also, the sex difference was not related to the subtype of anxiety disorders. Higher self-esteem in patients with anxiety disorder compared to the other groups of patients has been reported in another study (Silverstone, 1991), but the difference between self-esteem of males and females with anxiety disorders has not been previously considered.

The differences between males and females were not statistically significant in subgroups of patients with dysthymia, bipolar disorder, and

alcohol dependence for either scale of self-esteem.

Surprisingly, females with psychotic disorders had higher self-esteem and statistically significantly greater feelings of social adequacy than males with psychotic disorders. This was not related to the subtype of psychotic disorder. These findings could suggest that females with higher level of self-esteem are more susceptible to psychotic disorder. However, in view of the small sample size, further research is needed to confirm these findings.

5.4 Self-Esteem and Marital Status

Divorce is among the most stressful life events (Holmes & Rahe, 1967), and is a threat to mental health. Compared to married patients, divorced or separated patients have been found to be over presented in mental institutions (Bloom et al., 1978), and to have higher rates of both physical and mental disturbances in community surveys (Berkman, 1969; Briscoe et al., 1973; LaHorgue, 1960). They are also more likely to be frequent users of one or more psychotropic drugs (Bachrach, 1975), to suffer from alcoholism (Bloom et al., 1978) and to commit suicide (Gove, 1972; Stack, 1980). Also, divorced or separated mothers compared to married once, have shown significantly lower self-esteem on the Rosenberg Self-Esteem Scale and used professional therapists more than married mothers (Tcheng-Laroche & Prince, 1983). However, separation and divorce may not be as pathogenic as they once were, at least for women who have adequate income and who have responsibility for children (Tcheng-Laroche & Prince, 1983).

Consistent with other research, we found that in individuals with conditions not attributable to a mental disorder, married individuals had

significantly higher self-esteem and feelings of social adequacy than those who never married or were divorced, even after adjusting for age. The causal direction of this association is not clear. Perhaps individuals with high self-esteem are generally more successful in meeting their needs and aspirations, whereas those with low self-esteem generally experience failure or are frequently less successful in meeting their needs.

It has been shown that the self-esteem of women who had a confidant was higher than women who did not have a confidant (Ingham et al., 1986). A spouse can be considered as a confidant in most situations and therefore another proposition is that married individuals enjoy the supportive function of their spouses in different situations. Supporting this suggestion is the findings that the self-esteem of individuals without a psychiatric disorder who had a common-law relationship was not significantly different from those of married individuals. However, the self-esteem of married individuals without a psychiatric disorder was significantly higher than never married individuals.

Another interesting finding in the present study was that the feelings of social adequacy of psychiatric patients did not differ significantly according to their marital status. This was also the case for global self-esteem after adjusting for the effect of age. This clearly shows the importance of psychiatric illness in damaging self-esteem; once a mental disorder happens, the self-esteem and feelings of social adequacy drop to their lowest level, whether the subjects are married or not.

5.5 Self-Esteem and Educational Status

Some researchers have found a relationship between self-esteem and performance, even on simple counting task (League & Jackson, 1964). Similarly, a correlation exists between self-esteem and scholastic performance and educational attainment. In men, this correlation appears to be stronger in adolescents than young adults. One interpretation is that this shift occurs because a young person in the process of becoming an adult increasingly anticipates and experiences situations in which self-evaluation depends on factors quite different from success in school, and academic success becomes less dominant in shaping self-esteem. It appears that self-esteem and educational attainment are correlated primarily because both are heavily influenced by prior causal factors such as academic ability, past academic performance, and family socioeconomic level. In other words, academic talent and performance contribute to self-esteem both during high school and also to later academic success (Bachman & O'Malley, 1977).

Consistent with previous studies, the overall findings from present study were that patients with higher educational attainment had greater feelings of social adequacy and higher global self-esteem than those with lower educational attainment. It seems that there is a reciprocal association between educational status and self-esteem. Previous studies have shown that individuals with low self-esteem would predict lower grades for themselves on examinations than high self-esteem subjects (Morrison et al., 1973), and put less effort into their scholastic performances (Sigall & Gould, 1977). Thus, low self-esteem is tied to failure outcomes such as poor academic experiences

(Weiss & Hechtman, 1986; Slomkowski et al., 1995). On the other hand, higher levels of educational attainment lead to higher status jobs and indirectly a positive impact on self-esteem (Bachman & O'Malley, 1977).

In the present study, however, levels of self-esteem and feelings of social adequacy in individuals with conditions not attributable to a mental disorder were not statistically significantly different according to their educational status. We therefore speculate that the pathogenic effect of mental illness on self-esteem is greater for individuals with lower educational attainment. Thus, with the onset of mental illness, the self-esteem of patients with higher educational attainment remains more intact than patients with lower educational attainment. This would produce the observed difference between the self-esteem of patients with higher education compared to patients with lower education. It is also possible that higher educational attainment induces higher feelings of social adequacy and higher global self-esteem, and that this then acts as a buffer to help prevent subsequent mental illness.

5.6 Self-Esteem and Current Employment

Occupational status has been shown to have a direct positive impact on self-esteem (Bachman & O'Malley, 1977). Feather's study (1982) also shows a significant correlation between low self-esteem and unemployment. The results of the present study also show that employed patients had significantly higher self-esteem than unemployed patients. These results might be interpreted as indicating that an individual with low self-esteem usually underestimates his abilities and may in turn be treated as if this is a true reflection of his abilities. This would then confirm the individuals' poor view of themselves. In this way, a

vicious cycle will be created which leads to continued deterioration of the self-esteem (Coopersmith, 1967). On the other hand, individuals with high self-esteem are generally more successful in meeting their needs. They also have higher expectation of success, better expression of their abilities, and put more effort into their endeavours (Sigall & Gould, 1977). Thus, they can find a job more easily, and get internal and external rewards for their success.

It is possible that these findings regarding the effects of employment on self-esteem may reflect the effects of financial security, respect, social position, and prestige on the self-esteem of individuals. In keeping with this suggestion the results of the present study show lower self-esteem in students compared to employed patients; it may therefore be the differences in the financial conditions, prestige and social conditions accompanied by employment status that account for these differences. Interestingly, it has been reported that women in higher grade employment are more likely to have higher self-esteem (Brown & Bifulco, 1990), and that work status index might reflex some related factors such as a woman's financial situation (Keith & Schafer, 1980).

5.7 Self-Esteem and Income

Our findings suggest that patients with higher family income, and particularly high personal income, tend to have higher self-esteem than patients with low family or personal income. It seems that financial security, social situation, prestige, and respect accompanied by high income status has an impact on the self-esteem of individuals. These findings of the effects of income on self-esteem are similar to those previously reported in the literature.

For example, it has been demonstrated that women in higher grade employment are more likely to have higher self-esteem (Brown & Bifulco, 1990). It has also been suggested that the difference between the self-esteem of married and divorced women be partly related to the lower economic status of divorced women (Tcheng-Laroche & Prince, 1983), and that the difference in self-esteem due to the work status of women is partly related to their financial situation (Keith & Schafer, 1980)

5.8 Self-Esteem and Legal Problems

The results from previous studies suggest that the types of crimes committed are an indication of the enduring beliefs that prisoners have of themselves and others (Cohen, 1964; Coopersmith, 1967). When the destruction is directly to others and when the destruction is only to oneself, the self-esteem scores are lower. Also, prisoners who were on work release and in psychology classes tended to have higher self-esteem (Yelsma & Yelsma, 1977). Some researchers reported that adolescents who were delinquent felt inadequate in their roles and had lower self-esteem compared to the adolescents who fitted into legitimate roles (Gold, 1970; Wood & Johnson, 1972).

The association of self-esteem and having legal problems such as possession of illegal drugs and theft has been studied in the present study. Although patients who had history of legal problems tended to have lower self-esteem than those who did not, this difference was not statistically significant. In other words, the results of present study imply that delinquency and unlawful behaviour cannot be predicted by level of self-esteem of individuals.

5.9 Self-Esteem and History of Alcohol Abuse in the Past or Present

Like most other investigators (Chafetz et al.,1970; Clinebell, 1968; Sands et al., 1967), we found that there were lower self-esteem scores and lower feelings of social adequacy among alcoholics compared to non-alcoholic patients. This difference was particularly prominent in depressed patients, and was not related to subtype of depressive disorder. It seems that patients who have lower self-esteem are more prone to use alcohol in confronting life problems or as a strategy to manage negative feelings about themselves (Kaplan, 1975 & 1980). However, it is suggested that after a while an alcoholic feel the social and physical stresses of abusing alcohol and this enhances the negative feelings they have about themselves (Charalampous, 1976). This is true in depressed alcoholic patients who tend to exaggerate the negative aspects of themselves (Beck, 1967).

In non-depressed patients, feelings of social adequacy of alcoholic was not significantly different from non-alcoholics. This finding is in the favour of the view that people who use alcohol, as time passes, feel the negative effects of alcohol which will be reflected in their self-concept (Charalampous, 1976). Since depressed patients interpret life events and different situations in a more negative manner and magnify them (Beck, 1967), their understanding of the negative effects of alcohol decreases their self-esteem more than in non-depressed patients.

5.10 Self-Esteem and History of Drug Abuse in the Past or Present

The literature indicates that at least some aspects of self-esteem are related to drug abuse (Allendorf et al., 1985; Botvin et al., 1986). Young et al.

(1989) concluded that specific aspects of self-esteem are highly associated with several types of substance use. Also, it was observed that health risk behaviours, such as drug abuse, tend to cluster together in certain vulnerable adolescents, especially those with low self-esteem (Fisher et al., 1991). Consistent with most previous studies, our findings show that patients who abuse drugs had a statistically significant lower self-esteem than non-abusers. However, the feelings of social adequacy of drug abusers were not statistically significantly different from non-abusers.

On the other hand, among depressed patients, drug abusers showed not only significantly lower self-esteem but also significantly lower feelings of social adequacy than non-abusers. These findings might imply that patients who had lower self-esteem use drugs as a means of coping with their problems (Guglielmo et al., 1985). As time passes, a drug addict feels the social and physical side effects of his habit (Charalampous, 1976). This feeling and knowledge, in turn, decrease the self-esteem of drug addicts even more, particularly in depressed patients who ruminate the negative and usually exaggerated thoughts about their maladaptive habit (Beck, 1967).

5.11 Self-Esteem and Psychosocial Stressors

Low self-esteem, at least in part, is related to adverse social circumstances such as unemployment (Feather, 1982; Warr & Jackson, 1983) and life stress such as divorce (Tcheng-Laroche & Prince, 1983), lack of close confiding relationship, early loss of mother or early inadequate parenting, and negative interaction with family members (Brown et al., 1990b; Brown & Harris, 1987; Ingham et al., 1986). On the other hand, positive life changes

lead to more positively evaluating of self (Brown et al., 1988). Rutter (1987) has described the role of perceived self-worth as a buffer against stress. A sense of global self-worth may diminish the likelihood that an individual experiences depression when faced with individual disappointments or threats to specific areas of perceived competence.

Two factors should be considered in the study of the effects of psychosocial stressors on self-esteem, the severity of psychosocial stressors and whether these are acute or enduring. Our results indicate that the severity of enduring psychosocial stressors, but not the severity of acute psychosocial stressors is an important factor affecting the global self-esteem of patients. Patients who experienced severe enduring psychosocial stressors had significantly lower global self-esteem than others. This is consistent with most previous research which reported a correlation between life events and level of self-esteem (e.g., Brown et al., 1985).

According to the results of current study, the severity of acute or enduring psychosocial stressors does not affect the feelings of social adequacy of patients.

5.12 Self-Esteem and Psychiatric Disorders

A number of previous studies reported higher self-esteem in normals compared to patients with different psychiatric conditions, such as dysthymic disorder (Roy et al., 1985), major depressive disorder (e.g., Lewinsohn et al., 1981), anxiety disorders (Felix Gentil & Lader, 1979), eating disorders (e.g., Kendler et al., 1991), psychotic disorders (Nickols, 1966), and alcohol or drug dependence (e.g., Chafetz et al., 1970; Guglielmo et al., 1985). Consistent with

previous studies, we found significantly lower self-esteem and feelings of social adequacy in the majority of psychiatric patients compared to normals.

5.12.1 Normal Group in Our Study

Since the normal group consisted of individuals who accompanied patients, there was a possibility that this group was not an independent group; some psychiatric disorders are common in other members of the patient's family and these normal individuals who accompanied patients might suffer from a milder form of illness or might develop the disorder in the near future. However, it should be mentioned that these normal individuals were interviewed by therapists and no specific diagnosis was determined for them. Furthermore, even if it is supposed that these normal individuals might have been affected by mild forms of the disorder, we expect to see similar levels of self-esteem in these individuals and patients. In other words, an independent group of normals should show even higher level of self-esteem compared to patients.

5.12.2 Groups with Lower Level of Self-Esteem

The results from the present study suggest that low self-esteem and / or feelings of social adequacy are common in psychiatric patients. Still, there are considerable differences between the self-esteem of patients with different clinical diagnoses. For instance, patients with eating disorders, dysthymia, major depression, and comorbidity of major depression and dysthymia, major depression and anxiety, major depression and alcohol abuse, or major depression and drug abuse, had lower self-esteem or feelings of social adequacy

than those of the other patients. Patients with comorbidity of dysthymia and major depression had the lowest global self-esteem. Low self-esteem has been observed by previous researchers in these disorders.

5.12.2.1 Patients with Eating Disorders

Patients with eating disorders had the lowest feelings of social adequacy in the current study. Low self-esteem has been considered a psychological hallmark of most patients with eating disorders (Baird & Sights, 1986). Also, it has been shown that among different variables such as self-esteem, family conflict, self-presentation, behavioral control, and the criticism of eating, self-esteem is the only variable that by itself distinguishes patients from non-patients (Huon & Brown, 1984). It has been demonstrated that low self-esteem occurs in eating disorder patients in the absence of depression (Walters & Kendler, 1995; Silverstone, 1990). Indeed it has been suggested that low self-esteem be the final common pathway leading to eating disorders (Silverstone, 1991).

5.12.2.2 Patients with Major Depression or Dysthymia

The link between negative self-appraisal and mood disorders is well known and documented (Battle, 1978; Harter, 1989; Ryan et al., 1987), However the causal direction of this association is not obvious. Some researchers believe that low self-esteem arises as a consequence of depression (Lewinsohn et al., 1981). Depressed patients are likely to recall more negative self-referent adjectives which leads them to describe themselves in largely negative terms (Brewin, 1988; Kuiper et al., 1983; Beck et al., 1979; Power, 1987). Ingham et al. (1987) found a major fall in self-esteem with the onset of

depressive illness, especially major depressive illness. An alternative view is that the altered self-concept may be primary. Low self-esteem was shown to act as a vulnerability factor in the sense of being associated with a doubling of the risk of depression during a one year follow up period once a provoking crisis had occurred (Brown et al., 1990). Some investigators found that self-esteem lability is a better index of depression proneness than low self-esteem as a trait. Highly labile subjects may have especially high recall for negative life events because of the impact of those events on self-esteem, whereas subjects with low lability may experience the same events but be less inclined to recall or report them (Butler et al., 1994). Another proposition is that low self-esteem is an intervening between social adversity and depression (Brown & Harris, 1978). Low self-esteem and lack of a supportive confidant have been shown to be associated with a greatly increased risk of subsequent depression once a stressor occurs (Brown et al., 1986). In other words, perceived self-worth acts as a buffer against stress (Rutter, 1987). Besides major depression, low self-esteem is also observed in other depressive disorders such as dysthymia (Roy et al., 1985). In fact, low self-esteem has been identified as one of the diagnostic criteria for dysthymic disorder.

5.12.2.3 Patients with Comorbidity of Major Depression and Dysthymia

In the present study, patients with comorbidity of major depression and dysthymia had statistically significantly lower feelings of social adequacy than patients with either major depression or dysthymia. It seems that dysthymic patients who have lower self-esteem are at high risk of developing major depression. Also it is possible that the onset of major depression decrease the

self-esteem of dysthymic patients further.

5.12.3 Other Groups

5.12.3.1 Patients with Bipolar Disorder

We observed that patients with bipolar disorder had high global self-esteem and moderate level of social adequacy compared to the other psychiatric patients. Some researchers believe that the tendency of bipolar patients to social conformity and their drive for success may partly explain their higher self-esteem. They speculated that bipolar patients have negative feelings of self which is not revealed on usual self-report inventories, and could be said to represent an example of defensively high self-esteem (Winters & Neale, 1985; Pardoen et al., 1993).

5.12.3.2 Patients with Conduct Disorder and Impulse Control Disorder

In the present study, patients with conduct disorder and impulse control disorder showed high feelings of social adequacy and rather high global self-esteem compared to other patients.

5.12.3.3 Patients with Anxiety Disorders

Patients with anxiety disorders had higher feelings of social adequacy and particularly higher levels of global self-esteem than patients with eating disorders, major depression, dysthymia and comorbidity of major depression and dysthymia. Higher global self-esteem measured by the Rosenberg self-esteem scale in patients with anxiety disorders compared to five different psychiatric conditions including depression, psychosis, personality disorder, alcohol dependence and other conditions have been reported by Silverstone (1991). Beck et al. (1992) studied self-concept dimensions of clinically

depressed and anxious outpatients and found that outpatients with mood disorders considered their physical appearance, work efficacy, and virtue to be less acceptable than those with anxiety disorders. Consequently, life experiences that threaten the self-concept in these content areas may have the potential to elicit future depressogenic self-concepts in patients with primary anxiety disorder. In the present study, we observed lower levels of self-esteem in anxious patients compared to normals, which was also observed by previous investigators (Cowen, 1972; Bond & Lader, 1976, Felix Gentil & Lader, 1979).

We also noticed that in anxious patients, compared to other psychiatric conditions, the self-esteem sex-difference was produced by an increase in men's self-esteem and not by drop in women's self-esteem. In other words, the higher self-esteem of patients with anxiety disorders that we saw is most probably related to the rise in men's self-esteem.

5.12.3.4 Patients with Psychotic Disorder

There are a limited number of studies regarding self-esteem of psychotic patients. In our study, patients with psychotic disorders had intermediate levels of self-esteem and feelings of social adequacy compared to other psychiatric conditions. However, psychotic patients had significantly lower global self-esteem and feelings of social adequacy than normals. This is consistent with previous research (Nickols, 1966).

5.12.4 General Discussion

Self-esteem is an abstract concept. It is also a composite rather than a single entity. Available measurements of self-esteem usually measure

different components of this global entity. For example, the Janis and Field Self-Esteem Inventory primarily measures feelings of social adequacy. Some investigators like Rosenberg tried to devise a scale that can capture primarily the global entity of self-esteem, but this has not been very successful (Robson, 1988).

The formation and development of this abstract concept, self-esteem, seems to be primarily via acquisition rather than being inborn (James, 1890). Cooley (1902) stressed the importance of other peoples' reactions in shaping self-esteem. Similarly, Mead (1934) stated that self-esteem derives largely from the reflected appraisals of others. Personal values (James, 1890) and values and aspirations of the family and social group (Lewin et al., 1944) have vital roles in determining the affective response to self-evaluation. First parents and then teachers have an important role in shaping the self-esteem of a child. Self-esteem is also determined by interaction between success and pretensions (James, 1890). According to Beck (1967), a person acquires his self-concept from personal experiences, from the judgements made of him by others, and from identification with family and friends. Once a concept begins to emerge, events are interpreted in such a way as to consolidate the concept, eventually giving rise to a permanent cognitive structure.

A number of factors have been shown to change the self-esteem of individuals. For example, early separation from parents and lack of a personal confidant has been observed to be associated with low self-esteem in women (Ingham et al., 1986). Rosenberg (1965) also explored the effects of various social factors, including social class, ethnic group, religion, orders of birth, and

parental concern on self-esteem in a large number of adolescents. In the present research, we studied the relationship between self-esteem and a number of factors, including demographic factors, psychosocial stressors, and history of drug and alcohol abuse. As discussed earlier, many of these factors have a relationship with self-esteem.

We speculate, based on both previous literature and results of the current study, that low self-esteem predisposes individuals to psychiatric disorders. The presence of psychiatric disorders, in turn, then decreases further the self-esteem of the patients. The severity of the decrease in self-esteem depends on the type of psychiatric disorder. For instance, major depression seems to have the most negative effect on self-esteem of patients. That these changes are likely to be due to the illness, i. e., being state determined factors, is suggested by other studies. For example, some researchers observed that with improvement in the condition of depressed patients, the level of self-esteem increased (Hamilton & Abramson, 1983) and with the onset of depressive illness the self-esteem level dropped (Ingham et al., 1987). Also, with enhancement of self-esteem, the condition of depressed patients improved (Brown et al., 1990_d). On the other hand, lowering self-esteem has been shown to produce depression, anxiety, hostility, and withdrawal (Wilson & Krane, 1980). Figure 5.1 presents a summary of our speculations.

Also, as shown in Figure 5.1, the cumulative weight of the evidence indicates that high self-esteem is associated with adaptive functioning, greater personal contentment and less susceptibility to the onset of mental illness in the face of life events.

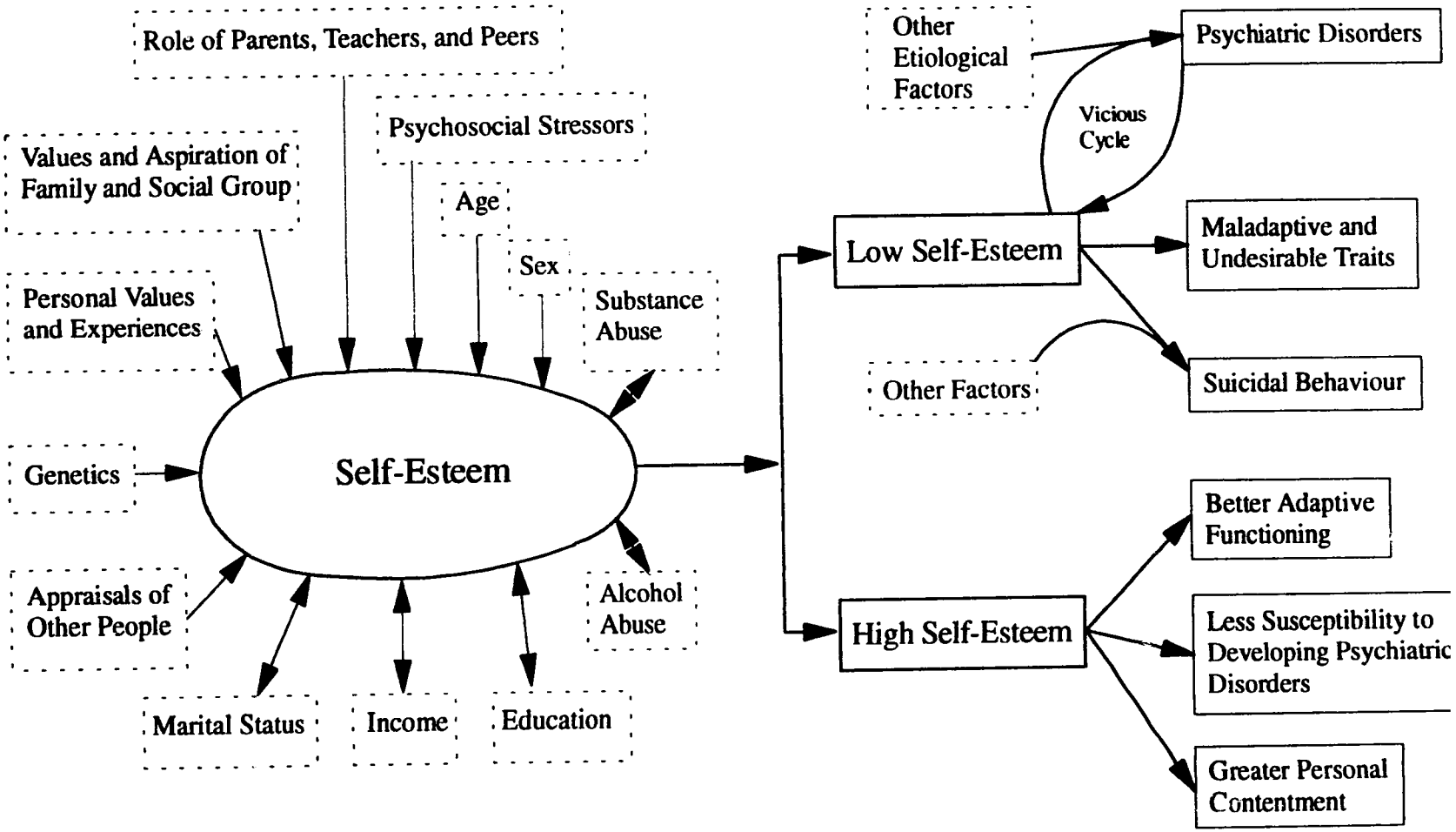


Figure 5.1 Association of Self-Esteem, Psychosocial Factors, and Psychiatric Disorders

CHAPTER 6

SUMMARY AND CONCLUSION

6.1 Summary

The major findings of this study are summarized as follows.

1. A general pattern of increase in self-esteem and feelings of social adequacy with increase in age was observed, except for feelings of social adequacy of teenagers.

2. Although females had significantly lower global self-esteem, and more salient, lower feelings of social adequacy, this was not the case in all psychiatric disorders;

- In patients with anxiety disorders, males had significantly higher global self-esteem and greater feelings of social adequacy than females. This was due to a rise in men's self-esteem and not due to drop in females' self-esteem.

- In patients with adjustment disorder, and also in individuals with conditions not attributable to a mental disorder, males had significantly greater feelings of social adequacy than females, mostly due to a rise in men's scores. Differences between global self-esteem of males and females existed, but were not statistically significant.

- In patients with major depression, only feelings of social adequacy of males were higher than of females. This difference was statistically significant.

- In psychotic patients, on the contrary, females had higher global self-esteem and significantly greater feelings of social adequacy than males.

- In other psychiatric disorders, no significant difference was observed between self-esteem of males and females.

3. Although in individuals with conditions not attributable to a mental disorder,

both global self-esteem and feelings of social adequacy of married was significantly higher than those of the never married and divorced subjects, in psychiatric patients no significant difference was found due to marital status.

4. Since in patients, and not in individuals with conditions not attributable to a mental disorder, self-esteem of well-educated patients was higher , it is concluded that high education may act as a buffer to prevent a severe drop of self-esteem in the face of mental illness.

5. Employed patients have higher self-esteem than unemployed patients.

6. Patients with high family income, particularly personal income, tend to have higher global self-esteem and feelings of social adequacy than patients with low income.

7. Delinquency and unlawful behaviou: annot be predicted by the level of self-esteem.

8. Among different psychiatric patients, particularly in patients with major depression were global self-esteem and feelings of social adequacy significantly lower in patients who had abused alcohol or drug in their lifetime. In a study of association of self-esteem with drug or alcohol abuse, since a large portion of psychiatric patients is diagnosed with major depression, extra care is needed when interpreting the results for the whole population of psychiatric patients.

9. Severity of enduring psychosocial stressors but not severity of acute stressors is an important factor affecting global self-esteem of patients. Patients who experienced severe enduring psychosocial stressors had significantly lower global self-esteem than others.

10. Severity of acute or enduring psychosocial stressors does not affect the

feelings of social adequacy of patients.

11. Lower feelings of social adequacy and global self-esteem were observed in psychiatric patients compared to normals. Multifactorial analysis of variance shows that the variances due to the presence of psychiatric illness are the largest variance of all.

12. Patients with different psychiatric disorders had considerably different levels of global self-esteem and social adequacy. For example, patients with eating disorders and depressive disorders had lower self-esteem and lower feelings of social adequacy.

6.2 Conclusion

We have carried out the largest study to date to determine self-esteem in psychiatric patients. We have shown that in this population, low self-esteem and low social adequacy are related to a range of psychosocial factors. It has also been shown that patients with different psychiatric conditions vary considerably in their levels of self-esteem. This observation suggests that there are factors in the illness itself which are responsible for the effect on self-esteem. Further research is required to further elucidate the complex relationship between low self-esteem and development of psychiatric illness. Clearly, prospective studies toward this end are appropriate.

References

Abramson, L. Y., Seligman, M. E. P. & Teasdale, J. D. (1978). Learned helplessness in humans: Critique and reformulation. Journal of Abnormal Psychology, 87, 49-74.

Allen, L. R. (1969). Self-esteem of male alcoholics. Psychological Record, 19, 381-389.

Allendorf, S., Sunseri, A. J., Cullinan, J., & Oman J. K. (1985). Student heart health knowledge, smoking attitudes and self-esteem. Journal of School Health, 55, 196-199.

Altman, J. H., & Wittenborn, J. R. (1980). Depression prone personality in women. Journal of Abnormal Psychology, 89, 303-308.

Anderson, N. N. (1971). Effects of institutionalization on self-esteem. Journal of Gerontology, 22, 313-317.

Anderson, S. & Williams, M. (1985). Cognitive / affective reactions in the improvement of self-esteem. When thoughts and feelings make a difference. Journal of Personality and Social Psychology, 49, 1086-1097.

Andrews, B., & Brown, G. W. (1988). Social support, onset of depression and personality: An exploratory analysis. Social Psychiatry and Psychiatric Epidemiology, 23, 99-108.

Andrews, B., & Brown, G. W. (1993). Self-esteem and vulnerability to depression: The concurrent validity of interview and questionnaire measures. Journal of Abnormal Psychology, 102, 565-572.

Axford, S , & Jerrom, D. W. A. (1986). Self-esteem in depression: A controlled repertory grid investigation. British Journal of Medical Psychology, 59, 61-68.

Bachman, J. C. & O'Malley P. M. (1977). Self-esteem in young men: A longitudinal analysis of the impact of educational and occupational attainment. Journal of Personality and Social Psychology, 35(6), 365-380.

Bachrach, L. (1975). Marital status and mental disorder: An analytical review. Washington, DC: National Institute of Mental Health, Government Printing Office

Back, K. W., & Guptill, C. S. (1966). Retirement and self-ratings. In I. H. Simpson, & J.C. McKinney (Eds.), Social aspects of aging. Durham, N.C.: Duke University Press.

Baird, P., & Sights, J. R. L. (1986). Low self-esteem as a treatment issue in the psychotherapy of anorexia and bulimia. Journal of Counselling Development, 64, 449-451.

Bardwick, J. (1971). The psychology of women. New York: Harper & Row.

Barnett, P. A. & Gotlib, I. H. (1988). Psychological functioning and depression: Distinguishing among antecedents, concomitants, and consequences. Psychological Bulletin, 104, 97-126.

Battle, J. (1978). Relationship between self-esteem and depression. Psychological Reports, 42, 745-746.

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

Beck, A. T., Rush, A. J., Shaw, B. F., & Emery, G. (1979). Cognitive therapy of depression. New York: Wiley.

Beck, A. T., Steer, R. A., & Epstein, N. (1992). Self-concept dimensions of clinically depressed and anxious outpatients. Journal of Clinical Psychology,

48(4), 423-432.

Beckman, L. J. (1978). Self-esteem of women alcoholics. Journal of Studies on Alcohol, 39, 491-498.

Berger, C. R. (1968). Sex differences related to self-esteem factor structure. Journal of Consulting and Clinical Psychology, 32, 442-446.

Berkman, P. L. (1969). Spouseless motherhood, psychological stress and physical morbidity. Journal of Health and Social Behaviour, 10, 323-334.

Berman, S. M. (1976). Validation of social self-esteem and an experimental index of delinquent behavior. Perceptual and Motor Skills, 43, 847-850.

Bingham, W. C. (1983). Problems in the assessment of self-esteem. International Journal for Advancement in Counselling, 6, 17-22.

Block, J. & Thomas, H. (1955). Is satisfaction with self a measure of adjustment? Journal of Abnormal and Social Psychology, 51, 257-261.

Bloom, K. L. (1961). Age and the self concept. American Journal of Psychiatry, 118, 534-538.

Bloom, B. L., Asher, S. J., & White, S. W. (1978). Marital disruption as a stressor: A review and analysis. Psychological Bulletin, 85, 867-894.

Bolger, N. & Schilling, E. A. (1991). Personality and the problems of everyday life: The role of neuroticism in exposure and reactivity to daily stressors. Journal of Personality, 59, 355-386.

Bonagura, J. A., & Bonagura, E. W. (1987). Self-concept, stress symptomatology, and tobacco use. Journal of School Health, 57, 56-58.

Botvin, G. J. (1986). Substance abuse prevention research: Recent

developments and future directions. Journal of School Health, 56(9), 369-374.

Brewin, C. R. (1988). Cognitive foundations of clinical psychology. London: Erlbaum.

Brewin, C. R., Smith, A. J., Power, M., & Furnham, A. (1992). State and trait differences in depressive self-perceptions. Behaviour Research and Therapy, 30(5), 555-557.

Breytspraak, L. M., & George, L. K. (1979). Measurement of self-concept and self-esteem in older people: State of the art. Experimental Aging Research, 5, 137-148.

Bridle, M. J. (1984). Comparison of the Tennessee Self Concept Scale and the Rosenberg Self-Esteem Scale. Occupational Therapy Journal of Research, 4, 51-52.

Briscoe, C. W., Smith, J. B., Robbins, E., Marten, S. & Gaskin, F. (1973). Divorce and psychiatric disease. Archives of General Psychiatry, 29, 119-125.

Brisset, D. (1972). Towards a clarification of self-esteem. Psychiatry, 35, 255-263.

Brown, G. W., & Harris, T. O. (1978). Social origins of depression: A study of psychiatric disorder in women. London: Tavistock.

Brown, G. W., & Bifulco, A. (1985). Social support, life events and depression. In J. G. Sarason (Ed.), Social support: Theory research and applications. The Hague: Martinus Nijhof.

Brown, G. W., Andrews, B., Harris, T., Adler, Z., & Bridge, L. (1986). Social support, self-esteem and depression. Psychological Medicine, 16, 813-831.

Brown, G. W., Adler, Z. & Bifulco, A. (1988). Life events, difficulties and

recovery from chronic depression. British Journal of Psychiatry, 152, 487-498.

Brown, G. W. & Bifulco, A. (1990). Motherhood, employment and the development of depression: A replication of a finding? British Journal of Psychiatry, 156, 169-179.

Brown, G. W., Andrews, B., Bifulco, A. & Veiel, H. O. F. (1990a). Self-esteem and depression.I: Measurement issues and prediction of onset. Social Psychiatry and Psychiatric Epidemiology, 25, 200-209.

Brown, G. W., Bifulco, A., Veiel, H. & Andrews, B. (1990 b). Self-esteem and depression. II: Social correlates of self-esteem. Social Psychiatry and Psychiatric Epidemiology, 25, 225-234.

Brown, G. W., Bifulco, A., & Andrews, B. (1990c). Self-esteem and depression. III: Etiological issues. Social Psychiatry and Psychiatric Epidemiology, 235-243.

Brown, G. W., Bifulco, A., & Andrews, B. (1990d). Self-esteem and depression. IV: Effects on course and recovery. Social Psychiatry and Psychiatric Epidemiology, 25, 244-249.

Brown, G. W., Lemyre, L. & Bifulco, A. (1992). Social factors and recovery from anxiety and depressive disorders: A test of specificity. British Journal of Psychiatry, 161, 44-54.

Buchman, J. G., & O'Malley, P. M. (1977). Self-esteem in young men: A longitudinal analysis of the impact of educational and occupational attainment. Journal of Personality and Social Psychology, 35, 365-380.

Butler, A. C., Hokanson, J. E., & Flynn, H. A. (1994). A comparison of self-esteem lability and low trait self-esteem as vulnerability factors for depression. Journal of Personality and Social Psychology, 66, 166-177.

Butler, R. N., & Lewis, M. I. (1973). Aging and mental health: Positive psychological approaches. Sant Louis, Missouri: C. V. Mosby.

Carlson, R. (1970). On the structure of self-esteem: Comments on ziller's formulation. Journal of Consulting and Clinical Psychology, 34, 264-268.

Carmichael, J. S., Linn, M. W., Pratt, T., & Webb, N. (1977). Self-concept and substance abuse treatment. Comprehensive Psychiatry, 18, 357-362.

Chafetz, M. E., Blane, H. T. & Hill, M. J. (1970). Frontiers of alcoholism. New york: Science House.

Charalampous, K. D., Ford, K. B., & Skinner, T. J. (1976). Self-esteem in alcoholics and nonalcoholics. Journal of Studies on Alcohol, 37, 990-994.

Clarke, S. K. (1974). Self-esteem in men and women alcoholics. Quarterly Journal of Studies on Alcohol, 35, 1380-1381.

Clinebell, H. J., Jr. (1968). Understanding and counselling the alcoholic through religion and psychology. Rev. and enl. ed. Nashville: Abingdon Press.

Cofer, D. H., & Wittenborn, J. R. (1980). Personality characteristic of formerly depressed women. Journal of Abnormal Psychology, 89, 309-314.

Cohen, H. (1964). The relationship of the prison program to changes in attitudes and self-concepts in inmates (Doctoral dissertation, New York University). Ann Arbor: University Microfilms.

Coleman R. G. (1975). Manipulation of self-esteem as a determinant of mood of elated and depressed women. Journal of Abnormal Psychology, 84(6), 693-700.

Cooper, S. E. (1983). The influence of self-concept on outcomes of intensive alcoholism treatment. Journal of Studies on Alcohol, 44, 1087-1093.

Coopersmith, S. (1967). The antecedents of self-esteem. San Francisco: Freeman.

Coopersmith, S. (1969). Studies in self-esteem. Scientific American., 218, 96-109.

Cowan, R., Altmann, H., & Pysh, F. (1978). A validity study of selected self-concept instruments. Measurement and Evaluation in Guidance, 10, 211-218.

Crandall, R. C. (1973). The measurement of self-esteem and related constructs. In J. Robinson & P. Shaver (Eds.), Measures of psychological attitudes. Ann Arbor, MI: Institute for Social Research.

Dielman, T., Leech, S., Larenger, A., & Horvath, W. (1984). Health focus of control and self-esteem as related to adolescent behavior and intentions. Adolescence, 19, 935-950.

Douvan, E., & Adelson, J. (1966). The adolescent experience (p. 151). New York: Wiley.

Eckenrode, J. (1983). The mobilization of social support: some individual constraints. American Journal of Community Psychology, 11, 509-528.

Eckenrode, J. & Gore, S. (1981). Stressful life events and social support: the significance of context. In B. H. Gottlieb (Ed.), Social networks and social support in community mental health (pp. 43-69). Sage: Beverly Hills.

Feather, N. T.(1982). Unemployment and its social correlates: a study of depressive symptoms, self-esteem, protestant ethic values, attributional style and apathy. Australian Journal of Psychology, 34, 309-323.

Feather, N. T. (1985). Masculinity, femininity, self-esteem and subclinical depression. Sex-Roles, 12, 491-500.

Fein, D., O'Neill, S., Frank, C., & McColl Velit, K (1975). Sex differences in preadolescent self-esteem. Journal of Psychology, 90, 179-183.

Felde, R. (1973). Alcoholics before and after treatment: A study of self-concept changes. Newsletter for Research in Mental Health and Behavioral Sciences, 15, 32-34.

Felix Gentil, M. L., & Lader, M. (1979). Effects of anxiety on attitudes: A semantic differential study. British Journal of Medical Psychology, 52, 133-139.

Fichtler, H., Zimmermann, R. R., Moore, R. T. (1973). Comparison of self-esteem of prison and non-prison groups. Perceptual and Motor Skills, 36, 39-44.

Finlay-Jones, R. A. (1981). Showing that life events are a cause of depression: A review. Australian and New Zealand Journal of Psychiatry, 15, 229-238.

Fisher, M., Schneider, M., Pegler, C., & Napolitano, B. (1991). Eating attitudes, health-risk behaviors, self-esteem, and anxiety among adolescent females in a suburban high school. Journal of Adolescent Health, 12, 377-384.

Fleming J. & Courtney, B (1984). The dimensionality of self-esteem II: Hierarchical facets model for revised measurement scales. Journal of Personality and Social Psychology, 46, 404-421.

Fromm, E. (1941). Escape from freedom. New York: Rinehart.

Glass, G. V., & Hopkins, K. D. (1984). Statistical methods in education and psychology (2nd ed.). Boston: Allyn & Bacon.

Gold, M. (1970). Delinquent behavior in an American city. Beltmont, California: Brooks.

Gordon, S. K., & Vinacke, W. E. (1971). Self and ideal self-concepts and dependency in aged persons residing in institutions. Journal of Gerontology, 26, 337-345.

Gore, S. (1985). Social support and styles of coping with stress. In S. Cohen & L. Syme (Eds.), Social support and health (pp. 263-278). New York: Academic Press.

Gove, W. R. (1972). Sex, marital status and suicide. Journal of Health and Social Behaviour, 13, 204-213.

Gravetter, F. J., & Wallnau, L. B. (1988). Statistics for the behavioral sciences (2nd ed.). New York: West Publishing Company.

Gross, W. F. (1971). Self-concepts of alcoholics before and after treatment. Journal of Clinical Psychology, 27(4), 539-541.

Guerney, B.Jr., & Burton, J. L. (1963). Relationships among anxiety and self, typical peer, and ideal percepts in college women. Journal of Social Psychology, 61, 335-344.

Guglielmo, R., Polak, R., & Sullivan, A. P. (1985). Development of self-esteem as a function of familial reception. Journal of Drug Education, 15, 227-284.

Hagborg, W. (1993). The Rosenberg Self-Esteem Scale and Harter's Self-Perception Profile for Adolescents: A concurrent validity study. Psychological School , 30, 132-136.

Hamilton, E. W., & Abramson, L. Y. (1983). Cognitive patterns and major depressive disorder: A longitudinal study in a hospital setting. Journal of Abnormal Psychology, 92, 173-184.

Harter, S. (1989). Adolescent self and identify development. In S.

Feldman & G. Elliot (Eds.), At the threshold: The developing adolescent. Cambridge, MA: Harvard University Press.

Heatherton, T. F., & Polivy, J. (1991). Developmental and validation of a scale for measuring state self-esteem. Journal of Personality and Social Psychology, 60, 895-910.

Hechtman, L., Weiss, G., & Perlman, T. (1980). Hyperactives as young adults. Canadian Journal of Psychiatry, 25, 478-483.

Hobfoll, S. E., & Leiberman, J. R. (1987). Personality and social resources in immediate and continued stress resistance among women. Journal of Personality and Social Psychology, 52, 18-26.

Hoge, D. R., & McCarthy, J. D. (1983). Issues of validity and reliability in the use of real-ideal discrepancy scores to measure self regard. Journal of Personality and Social Psychology, 44, 1048-1055.

Hollender, J. (1973). Self-esteem and parental identification. Journal of Genetic Psychology, 122, 3-7.

Holmes, T. H., & Rahe, R. H. (1967). The social rating scale. Journal of Psychosomatological Research, 11, 213-218.

Horney, K. (1950). Neurosis and human growth. New York: Norton.

Huon, G., & Brown, L. B. (1984). Psychological correlates of weight control among anorexia nervosa patients and normal girls. British Journal of Medical Psychology, 57, 61-66.

Ingham, J. G., Kreitman, N. B., Miller, P. McC., Sashidharan, S. P., & Surtees, P. G. (1986). Self-esteem, vulnerability and psychiatric disorder in the community. British Journal of Psychiatry, 148, 375-385.

Ingham, J. G., Kreitman, N. B., Miller, P. McC., Sashidharan, S. P., &

Surtees, P. G. (1987). Self-appraisal, anxiety and depression in women: A prospective enquiry. British Journal of Psychiatry, 151, 643-651.

James, W. (1890). The principles of psychology. London: Macmillan.

Johnson,P. B. (1982). Sex differences, women's roles and alcohol use: Preliminary national data. Journal of Social Issues, 38(2), 93-116.

Jones, E. E., Berglas, S., Rhodewalt, F. & Skelton, J. (1981). Effects of strategic self presentations on subsequent self-esteem. Journal of Personality and Social Psychology, 41, 407-421.

Juhasz, A. M. (1985). Measuring self-esteem in early adolescents. Adolescence, 20, 877-887.

Kaplan, H. B. (1975). Self-attitudes and deviant behavior. Pacific Palisades, CA: Goodyear.

Kaplan, H. B. (1976). Antecedents of negative self-attitudes: membership group devaluation and defencelessness. Social Psychiatry, 11, 15-25.

Kaplan, H. B. (1980). Deviant behavior in defense of self. New York: Academic Press.

Keith, P. M., & Schafer, R. B. (1980). Depression in one-and-two job families. Psychological Reports, 47, 669-670.

Kendler, K. S., MacLean, C., Neale, M., Kessler, R., Health A., & Eaves, L. (1991). The genetic epidemiology of bulimia nervosa. American Journal of Psychiatry, 148(12), 1627-1637.

Kiesler, C. A. (1971). Psychology of commitment: Experiments linking behavior to belief. New York: Academic Press.

King, C. A., Naylor, M. W., Segal, H. G., Evans, T., & Shain, B. N. (1993). Global self-worth, specific self-perceptions of competence, and depression in adolescents. Journal of American Academy of Child and Adolescent Psychiatry, 32(4), 745-752.

Klopfer, W. G. (1965). Interpersonal theory of adjustment In R. Kastenbaum (Ed.), Psychobiology of aging. New York: Springer Publishing Company.

Kuiper, N. A., MacDonald, M. R. & Derry, P. A. (1983). Parameters of a depressive self-schema. In J. Suls & A. G. Greenwald (Eds.), Psychological perspectives on the self (Vol. 2). Hillsdale, N.J.: Erlbaum.

LaHorgue, Z. (1960). Morbidity and marital status. Journal of Chronic Disease, 12, 476-498.

League, B. J., & Jackson, D. N. (1964). Conformity, veridicality and self-esteem. Journal of Abnormal and Social Psychology, 68, 113-115.

Lerner, R. M., Lerner, J. V., & Hess, L. E. (1991). Physical attractiveness and psychological functioning among early adolescents. Journal of Early Adolescence, 11, 300-320.

Lewin, K., Dembo, T., Festinger, L. & Sears, P. S. (1944). Level of aspiration. In J. McV. Hunt (Ed.), Personality and the behavioural disorders (Vol. 1). New York: Ronald Press.

Lewinsohn, P. M., Steinmetz, J. L., Larson, D. W., & Franklin, J. (1981). Depression-related cognitions: Antecedent or consequence? Journal of Abnormal Psychology, 90, 213-219.

Lloyd, C., Chang, A.F. & Powell, B. J. (1979). Relationship of different measures of self-esteem to locus of control. Psychological Reports, 45, 160-162.

Lowenthal , M. F., Thurner, M., & Chiriboga, D. (1975). Four stages of life. San Francisco: Jossey-Bass.

Lundgren, D. C., & Schwab, M. R. (1977). Perceived appraisals by others, self-esteem, and anxiety. Journal of Psychology, 97, 205-213.

Many, M. A., & Many, W. A. (1975). The relationship between self-esteem and anxiety in grades four through eight. Educational and Psychological Measurement, 35, 1017-1021.

Maslow, A. H. (1954). Motivation and personality. New York: Harper.

Mathes, E. W., & Kahn, A. (1975). Physical attractiveness, happiness, neuroticism, and self-esteem. Journal of Psychology, 90, 27-30.

Matteson, R. (1974). Adolescent self-esteem, family communication, and marital satisfaction. Journal of Psychology, 86, 35-47.

MacLachlan, M. (1985). Psychometric contamination in correlational studies of depression and self-esteem. IRCS Medical Science, 13, 443-444.

McLachlan, J. F. C., Walderman, R. L., Birchmore, D. F., & Marsden, L. R. (1979). Self-evaluation, role satisfaction, and anxiety in the women alcoholic. International Journal of Addiction, 14, 809-832.

Mead, G. H. (1934). Mind, self and society. Chicago: University of Chicago Press.

Melges, F. T., Anderson, R. E., Kraemer, H. C., Tinklenberg, J. R., & Weisz, A. E. (1971). The personal future and self-esteem. Archives of General Psychiatry, 25, 494-497.

Miller, P. McC., Kreitman, N. B., Ingham, J. G., et al. (1989). Self-esteem, life stress and psychiatric disorder. Journal of Affective Disorders, 17, 65-75.

Mitic, W. (1980). Alcohol use and self-esteem of adolescents. Journal of Drug Education, 10, 197-208.

Monge, R. H. (1975). Structure of the self-concept from adolescence through old age. Experimental Aging Research, 1, 281-291.

Mulaik, J. S. (1992). Noncompliance with medication regimens in severely and persistently mentally ill schizophrenic patients. Mental Health Nursing, 13, 219-237.

Munro, B. H., & Page, E. B. (1993). Statistical methods for health care research. Philadelphia: J. B. Lippincott Company.

Nocks, J. J., & Bradley, D. L. (1969). Self-esteem in an alcoholic population. Diseases of Nervous System, 30, 611-617.

Nickols, J. (1966). Self-image ratings of normal and disturbed subjects. Journal of Health and Human Behavior, 7, 28.

O'Leary, M. R., Chaney, E. F., & Hudgins, W. (1978). Self-concept: Effects of alcoholism, hospitalization and treatment. Psychological Report, 42, 655-661.

Olmsted, M. P., Kaplan, A. S., & Rockert, W. (1994). Rate and prediction of relapse in bulimia nervosa. American Journal of Psychiatry, 151, 738-743.

O'Malley, P. M. & Bachman, J. G. (1983). Self-esteem: Change and stability between ages 13 and 23. Developmental Psychology, 19, 257-268.

Ostrov, E., Offer, D., & Howard, K. (1989). Gender differences in adolescent symptomatology: A normative study. Journal of American Academy of Child Psychiatry, 28, 394-398.

Overholser, J. C., Adams, D. M., Lehnert, K. L., & Brinkman, D. C. (1995). Self-esteem deficits and suicidal tendencies among adolescents. Journal

of American Academy of Child and Adolescent Psychiatry, 34, 919-928.

Pardoen, D., Bauwens, F., Tracy, A., Martin, F., & Mendlewicz, J. (1993). Self-esteem in recovered bipolar and unipolar out-patients. British Journal of Psychiatry, 163, 755-762.

Parsons, L. B., Peterson, R. A., & Davids, A. (1968). Manifest anxiety and self-concept in emotionally disturbed boys in residential treatment. Journal of Clinical Psychology, 24, 332-335.

Perez, R., Padilla, A. M., & Ramirez, A. (1980). Correlates and changes over time in drug and alcohol use within a barrio population. American Journal of Common Psychiatry, 8, 621-636.

Phillips, B. N., Hindsman, E., & Jennings, E. (1960). Influence of intelligence on anxiety and perception of self and others. Child Development, 31, 41-46.

Phillips, B. N., Hindsman, E., & McGuire, C. (1960). Factors associated with anxiety and their relation to the school achievement of adolescents. Psychological Reports, 7, 365-372.

Pilisuk, M. (1963). Anxiety, self-acceptance, and open-mindedness. Journal of Clinical Psychology, 19, 387-391.

Power, M. J. (1987). Cognitive theories of depression. In L. B. Alloy (Ed.), Theoretical foundations of behavior therapy. New York: Guilford Press.

Richards, J. M. (1983). Validity of locus of control and self-esteem measures in a national longitudinal study. Educational and Psychological Measurement, 43, 897-905.

Robson, P J. (1988). Self-esteem: A psychiatric view. British Journal of Psychiatry, 53 6-15.

Rogers, P. D., Harris, J., & Jarmuskewicz, J. (1987). Alcohol and adolescence. Pediatric Clinics of North America, 34, 289-303.

Rollnick, S., & Heather, N. (1980). Psychological change among alcoholics during treatment. British Journal on Alcohol and Alcoholism, 15, 118-128.

Rooney, J. F., Volpe, J. N., & Suziedelis, A. (1984). Changes in femininity, masculinity, and self-regard among women alcoholics in residential treatment. Sex Roles, 11(3-4), 257-267.

Rosenberg, M. (1963). The association between self-esteem and anxiety. Journal of Psychiatric Research, 1, 135-152.

Rosenberg, M. (1965). Society and the adolescent self image. Princeton NJ: Princeton University Press.

Rothstein, E., et al. (1966). An experimental alcoholism unit in a psychiatric hospital. Quarterly Journal of Studies on Alcohol, 27, 513.

Roy, A., Sutton, M., & Pickar, D. (1985). Neuroendocrine and personality variables in dysthymic disorder. American Journal of Psychiatry, 142, 94-97.

Roy, A., Thompson, R., & Kennedy, S. (1983). Depression in chronic schizophrenia. British Journal of Psychiatry, 142, 465-470.

Rutter, M. (1987). Psychosocial resilience and protective mechanisms. American Journal of Orthopsychiatry, 57, 316-331.

Ryan, N. D., Puig-Antich, J., & Ambrosini, P. (1987). The clinical picture of major depression in children and adolescents. Archives of General Psychiatry, 36, 698-700.

Sands, P. M., Hanson, P. G., & Sheldon, R. B. (1967). Recurring themes in group psychotherapy with alcoholics. Psychiatric Quarterly, 41, 474-482.

Savin-Williams, R. C. & Jaquish, G. A. (1981). The assessment of adolescent self-esteem: A comparison of methods. Journal of Personality, 49, 324-336.

Sigall, H., & Gould, R. (1977). The effects of self-esteem and evaluator demandingness on effort expenditure. Journal of Personality and Social Psychology, 35, 12-20.

Silverstone, P. H. (1990). Low self-esteem in eating disordered patients in the absence of depression. Psychological Reports, 67, 276-278.

Silverstone, P. H. (1991). Low self-esteem in different psychiatric conditions. British Journal of Clinical Psychology, 30, 185-188.

Slomkowski, C., Klein, R. G., & Mannuzza, S. (1995). Is self-esteem an important outcome in hyperactive children? Journal of Abnormal Child Psychology, 23, 303-315.

Sorell, G. T., Silvia, L. Y., & Busch-Rossnagel, N. A. (1993). Sex-role orientation and self-esteem in alcoholic and nonalcoholic women. Journal of Studies on Alcohol, 54, 566-573.

Spitzer, S. (1969). Test equivalence of unstructured self evaluation instruments. Sociological Quarterly, 10, 204-215.

Stack, S. (1980). The effects of marital dissolution on suicide. Journal of Marriage and Family, 42, 83-92.

Sullivan, H. S. (1953). The interpersonal theory of psychiatry. New York: Norton.

Taylor, D. N., & Pilar, J. D. (1992). Self-esteem, anxiety, and drug use. Psychological Reports, 71, 896-898.

Tcheng-Laroche, F., & Prince, R. (1983). Separated and divorced women

compared with married controls. Social Science and Medicine, 17, 95-105.

Thomae, H. (1962). Theory of aging and cognitive theory of personality. Proceedings of the International Association of Gerontology, 1.

Tucker, L. (1985). Physical, psychological, social and lifestyle differences among adolescents classified according to cigarette intention status. Journal of School Health, 55(4), 127-130.

Vrasti, R., Enasescu, N., Poelinca, C., & Apostol, V. (1988). Interpersonal dependency, self-esteem and depression in primary alcoholism. Acta Psychiatrica Scandinavica, 78(4), 448-450.

Walters, E. E., & Kendler, K. S. (1995). Anorexia nervosa and anorexic-like syndromes in a population-based female twin sample. American Journal of Psychiatry, 152, 64-71.

Ward, R.A. (1977). The impact of subjective age and stigma on older persons. Journal of Gerontology, 32, 227-232.

Warr, P., & Parry, G. (1982). Paid employment and women's psychological well-being. Psychological Bulletin, 91, 498-516.

Weiss, G., & Hechtman, L. T. (1986). Hyperactive children grown up. New York: Guilford Press.

Wells, L. E. & Marwell, G. (1976). Self-esteem: Its conceptualisation and measurement. Sage Publication: Beverly Hills and London.

White, R. W. (1959). Motivation reconsidered: The concepts of competence. Psychological Review, 66, 297.

White, R. W. (1960). Competence and psychosexual stages of development. In M. Jones (Ed.), Nebraska symposium on motivation (p. 97). Lincoln, Nebraska. University of Nebraska Press.

White, W. F, & Gaier, E. L. (1965). Assessment of body image and self-concept among alcoholics with different intervals of sobriety. Journal of Clinical Psychology, 21, 374-377.

White, W. F., & Porter, T. L. (1966). Self-concept reports among hospitalized alcoholics during early periods of sobriety. Journal of Counselling Psychology, 133(3), 352-355.

Wilson, A. & Krane, R. (1980). Changes in self-esteem and its effects on symptoms of depression. Cognitive Therapy and Research, 4, 419-421.

Winters, K. C., & Neale, J. M. (1985). Mania and low self-esteem. Journal of Abnormal Psychology, 94, 282-290.

Wittenborn, J. R., McDonald, D. C., & Maurer, H. S. (1977). Persisting symptoms in schizophrenia predicted by background factors. Archives of General Psychiatry, 34, 1057-1061.

Wood, F., & Johnson, A. (1972). Coopersmith Self-esteem Inventory scores of boys with severe behavior problems. Exceptional Children, 38, 739-740.

Wylie, R. C. (1974). The self concept: Vol. 1. A review of methodological considerations and measuring instruments. Lincoln: University of Nebraska Press.

Yelsma, P., & Yelsma, J. (1977). Self-esteem of prisoners committing directly versus indirectly destructive crimes. Perceptual and Motor Skills, 44, 375-380.

Young, M., Wrech, C. E., Bakema, D. (1989). Area specific self-esteem scales and substance use among elementary and middle school children. Journal of School Health, 59, 251-254.

APPENDIX 1

Name : File No. Registration: Discharge:
Date of birth: / /19 Age : Sex :
Marital status : Origin: Religion :
19. No. of children : 19. No. of brothers & sisters : Education :
Income : Family income :
Current Employment: Usual occupation : Current occupation:

6. Complaint :
7. Other problem :

Family record :
9. Relationship :
9. Problem :
12. Prescribed Medication :
13. Other Medication :
15. Drug / Alcohol abuse :
21. Legal problem :

Patient record :
10. Seen a Psych. before : 11. Hospitalized before :
12. Prescribed Medication :
13. Other Medication :
14. Drug / Alcohol abuse :
21. Legal problem :

22. Women only :
Menstrual cycle problem : No. of pregnancies :
Abortions: Miscarriages :

Self esteem measurement : Scale 1) Scale 2)

Assessment :
Treatment :
Consultations / Transfers :

Diagnosis:
Axis I)
Axis II)
Axis III)
Axis IV) Acute enduring
Axis V) current highest level in past year

Medication :
Comments :

APPENDIX 2

The Janis and Field Self-Esteem Inventory:

The questions of this scale are part of the Janis and Field personality questionnaire. The measure consisted of 23 items that asked the subjects to give self- ratings on three factors of this inventory.

Factor 1: Anxiety in social situation (questions 1, 9, 10, 15, 17, 19, 21, 22 and 23).

Factor 2: Self-consciousness (questions 11, 12, 13, 16, 18 and 20).

Factor 3: Feelings of personal worthlessness (questions 2, 3, 5, 6, 7 and 8).

The questions of " feelings of adequacy " are as follows.

1. How often do you feel inferior to most of the people you know?
2. Do you ever think that you are a worthless individual?
3. How confident do you feel that some day the people you know will look up to you and respect you?
4. How often do you feel to blame for your mistakes?
5. Do you ever feel so discouraged with yourself that you wonder whether anything is worth while?
6. How often do you feel that you dislike yourself?
7. In general, how confident do you feel about your abilities?
8. How often do you have the feeling that there is nothing you can do well?
9. How much do you worry about how well you get along with other people?
10. How often do you worry about criticisms that might be made of your work by whoever is responsible for checking up on your work?

11. Do you ever feel afraid or anxious when you are going into a room by yourself where other people have already gathered and are talking?

12. How often do you feel self-conscious?

13. When you have to talk in front of a class or a group of people your own age, how afraid or worried do you usually feel?

14. When you are trying to win in a game or sport and you know that other people are watching you, how rattled or flustered do you usually get?

15. How much do you worry about whether other people will regard you as a success or a failure in your job or career?

16. When in a group of people, do you have trouble thinking of the right things to talk about?

17. When you have made an embarrassing mistake or have done something that make you look foolish, how long do you usually keep on worrying about it?

18. Do you find it hard to make talk when you meet new people?

19. How often do you worry about whether other people like to be with you?

20. How often are you troubled with shyness?

21. When you are trying to convince other people who disagree with your ideas, how worried do you usually feel about the impression you are making?

22. When you think about the possibility that some of your friends or acquaintances might not have a good opinion of you, how concerned or worried do you feel about it?

23. How often do you feel worried or bothered about what other people think of you?.

APPENDIX 3

The Rosenberg Self-Esteem Scale:

This questionnaire consisted of ten items as follows.

1. On the whole, I am satisfied with myself.
2. At times I think I am no good at all.
3. I feel that 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'm 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 toward myself.